

PROCEEDINGS



Seminar on

**Gender
and
Forestry**

**and IUFRO 6.08.01
Workshop
Umeå, Sweden
June 17-21, 2006**

Editors:
Gun Lidestav
Eva Holmgren

Organized by the Faculty of Forest
Sciences, Swedish University of Agricultural Sciences, Umeå

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PREFACE

Forestry concerns not only of plants, animals, soil, and water conditions. It also concerns actions, thinking, and relations between human beings, who organise and carry out specific tasks and management on a business level. Furthermore, it concerns people as consumers of forest products, services and environmental goods. By applying a gender perspective, we will increase our knowledge and skills in the management of this valuable nature resource.



Photo: Sven-Olof Bylund, SLU

The objective of this International Seminar on Gender and Forestry was to raise awareness of the present gender structures in forest ownership and forest organisations, and to reveal the impact of gender on the perception of forests and forestry in Europe, CIS and North America. More than sixty foresters and researchers from fifteen countries were gathered to exchange knowledge and experiences and to plan future co-operation. This was done by presenting and discussing the Report *'Time for action – Changing the gender situation in forestry'* prepared by the Team of Specialists (Appendix 1). In addition, prominent experts in gender research were giving lectures and practicable methods for analysing gender structures and raising awareness were presented. The Seminar was preceded by a Field Trip and followed by an IUFRO 6.08.01 Workshop with special focus on Gender Research in Africa, Asia, Australia and Latin America. After the closing of the workshop a IUFRO 6.08.01 Business Meeting was held.

By the field trip participants was engaged in a content analysis of the 'SkogsNolia Forest Fair' and during the seminar all Seminar participants were involved by the Forum theatre. Thus, an objective was also to provide participants with useful instruments for improving gender equality in participant's home countries, organisations.

The proceedings of the International Seminar "Gender and Forestry" with field trip and IUFRO 6.08.01 Workshop held in Umeå, Sweden 17-21 August 2006 include the papers, posters and speeches that were presented, additional papers related to the subject, the outcome of the workshops and business meeting and a brief review of the excursion.

The Faculty of Forest Sciences was responsible organizer for the Seminar, supported financially by the Ministry of Industry, Employment and Communications, the Food and Agriculture Organization (FAO), Formas, Sveaskog, SkogsNolia and Husqvarna. A sincere thank you to our sponsors, who made it possible to arrange the Seminar and Workshop. We also thank all the participants for sharing their knowledge and experiences with us.

Umeå, March 2007

Gun Lidestav

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Conclusions and recommendations from workshops

Compiled by Team of specialist members;
Rose Simmone, Renate Spaeth and Gun Lidestav

The following conclusions and recommendations were made following workshop discussions. They have been grouped under three categories: i) Gender and forest ownership, ii) Gender structures in forest organizations and iii) Gender and perception.

i) Gender and forest ownership

Conclusions

- Forest Owners Associations are still mainly male dominated. Some of these associations tend to be very old fashioned and conservative, refusing women membership.
- Increased knowledge among female forest owners creates a better negotiation climate especially when dealing with their male counterparts
- The lack of data on Female Forest Organizations is a problem making it difficult to assess the status of these organizations and challenges they face. It is almost impossible to raise awareness of these organizations especially among policy and decision makers without any data.

Recommendations

- Benchmarking should be used to put pressure on countries and Forest Owners Organizations to impose gender balance among their membership
- Meetings of Forest Owners Associations should be arranged at a time during the day that is suitable for both men and women
- Women in Forestry Networks should be linked to male dominated networks
- As a measure of success for achieving gender balance and equality in Forest Owners Associations; Women in Forestry Networks should aim at becoming redundant and being replaced by other supportive networks for both male and female
- More efforts should be made to raise awareness on the issue. (Participants noted that the attendance of men at the conference was poor. They suggested that the next meeting of this kind should aim for a 50/50 representation of men and women. Failure to elicit male participation could result in gender continuing to be viewed as a “women’s issue.”)
- A shorter version of the UNECE/FAO Team of Specialists final report “Time for Action” should be made available for distribution and discussion among local Forest Owners Organizations
- The conclusions and recommendations from this seminar should be disseminated to local and regional organizations

ii) Gender structures in forest organizations

Conclusions

- There is still very little information available on gender structures in forest organizations.
- Organizations are influenced by societal and cultural norms. Neither men nor women should feel threatened when gender issues are discussed. However in forest organizations, gender is seldom discussed.

- Female contact persons within organizations is a positive way of forging ahead to acquire attain a gender-balanced working environment
- The current situation of gender inequality and gender imbalance within the forestry sector is a reflection of the gender situation in forestry institutions

Recommendations

- It is important to deal with the problems of gender balance from the recruitment process. Job advertisements should be created which specifically target women.
- Recruitment into the forestry sector should begin as early as university, with career guidance counsellors visiting educational institutions to encourage women to take up careers in forestry
- Women should be involved in the recruitment process. This will make female candidates more comfortable and may render less bias towards male candidates.
- There may be the need to establish clear goals for the forestry sector especially in terms of recruitment, in order to achieve gender balance in the workplace. These may take the form of quotas and require clear guidance from the leaders/management.
- Once within the forestry sector, we need to recognize the differences between men and women and the unique problems faced by each of these groups, and work together to resolve these
- Efforts should be made to reduce the rate of turnover of female employees in the forestry sector, including addressing existing impediments (e.g. organizational culture & lack of alternative working arrangements) which make retention of female employees difficult.
- Mentoring programmes geared towards career development of female employees within the organization should be developed
- Diverse ways of corporate thinking should be incorporated into the traditional methods of doing things. This may be enhanced by special gender training within the workplace
- Equity committees should be established to address discrimination at all levels.
- Positive role models, both male and female, should be used to encourage improved gender balance at all forestry sector levels

iii) Gender and perception

Conclusions

- Governments continue to ignore the issue of gender mainstreaming in the forestry sector
- Women's contribution to the sector has been taken for granted
- Men seem to have more advantages for employment in the sector than women

Recommendations

- More studies need to be conducted on the perceptions of the industry from persons outside of the industry
- Issues related to sustainable forest management and the use of natural resources in general should be discussed with both male and female audiences in mind
- National forest projects should seek to involve both male and female local participants, on an equal basis
- Forestry educational institutions should help to create awareness of the value of both male and female participation in the forestry sector

Program, overview

PROGRAM; Field Trip, Seminar, Workshop				
	Morning		Afternoon	Evening
<i>Saturday June 17</i>	Visit and content analysis of Skogs-Nolia (Exhibition Nolia Forest Fair) from a gender perspective			Elk house Balsjö
<i>Sunday June 18</i>	Visit Vindelns experimental forests: * Socio-economic impact of forestry * Can biodiversity be cultivated?			Registration
<i>Monday June 19</i>				Reception party at 'Market place' Exhibition
	Regist- ration	Welcome Introduction to the Seminar	I) 'Gender structures in forest ownership' * Presentation of the ToS Report, * Lecture from a researcher * Lecture from "Practice" II) Presentations and lectures on 'Gender structures in forest organisations' * Presentation of the ToS Report, * Lecture from a researcher, * Lecture from "Practice"	Forum theatre: "A day in the life of a forester" Dinner
<i>Tuesday June 20</i>	III) 'Gender and perception of forest' * Presentation of the ToS Report * Lecture from a researcher * Presentation of the content analysis of the Nolia Forest Fair		Conclusions and recommendations End of Seminar	
<i>Wednes- day June 21</i>	IUFRO 6.08.01 Workshop on Gender Research in Forestry with focus on Africa, Asia, Australia and Latin America			
	Regist- ration Welcome	Workshop introduction * Men and masculinities * Women and femininities	Approaching Gender Research in Forestry by I)) Quantitative Methods II) Qualitative Methods III) Case studies End of Workshop	Business Meeting

Schedule for Gender and Forestry Field Trip to Umeå, Balsjö and Vindeln, June 17-18 2006

Saturday	June 17	Location
09.30	Bus departs to SkogsNolia	Faculty of Forest Sciences, Upper main entrance
10.00	Arrival SkogsNolia Coffee and introduction to Content analysis	
11.00	Field survey in groups, Lunch Field survey continued	SkogsNolia SkogsNolia SkogsNolia
15.00	Reunion	
15.30	Bus departs for tour of the Elk Farm	
17.30	Dinner at the Elk-House	Elk-House, Balsjö
18.30	Bus departs to Hällnäs	
19.30	Arrival Parken Hällnäs	
20.00-	Field survey data compilation and analyses	Parken Hällnäs
22.00	Coffee/Tea and refreshments	
Sunday	June 18	
08.00	Breakfast	Parken Hällnäs
09.00	Bus departs to Vindeln	
10.00	Visit Vindeln Experimental Forest, Field excursion including lunch	SLU, Vindeln experimental Forest
15.00	Arrival Umeå Check in at hostel and hotels	

Schedule for Gender and Forestry Seminar, June 18-20 2006, Faculty of Forest Sciences, Umeå

Sunday	June 18	Locality
17.00-20.00	Reception party Market place and exhibitions. Registration	Åteln
Monday	June 19	
8.30-10.00	Registration Market place activities continues	Åteln
10.00-11.30	Welcome <ul style="list-style-type: none"> • <i>Jan-Erik Hällgren</i>. Dean, Faculty of Forest Sciences, SLU • <i>Bengt Toresson</i>. Ministry of Industry, Employment and Communications; Division Director; Sustainable Development and Primary Industries. • <i>Dan Rugabira</i>. FAO Forestry Department, Program Coordinator and Departmental Gender Focal Point • <i>Gun Lidestav</i>. Seminar organizing committee. Welcome and introduction to the seminar sessions and group assignments. 	P-O Bäckströms sal
11.30-12.30	Lunch	Åteln
12.30-14.30	Topic I: Gender structures in forest ownership <ul style="list-style-type: none"> • Report from Team of Specialists. <i>Natalie Hufnagl</i>. Secretary General, Confederation of European Forest Owners, CEPF • Lecture. <i>Lena Abrahamsson</i>, Researcher PhD, Luleå University of Technology • Comment from practitioner. <i>Lars Henrik Sundby</i>, Deputy Chairman, Vikens skog BA <p><u>Moderator topic I:</u> <i>Astrid Bergqvist</i>, The Royal Swedish Academy of Agriculture and Forestry. Former advisor and international forest expert at the Ministry of Industry, Employment and Communications.</p>	P-O Bäckströms sal
14.30-15.00	Coffee and refreshments	Åteln
15.00-17.00	Topic II: Gender structures in forest organizations	P-O Bäckströms sal

	<ul style="list-style-type: none"> • Report from Team of Specialists. <i>Liz Agpaoa</i>, Chief of Staff, Forest Service US. • Lecture by Researcher. <i>Maureen Reed</i>, Sustainable forest management network, University of Saskatchewan, Canada. • Comment from practitioner. <i>Gunnar Olofsson</i>, President and Chief Executive Officer, Sveaskog. <p><u>Moderator topic II:</u> <i>Åke Barklund</i>, Chairman of Swedish Association of Graduates in Forestry (skogsakademikerna).</p>	
19.00-22.00	Seminar dinner and Forum Theatre ‘A day in the life of a forester’	Forestry students union house
Tuesday	June 20	
08.00-10.00	<p>Topic III: Gender and perception of forests (and forestry)</p> <ul style="list-style-type: none"> • Report from Team of Specialists. <i>Renate Späth</i>, Ministerium für Umwelt und Naturschutz, Landwirtschaft und Verbraucherschutz des Landes Nordrhein-Westfalen. Düsseldorf. • Lecture by researcher. <i>Dulce Armonia Borrego</i>, Autonomous University of Barcelona. • Results from the content analysis performed at the Skogs-Nolia forestry fair. <i>Patrik Häggqvist</i>, SLU, Umeå. <p><u>Moderator topic III:</u> <i>Sofia Blomquist</i>, Swedish Forest Agency.</p>	P-O Bäckströms sal
10.00-10.30	Coffee and refreshments	Åteln
10.30-13.30	<p>Practical implications</p> <ul style="list-style-type: none"> • Group Assignments Topic I-III <p>Lunch available from 11.30</p>	Åteln and Rönnen
13.30-14.30	Presentations of results from group assignments	P-O Bäckströms sal
14.30-15.00	Conclusions and recommendations	P-O Bäckströms sal
15.00-15.30	Coffee and refreshments	Åteln
15.30	End of Seminar	P-O Bäckströms sal

Schedule for IUFRO 6.08.1 Workshop on Gender Research in Forestry with focus on Africa, Asia, Australia and Latin America, June 21 2006, Faculty of Forest Sciences, Umeå

Wednesday	June 21	Locality
08.00-09.00	Registration	Åteln
09.00–10.15	<p>Welcome</p> <ul style="list-style-type: none"> • <i>Gun Lidestav</i>, Coordinator IUFRO Working Group 6.08.1 • <i>Lisa Sennerby-Forse</i>. FORMAS, the Swedish Research Council for Environment, Agriculture Sciences and Spatial Planning and coming Rector of SLU. <p><u>Key Note:</u> Important Trends in Gender and Forestry Research. <i>Carol Colfer</i>, CIFOR, Centre for International Forest Research, Indonesia.</p>	P-O Bäckströms sal
10.30-11.00	Coffee and refreshments	Åteln
11.00-12.00	<p>Oral presentations I</p> <ul style="list-style-type: none"> • Gender Mainstreaming and the Glass Ceiling Phenomenon in Forestry Management in India. <i>Monika Singh</i>. • Gender issues in land use and farm forestry research, Vietnam. <i>Kajsa Sandewall</i> • Women, Gender and Management of Off-reserve Forests in Ghana. <i>Elisabeth Ardayfio-Schandorf</i>. 	Björken
12.00-13.00	Lunch	Åteln
13.00-14.15	<p>Oral presentations II</p> <ul style="list-style-type: none"> • Gender and Poverty Issues in the Forest Regions of Northern Lao PDR. <i>B.M. Calub</i>. • Sustainable Harvesting of Non-Timber Forest Products: The Role of Gender. <i>Arsenio B. Ella</i>. • Gender position in the forest sector. Dr. Viera Petrášová, Mária Poljovková and Anna Tučeková, PhD. • Gender perspectives in the Development Oriented Interdisciplinary Thematic Action Research Programme at Hawassa/Wondo Genet College of Forestry, Ethiopia. <i>Mersha Gebrehiwot</i> 	Björken

14.15-14.45	Coffee and refreshments	Åteln
Tuesday	June 20	
14.45-15.45	Oral presentations III <ul style="list-style-type: none"> • Female Forestry Officials' Roles – Forewomen or Mothers? <i>Tiina Suopajärvi.</i> • Labour protection: a case of women employed in the State Forests in Poland. <i>Wiesława Nowacka.</i> • Gender Issues in Armenian Forestry. <i>Inna Hakobjanyan</i> <i>End of Workshop</i>	Björken
15.45-17.00	IUFRO 6.08.01 Business Meeting	Björken

Reception Speech

Gun Lidestav

Ladies and Gentleman, most welcome to Umeå, to the Faculty of Forestry and this Gender and Forestry Seminar.

My name is Gun Lidestav, and I am associate professor at the Department of Forest Resource Management and Geomatics at the Swedish University of Agricultural Sciences. In my research on family forestry and contract labour force in the entire forestry sector, gender perspective and gender issues have been a main topic for several years. I have also developed postgraduate courses on this topic.

I suppose this is why I was asked by our Ministry of Industry, Employment and Communications to join a Team of Specialists (ToS) on gender and forestry, that was established in April 2004, by the Joint FAO/ECE/ILO Committee on Forest Technology, Management and Training in order to raise visibility of women and women's involvement in the forestry sector and to understand the gender structures throughout the sector in Europe and North America.

The ToS was an outcome of the seminar on "Women in Forestry – Strategies to Increase Women's Participation in the Forestry Sector in Europe and North America", which was held in Viseu, Portugal, in April 2001.

14 other members were also selected, either directly by the Joint Committee secretariat or through a nomination process by their respective countries. Some of them are here tonight, some more will join us tomorrow, while others have not been able to come for the seminar due to Service.

Liz Agpaoa (United States) is Chief of Staff for the United States Forest Service
Skadrite Albertina (Latvia) She is a member of the Forest Owners' Association of Latvia, a board member of the Forest Owners Association of Latvia and chairperson of the Council of PEFC, Latvia

Merete Furuberg representing Norway and also IUFRO

Natalie Hufnagl (Germany – Confederation of European Forest Owners [CEPF])

Marion Karmann from (Germany - She is presently coordinator at the Forest Stewardship International (FSC)

Bozena Kornatowska (Poland – Ministerial Conference on the Protection of Forests in Europe [MCPEF])

Siegfried Lewark (Germany) is professor of forest work science at the University of Freiburg.

Wieslawa L. Nowacka (Poland) is adjunct professor at the Department of Forest Utilization, Warsaw Agricultural University (SGGW).

Simmone Rose (Food and Agriculture Organization of the United Nations [FAO]) is a Forestry Officer with the Forest Products and Economics Division.

Anna Springfors (Food and Agriculture Organization of the United Nations [FAO]) is a former Associate Professional Officer attached to the FAO Forestry Department. While at FAO, she was involved in work on microfinance and gender issues.

Berit Sanness (Norway) formerly Norwegian Forest Owners' Federation. Presently, she manages the consultant company Pinus-Betula AS.

Renate Spaeth (Germany) is forest officer at the Ministry for Environment in Nordrhein-Westfalen.

Patricia Tomlin (United Kingdom) is director of the management consultancy company Wildcat One Ltd. on behalf of the British Forestry Commission

Gunilla Törnquist-Hedström (Sweden) is forest owner and member of the Swedish women forest owners' association Black Woodpecker.

Eriks Zakis (Latvia) is a member of the Latvian Forest Owners' Association.

At the first workshop held in Rome on 23 April 2004, I was elected Team Leader, Skadrite Albertina as Deputy Team Leader. Anna Springfors and later on Simmone Rose (both FAO) was appointed as coordinator.

The Team of Specialists' mandate was developed from discussions and recommendations at the FAO/ECE/ILO seminar in Viseu, Portugal (2001), and has been regarded as a strategic framework for our work during the terms of our mandate,

The mandate has covered:

- reviewing relevant data;
- developing criteria and indicators that reflect gender aspects in sustainable forest management;
- launching case studies concerning specific aspects of gender and forestry, including family-owned forests;
- disseminating information about national experiences, in particular success measures and good practices;
- promoting national networks of women in forestry;
- and organizing a follow-up meeting to the 2001 seminar in Portugal

The Team of Specialist has focused its work mainly on the first and last issue, but it has also worked on disseminating information on national experience and organizing meetings. So, the reason why we are gathering here tonight and the coming two days is to deliver the Report on Gender Situation In Forestry, and to discuss how to change and improve the situation as the conclusion of ToS work is reflected by the title of the report is Report "TIME FOR ACTION – changing the gender situation in forestry!"

BY THIS WE DELIVER THE REPORT TO OUR PARENT BODY, FAO here represented by Mr. DAN RUGABIRA, who is Program Coordinator and Departmental Gender Focal Point at the Forestry Department, FAO.

Seminar Papers, Presentations and Abstracts

Welcome Opening speech

Jan-Erik Hällgren, Dean, Faculty of Forest Sciences¹

I am pleased to welcome you on behalf of the faculty of forest sciences and I thank you ALL for coming, including the representatives from our co organizers FAO and IUFRO. Our faculty of Forestry Sciences is very old, traditional, the only one of its kind in Sweden and spread out in the country from Umeå, Uppsala to Alnarp. We have 360 persons in the faculty of which 50 are professors. Yearly we educate approximately 700 students in three different programs harmonizing to the Bologna model: a five year forestry program, a three year forestry engineering program and a four year environmental monitoring program. The University structure is today under huge organizational changes, not least the Faculty of Forestry, but we try to change within the old structure. We have about 30 percent women within the educational program which is not as many as we would like, but we are slowly improving and most of the women get good positions after finishing their studies here. Gender equality and gender issues are of course included in our scheduled issues e.g. into our educational program. Our research in this area aims to contribute to more knowledge, to more accurate data and to more action. The faculty is very natural sciences oriented but we know that forestry deals with people and that means that we have to adapt to that knowledge.

There are right now many organizational changes going on e.g. in the society, in forestry organizations and in forestry companies. There are also changes in people's perceptions on forests, the use of forests, the use of the resources, non-timber products, wishes and aims and we have to adapt to this. Our Faculty aims to conduct scientific work where we contribute to knowledge in these areas taking all possible actions as we can take, to utilize all available resources that are connected to this fantastic thing, forest. The work must have a connection with people's wishes, to take a broader outlook and also include international aspects as well as international research collaboration. Meetings like this are necessary for the exchange of ideas and for network building and I hope that this meeting will be a success. At the IUFRO Conference in Brisbane last year, we presented a Bibliography on research in this area that we hope to develop into a full database that could play an important role for scientists that work with these issues. It is time for action. Further, I want to thank the UNECE/FAO Team of Specialists on Gender and Forestry for their good work that resulted in a nice report with many interesting and good recommendations which I hope you will be able to discuss in the next two days.

The uses of the resources are important for the future. Land ownership and property rights are examples of fields of research that will play an important role in the future and coupled to this are many other areas in the society like rural development, landscape, politics etc. I believe that documents like this can contribute. It is also important that political actions

¹ Transcript by Eva Holmgren

that will be taken have a solid scientific base to lean on. Therefore your job matters, it can make a difference and research in area is important for the future! The subject area, forestry is increasing; it is no longer only natural science work. I am glad to see people from other countries here with the background also in other disciplines than forestry. It makes it a true interdisciplinary seminar which I am positive to.

Please, take the opportunity to enjoy, make contacts, learn more, discuss and most of all, have fun! It time to act! It's time for action and it is time to take the next step! It is a slowly moving process but thanks to most of you who have contributed in this area, it is moving ahead. I wish you good luck, and thank you for coming!

Finally, I want to take the opportunity to thank sponsors and collaborators.

Thank you all! And again, very welcome to Umeå!

Jan-Erik Hällgren

Short overview of Swedish gender policy and how it affects the Swedish forest policy

Bengt Toresson²

Division Director, Sustainable Development and Primary Industries
Ministry of Industry, Employment and Communications:

Mr Toresson is Director for the division that within the Ministry is responsible for the Swedish forest policy among other areas like mining and mineral policy, matters regarding the primary industries in Sweden and for coordinating the work with sustainable development within the Ministry.

In his presentation Toresson presented a short overview of Swedish gender policy and how it affects the Swedish forest policy. He touched upon four themes i) the forest policy ii) the Swedish gender policy iii) Why the Swedish government regards it important to work with gender issues within the forest policy area and iv) What has been done and future plans.

i) The Swedish forest policy has two equally important main objectives; the production objective and the environmental objective. In brief this means that forests and forestland are national assets that should be used efficiently and responsible so that they produce high sustainable yields while at the same time preserving biological diversity. The Swedish forest agency is the Government's experts on forests and forest policy with the mission to work with the sustainable utilization of the Swedish forest according to the guidelines given by the Swedish parliament and Government

ii) The Swedish gender equality policy has the principal aim that women and men should have the same opportunities, rights and responsibilities in all areas of life. This implies e.g. equal distribution of power and influence between women and men, the same opportunities to achieve economical independence, equal access to education and training and shared responsibilities for children. Achievements of this aim requires both strategies for how it is to be pursued and also an organizational structure that meets the requirements of a society capable of guaranteeing equal opportunities. An active gender policy must also be knowledge based and perceived from an analysis of the causes to gender inequality.

Originally, efforts to promote gender equality were mainly focused on achieving it in a formal sense, i.e. ensuring that women and men were equal before the law. But this was not seen as bringing about real equality between women and men. Thus, a new approach was needed, focusing on the existing imbalance of power between women and men. In 1994 the strategy called 'Gender mainstreaming' was adapted. Additionally a number of measures were taken with the intention to strengthen the gender equality efforts such as a new rule requiring that all government decisions must be analyzed from a gender perspective. Binding regulations were introduced requiring that all official statistics related to individuals should be disaggregated by sex enabling that background reports and other supporting data could be properly analyzed from a gender perspective. Further, governmental funding to gender

² Transcript by Eva Holmgren

research was increased on the grounds that the gender equality policy must be knowledge based. Also, special resources were set aside to help the County Administrative Boards to realize the National Gender Equality Policy Objectives. This was the platform. However, time showed that even this was not enough, too little was known about how gender equality work should be conducted in practice. A special working group was appointed to develop methods how to tackle this task. In 2001 the group published a book of methods called 'Just progress - applying gender mainstreaming in Sweden' and also a final report was delivered that presented a number of proposals how the gender mainstreaming work might be intensified. An important finding of the working group was that the Government Office is a key actor in this area. In response to the report the Government appointed a high level Steering Committee in 2002 to address a range of concerns. One of its tasks was to draw up a plan for the implementation of gender mainstreaming in the Government office. This assignment was completed in 2005 and the work of gender mainstreaming in government activities entered a new more intensive phase. In the case of Government Office, gender mainstreaming now means the integration of gender equality into all stages of the decision making process, in all policy areas and making each policy area responsible for its own efforts in this respect. Also, special coordinators for gender equality matters have been appointed in all Ministries and analyses from gender equality perspectives are being done regarding the governments objectives in all policy areas.

iii) Why the Swedish Government regards it important to work with gender issues within the forest policy area

More than half of the Swedish surface area is covered by forests, more forest relatively than any other country in Europe and the forest sector; forestry and forest industry, are of vital importance for the Swedish economy. A substantial proportion of Swedish net exports derive from this sector. About 100.000 persons are directly employed within the sector (15 % women) and about 354.000 forest owners (38 % women). It is therefore obvious that the forest sector has a fundamental importance for the Swedish society. In order to reach out with a forest policy it is important that both men and women are involved and have the same power to carry on forestry and also have the same possibilities to be active in every area in the forest sector.

Looking into the future, the importance of the forest sector is not likely to diminish, rather the opposite. One example is the recent discussion we have that bio energy from forest raw material might be one of our most important energy sources for our country the future in our efforts to reduce the dependence on fossil based energy. With this development it gets even more important for the Swedish Government that both women and men have equal influence in the forest sector and thereby also equal influence in the development of the future energy policy in Sweden.

iv) What have been done and future plans?

Gender equality is a 'Cross sector policy area' and fulfilment of the national objectives is dependent on what is achieved in all the various policy areas. Thus, an important part of the efforts to carry gender policy forward is to establish gender equality objectives at all levels in each policy area. In time this will make it possible to determine under what conditions and to what extent women and men have access to the funds that are distributed in the national budget. In 2002 a special project called 'An equal share' was launched to start the gender budgeting work in the Government Office. This project focuses on method development, identifying training requirements and collecting information about what is needed to ensure

that a gender perspective is successfully mainstreamed into budget work. By this project the Government has been laid for starting the gender budgeting process on a wide front in a work process with the Swedish state budget, and in an action plan for gender equality that was presented to the Swedish parliament in 2003 the Government has undertaken to conduct gender equality analysis in all policy areas and where it is possible identify gender equality objectives and outcome indicators. This started in 2004 and results will be presented to the parliament in 2006. And for the forest policy this, has among other things, led to that in the letter of instructions for 2006 to the Swedish Forest Agency has been given as a specific objective to increase the adjustment of it work with the advisory service, education and information to be better adopted for both women and men. Further gender analysis will also be done in the forest policy area. Additionally, other work with gender issues will be carried on, both internal and external. The Ministry of Industry, Employment and Communications of course regards your work that will be presented in this conference as clearly important and will be studied carefully as a further input to our efforts to continue the development of gender equality in the Swedish forest sector.

To sum up, the Swedish government is making a serious efforts it its aim in the gender policy area, and to reach the aim of the forest policy we find it important to continue to work with the gender mainstreaming process. A lot has been done but there are much more to do. The results presented in from this conference will be carefully studied and will hopefully be of help in our work with the development of gender equality in the Swedish forest sector.

Bengt Torenson

Welcome by

Dan Rugabira
Program Coordinator, Forestry Department, FAO



Mr. Rugabira, FAO and Gun Lidestav, Team leader, Team of specialists (Photo; Sven-Olof Bylund)

Dear staff, members of Team of specialists, participants, Ladies and Gentlemen,

I am delighted to be in this wonderful country for the first time and particularly in this beautiful setting of the Faculty of Forestry at Umeå.

I would like to thank the Faculty Administration and all the seminar organizers for all the facilitation that were provided to ensure a successful seminar. On behalf of the Director-General of the Food and Agriculture Organization (FAO), I would like to thank the Team of specialists for all the hard work that has been put into completing the report 'TIME FOR ACTION - Changing the gender situation in forestry'.

I would recall that the team of specialists is an outcome of an earlier seminar which was held in Viseu, Portugal in April 2001 entitled 'Women in Forestry – Strategies to increase Women's participation in the Forestry sector in Europe and North America. The Team has met five times in the last three years and the quality of the report and the pertinent

recommendations which have been made is a testimony to the excellent work well done. FAO is confident that this work will make a significant contribution to mainstreaming gender issues within the forestry sector and even beyond that, to the development and welfare of the society in general.

In FAO, gender is an important cross-cutting issue requiring organization-wide responsibilities. For each of the technical areas for which FAO is responsible (agriculture, forestry, fisheries etc), Programmes of Action for the advancement of women have been developed. These Programmes seek to strengthen the technical, professional and resource capacities of FAO to address issues of gender, and to diffuse responsibility for integrating such issues among all those working in the development arena. These programmes form the core of the FAO Plan of Action. We in the Forestry Department have for example, as a part of the FAO Plan of Action, given ourselves a set of objectives and targets in the following priority areas:

- Increase of the number women and men who participate in research, development and training activities.
- Training material that is gender-sensitive.
- Promoting income from tree resources that is gender-differentiated
- Increase in the number of women and men participating in decision-making in forestry and in the community
- Increase in the number of professional women and men working in supporting services at different levels
- Improved involvement of women in local communities for land and natural resource planning and management.
- Increase in training materials targeting gender-sensitive issues

These sets of objectives strongly match the recommendations of the task force.

FAO has championed and early recognized that women contribute to forestry in many significant ways. Women, play key roles in agro-forestry, watershed management, in tree improvement and forest protection and conservation. Forests also often times represent an important source of employment for women. From nurseries to plantations and from logging to wood processing, women make up a significant proportion of the labour force in forest industries throughout the world. Added to this, women bring a lot to the employer organizations. It has been recognized that gender balanced organizations work more efficiently.

As a member of the UN community, FAO has endeavoured and will continue to work towards the achievement of the UN Development Goals. You would all recall that Goal number three is about the 'Promotion of the gender equality and empowering women'. With the goal number three, the World Community is actually saying that the current situation in the world whereby equal work doesn't translate in equal wages for women, whereby positions in the senior level on the policy positions are unbalanced in favour of men has imperatively to change. The sustainable use of natural resources and more specifically forest resources clearly requires the participation of all, especially women.

On the positive side, while the report points to issues which are still problematic and need to be improved and corrected, there are a number of positive steps which can be mentioned.

- The number of women graduating in Forestry in Europe and North America has increased quite significantly over a relatively short period and the trend is likely to continue.
- There is also a slow but steady increase in number of women employed in the forestry sector in Europe and North America.
- Legal frameworks for equal opportunity between men and women are in place in a number of European countries and North America.
- There is also generally a strong political will towards achieving gender balance in most countries. The awareness campaigns which have been conducted over a number of years, before and after Beijing, have started paying off. In a number of countries and not only in Europe, gender mainstreaming is a part of the politically correct thinking. I am particularly proud to come from a small country in Central Africa which has 48.8 % of women Member of Parliament. Rwanda has replaced since 2003, the long time champion, Sweden which now ranks second with 45 % women parliamentarians. I would say, let us build on this politically correct cloud to advance the cause of women. In this context, you may have been following recent political discussions in southern Europe (France and Italy) where they are trying to impose what has been called 'rose quotas'. It is advancement.
- The development in the gender mainstreaming may be slow and uneven from one country to another, but the movement it is steady, on the increase and likely to continue.

In the light of the above, one may ask where we go from here.

I would say that we should remain committed. The team of specialist' activities should not cease with the release of the report.

With regard to FAO, we remain committed to gender mainstreaming and we will continue to implement the FAO gender Plan of Action as well as work unceasingly towards the achievement of the Millennium Development Goals.

In the follow up to the recommendations of this report, may I propose that your thinking, discussions and exchange on this important topic should be maintained and continued.

In a period 'vache maigre' or financial lean times for all, I would propose that the debate and discussions should continue through electronic means. FAO would be willing to host List-serve discussions on the topic and take the issue even beyond Europe to other regions of the World.

FAO would also like to propose that the reports' recommendations should be given a wide audience both in Europe and North America (as the report is about Europe and North America). We would like to offer two forums appropriate for this, the European Forestry Commission and the North America Forestry Commission. These two are some of the FAO's statutory bodies which may be appropriate fora for the dissemination of the recommendations. It may be too late to have these issues discussed in the 2006 Commissions meetings but given proper preparations, the 2008 Commission could table the recommendations.


Today and tomorrow you will discuss the results of the team and other work completed and on-going in this field. I am particularly delighted to see that you have come from your respective countries, not only Europe and North America but also from Asia and Africa, to be part in this important seminar. I hope that your discussions will be productive, generating many good ideas and suggestions, and I am convinced that with our joint efforts, we will be able to have a concrete plan of action that reflect our common aspirations.

Thank you for your attention and good luck in your discussions!

Dan Rugalira

Welcome

Gun Lidestav, Seminar organizing committee



Gender and Forestry SLU Umeå 2006

Objective of the Seminar

To raise awareness of the present gender structures in forest ownership and forest organisations, and reveal the impact of gender on the perception of forest and forestry in Europe, and North America.

This will be done by **presenting and discussing the Report** prepared by the Team of Specialists. In addition, practicable methods for analysing gender structures and raising awareness will be presented.

Field trip participants will be engaged in a content analysis of the Skogs-Nolia Forest Fair and all Seminar participants will be involved by the Forum theatre. Thus, an objective is also **to provide participants with useful instruments for improving gender equality** in participant's home countries, organisations.



Gender and Forestry SLU Umeå 2006

Monday June 19

Welcome

10.00-11.30	<ul style="list-style-type: none"> • <i>Jan-Erik Hällgren</i>. Dean, Faculty of forest sciences, SLU • <i>Bengt Toresson</i> Ministry of Industry, Employment and Communications; Division Director; sustainable development and primary industries. • <i>Dan Rugabira</i> FAO Forestry Department Programme Coordinator and Departmental Gender Focal Point • <i>Gun Lidestav</i>, Seminar organising committee. Introduction to the seminar sessions and group assignments.
11.30-12.30	Lunch



Gender and Forestry

SLU Umeå 2006

Monday June 19

Topic I: Gender structures in forest ownership

Moderator: *Astrid Bergqvist* Former advisor and international forest expert at the Ministry of Industry, Employment and Communications.

- 12.30-14.30
- Report from Team of Specialists. *Natalie Hufnagel*. Secretary General, Confederation of European Forest Owners CEPF
 - Lecture by researcher PhD *Lena Abrahamsson*. Luleå University of Technology .
 - Comment from practitioner *Lars Henrik Sundby*. Deputy Chairman, Vikens Skog BA

14.30-15.00 Coffee and refreshments



Gender and Forestry

SLU Umeå 2006

Tuesday June 20

Topic III: Gender and perception of forests

Moderator: *Sofia Blomquist* Swedish Forest Agency

08.00-10.00

- Report from Team of Specialists. *Renate Späth*. Ministerium für Umwelt und Naturschutz, Landwirtschaft und Verbraucherschutz des Landes Nordrhein-Westfalen.
- Lecture by researcher. *Dulce Armonia Borrego*, Autonomus University of Barcelona
- Results from the content analysis performed at the Skogs-Nolia forestry fair. *Patrik Häggqvist* SLU.

10.00-10.30 Coffee and Refreshments



Gender and Forestry SLU Umeå 2006

Monday June 19

Topic II: Gender structures in forest organisations

Moderator: *Åke Barklund* Chairman of Swedish Association of Graduates in Forestry

15.00-17.00

- Report from Team of Specialists. *Liz Agpoa* Chief of Staff Forest Service US
- Lecture by researcher. *Maureen Reed* Sustainable forest management network University of Saskatchewan, Canada
- Comment from practitioner. *Gunnar Olofsson* President and Chief Executive Officer, Sveaskog.

19.00-22.00 **Seminar dinner and Forum Theatre** "A day in the life of a forester" Forestry students union house



Gender and Forestry SLU Umeå 2006

Tuesday June 20

10.30-13.30

Practical implications Group assignments/Workshops on Topic I-III.

Lunch available from 11.30

13.30-14.30

Presentation of results from group assignments/Workshops

14.30-15.00

Conclusions and recommendations

15.00

Coffee and refreshments

15.30

End of Seminar

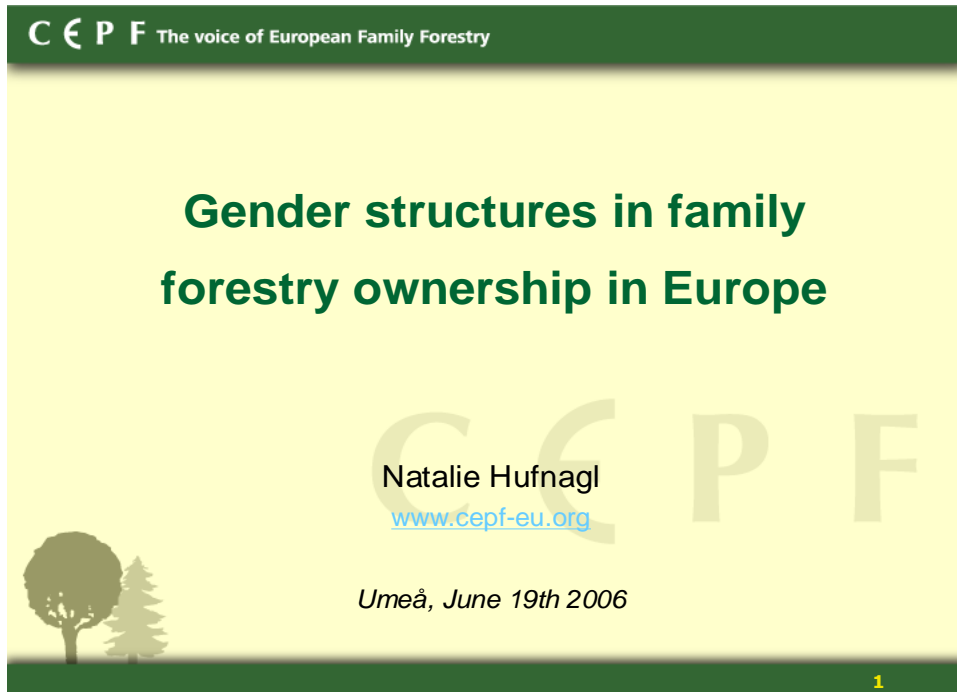


Topic I: Gender structures in forest ownership

Gender structures in family forestry ownership in Europe

Natalie Hufnagl


Secretary General, Confederation of European Forest Owners, CEPF



C E P F The voice of European Family Forestry

Structure

1. Some words about the CEPPF
2. Why does gender balance matter?
3. ToS examples: Sweden, Nordrhein-Westfalia, Norway, Finland, Baltic States
4. Conclusions



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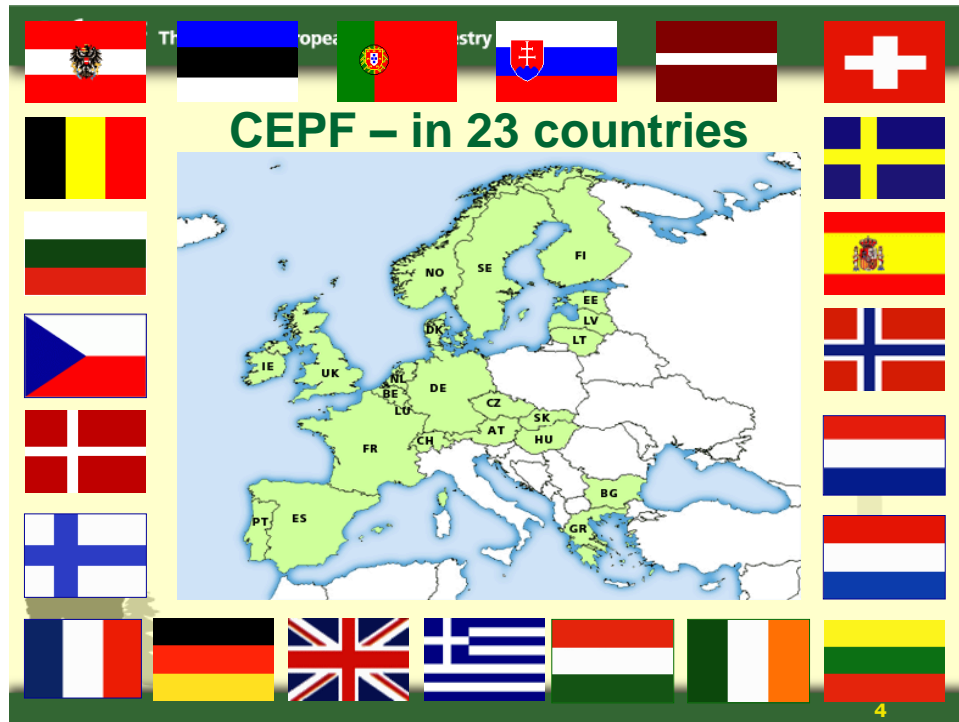
C E P F The voice of European Family Forestry

CEPF – The voice of European Family Forestry

- Founded in 1996
- Represents the interests of family forest owners vis-à-vis the **European Institutions**
- Participates in international and global forest policy fora
- Assembles national forest owner associations of 23 European countries



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CEPF The voice of European Family Forestry

Vision

Being the heart and representative of family forestry in Europe enhancing the values of private property through sustainable forest management

Mission

Assist and strengthen national forest owners' organisations in Europe to maintain and enhance an economical viable, social beneficial, cultural valuable and ecological responsible sustainable forest management



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Table 32: Ownership structure in the ECE area

Region	Public ownership (%)	Private ownership (%)
Europe	45.2	54.8
15 European Union countries	29.8	70.2
CIS	100.00	0
North America	63.2	36.8
Canada	89.7	10.3
United States of America	33.3	66.6
Other TBFRA countries		
Australia	73.0	27.0
Japan	41.0	59.0
New Zealand	69.4	30.6
Total	80.7	19.3

Source: TBFRA, 2000.

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Why does gender balance matter in family forestry?

1. Generation to generation concept
2. The Wood age – forests and forestry in the 21st century
3. Communication that appeals to women as day-to-day decision makers
4. Use it or loose it!




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C E P F The voice of European Family Forestry

ToS Examples

1. Lack of data as lack of awareness?
2. Sweden: Equal rights on smaller land
3. Nordrhein-Westfalia: Smaller size & lower association degree
4. Norway: 20 years of awareness building for equal rights
5. Finland: Inbalance between policy and implementation level
6. Baltic States: Basic challenges overlaying gender awareness



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C E P F The voice of European Family Forestry

Conclusions

1. Discrepancies between responsibility on the ground and decision power on policy level
2. Recognising women's role as key consumers
3. Influence of urbanisation on gender specific attitudes towards sustainable forest management
4. Time for action – living forests for livelihood!



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Natalie Hufnagl

Forestry ownership: hero story, family matters or just business?

Professor Lena Abrahamsson
Human Work Sciences, Luleå University of Technology

Forestry ownership: hero story, family matters or just business?



Some reflections on gender,
organization and entrepreneurship in
forestry

Forestry ownership: hero story, family matters or just business?

Women in family forestry

- 37% of all owners in Sweden are women
 - in the Baltic states 50% of the owners are women
 - quite a lot of women?
 - more than small companies (25%)
- But clearly more men own forestland
 - 63% men (in Sweden)
 - and men own larger areas, more often inherit the land and are more often single owner
- Women are under-represented in owner associations
 - board level: 8-20%
 - membership: 15%
 - the husband is the member if both husband and wife are owners

Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

Gender in family forestry

- Women are under-represented (and made invisible) in trade magazines
 - 8-12%
- Men see themselves as
 - forest farmers
 - self-employed in foresting
 - main responsible for decision-making and practical work (and absolutely not the wife)
- But times are changing (especially in Norway)
 - the member registers are now being updated with both names

Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

Some reflections on gender, organization and entrepreneurship in forestry

- ❑ Comparisons with results from two projects
 - Organizations in small companies
 - ❑ diffuse and informal 'family' type of work organization
 - ❑ the step to a more strategic and formal organization
 - Safety and mining work
 - ❑ a study on workplace culture at LKAB in Kiruna and Malmberget
- ❑ Some basics on gender theory

Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

The entrepreneur as organization?

- ❑ Small companies are often organized around one single person
 - the entrepreneur, the founder, the owner
 - he controls and does everything by himself
 - very difficult to delegate work tasks or responsibility
- ❑ The hero story?
 - the manager's story and glorification of the company and of himself
 - ❑ not necessary the same story as the rest of the family or the employees
 - but the husband's story is the story we recognize and know
 - ❑ spread in research, in newspapers, in trade associations ...
 - ❑ rewarded in the local community
 - close to myths and the rhetoric around entrepreneurship

Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

Masculinity and entrepreneurship

- ❑ The hero stories of small companies are stories of men on men
 - the simple hard working man
 - the lonely adventurer, fighting against the wind, taking risks
 - the survivor, building up the company from two empty hands
- ❑ Entrepreneurship and management – is seen as a business only for men
 - the history of the company is built on grandfathers, fathers and sons
 - the husband is seen as the entrepreneur and the owner
- ❑ The women are seen as 'wives' and 'support' – or total invisible in pictures and texts, in spite of that
 - 25% of all small companies are owned and managed by women
 - many companies are owned 50-50 between wife and husband
 - and both the husband and wife is often active in the company

Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

Women in entrepreneurship as something wrong?

- ❑ Women are seen as insufficient
 - as lacking the right competence (whatever competence they actually have)
- ❑ Women are seen as exception
 - not as real women
- ❑ Women are seen as a complement
 - a valuable resource, but as something very different
 - 'female entrepreneurship'
 - 'female attitudes' – co-operation, focus on 'soft things', not taking risks, not working for profit
- ❑ None of these things have been proved
 - women and men in lead a company in the same way

Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

Family matters?

- A family-like and patriarchal structure
 - a 'father' surrounded by support functions (often the wife and children)
 - a traditional gender based organization structure (based on the ideas of 'father' and 'mother')
 - women in typical 'female' jobs (support, administration, economy)
- Management and ownership inherited in the family
 - often through the male line

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Forestry ownership: hero story, family matters or just business?

The diffuse organization

- Family members are movable in the company – can go in and out
 - sons, daughters and their spouses are given central roles in the company, almost as a law of nature
 - also brothers, cousins, uncles are often employed, not recruited as ordinary employees
- Company questions are dealt with in private arenas
 - diffuse organization, hidden actors, but also an important support
 - some spouses (wives) are active in the company this way
 - many spouses (wives) are working outside the company financing the company in bad times

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Forestry ownership: hero story, family matters or just business?

Business?

- A step to a more strategic and formal organization
 - when there is 15-30 employees
 - activities and responsibilities are moved from the diffuse organization to a more formal
- The diffuse organization has limitations
 - a more professional and complex organization more successful when the company is growing
 - open, formal, structural control
- But the diffuse and informal organization often lingers on
 - 'growing pains' for the company
 - caused by
 - the family organization
 - the hero story
 - the anxious links to masculinity

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Forestry ownership: hero story, family matters or just business?

Strong links – gender, identity and work

- Gender homo-social organisations
 - male bonding, likeness and identification
 - power strategies or subordinated 'free-zones'
 - difficult to change attitudes and behaviour at the workplace at the organisational level as well as at the individual level
 - a kind of confusion of qualifications and gender
 - 'masculinity' is difficult to notice and often so invisible that you do not see it as masculinity, instead rather as competence
- 'The identity lag'
 - the formal work structure can mean a modern, professional and 'high-tech' organisation with demands for new qualifications
 - the symbols of the work can still be 'old-fashioned' in some aspects, based on the old type of mining work
 - the identity and the symbolic aspects of work lag behind the more structural changes at the workplace

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Forestry ownership: hero story, family matters or just business?

From underground to level seven

For a long time the underground mining work was characterised by

- a close relation between the worker and the rock
- hard physical and dangerous manual work under difficult conditions
- a certain type of workplace culture was developed – with 'macho-masculinity'?

Step-by-step new conditions for mining work have been established

- the company has continuously invested in development of new technology to increase the capacity of their mining
- a transformation from underground work close to the rock
- to remote control from above ground, at level seven in an office building close to the mine



Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

The worker's role in the technical system changes

- Automation and remote control of more and more of the production processes
 - the relationship between the worker and the rock changes
 - between the man and the rock there is always a machine and that machine is getting larger and larger
 - the distance grows by automation and advanced remote control technology
 - for many of the mine workers the actual contact with the rock is minimal
- Physical work environment improvements
- A reduced number of 'work mates' (mining workers)
- New types of work tasks
 - remote control, in a "white-collar environment"
- Qualification transformations



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Forestry ownership: hero story, family matters or just business?

Effects on workplace culture and identities

A challenge of old behaviours and attitudes

- it is other things that are important today compared to yesterday
- there is a very different type of persons and competences that the company will recruit in the future?

People and the organisation are adapting to the new demands

But this process is not at all simple and not without resistance ...



Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

Modern mining work and masculinity



The work and the workplaces are male in a concrete and obvious way

- 90% of all people at LKAB are male
- 96 % of the mining workers at LKAB are male

The mining workplaces are also male in a discursive and cultural way

- the work, the profession and the workplace culture have strong symbolic links to masculinity
- over-explicit expressions of a special type of masculinity, 'macho-masculinity'

An old opposition towards women in the mine

- the lesser workload, new competence demands and new attitudes are said to give more women possibilities to work in the mine, but that has not become evident yet

But the number of women is rising

Professor Lena Abrahamsson, Human Work Sciences, Luleå University of Technology

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Forestry ownership: hero story, family matters or just business?

Masculinity as stability – and change

- New technology and a changing work organization
 - a threat to the local masculinity rooted in the old type of mining work and identity
 - the connections between mining work and (macho-) masculinity probably make the worker identity lag stronger and longer
- The restoring of the connection between mining work and masculinity
 - still there are a number of old and new masculine 'hero stories' around that the male workers use to construct identities and to learn
- But not only restoring of the old culture or identity
 - a new type of worker identity, and understanding of knowledge, is starting to emerge
 - new types of masculinities (and femininities) share the space with the old and perhaps fading 'macho-masculinity'

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Forestry ownership: hero story, family matters or just business?

What is gender?

- Gender is social and cultural constructions
 - together we *create, build and decide* what we see as feminine and masculine
 - gender is results of *negotiations*
 - there is a lot of different ideas of what is feminine and masculine

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Forestry ownership: hero story, family matters or just business?

Big variations – but also some stability

- Big variations within the 'categories' women and men
- Woman and man, femininity and masculinity have different meanings
 - in different cultures, social classes, cities, trades, occupations, workplaces and homes
 - parallel masculinities exist at the same time
 - some have more status than others
- And they are changing all the time
 - following the changing society?
- The stability
 - built on connection to power relations in the society?
 - what's the local 'natural' gender favour large groups of men?

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Forestry ownership: hero story, family matters or just business?

The gender order

Two main mechanisms – and effects:

1. Segregation
 - segregation between women and men
 - physical and symbolic
 - large "natural" differences between women and men and between femininity and masculinity
 - stereotypic gender labeling of things, places, work, behavior and competences
 - strict and visible segregation between these 'women's things' and 'men's things'
2. Hierarchy
 - a gendered hierarchy with men at the top
 - men and masculinity often gets a higher value
 - there is often a general domination of men and a subordination of women

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Forestry ownership: hero story, family matters or just business?

Gender and organization

- Gender is one basic organisational and structural factor in society – and also in organizations
- The gender order functions in two interacting ways:
 1. Gender based sorting, organization and control (the gender structure)
 - Distribution of men and women in the organisation (number, positions, work tasks, occupations, positions)
 - Varies over time and between organisations
 2. Gender construction – social construction of femininity and masculinity
 - Ideas and preconceptions of what are suitable women and men best and of how women and men are/should be
 - Varies over time and between organisations

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Forestry ownership: hero story, family matters or just business?

Gender order as a restoring mechanism

- Gender order is so 'obvious' and 'natural' that it is invisible and routine
 - it is easy for people to re-create the old gender patterns in new situations
- Gender order can be seen as a strong restoring power
 - not only in society in general but also within work organizations
 - therefore obstacles to strategic organizational changes
 - in organizations with strong gender hierarchy and gender segregation, there are more restoration responses and difficulties in introducing organizational change

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Forestry ownership: hero story, family matters or just business?

Gender order in work organisations

□ Four main gender based mechanisms:

1. segregation of women and men:
 - physical, functional and hierarchical
2. gender labeling
3. stereotype ideas and myths about masculinity and femininity
4. myths of women's and men's work

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Forestry ownership: hero story, family matters or just business?

Processes of gender in society, organisations and individuals

The gender structure

- In education, workplaces, organisational structures, occupations, hierarchies, wage differences, power differences
- Often a gender based segregation and hierarchy
- Or gender equality!
- This could be very visible and also formal and legal

Symbols of gender

- In TV, movies, commercials, books, clothing ... etc
- The symbolic gender
- Dualism, opposites, antithesis
- Often "morally" legalise, reinforce or reconstruct gender differences
- This is also very visible, but often unintended
- Sometimes gender doesn't matter!

Interaction and behaviour

- This takes place between individuals
- Creating alliances and exclusions
- Remedial, restoring
- Often following the symbolic gender, presupposed dominances and subordinations

Individual understanding of gender and adaptation to the external gender order

- This takes place inside your head
- The individual gender
- Creating of suitable behaviour and a correct personality
- Living with paradoxes
- Deep forming of the identity, socialisation, learning ...

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Lena Abrahamsson

Gender balance in family forestry; A question of leadership

*By forest owner Lars Henrik Sundby,
Deputy Chairman, Viken Skog BA, Norway
www.viken.skog.no*

Introduction

First of all I would like to thank Dr. Gun Lidestav and her “Team of Specialists” for being invited to this seminar.

This gives me a good opportunity to tell you about how we practice the work to gain a better gender balance in the Norwegian family forestry organizations. To be here, participating in the discussions, will also give me the opportunity to learn more about the issue and bring this back home to Norway and Viken Skog.

The goal “Changing the gender situation in forestry” is important for the whole forest sector. I will come back to that at the end of my contribution. So therefore, on behalf of the forest owners I represent, I congratulate you with your impressive report and for this valuable seminar.

My name is Lars Henrik Sundby, and I am the deputy chairman of Viken Skog, being the largest forest owners’ organisation in Norway. Viken Skog is representing almost 1/3 of the organized forest owners in Norway.

I will start this speech by giving you a very brief introduction to the Norwegian forestry sector before I present my next item, which will be my comments to chapter two of the report we have just got presented. Thereafter, I will present to you how we are dealing with the gender balance issue in my organisation. Finally, I will bring to the table some views about why the family forestry organisations need to succeed in gender balance in the future.

The Norwegian forestry sector

The forests

Norway is a mountainous country. 20% of the land area is situated higher than 900 meters above sea level. Approximately 37% of the land area is covered with forests, while productive forest covers only 20% of the land area.

Because of difficult terrain and long distance transport, the economical forestry is limited to only 50% of forested area. As you can see, the annual growth is twice as big as the annual cut, -so we are getting more and more old forests.

Ownership structure

There are some 121.000 forest holdings in Norway. No other country in Europe has got a higher share of private owned forests than Norway (80 per cent). Forestry in Norway is a family affair and the average size of a Norwegian forest holding is about 50 hectares.

The Norwegian Forest Owners' Federation is a co-operative organisation. Almost 50% of the forest owners in Norway are members of our organisation. These members are organized in 368 local organisations. Furthermore, these are organized in 8 district co-operatives, Viken Skog being one of them.

Major comments to chapter 2 of the report (concerning family forestry)

I read your report with much interest. In particular, I would like to give some comments on Chapter 2, where you cover the family forestry issues.

Lack of data

To a large extent, I recognize your description of the situation within the family forestry. The chapter also gave me new information about the situation in other countries

The Baltic States

I would like to pay particular attention to your subchapter concerning the situation in the Baltic States. Your report states that the majority of the new forest owners are more than 60 years of age and that more than half of them are women. That is rather interesting. One can only imagine how challenging it is for families that once again get their family forests back in their own ownership. But after several generations in the ownership of the state, I see that the lack of forestry competence might be a huge challenge to overcome. On the other hand, both men and women will actually be in the same situation in this case. Both sexes will need basic competence on forestry issues, market conditions a.s.o. This means that in contradiction to countries with traditional family forestry ownership, it may be easier to achieve gender balance in the Baltic States.

Comparing female and male owners in Sweden and Nordrhein-Westfalen

I found it interesting that you, in your report, describe the conditions in Sweden and Nordrhein-Westfalen with at least one thing in common; The values differs between female and male owners, for instance concerning the environment. This underlines why it is important to achieve gender balance within the forestry sector in general and the forest owners' organisation in particular. A balance will make the behaviour of the forest owners more in line with the rest of the society. Even if the rest of the society consists of half of each sex, many decisions and actions are actually dominated by women's values.

Share of female owners

Finally, I have to comment on the differences concerning the share of female forest owners' within the Nordic countries. I read in your report that Sweden and Finland have approximately 40 per cent women as registered owners. In contradiction, the share is only 22 per cent in Norway. I think Norway is still affected by a law concerning the right to heritage farms and forests, giving priority to men. Even if the law was changed several decades ago, we still see the consequences of this law. On the other hand, approximately 80 per cent of the

forests holdings in Norway are owned by the couples together. So the potential for more women within our organisation is huge!

Women within the organisations

Concerning women's share of the Board of Directors within the forest owners' organisations in the Nordic countries, Norway seems to have taken a leading role, having a share of 30 per cent, while Sweden follows with 15-20 per cent. Finland seems to have a long way to go, with only 3 per cent share of women at the district level. But I am sure we will see new figures from Finland soon, as their equality programme is approved, aiming at increasing the share of women in decision-making bodies within MTK to one-third.

Finally, if we take a look at the figures concerning women as employees, Finland can show up a much better share of women compared to for instance Norway, where only 4 per cent of the local forestry advisors and senior positions are women.

Gender actions within Viken Skog

Although the means and actions to increase the number of women within the Norwegian forestry sector have been on the agenda for twenty years, the share of women within the sector is still low. I see from your report that the gender situation in forest owners' organizations in other countries are even less balanced.

Lately, more women have become board members in Norway, for instance within Viken Skog. In our case, this is a result of a goal-oriented process at the request of the Board of Directors.

Twenty years on the agenda

Looking back, we had much political focus on gender aspects in Norway in 1986 and the following years, due to former Prime Minister Dr. Gro Harlem Brundtland and her Cabinet. Women's rights were on the political agenda in different ways. Among other things gender quotation was introduced as a tool to ensure gender balance in governmental committees and boards.

After centuries where men were the preferred forest owners according to a law concerning heritage of farms and forests, the Norwegian forestry sector was the men's world. Therefore, twenty years ago, some of the forest owners most likely expressed their support to gender balance without actually supporting the idea after all.

In 1986, the organization Women in Forestry was also launched in Norway, as the first of its kind in the world, I believe. The new organization ensured that the gender issue was on the agenda within the forestry sector for several years. The organization achieved respect for their work by the government as well as the forest owners' organizations. I also recall that the vision of Women in Forestry was to make the organization redundant in the future. They brought forward ideas and proposals, but let the established organization carry out the actions whenever possible. We found that to be an interesting strategy.

Unfortunately, the progress on gender balance within the family forestry in Norway did not develop satisfying the following 15 years, even if actions were taken now and then. Looking

at the situation of Viken Skog; By year 2000, few women attended the general assemblies of the local forest owners' associations and we still had only 8 per cent share of women as members of the local boards. Similarly, the gender situation at the district level was still male-dominated. How come?

Some actions, but no plan

Even if at least some of the key people within the forest owners' organizations in Norway truly supported the idea to get more women within the forestry sector twenty years ago, few understood which efforts that would be needed to achieve the changes. Except for a pilot project in the middle part of Norway, clear objectives concerning improved gender balance were absent in the strategic plans of the forest owners' organizations. To day I might say; What a waste of time!

May be we left the gender responsibility to the organization Women in Forestry, rather than taking a more explicit responsibility ourselves? I am sure we needed the contribution from them as these women opened our eyes and were role models for other women, in particular for young women about to become forest owners. By this contribution we now have a critical mass of women within our organization. I doubt that would have been the case without Women in Forestry.

On the other hand, real changes can hardly be implemented in any organization if the organization itself is not the owner of the process. The forest owners' organizations were not ready to take this ownership twenty years ago. That is why we needed the initiatives from Women in Forestry that pushed us some steps in the right direction. However, if substantial gender improvements were to be achieved within an organization like Viken Skog, we realized that we would need a new approach.

On the Board's agenda

In 2003, Viken Skog finally changed attitude. When the Board of Directors discussed the strategic plan, we then concluded that:

- The organization was still very dominated by men. Some women were active and engaged forest owners, but they were few.
- Clear objectives concerning gender balance were missing. This meant that the actions to increase the share of women within the organization were not goal oriented

The Board of Directors decided to include a new objective into the strategic plan, stating that by year 2005 Viken Skog should increase the share of women in the board of the district association as well as in the boards at the local level.

I believe that it was a very important step we made in 2003; The gender balance questions had become a matter of concern of the Board of Directors and we agreed to do something about it. Later on, our Chairman, Mr. Helge Evju, became the Chairman of a separate gender project we agreed to launch. This way, we ensured a direct link to the board of Viken Skog.

The Government forces gender balance in the boards

I should admit that it is not by accident that Viken Skog put gender issues on the agenda in 2003. This was the year when the Norwegian Government put forward a new act that was said to be in force by the end of 2005, in case the large stock exchange companies in Norway did not achieve 40 per cent women in their Board of Directors voluntarily by this date.

This treat brought the gender issue on the boards' table in a number of companies and organizations, including Viken Skog.

We do not appreciate new regulations. We prefer to implement changes on a voluntarily basis. Besides, we saw several reasons why the gender balance should be improved regardless of the Governments ambitions.

Why gender balance?

In addition to women's obvious right to have the same opportunities as men in all parts of Norwegian society, the Board of Directors realized that:

- We could not afford not to benefit from all human resources available. To avoid 50 per cent of the competence – what kind of business can afford that?
- We needed to broaden the competence within the key positions in the organizations (i.e. BoD) to be better prepared for meeting new challenges
- Viken Skog had to leave the level of 'words only'. Year after year with nice speeches had proven not to be enough.
- We had to ensure that relevant, goal-oriented actions were taken.
- The number of female forest owners was increasing. Viken Skog should become an attractive organization for them

The Board of Directors also agreed that:

- We had to be willing to test new actions
- We had to involve the target group; The female forest owners
- We had to ensure that our gender actions were understood and approved at the decision-making level of the organization
- We had to be willing to give the actions budget priority

To summarize, the Board saw it as important to increase the women's engagement so that **Viken Skog could become at better organisation for its owners**

Situation in 2004

In 2004, we had the following situation in Viken Skog:

- Approximately 14 per cent of the members were women. This was almost similar to the share of women within the local boards.
- The shares of women participating in the annual meetings of the local forest owners' organizations were even lower; Only 8 per cent.
- At the district level 1 out of 5 (20 per cent) of the board members that were elected by the forest owners was a woman.
- There were no women in leading positions within Viken Skog.
- Only 1 out of 35 local forestry advisors were women.

We had tremendous challenges in front of us!

Gender project 2005-2006

The Board of Directors approved that a project was set up to meet the following objective:

“To contribute to the achievement of 40 per cent women in boards, committees and leading positions among the employees by year 2009”

The project aims to:

- Contribute to motivation, attention and recognition
- Make the forest owners organisations more attractive
- Stimulate for increased share of women
- Motivate women to become elected as board members – even in leading positions
- Establish network

Which actions?

Inspiration seminar

After some preliminary work Viken Skog invited all women interested in forestry within its geography to take part in a two days seminar for inspiration and exchange of ideas – a seminar free of charge. We know women are busy. Therefore, we were convinced that the programme had to include high quality speakers. Traditional forestry was not in focus, but rather items like communication, motivation, market requirements, women as key consumers, wood promotion a.s.o. The target group immediately responded. After two days the seminar was fully booked with 150 women.

The forestry language

The inspiration seminar was held in May 2005 and became a success. The group discussions proposed a number of follow-up actions. One request was to learn some basic things about forestry. We were asked to offer this for women only, which we respected. Last autumn Viken Skog held a day or an evening of “Introduction to the forestry language” in each of our nine regions. A total of 170 women participated and gave positive evaluation of the actions. More courses were requested, and these are offered this year, partly for women only and partly as mixed courses.

Publications

The inspiration seminar also advised us to improve our publications to make it more readable and interesting for women as target group. So far we have included more information in our news publication (Viken Nytt) that we believe are relevant for women.

Women’s network

As Viken Skog is organised in nine regions, we have appointed one female contact person in each region. These women are key people that communicate with female forest owners within the region to motivate them to attend forestry events. In addition, they are meant to serve as advisors on gender issues for the chairmen of the local forest owners. Similarly,

female contact people in each local forest owners' organisation would be preferable and is on the agenda, at least in some of the regions.

Promotion of wood

During the inspiration seminar last year we learnt that the participants appreciated very much to get a presentation of modern use of wood in architecture and design. As Viken Skog was about to test new ways of promoting wood at the local level, we now combine these ideas. Several events concerning promotion of wood will be offered with women as target groups, including our female owners.

By-laws

After changing by-laws last year Viken Skog now requires 40 per cent women among the owners in the Board of Directors. In most cases, also the local forest owners' organisations require this after changes of by-laws last year. The message is clear.

Election committees

The election committees are elected by the general assemblies to prepare the elections next year, giving them a key role concerning improved gender balance. The members of the election committees both have to realize the need for women within the board, they have to know how to look for female candidates and – they have to communicate with possible candidates in a way that makes these women positive to accept to become candidates. As a separate strategy we have for years recommended to elect women into these committees, to benefit from their network.

Viken Skog will pay even more attention to the election committees this autumn, to facilitate successful local processes when recruiting women.

New inspiration seminar in the pipeline

Our gender project lasts until the end of 2006. We intend to invite our female owners to a new seminar this autumn, to sum up and discuss the further approach concerning gender actions.

After 2006

What will be the next step is not yet decided. A new project could be launched, but not necessary. We could continue with the networking, with course and seminars, with female contact people in each region and at the local level. I shall not conclude in advance. First we need to evaluate thoroughly the outcome of the actions taken so far. The only thing I can assure you is that Viken Skog will continue to have the gender questions in focus. The objective for 2009 is still valid because it is important for our organisation.

Results

The gender actions have given positive results. This spring the share of women at the annual meetings of the local forest owners' organizations increased to 12 per cent, after several years at approximately 8 per cent. At least a step in the right direction!

Local level

Even more interesting; we have got more women as local board members. As you can see from the following figures, we have achieved substantial improvements in some few years.

Starting at the level of 8 per cent in year 2000, we achieved 20 per cent this spring. The objective is 40 per cent by year 2009. We are on our way and see the positive development as a proof that at least some of our actions are working.

***Share of women as board members in the local forest owners' organisation
within Viken Skog BA, 2000-2006***

2000	2001	2002	2003	2004	2005	2006
8 %	8 %	11 %	13 %	15 %	17 %	ca. 20 %

District level

Now Viken Skog has 40 per cent women among the board members elected by the owners at the district level (2 out of 5). In Norway, on average, the share became 30 per cent after the last elections.

Among the employees, I am sorry to say that no progress has been achieved. We still have only one female forestry advisor at the local level and we have no women in any leading position at the head quarter. So here we have a way to go.

Challenges for the family forestry organisations

Time for action

The report is called "Time for action". Why act?

My conclusion is that it is definitely about time to act. Not necessary to achieve gender balance in itself, but because the forestry sector can not afford not to benefit from the resources that women represents.

I would like to highlight two main reasons for this:

- The development of the market
- The development of available competence and resources

The market

The family forestry has to meet a lot of challenges. One example is the need to improve our communication with the rest of the society. In this connection the forestry sector simply has to take into consideration that women play a key role in the society concerning both consumption and development of values and views among children. In addition, some studies show that women and men tend to have some different views, women being the one most concerned about the environment. This should be taken notice of.

As you highlight in the conclusions in your report, women make 80 per cent of the decisions related to household consumption. The focus on women as key consumers was brought up in Norway already in the early 1990's.

Recently, Viken Skog and our sister organization AllSkog joined a project initiated by Women in Forestry that focuses on women as key consumers. We are finally taking this issue seriously, you might say.

In addition, at least in Norway, the majority of teachers at primary schools and secondary schools are women. Just think about how these teachers have impact on the children's development. The teachers give them a platform for future attitude, trust in our forest management or the opposite, as well as background for future consumption.

I also remind you that the values differ between female and male owners, for instance as pointed out in your report, concerning the environment with women tending to be more environmental friendly. Gender balance within the forest owners' organisation will make our behaviour more in line with the rest of the society.

Viken Skog and I personally do see a number of reasons why we need improved gender balance, as I have tried to highlight earlier in my speech. However, for those forest owners' organizations in Europe and North America who don't agree on any other reason; Women's role as key consumers is a business-reason for increased gender balance that simply can not be overlooked or denied any more.

Available competence and resources

When new generations of forest owners' are not risen up with forestry education or learning from fathers, ref. the Baltic countries as well as in Norway, the differences between sexes will probably be modified. In addition, i.e. in Norway, in almost 90 per cent of the cases the practical forestry operations are handled by employees. In the past, this used to be the forest owners' work. The decision-making process is left with the forest owners, and can be made by women and men in the same way.

Leadership

I am convinced that the most efficient way to improve gender balance would be to put the issue on the agenda of the Board of Directors and ensure that clear objectives are implemented within the economic organizations. Or to put it in other words:

**To achieve gender balance is not the responsibility of women.
It is a question of leadership.**

From a practitioner

Thank you for your attention

Lars Henrik Sundby

Topic II: Gender structures in forest organizations

Report from Team of Specialists

Liz Agpaoa
Chief of Staff, Forest Service, US

CHANGING THE GENDER SITUATION IN FORESTRY

FORESTRY ORGANIZATIONS

ARMENIA

- At present there are relatively few professional foresters and forestry technicians.
- Women are represented in forest enterprises.

CANADA

- The Employment Equality Act of 1995 (EEA) is the principle piece of legislation that governs employment equality in the Canadian workforce.
- Women make up 39% of the forestry department's workforce, the Canadian public sector averages 51.5% women. Women continue to be underrepresented at the executive and decision making levels.

FINLAND

- Forestry education is highly promoted.
- A 2004 study on foresters, showed that of the 2,500 foresters, 24% were women. This trend is expected to increase by 2008.

CROATIA

- Forestry is highly represented by men.
- Women have not reached higher level positions and decision making positions.

GERMANY

- In 2004, in the state forestry sector, women represented between 3-16% of the positions.
- The number of women with positions in forestry is decreasing in forest organizations and also in the timber industry.

ITALY

- In 2003, women in farms and forestry organizations represent 32.2% of the total employees.
- In 1992, the first female forestry ranger was employed. Women now comprise 3% of the State Forestry Corp.
- In the State Forestry Corp, in 1998, women accounted for 10.8% of the workforce. Women forest rangers represented 4.1% of the workforce. Representation overall, increased by 1.5% by 1997.

NORWAY

➤ In the Norwegian Forestry Service, in 2006, the company employed 425 people, although the share of women in forestry positions has increased, it currently remains low with only 11% of women holding forestry positions.

➤ In the state-owned commercial company, Statskog FS, forestry represents 50% of the company's economy. Since 1995, Statskog SF met the 40% requirement concerning gender balance among board members. Since then, women have held the chairperson position and in 2005, the first woman was elected to be a member of the board of directors.

POLAND

➤ Similar to other countries, forests in Poland no longer play their former role of providing timber. Special importance has become attached to their ecological functions-the conservation of biodiversity and the protection of soil, water, and air--and their social dimensions. Under the law, Polish women and men have equal prospects in terms of education, employment, professional careers and salary.

➤ The number of female graduates from the Faculties of Forestry at Agricultural Universities from 1985 to 1998 ranged from 12.9 to 24.2%.

SLOVAKIA

➤ The restriction of women entering the professional forestry workforce was dropped in 1980.

➤ The number of women entering the professional forestry workforce grew, yet not at rates expected from graduates.

SWEDEN

➤ Only 7% of the total number of employed persons in forestry are women. Numbers have decreased significantly since 1990, when 13% of all people employed were women.

➤ In 2003, 35% of people employed on National boards were women. On Regional boards, 24% were women. In the past two decades, the proportion of women studying forestry was between 20-30%.

Gender in Forestry

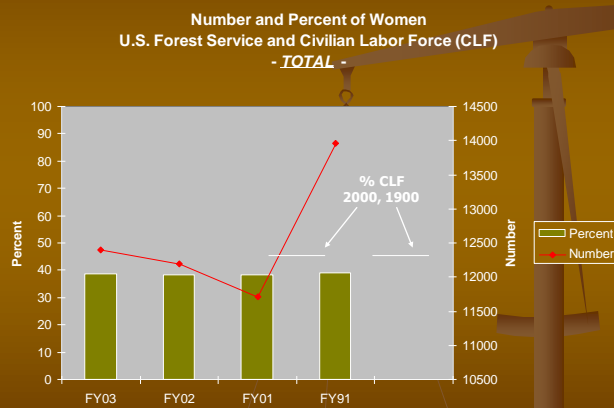
United States Report
ECE/FAO Timber Committee
Gender in Forestry Task Force

United States Forest Service

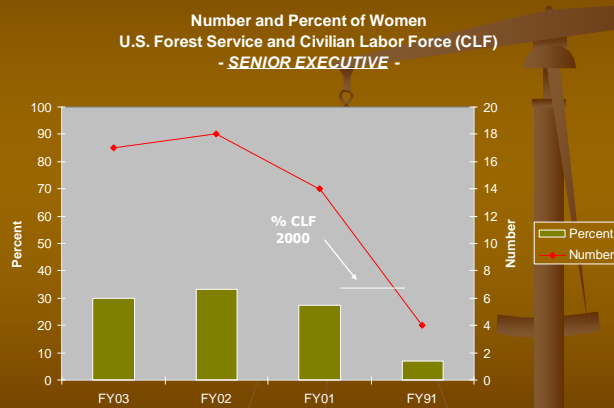
MISSION: *"Sustaining America's forests & grasslands for the benefit of present & future generations"*

- Over 35,000 employees managing public lands in 46 states.
- Manages the 192,500,000-acre (77,902,305 hectares) National Forest System for multiple purposes on a sustainable basis.
- Provides states, tribes, communities, and non-industrial, private landowners with technical and financial assistance through cost-effective, non-regulatory partnerships on 500 million acres (202,343,650 hectares) of non-federal forestland.
- Operates the largest forestry research organization in the world with scientists carrying out basic and applied research in the biological, physical, and social sciences.
- Operates, with other federal land management agencies and state and local partners, a unified command system to respond to wildland fires and other natural disasters. Last year, 99.1% of all wildland fires were successfully extinguished on initial attack.
- Manages an active International Forestry Program which protects our forests from invasive species, encourages international trade of forest products, seeks to improve management of some of the world's most threatened forests, and provides humanitarian relief following disasters around the world.

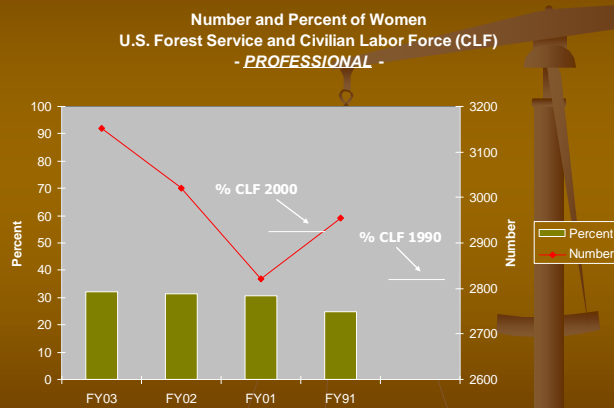
Gender in Forestry - United States Report



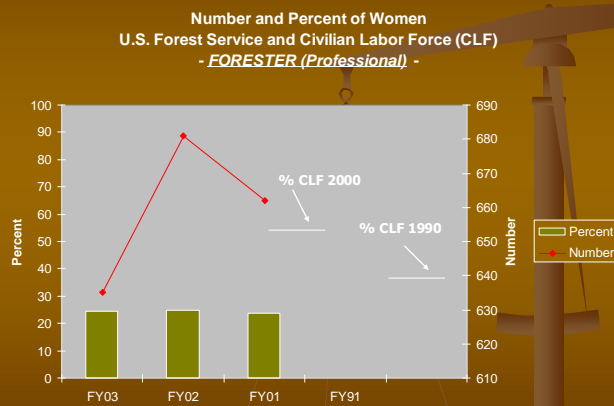
Gender in Forestry - United States Report



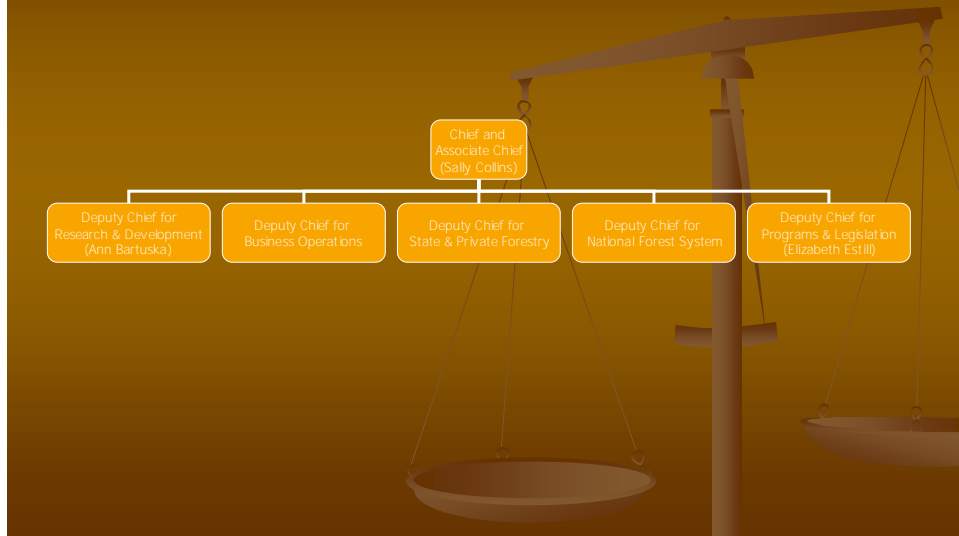
Gender in Forestry - United States Report



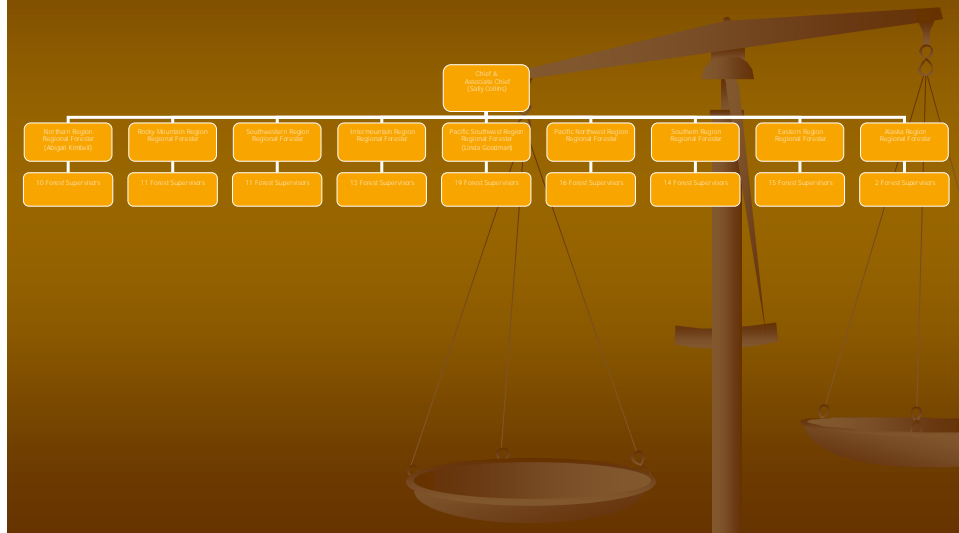
Gender in Forestry - United States Report



Organizational Chart (1)



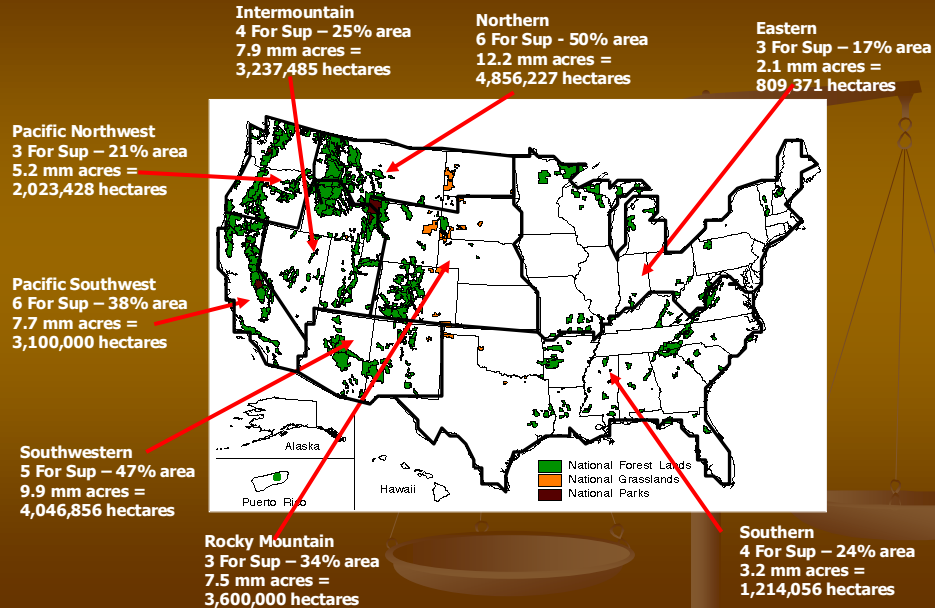
Organizational Chart (2)



Organizational Field Units (3)

- Northern Region-11 Forest Supervisors- 58 Ranger Districts
- Rocky Mountain Region-11 Forest Supervisors- 47 Ranger Districts
- Southwestern Region-11 Forest Supervisors- 52 Ranger Districts
- Intermountain Region-13 Forest Supervisors- 68 Ranger Districts
- Pacific Southwest Region-19 Forest Supervisors- 64 Ranger Districts
- Pacific Northwest Region-16 Forest Supervisors- 66 Ranger Districts
- Southern Region-14 Forest Supervisors- 83 Ranger Districts
- Eastern Region-15 Forest Supervisors- 52 Ranger Districts
- Alaska Region-2 Forest Supervisors- 12 Ranger Districts

Gender in Forestry - United States Report



Gender in Forestry - United States Report Fiscal Year 2003

- 12,404 females in all of Forest Service or 39%
- 33 Forest Supervisors
- 15 Deputy Forest Supervisors
- 140 District Rangers
- 32 National Forests/Grasslands managed by females, out of 154 total
- Female Forest Supervisors have authority over more than 55 million acres (22.5 million hectares)
- 29% of National Forests/Grasslands area managed by female Forest Supervisors
- 2 female Regional Foresters – Northern and Pacific Northwest regions; responsibility for close to 50 million acres (20 million hectares)

January 2004



Headquarters in Washington, DC



Headquarters in Washington, DC



Idaho Panhandle NF, Idaho



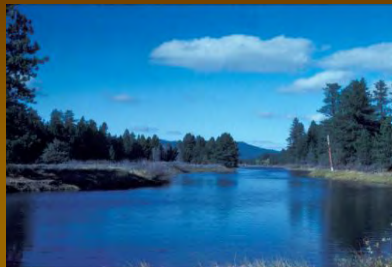
Apache Sitgreaves NF, Arizona



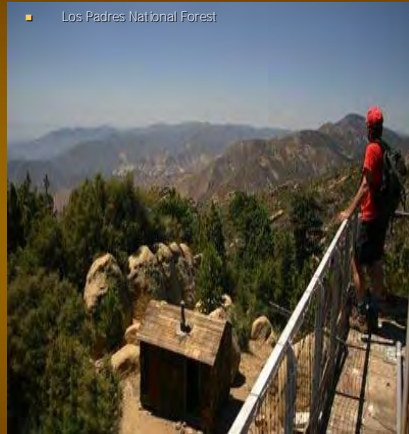
Fremont-Winema NF, Oregon



Freemont-Winema NF, Oregon



Los Padres NF, California



Los Padres NF, California



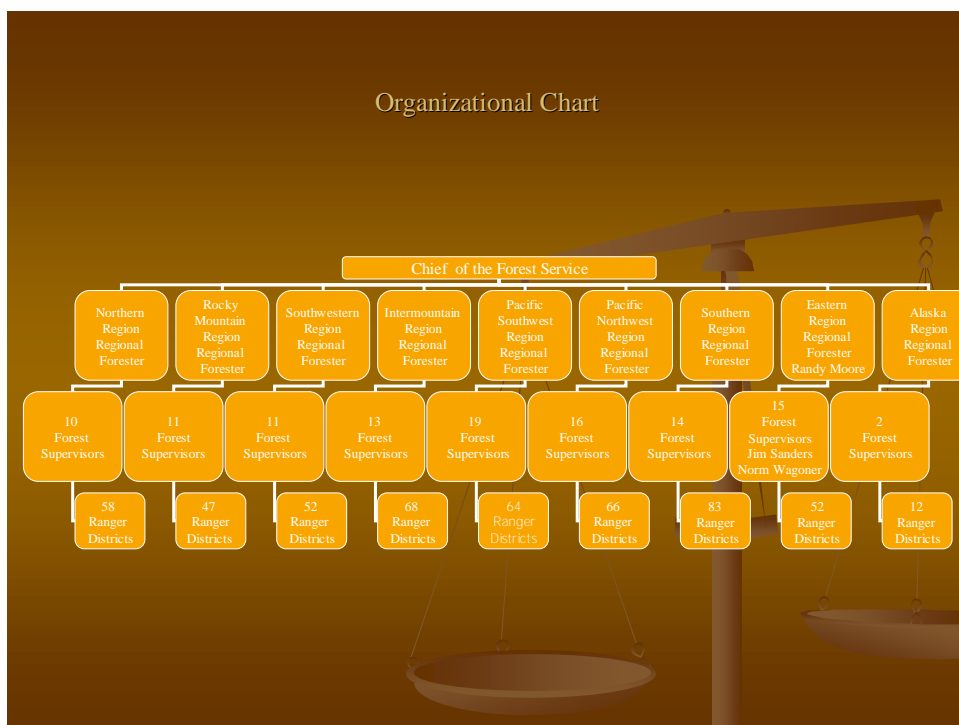
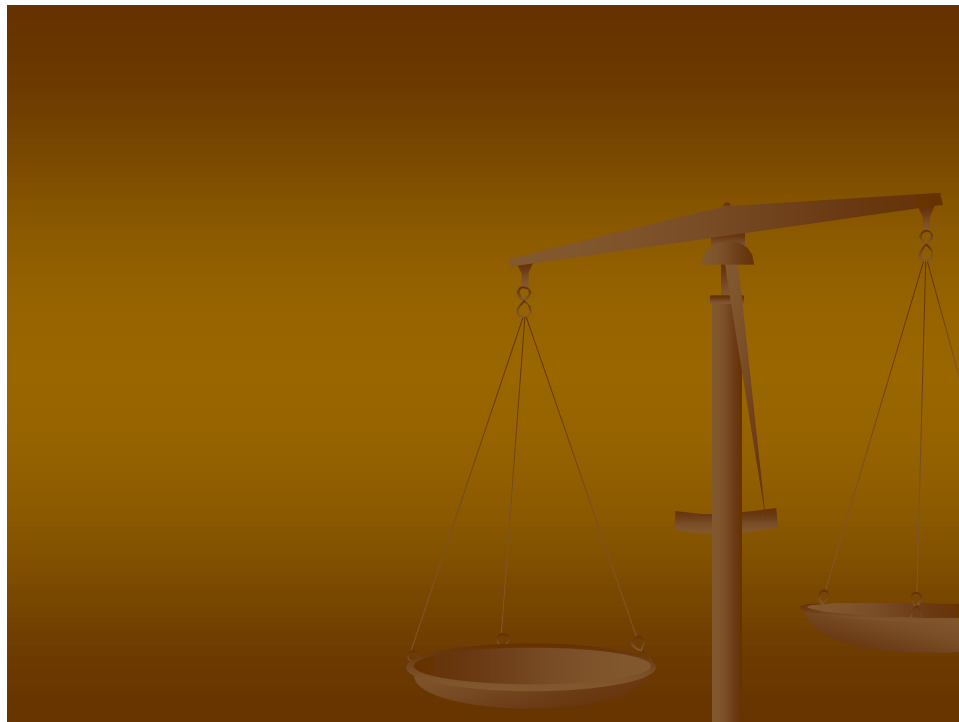
Nora Rasure

- **Forest Supervisor**
- **Coconino National Forest, Arizona**
- The forest consists of 1.8 million acres (800,000 hectares) in Flagstaff, Arizona
- **Education:** BS Forest Management, University of Illinois, 1980
- **Previous Jobs:**
 - Forest Supervisor, Colville NF: Colville, WA (7/00 to 7/03)
 - Deputy Forest Supervisor, Coronado NF: Tucson, AZ (9/97 to 7/00)
 - District Ranger, West Fork RD, Bitterroot NF: Darby, MT (1/91 to 9/97)
 - Various Positions, Las Vegas RD and Carson RD, Toiyabe NF: Nevada (6/80 to 1/91)



Coconino NF, Arizona





Liz Aspaen

Sustainable Forest Management Network

Professor Maureen Reed
Department of Geography, University of Saskatchewan, Canada

Thank you to Gun Lidestav who invited me and also to the Team of specialists. I congratulate you on a wonderful report, it is a huge undertaking and I was really interested and I learnt a great deal from the work that you have done.

I am going to flash out some of the data that related to the Canadian situation and I am going to talk about the organization of work and how gender intersects with that organization. Perhaps one of the differences in academic conferences is that almost all conferences are opened by saying welcome and thank you to the first nations who inhabited the area before the settlement of Europeans and other immigrants. That is one of the differences that I will talk about today. Another thing that I would do today is to give you a brief background on the structure of the Canadian forest industry and management because it is quite different from the European countries and there are also significant differences between Canada and USA. That set some context for talking about how we count women in and how we count women out of forestry occupations and I will speak as well to some of women's employment experiences. Women work as workers in the industry as men do. Women are preliminary not owners, our industry is owned by larger companies. I will talk about the structure of management, in terms of talking of some of the forest regions, the way in which harvesting is undertaken, land ownership and the role of average people.³



³ Transcript by Eva Holmgren

Outline

- Structure of Forest Management in Canada
- Gendered Structures in Canadian Forestry
 - Counting Women In, Counting Women Out
 - Women's Employment Experiences
- Recommendations for Change



Structure of Forest Management in Canada

Forest Regions
Size and Scope of Industry
Harvest Rates
Harvest Types
Land Ownership
Forest Tenure
Role of Aboriginal peoples

Management Structure: Forest Regions of Canada



Figure 9-3
Forest regions of Canada

SOURCE: Natural Resources Canada, Canadian Forest Service, (1995), *The state of Canada's forests 1994: A balancing act*. Ottawa, Endpage.

Draper and Reed (2005)

- About 45% of Canada's land base is forested. Boreal forests make up 1/2 area.

- BC, coastal temperate forest accounts for 45% of volume cut.

- Other forest regions are Columbian, Deciduous, Great Lakes-St. Lawrence and Acadian.

- Harvest by volume (AAC) 35% BC; 19% Prairie; 37% QC/ON; 9% Atlantic)

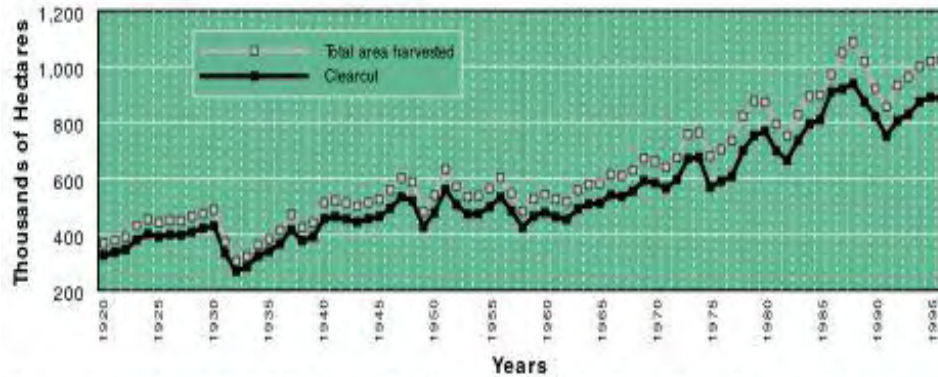
Management Structure: Size and Scope of Industry

- **Forest cover:** 45% (921.5 M Ha)
- **Commercial Forests:** 50.2% managed for timber production
- **Tree Species:** approximately 180
- **Forest types:** softwood (67%); hardwood (15%); mixed wood (18%)
- **Economic contribution:** \$34.5B to Canada's balance of trade (2004)
- **Social contribution:** 361,100 in forest industries (2004) (most in logging & paper manufacturing)
- **Harvesting rates:** 1.03 M ha annually (1995-1998) or about the size of PEI



Management Structure: Harvest Rates

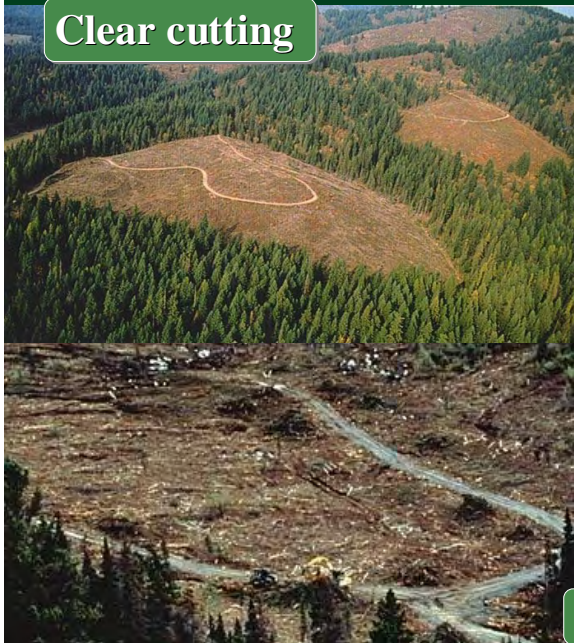
Figure 6. Area Logged Annually in Canada, 1920-1995



Sources: (For data from 1920-1992) Environment Canada, *Sustaining Canada's Forests: Timber Harvesting, Technical Supplement No. 95-4* (Ottawa: Environment Canada, 1995). Online at: <http://www3.ec.gc.ca/index/English/Home/default1.htm> (January 19, 2000).
(For data from 1993-1996) Canadian Council of Forest Ministers, "National Forestry Database Program: Silviculture: Table 6.1.1." Online at: <http://nfdp.ccfm.org> (January 19, 2000).

Management Structure: Harvest Types

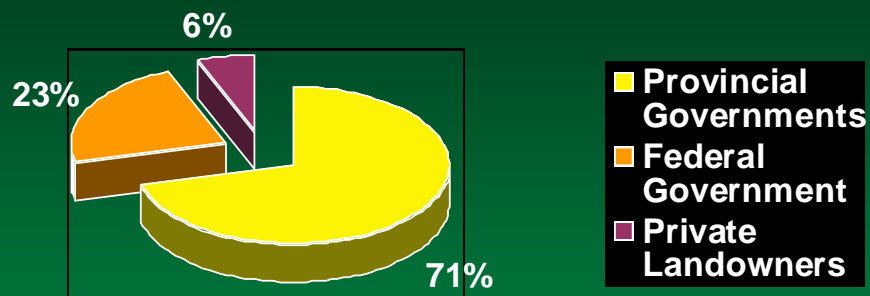
Clear cutting



Selective cutting



Management Structure: Land ownership and tenure



94% of Canada's forest lands are Crown Land (public) that are then leased to companies in area-based or volume-based tenures

Provincial governments own and manage forest lands

Federal government participates in forest agreements, data collection and monitoring, and research

Management Structure: Role of Aboriginal Peoples (First Nations and Métis)



Management Structure: Role of Aboriginal Peoples



Meadow
Lake, SK

Clayoquot
Sound,
BC

Iisaak Forest Resources

Tree Farm Licence 57



**CYPRE
OPERATING AREA**

Please treat the land with respect.

Hishuk-ish ts'awalk

FSC-certified operating area sign for Iisaak, Vancouver Island.

Summary of Management Structure

- 94% of all forest land is Crown Land (public).
- Provincial governments, not the federal government, are primary owners and managers
- Most forestry takes place in BC, Ontario, Québec, with multi-national companies contracted in multi-year tenure arrangements
- Aboriginal people are important - as landowners and/or managers and/or employees
- Current issues: moving to second growth, trade barriers, environmental activism, inclusion of Aboriginal people



Gendered Structures in Canadian Forestry

Counting Women In
Counting Women Out
Women's Employment Experiences



Counting Women In: Forestry as a masculine industry

“Let me tell you about loggers...I couldn't resist the smell of utter maleness in damp, sweaty black wool underwear sweetened by the heavy scent of fresh sawdust and chainsaw exhaust....I still love the romance of big men, big machines and big trees.... Loggers are the last of a dying breed of men who “work” for a living. Their work is dangerous and back-breaking.”
(Henderson 1993, 9)

Counting Women In: Census data reveals the structure of women's employment

In 2001, 16.4% of employees in all forest industries are female (compared to 47.6% for all other industries).

60% of part-time workers in primary forestry jobs (logging) were women; 48% of part-time workers in secondary forestry jobs (sawmills, pulp & paper) were women

What counts as forest industry jobs?

- Forestry & logging
- Support services for forestry
- Wood manufacturing
- Pulp and paper
- Furniture manufacturing

Fullerton 2006; Statistics Canada 2001

Counting Women In: Female representation by occupational category in the Canadian Forest Service

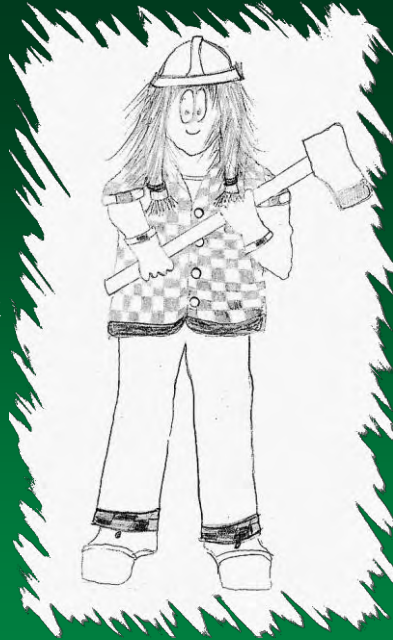
OCCUPATIONAL CATEGORY	FEMALE EMPLOYEES (%)	RATIO (% workforce availability)
Executive	16	47
Science Professionals	20	72
Administration & Foreign Service	52	93
Technical	34	106
Administrative support	94	116
Operational	6	52
TOTAL	34	90

Source: Fullerton (2006)

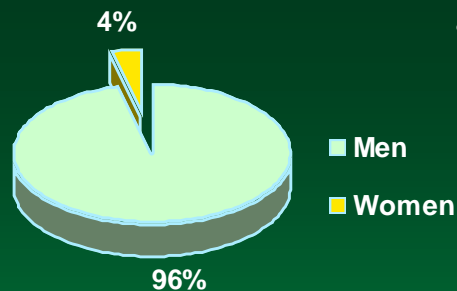
Counting Women Out:

Applying census data

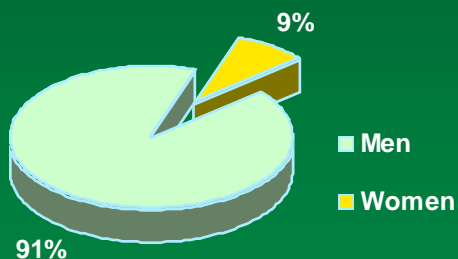
“...on Vancouver Island about 95 percent of resource workers are male, and about 80 percent of them are married. This suggests that there are about 15,000 women on Vancouver Island whose spouses work for resource industries” (CORE 1994a, 205)



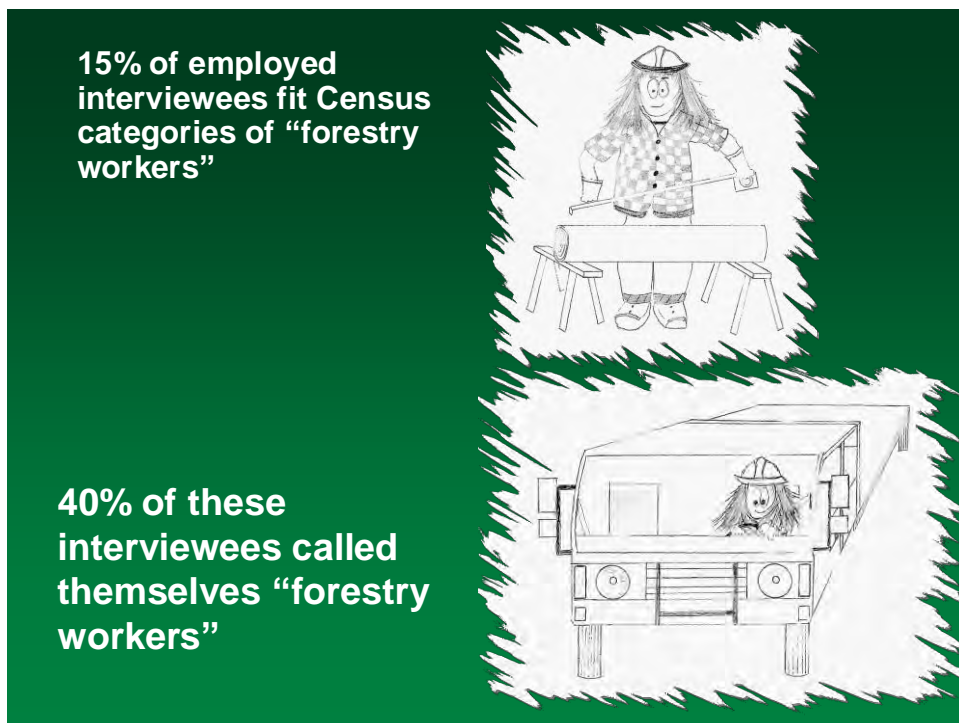
Paula Bunyan



- 1996 Census data revealed that women made up 4% of workers on northern Vancouver Island in occupations unique to primary industries.



- In 2001, this proportion was 8.7% for women across Canada



Counting Women Out

Canada-wide women working in all aspects of the industry have higher levels of education but remain

- * under-represented in management
- * and over-represented in unemployed

Women have higher levels of formal education in forestry than men (28.3% of forestry women aged 20-34 have academic qualifications in forestry fields)

- Between 4-16% of registered professional foresters are female (province by province).

Counting Women Out: Decision making

Gender participation in forest sector advisory committees

	Female		Male		Total
	#	%	#	%	#
Alberta	24	18.8	104	81.3	128
British Columbia	24	31.6	52	68.4	76
Manitoba	5	12.2	36	87.8	41
New Brunswick	11	10.0	99	90.0	110
Newfoundland	4	28.6	10	71.4	14
Nova Scotia	2	16.7	10	83.3	12
Ontario	34	13.7	214	86.3	248
Quebec	73	18.7	318	81.3	391
Saskatchewan	3	8.1	34	91.9	37
Total	180	17.0	877	83.0	1057

Counting Women Out: Decision making

Informal rules also affect women's access to and their effectiveness in decision making



To the extent that participation is a measure of citizenship rights, women's absence marks a failure of these processes to meet social sustainability criteria

FOREST COMMUNITY ECONOMIC DEVELOPMENT PROGRAM *Forest Renewal BC*



Strengthening Our Forest Communities

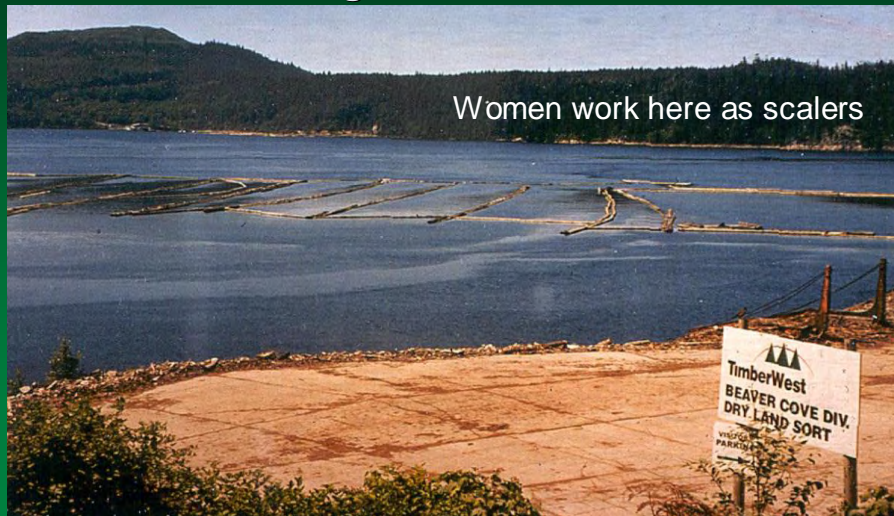
Implications of Counting Women Out: ...differential visibility, vulnerability, & access to transition programs

- Female job loss is more rapid than men's esp. in clerical and production jobs
- Women are less visible members of the forestry workforce
- Women are more likely to experience more long-term unemployment
- Women experience fewer points of access to labour adjustment services
- Labour unions are not gender-sensitive
- Transition challenges for (un)employed women are not considered

Women's Employment Experiences: Enjoyment

- Those who worked outside liked the work
- Physical work enjoyed, but older women did experience challenges (fatigue, injury)
- Some repetitious
- Shift work was given mixed reports - some liked several days' off, particularly those without young children, others reported it to be physically demanding and socially isolating

Women's Employment Experiences: Wages and benefits



Women's Employment Experiences: Health & safety

- Forest industry is well regulated, however mills are dangerous work environments where health & safety concerns include heat, dust, smell, hearing loss, repetitive motion injury, ergonomic concerns
- Paid training sessions, safety officers and inspectors, and regular meetings
- But tension between high safety standards & policies & individual demands to meet production targets

“Lots of people take lots of risks - personal risks - that the company would have been horrified to know about”

Women's Employment Experiences: Child care



- For women, juggling shift-work posed significant challenges, particularly those who were working long shifts or unusual shifts beyond 9-5 schedule.
- Child care arrangements were often informal, relying on partners or other family members
- Some woman quit because it was too hard

Women's Employment Experiences: Education opportunities

- Range of opportunities including incl. basic high school, office training, trades, and subsidies for university
- Difficult to arrange, esp. if travel is required.
- Women still not advanced through the system.
- Women don't typically take additional training



Women's Employment Experiences: Sexism

Form of sexism	Quotation	Job classification
Stereotyping	There's a tendency for a lot of the guys...to call you the secretary. You know, if you're a woman, and you work, then you must be the secretary.	Accountant in a private company
	...because there was a lot of camp work, a lot of guys. They wouldn't allow me to go into that situation.	RPF
	[In Ontario], I competed in woodsmen's and lumberjack competitions all through university and I came second out of 50. I came out here [BC] and it's, 'Oh my god, don't touch that, oh you might hurt yourself'	RPF
	The pulp mill doesn't hire women into the general population. The pulp mill hires women for clerical positions or cleaning positions.... in the past it's been you don't fight it because if you scream about not getting your job in there then that jeopardizes your husband's position.	Female resident

Women's Employment Experiences: Sexism (2)

Form of sexism	Quotation	Job classification
Promotion is limited	I haven't heard of anyone from up here (scaling) ever being promoted to any position like quality control...	Scaler
Not being taken seriously	...basically, you don't get anything unless you bang your hands and feet. They won't give you a promotion or a raise because you're doing such a great jobs or you've exceeded their expectations. The only way you'll get a raise is begging or threatening to leave... I swear, if I was six-foot four, and big hairy chest, I probably could be a lot more persuasive, but as a woman, it's really hard because they look at you as not serious...	Registered professional forester Scaler

Women's Employment Experiences: Sexism (3)

Proving	Even when I first applied for the job, even though I'd worked with the guys for twenty years.... They still have this closed mentality that they don't really want a woman in that position, you know? And I really had to prove myself, that I could do the job.	Front end loader
Lack of networks	There's a lot of mentorship that goes along with men. Like men will promote men under the buddy system, but they won't do the same for women, necessarily....women...have to work harder, be smarter, and they have to be lucky.	Scaler

...but work in government is better

Women's Employment Experiences: Workplace diversity

Aboriginal women have a double bind to prove themselves acceptable

“the occupations of women of aboriginal ancestry working in the forest sector [are] more similar to those of Aboriginal men than those of non-Aboriginal women” (Mills 2006)



Summary of Women's Employment Experiences

- Census data do not reflect work categories well. Consequently, women's employment is less visible
- Government policies and programs often exclude women's needs
- Forestry work is well-paid, particularly in rural areas
- Women in all job categories still experience sexism and reduced opportunities
- Aboriginal women are doubly marginalised



Recommendations for Change

Count women in



- Improve data availability
- Improve methods of data analysis

Improve work experiences...

- Increase child care options
- Flexible shift and overtime
- Improve other benefits (e.g. maternity)
- Improve recruitment strategies, esp. for “designated groups”
- Reduce disparity in wages between office and production workers
- Maintain training, monitoring and enforcement of health and safety standards
- Create incentives for additional training and advancement



Improve opportunities for women in decision making

- Within company and government management
- Within unions
- Within community advisory committees



Address sexism



Acknowledgements

- **Symposium on Gender Structures in Forestry** (Gun Lidestav)
- **Status of Women Canada, Policy Research Unit** (Ingrid Brueckner, Diane Martz, Suzanne Mills)
- **Sustainable Forest Management Network** (Tom Beckley and other team members, John Parkins, John Sinclair, Solange Nadeau, Len Hunt, and Sara Wallace)
- **Forest Renewal BC** (Maija Heimo, Janice May, Mary Pullen)
- **Nicholas Kinar** (cartoonist)
- **Research Participants**

Maureen Reed

Equal Opportunities within Sveaskog

By Gunnar Olofsson,
President and Chief Executive Officer, Sveaskog



Sveaskog at a glance

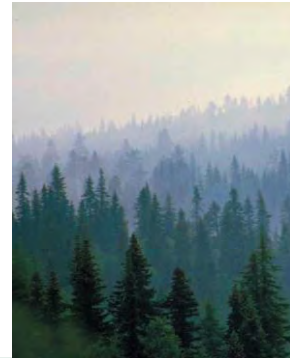
- 4.5 million ha land, of which 3.4 million ha productive forest
- All forestry conducted according to the Swedish FSC standard
- Leading supplier of sawlogs, pulpwood and biofuel
- Deliveries from own raw material assets and via purchases and exchanges
- 800 employees
- Annual sales SEK 6 billion
- Owned by the Swedish state



 SVEASKOG

Sveaskog's role

- The forest is the core business
- Long-term and sustainable management of a national resource
- Conducts research and development relating to forest assets




SVEASKOG

Guidelines for operations



- Conduct sustainable and profitable forestry.
- Be an independent player and contribute to increased competition in the timber market.
- Offer replacement land to the state in conjunction with the formation of nature reserves.
- Strengthen private farming and forestry and facilitate livelihoods and local development through add-on purchasing opportunities for land.
- Conduct extended operations within the area of nature-based tourism, recreation and experiences. Make land available to private entrepreneurs.
- These operations are to be conducted on commercial terms.


SVEASKOG

Mission

Sveaskog will increase the return on its forest capital through sustainable development of the benefits from all forest applications.




SVEASKOG

Vision

Sveaskog will lead the way in the development of forest values




SVEASKOG

Targets

- Financial targets
- Environmental targets
- Social targets




SVEASKOG

Financial targets

- Market return requirements
- Dividend – minimum 50%




SVEASKOG

Sveaskog in figures

MSEK	2005
▪ Net sales	6,155
▪ Operating profit	871
- of which capital gains from property sales	326
▪ Net profit for the year	616
▪ Fixed assets	29,688
▪ Return on equity	4%
▪ Return on net operating assets	2.8%
▪ Equity ratio	43%
▪ Dividend	355
▪ Number of employees	773



SVEASKOG

Three-year summary

MSEK	2005	2004	2003
▪ Net sales	6,155	6,272	8,420
▪ Operating profit	871	902	1,563
- of which capital gains from property sales	326		
▪ Profit before tax	524	683	1,047
▪ Net profit for the year	616	987	941
▪ Return on equity	3.8%	6.2%	7.4%
▪ Return on net operating assets	2.8%	3.6%	6.5%
▪ Equity ratio	43%	44%	46%
▪ Number of employees	773	805	2,211



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Environmental targets

- Preserve biodiversity
- Protect water and land ecosystems
- Minimise climate effects and emissions




SVEASKOG

Social responsibility

- Skills and participation
 - active development
- Working environment and health
 - preventive measures
- Diversity and equal opportunities
 - safeguard breadth
- Social responsibility and ethics
 - groupwide code of conduct




SVEASKOG

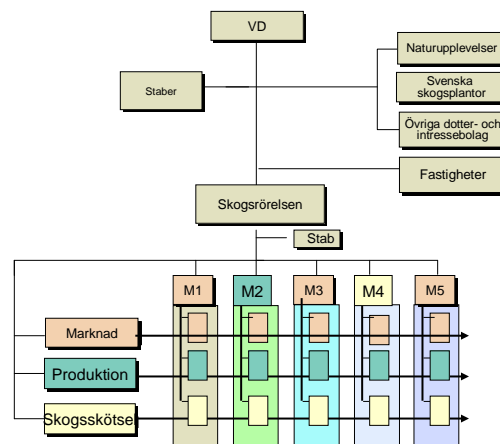
More focus on social responsibility

- Stronger and new policy documents related to social responsibility and ethics
- Relevant quantifiable social targets and KPIs based on guidelines for social responsibility
- A unifying code of conduct
- Routines and systems for reporting
- Structure for performance reporting within social responsibility in the 2005 sustainability report



 SVEASKOG

New organisation



 SVEASKOG





Women within Sveaskog

- 12% of employees (11% 2004)
- 67% of board members (63% in 2004)
- 33% of group management (0% in 2004)
- 14% of managers (12% in 2004)
- One out of three process managers is a woman



- Challenge to increase interest in forestry among young girls
- All employees have a responsibility to make Sveaskog a more equal workplace
- New equal opportunity policy



SVEASKOG'S EQUAL OPPORTUNITY POLICY

Sveaskog shall set an example with respect to equal opportunity. Equal opportunity work shall be conducted throughout the organisation and at all levels. Managers with personnel responsibility, together with Corporate Human Resources, have ultimate responsibility for equal opportunity work.

Sveaskog strives to maintain a balance between women and men in all positions and at all levels.

Sveaskog strives for good working conditions and terms of employment for both genders. It must be possible to combine parenthood with active employment in a positive manner.

Salaries shall be gender-neutral and individually based. Need and not gender shall steer competence development, and all employees shall be given the opportunity to influence their work situation.

Sveaskog does not tolerate sexual harassment or unwelcome behaviour that affects women's and men's integrity at the workplace. Other offensive special treatment is also unacceptable. A special policy against offensive special treatment and an action plan against sexual harassment have been adopted.


SVEASKOG**Employee survey**

- Measure how Sveaskog functions and is perceived as an employer
- Each manager identifies possible areas for improvement and develops action plans in consultation with employees
- The results are followed up in group management, which formulates a number of prioritized targets


SVEASKOG

The results

- 67% agreed with the statement
"I am very pleased with my total
work situation"
- 71,5% agreed with the statement
"My immediate manager is
overall a good manager"




SVEASKOG

However,

- 8% of the men and 25% of the women have experienced
some kind of insulting special treatment during the past
year
- Only 47% of the women feel that men and women are
treated equally within Sveaskog




SVEASKOG

Measures

- We take these problems very seriously!
- Discussions at manager meetings
- Code of conduct

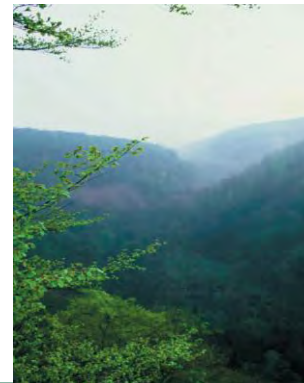



SVEASKOG

Code of conduct

A unifying policy that clarifies how Sveaskog should act as employer, business partner and member of society

- Working environment, health and safety
- Employees, personnel policy, equal opportunities
- Business ethics, customers, suppliers
- Human rights, labour law
- Environmental and social responsibility
- Information and communication
- Reporting violations




SVEASKOG

Women's forestry network

- Since 2003
- Some 30 members
- Improve the exchange of experiences and create clear female role models in the company
- Attract more women to the organization
- Participate in the annual review of the gender equality plan




SVEASKOG

Gunnar Olafsson

Can we afford gender discrimination?

Åke Barklund

Can we afford gender discrimination?

About "position" discrimination
of female scientists

Åke Barklund, Naturvetareförbundet
19th June 2006, Umeå

Källa: Naturvetareförbundet Löneenkät, 2004



Average salaries 2004

Sector	mean salary, SEK/month		
	Women	Men	Difference, %
Private	30 500	35 043	13
Government	24 703	27 996	12
Communes	24 157	26 058	7
County (Landsting)	26 098	32 611	20
<hr/>			
Total	26 888	30 916	13

Källa: Naturvetareförbundet Löneenkät, 2004



"Start salary" first 1-3 years

Sector	mean salary, SEK/month	
	Women	Men
Private	21 466	22 398
Government	19 577	20 064
Communes	20 970	21 318
County (Landsting)	21 524	25 625
<hr/>		
Total	20 630	21 382

Källa: Naturvetareförbundet Löneenkät, 2004



Naturvetareförbundet
SWEDISH ASSOCIATION OF SCIENTISTS

Likely salary influencing factors

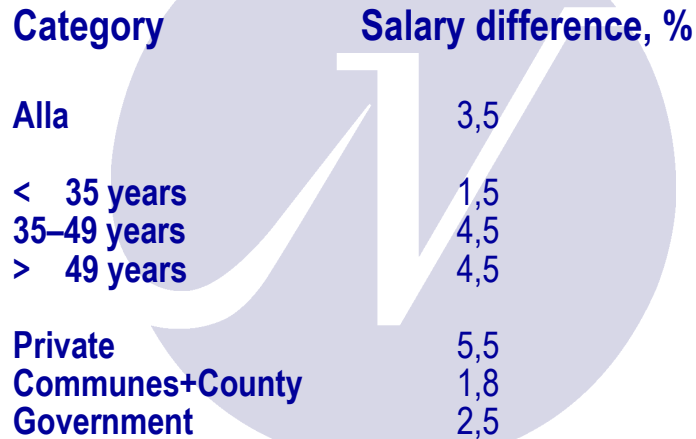
1. Education
2. Profession
3. Professional experience
4. Position level
5. Region
6. Individual "Salary talks"

Källa: Naturvetareförbundet Löneenkät, 2004



Naturvetareförbundet
SWEDISH ASSOCIATION OF SCIENTISTS

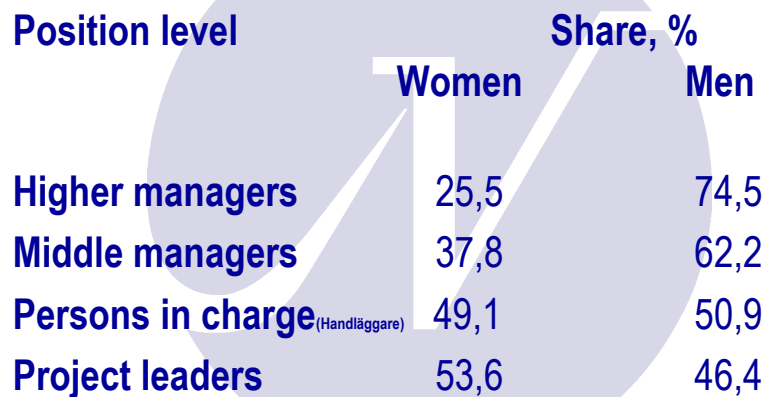
Remanining gender based salary difference after correlation of the 6 salary influencing factors



Källa: Naturvetareförbundet Löneenkät, 2004

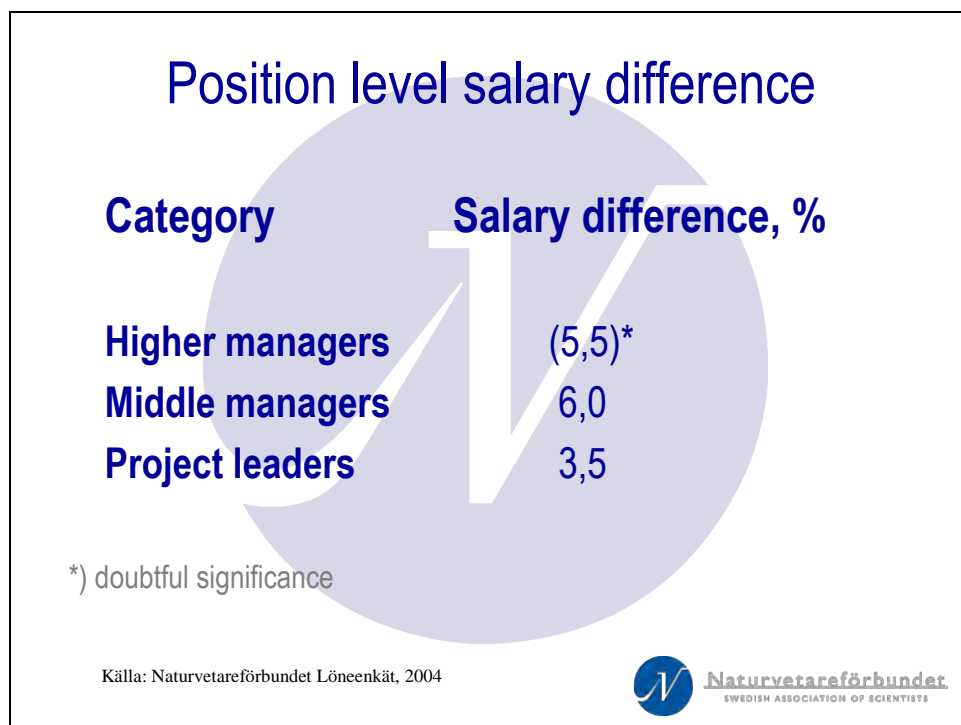
 **Naturvetareförbundet**
SWEDISH ASSOCIATION OF SCIENTISTS

Position level differences



Källa: Naturvetareförbundet Löneenkät, 2004

 **Naturvetareförbundet**
SWEDISH ASSOCIATION OF SCIENTISTS



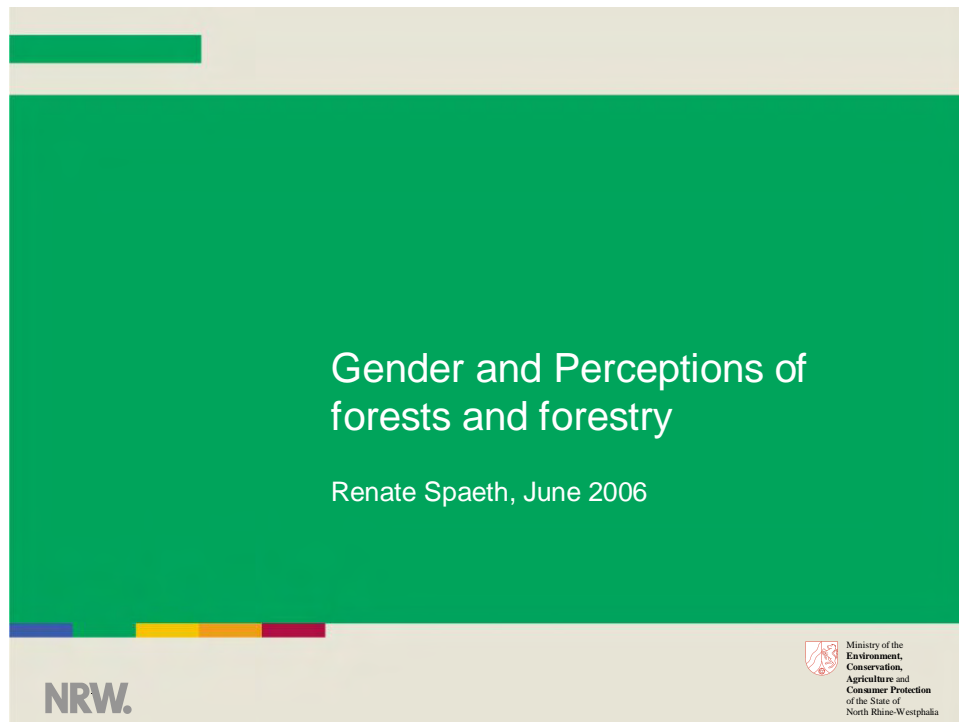
Åke Barklund

Topic III: Gender perception of forests (and forestry)

Report from Team of Specialists

Renate Späth

Ministerium für Umwelt und Naturschutz, Landwirtschaft und Verbraucherschutz des Landes
Nordrhein-Westfalen. Düsseldorf



Perceptions

- Public perceptions of forests as well as forestry have a significant impact on how natural resources are managed and used.
- Forestry is about people as much as about trees, some would even put it that
- forestry is about people not about trees**
- The ToS had to take this into consideration



NRW.

Ministry of the
Environment,
Conservation,
Agriculture and
Consumer Protection
of the State of
North Rhine-Westphalia

Perceptions

- In psychology and the cognitive sciences perception is the process of acquiring, interpreting, selecting and organizing sensory information.
- Perceptions are influenced by:
experience, science, values,
knowledge
attitudes, beliefs, ethical
concerns and the individuals
history with the landscape
- Thus to change perceptions is a highly complex task



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Consumer Protection
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North Rhine-Westphalia

Chapter 3: Gender and Perceptions of forests and forestry

- 1. What People think of forests and forestry: MCPFE Report 2003:

Europeans and their forests

- 2. The public's perception of and relation to the forest in Sweden
- 3. Innovation and Forestry: Attracting visitors and changing perceptions, an example from the UK – working with a local community
- 4. Urban nature – Perceptions of Turkish migrants in the Ruhr Area, Germany

In addition from Chapter 4: Gender mainstreaming in the National Parc Eifel, Germany:

developing implementation instruments: guidelines for public relations, environmental education and socioeconomic surveys

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Consumer Protection
of the State of
North Rhine-Westphalia

Forests in the perception of urban society

- Across Europe and North America nowadays 70-80 % of the population lives and works in cities and towns. In many countries the percentage of the population directly employed in the primary sector is already less than 5% and is still declining.
- Knowledge and personal experience about forests and forestry has declined tremendously, but
- urban dwellers have an increasing influence on the way forests are used.
- Surveys show that the male and female view on forests and forestry differs

NRW.

Ministry of the
Environment,
Conservation,
Agriculture and
Consumer Protection
of the State of
North Rhine-Westphalia

Two examples from the US

- **Nature Conservation in Northern New England
Findings from a Survey December 2002:**

One key finding:

the most sympathetic audiences to increase protection of the forests include women ...also, women more so than men express a more emotional connection to the forests.

Every single answer to the questions asked is viewed and commented from a gender point of view

- **National Forest Management in Timber and Spotted Owl Country:
A Survey of Interested People in Western Oregon and Washington, 2002**

- Was answered by 50 % female participants, but the results are not commented from a gendered point of view, neither are there hints about the gender of an extremely rich list of answers to open-ended opportunities to explain or qualify responses to policy-related opinion questions




Nature Conservation in Northern New England Findings from a Survey December 2002:

Some examples:

- Women are more likely than men to find the forest „relaxing“ and „quiet and calming“
- And vulnerable
- We have a personal responsibility to leave the forest in good shape for future generations male 70 %, female 80 %
- Forests are important places of natural beauty male 60 %, female 76 %
- Forests are important parts of identity male 53 %, female 65 %
- Forests are God's creation so we should respect them as God's work male 40%, female 58 %




Questions, recommendations and

▪ Questions we came across:

- Why do you want to know?
- Why does it make a difference if we know
- If we know – so what will be the consequences
- It has always been like that:
- Men and women are different, and shouldn't it stay like this
- Do you really want to change biology
- Why are you pressing people to change their behaviour and attitude

▪ Recommendations:

- Consider clearly what you are talking about when it comes to perceptions and values
- Be sure to involve experts in social sciences in framing research issues
- Focus on interdisciplinary forest research in this field together with social sciences
- Develop methods of public participation
- Develop communication strategies based on survey results and public participation
- Focus on girls and women in case you want to interest them for the sector




.....how to move on to bridge the huge gaps

Working group this afternoon should be helpful to set the scene for

- clarifying what we understand when we talk about perceptions and values
- Defining research fields and topics
- Distinguish between public relation methods and communication strategies
- Focus on public participation methods as a key issue for involving people
- Understand the underlying values, attitudes and ethic concepts of perceptions towards forestry
-
-




Future Option for research

- The rapid growth of cross-disciplinary and interdisciplinary work would indeed argue that new knowledge is no longer obtained from within the disciplines around which teaching, learning and research have been organized in the nineteenth and twentieth centuries (Drucker, 1989), aus C.T.S.Nair: Reinventing forestry education, unasyuva 2004.

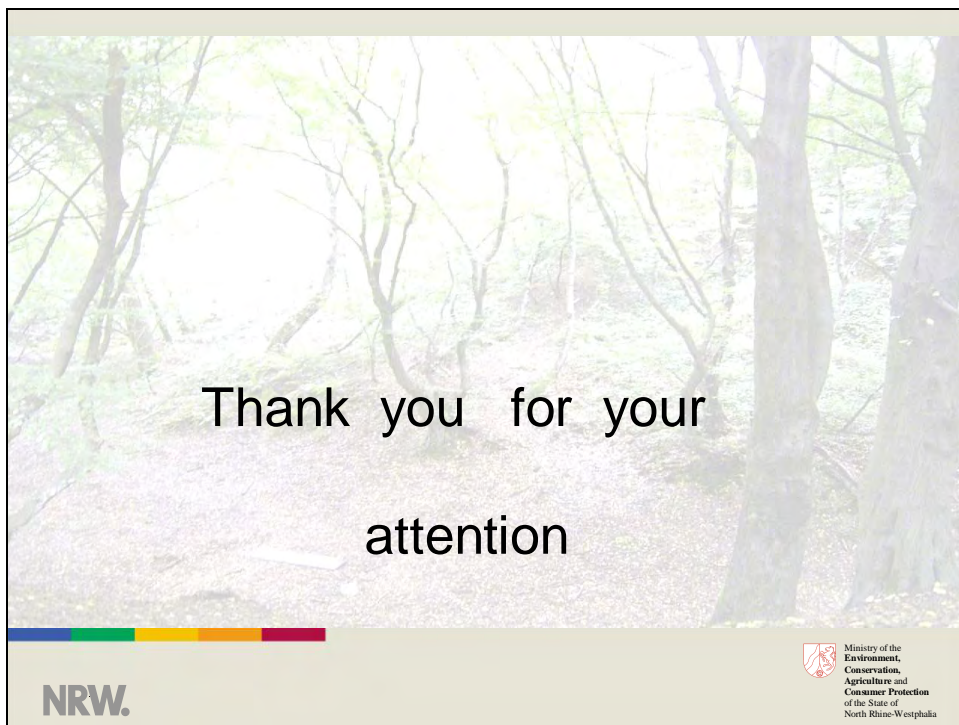
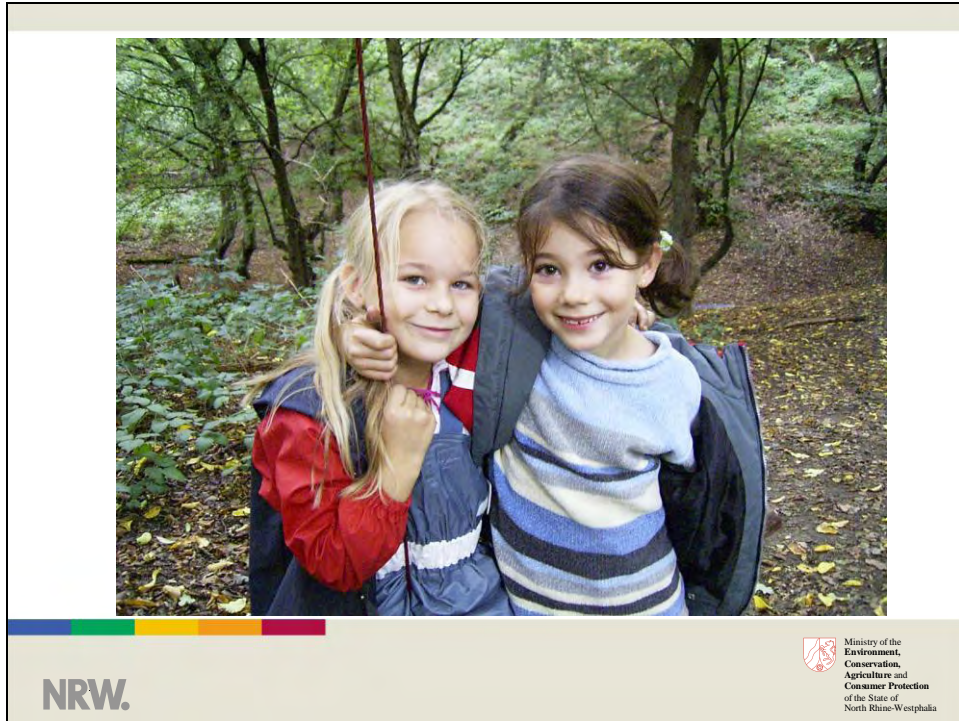
NRW.

Ministry of the
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Consumer Protection
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Consumer Protection
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Renate Späth

Gender and Foresters in Paintings - A Historical Perspective

Dulce Armonia Borrego (Autonomous University of Barcelona) and
Pere Riera (Autonomous University of Barcelona)

Summary

Several authors have reported differences in gender according to several forest variables. Some hypothesize that the gap between male and female attitudes toward forests may be closing with time. To add to the discussion, a more historical look to gender and forests is taken in this communication through the analysis of a sample of pictures from the 16th century to the early 20th century. A preliminary conclusion shows that the number of pictures with men only is larger than those with women. Furthermore, in the 16th Century men tend to appear hunting in the forest, while women appear with children. From the 17th Century onward, work the dominant activity of men, while women use forests more as a background for portraits in the 18th Century and for work and leisure in the 19th and 20th Centuries. In that regard, the gap seems to be narrowing, although women keep a less “utilitarist” approach to forests.

Content Analysis of a Forestry Trade Fair in Sweden

Patrik Häggqvist

Master of Arts, Media and communication studies

Aim of study

The overall aim of this study is to capture gender aspects the culture of forestry with a quantitative approach. Another aim is to draw attention to gender aspects of forestry.

Method

As far as I can tell there are no earlier studies with this approach. A fact that is quite remarkable since the trade fairs are an important part of forestry culture and also a major communicative event. In Sweden there are two large trade fairs, Skogsnolia and Elmia, which takes place every second year. Skogsnolia 2006 had 12 048 visitors in three days and 216 exhibitors. When approaching this field I have drawn inspiration from a numerous of different methods, among them, text based content analysis, participatory observation, mail survey and audience research.

The design of the study then became a sort of field excursion during Saturday 17/6 - 2006. It would have been an impossible project to carry out by myself and therefore I am very grateful to all the people who participated and made the study possible. We divided us into four groups that should analyze every second exhibitor on the basis of a code sheet (app 1). Out from the code sheet the groups asked the exhibitor direct questions, counted the visitors and also determined the visitors target group in terms of gender. We also had people that during one hour counted the visitors that entered the fair trade to catch the proportion of men and women.

Results

We managed to cover 77 out of 216 exhibitors (33%), which is a lower frequency than our aim, but the time was just not enough to do more. The counting showed that 77% of the visitors were male and 33% women. When we asked the exhibitors what target group they have 62% stated men or mostly men. We tried to estimate their target groups by using our self as audience. In short, we discussed what was our impression and how we perceived the exhibitors stand. Our conclusion then became that 72% of the stands had men or mostly men as target group. This is of course based on subjective perceiving but since we were quite many involved in this study and also in many ways is very alike the ordinary visitor together with the fact that audiences always are subjective tells us quite much.

When we then asked the exhibitor which visitors they actually have to their stands 89% stated men or mostly men. This is much like our own counting which showed that 88% of the people that approached a stand were men. In the case of direct communication with exhibitor and visitor 90% were men. One interesting aspect of this is that both the exhibitors and we ourselves estimated a broader target group then what is actually showed when we counted the visitors. But another and more critical question that can be raised according to this study is; Where were the women that entered the trade fair, since are counting shows that there should be 33% women in the area but they are not to be seen in connection to the stands. This leads us further to another question, do the forest industry, manufactures, organisations and others afford to miss this group of potential buyers? And for how long? Female forest owners is not a small group and there are indications that this group is increasing, both in numbers and interest.

IUFRO 6.08.01 Workshop on Gender Research in Forestry with focus on Africa, Asia, Australia and Latin America

Workshop Papers and Abstracts



Carol Colfer, Lisa Sennerby-Forse and Gun Lidestav with the report Time for action – Changing the gender situation in Forestry. (Photo: Sven-Olof Bylund)

Welcome

Gun Lidestav

Coordinator, IUFRO Unit 6.8.01, Gender Research in Forestry

IUFRO Unit 6.8.01 Gender Research in Forestry

Established at the IUFRO Congress in Kuala Lumpur 2000

Aim:

To develop projects in the various sub-areas,
possibly with interaction across several,
together with appropriate research methodology
and tools

Issues:

- Legislation
- Traditions/Social practices
- Education
- Institutions

Aspects:

- Ownership & Rights
- Management & Work Organisation
- Distribution of Benefits



Gun Lidestav 2002-06-21

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Present office holders

Coordinator:

Gun Lidestav, Swedish University of Agricultural
Sciences, Sweden

Deputies:

Janet Chaseling, Griffith University, Australia
Carol Colfer, CIFOR, Indonesia
Dr. Punam, CSK; HP Agricultural University,
India



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What's the importance of a gender perspective in/on forestry research ?

•Exampel:

- Contemporary family forestry in Europe and N A is characterised by heterogeneity and complexity in terms of ownership structure, owners' objectives, and management practices.
- To better understand the paradox of changeability and persistence, institutions and concepts of significance should be identified and combined to a conceptual model.



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Essential Concepts and Institutions

- *Social practices*
- *Land*
- *Property rights*
- *Inheritance*
- *Marrige*
- *Gender*
- *Taxes*
- *Work*



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Theoretical point of departure

(Bourdieu and Bhaskar)



Land

- In most societies **land** is a central (scarce) production resource
- Therefore usually competition of **land**
- The use of **land** are regulated



Property rights

I. The right to use



II. The right to keep out others



III. The right to dispose



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Property rights - Ownership

- A social and political construction
- The distribution of land reflects the distribution of economical power
- A symbol of status and power, affecting, local culture, individual and regional identity, etc



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Inheritance – the transfer of accumulated wealth (invested work and capital) from one generation to the other

- Principle of "First born"
- Principle of Real estate
- Last will



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Marriage

Combining properties from two families
(for shorter or longer time) into one
production unite

or

Transferring resources (land, workforce)
from one family to an other

therefore

Necessary to control/regulate in order to
ensure the proper management/yeild/tax-
paying ability



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Taxation

- Fiscal tool
- Policy tool
- Different means to reduce taxes



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Work

Generating and distributing;

- Living/income
- Status, inheritance position
- Identity, job satisfaction
by *gender*



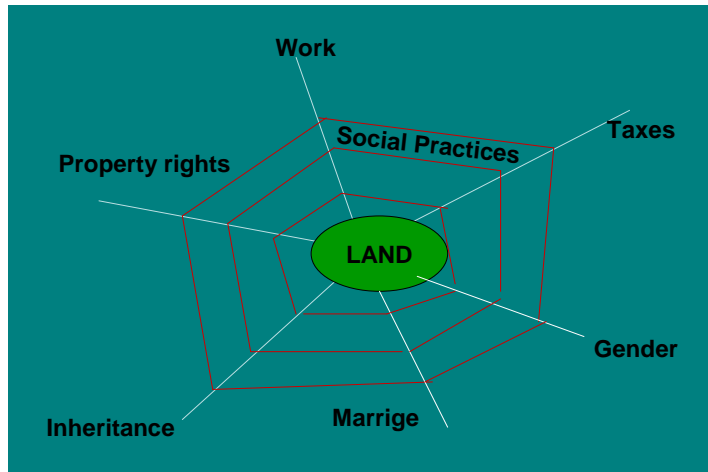
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A tool to understand the complexity

The cobweb –model



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THE COBWEB MODEL APPLIED ON FAMILY FORESTRY IN SWEDEN (1)

- Forestry work (self-employment) can be regarded as a rural masculinity.
- Yet, a significant proportion of male owners do not perform practical work themselves, and a significant proportion of female owners do planting, planning of future activities, book-keeping and tax-declaration.
- Such management work however, does not seem to yield a status as a “proper forest farmer”.
- The perception of being a forest farmer appears to be rather complex, and has not only to do with self-employment, but also the size of the forest holding.



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THE COBWEB MODEL APPLIED ON FAMILY FORESTRY IN SWEDEN (2)

- Gender has an impact on inheritance position. But, female owners inferior participation in management activities and less frequent perception as forest farmer, does not seem to disqualify women as heirs of forest properties
- Gender seems to have an impact on the terms of transfer from parents to children – resulting in different incentives for forestry management



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Gun Lidestav

Introductory note

Professor Lisa Sennerby-Forse⁴
President, SLU

Good morning,

Thank you for inviting me to this important conference, to give a short introductory note to all of you. Let me start to give you a background why I am standing here. I have been an active researcher at this university for about 16-17 years working in the field of plant physiology. I have also been quite active in different kinds of tropical forestry. I used to be a member of IUFRO, I have spent at least 10-12 years with the IUFRO organization, and when I left IUFRO about five years ago I was the coordinator of division 1 in silviculture. So, I am glad to see that IUFRO activities are very active and that this type of research has come up during the last 10 years. During my time at IUFRO, gender questions and gender formulations was a not a separate issue but there were aspects of gender research in the different divisions and especially in tropical forestry. In my own research I very seldom reflected over the gender issue, it was more pure science kind of problems that I was dealing with and the issue never came up evident in that way. Today I can see that the gender issues are everywhere and are discussed in many different areas of the society, and especially with the forests. The forests are home to some 300 million people of which half are women. The sustainable use of forests requires the participation of rural populations, including women. Although women's needs often differ from those of men in many different situations, many programs tend to overlook the women's specific needs regarding forestry, mainly lack of knowledge at the decision makers and trainers level. They lack adequate data, lack information and methodologies to address this important gender issues. So I think the lack of gender awareness constrains the sustainable use of management of forests and forest ecosystems throughout the world. And in the Consultative Group on International Agricultural Research (CGIAR) where I am a member of the science council, the gender issues are always present in the discussions of the research priorities. However, the first priority of this organization is to alleviate poverty and the discussion is that usually that poverty alleviation comes first and when that is organized in a good way then the gender issues can come up. I do not believe in this. I think that we have to work with the gender issues alongside the alleviation of poverty. It is a wrong impression that if you take away the basic problems the next step will be to try to figure out how to work with gender issues. Just look at our own society, we don't have starvation or poorness and still we are still struggling with gender and equality issues.

Within CGIAR there is a task force on gender and they are working both with gender and equality issues in their research programs. The equality issue is mainly about the number of women that are applied in the different institutes in the different parts of the world. Women are not the dominating sex in this organization, it is very male dominated and we are working very hard to balance that a bit better. The two forestry related institutes, ICRAF and CIFOR, have ideas and parts of their research programs where gender issues are addressed. Things are moving, and I am happy to tell you that they next Director General of CIFOR is a woman,

⁴ Transcript by Eva Holmgren

Frances Seymour. We give her our support and hope she will find challenging and interesting work at CIFOR.

For two more weeks I am in charge for FORMAS, the Swedish Research Council for Environment, Agriculture Sciences and Spatial Planning. Here the gender issues are very important and we have an ongoing task from the Government to address the gender issues in all types of research. This is not easy. So far we have told the applicants, when sending in their applications, to address gender issues whenever relevant. This is seldom the case, it almost never happens. It is not surprising because it is not easy to address gender issues when you work on other types of problems. You need to know how to address it and what kind of methodologies to use to make the research acceptable and of high standard. In order to do this you need to be trained, to think along those lines and know what types of methodologies to use. This is something for the universities to really look into. At the Research Council, the financing body for research, we can only try to help by organizing seminars, by creating platforms for discussions and try to bring people together address this problem, both researchers and stakeholders outside the research community.

Another aspect, when discussing the gender issue is the issue of equality. These two different things are often interlinked and also mixed up with each other. However, also the equality things are important for the further addressing of the gender issues and at the research council we have been working actively to raise the number of women in our expert groups, i.e. in our evaluation groups. We have succeeded in five years to raise the number women in expert groups from 25 percent to 40 percent. I believe we have the leadership of the league of funding organizations in Sweden in doing that, and I am proud of that. We also have been working actively on getting women taking on the chair positions in the evaluation groups. We have 20 permanent evaluation groups, and when we started the numbers of women as chairs in those groups were about 10-15 percent and they are now approaching 40 percent. We have worked actively to promote and persuade women to take on this responsibility and it works fine when they finally give in and take it on. It influences the discussions in the evaluation groups and it gives better discussions and a better view of how to look at the research projects. Another thing, when it comes to research applications, there is a common view that women are not as successful as men in certain areas to get money from the research councils. But we have very thoroughly followed the number of women or the percentage of women applications that come to FORMAS and how many of them that is actually successful in getting money. Women are very successful! We have seen this in all areas where they participate as applicants and in many regards they are more successful than men. This is also something that we would like to promote; I think it has to do with the change in the expert groups, more women in the groups, more women that are successful in writing applications, more women that feel they can do it, and that we get more applications from women.

Looking at the University world, and what is going on in different courses; in the pedagogic, of teaching, in research groups at the University, I think it is extremely important to develop the knowledge and competence among the teachers and supervisors at all levels in this concept of gender, but also as a research field in its own. In this university there are areas that are very heavily male dominated like forestry, but also areas that are very female dominated like veterinary medicine, landscape architecture and animal husbandry. We have a lot of women in those courses. In my view SLU should have very high ambitions to increase the awareness of gender and equality issues in the different education and research areas. Not

only in the research, but the students when we have the new way of teaching, and a new way of education, courses and programs in place according to the Bologna model, there will be many students that will take the step out to the working life after maybe a BA or Msc degree and it is important that they before that have been taught these aspects in there basic courses so they are trained when they come out, in order to have some impact on the society. For the PhD students there should be courses, there are courses like the on Gun have, but it should be common or possible to get that kind of training all over the university. This is something that each faculty would have to deal with.

Other ways, besides the training and education, to deal with these issues is to look at the content of the courses. We have the example of the civil engineer education which had problem of attracting women students. Some years ago biology was introduced as a part of the program and this was a total success as biology was much more interesting to women then physics and mathematics. Nowadays we have a special kind of civil engineers with biology and biotechnology focus. It is important in discussing these issues to consider the fact that there are other factors that are influencing what types of subjects or kinds of problems that are more attractive to women or to men. Those factors are things like tradition and culture and also to some degree depending on sex. We have to try to improve our understanding of why it is like that and how we can make the different areas more attractive to the underrepresented sex, whatever area and sex.

There are a lot of things to do at the university and we should have a lot of discussions in this area and I know that many things are already going on in the faculty of forestry and I will have discussions with the Deans and with those of you that are already involved in this kind of research. We will discuss how to increase the awareness and competence regarding the gender perspectives in both education programs and in research areas in SLU.

In the mean time, you that are sitting here, you are the forerunners in this male dominated area of forestry and I wish that you keep up the good spirit; the gender issue is definitely here to stay. Things can only improve, as I see it. I wish you all success as role models for others to follow you, and also all success in your work as researchers and teachers in this important area.

Thank You!

Lisa Sennerby-Forse

Important Trends in Gender and Forestry Research

Key Note

Carol J. Pierce Colfer

From What Perspective?

- American woman
- Anthropologist
- Working in a Forestry Research Institute (CIFOR)
- In the developing world (Bogor, Indonesia)
- But with experience in the 'West' (US)

Topics

- Clarification of the 'gender' vs. 'women' issue
- Greater understanding of the barriers to involving women (research, action)
- Experimentation with new approaches
 - Participatory action research
 - Health as an entry point (revisiting)
- Mainstreaming gender in forestry research institutions

Clarification of the 'gender' vs. 'women' issue

- Remaining confusion about the difference:
- Gender involves looking at roles and power differences between men, women and others
- Gender – social (not biological) construct
- Important to look at women's and men's situations within a context

Greater understanding of the
barriers to involving women in forestry

- Things we've tried
- Recurring barriers

Things we've tried

- Including gender specialists on teams
- Having = no. of men/women on teams
- Trying to get = no. of male/female respondents/participants
- Disaggregating data by gender
- Working with women continuously over time [the only one that works!]

Barriers to Involving Women

- Less knowledge of national language
- Busier schedule, no time
- Children interfere with woman's concentration
- Norms against interacting with men
- Unused to interacting with strangers
- Accustomed to deferring to men
- Unaccustomed to giving opinions
- [no one asks them]

Involving Women

**TAKES MORE TIME
AND EFFORT!**

Experimentation with new approaches

- Participatory action research
- Health as an entry point

Participatory action research

- Long term
- Collaboration between researchers or foresters and community members
- Facilitated process
- Iterative process
- Social learning
- Local determination of research/action

Advantages of PAR for women

- Uses local languages
- Lets women become accustomed to dealing with outsiders
- Facilitates learning of new skills by women
- Creates fora for women to speak out
- [Allows facilitator to learn local context and constraints for both men and women]

Health and Population as an Entry Point

- People's health in many forested areas is bad (for everyone)
- Women's traditional roles include caretaking [High birth rates may be a problem, environmentally and health-wise]
- Women tend to be strongly committed to improving health and *may* want contraception

Health and Population – Related Hypotheses

I hypothesize that

- the strong interest of women in health matters will motivate them to act together, if properly facilitated
- the skills they learn acting together will translate into better ability to act in managing local forests
[resulting in win-win outcomes]

Mainstreaming gender in forestry research institutions

- Necessary if we are to make the kinds of changes needed to conduct forest management more equitably
- Need more women foresters
- Need more researchers looking at gender
- Need to highlight the importance of gender issues more broadly

Develop & use a "Gender Lens"

Think critically in your own work about the

- impacts of new plans on men vs women (in forests, communities, offices)
- gender composition of teams
- gender expertise available/needed
- potential contribution of men and women to new programs
- settings that encourage sharing of perspectives
- relevance of new programs by gender

Don't be shy!

- Note gender inequities in your own places of work
- Speak up (gently, but firmly) about gender inequity,
- Identify contexts where women are unlikely to speak up
- Speak up about differential impacts of plans, programs, curricula, policies
- Identify champions and fellow travelers
- Serve as mentors to the young
- And be sure to practice what you preach (harder than we realize)

Enough from me...

Let's hear what the rest of you
have to say!

Carol J. Pierce Colfer

Presentations

Gender Mainstreaming and the Glass Ceiling Phenomenon in Forestry Management in India

Monika Singh

Introduction

Gender issues in forest management have been discussed from the perspective of “Women in Development”, and “Gender and Development” i.e. the beneficiaries of the programmes. Recently, gender issues have also been looked at from the ‘implementers’ point of view, i.e. mainstreaming gender in organizations. According to the UN, gender mainstreaming may be defined as “... *the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres, so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.*”

The following definition of gender mainstreaming has been developed by the Council of Europe:...*The (re)organization, improvement, development and evaluation of policy processes, so that a gender equality perspective is incorporated in all policies at all levels and at all stages, by the actors normally involved in policy making.*

So far studies on this have focused on mainstreaming gender in the private sector, voluntary sector or donor organizations involved in development work (For example Oxfam, DFID).

Researches have so far focused on the role of forest in women’s lives and cultural attachment of women with forests. They talk about how women have the knowledge of medicinal plants and uses of nature, which has not yet been tapped or documented systematically. Going on further, studies have stated how women have not been integrated in the participation and how their voices have not been heard for programme and policy formulation. By not involving women, there is often tension in the villages and programmes either tend to marginalize the women further, or do not work. Needless to say that, the studies focus on the beneficiaries’ point of view.

Recently, the need for women implementers, more specifically women officers in the Forest Department, has been voiced in many forums, albeit without adequate research. Alongside, there has been an effort on the part of non-governmental organizations to have more women workers on their rolls, trying to ensure the fact that women’s perspective is adequately addressed.

The following study discusses the above in the light of the literature available and the data collected.

History of gender interventions in forestry sector

The subject of gender and natural resources merits particular attention because women and men: interact in different ways with the natural resource base through their varied roles, work responsibilities and relationships; have different rights of access, control and ownership of natural resources; are the source of different knowledge and skills; experience the outcome of policy and environmental changes in gender specific ways⁵

International scenario

While in the 1970s and 1980s women in development advocates talked of 'integrating women into development', in the 1990s the emphasis was on the institutionalization of gender issues in development policy and planning. This shift in emphasis came from the recognition that institutions were already 'gendered', typically placing women in sex-typed services and targeting women's reproductive (family planning) or social (community management services) functions. Without changing institutions to reflect and represent women's interests, the goal of gender equality cannot be attained (Goetz, 1995).⁶

FAO's contribution to the *United Nations World Survey on the Role of Women in Development* (1989) introduced the concept of gender, and addressed "concern to put women into the mainstream in all spheres from macro-level policy and planning to micro-level project activities. It pointed to the importance of national machinery to address mainstreaming, gender sensitive national agricultural policies, and checklists and guidelines (FAO 1990). In the same year the first *Plan of Action for the Integration of Women in Development* was adopted by the FAO Conference. The Plan of Action did not yet make use of the gender concept, but in line with the Nairobi Forward Looking Strategies sought to improve women's status in four spheres identified as civil status, economic, social and decision-making spheres. It again advocated mainstreaming of women's concerns and urged all FAO departments and member governments to find ways of integrating women into their mainstream projects. By 1990 FAO documents intermittently employed the concept of gender. Between 1990-1993 gender mainstreaming was supported by a large-scale compulsory gender-training programme mandated by the FAO Conference, which managed to introduce 80% of technical FAO staff to basic gender concepts⁷. The mainstreaming of WID/gender concerns has been discussed within FAO since 1983, and recommendations to mainstream gender concerns have found their way into FAO conference resolutions at least since 1987. Prior to 1985 little specific initiatives were taken to support mainstreaming. Initially mainstreaming found its expression in mandatory gender analysis training of FAO staff between 1990 and 1993. From 1993 onwards gender training was supported by the

⁵ DFID, 2002, Sustainable Livelihoods and Natural Resource Development: A Gender Perspective. http://www.genie.ids.ac.uk/gem/index_sectors/natural/nr_coretext.htm.

⁶ Nüket Kardam, Changing institutions in women's interests. Nüket Kardam is Associate Professor and Program Head, Monterey Institute of International Studies, USA. (visited website in July 2002 <http://www.ids.ac.uk/bridge/dgb5.html>)

⁷ <http://odin.dep.no/ud/engelsk/publ/rapporter/032001-990250/index-hov010-b-n-a.html>

formulation of a Socioeconomic and Gender Analysis Programme (SEAGA) under the auspices of the WID Service.

In many countries, women are moving into positions of responsibility in the private sector as well. They are rising executives in multi-national wood and paper companies, in international environmental organizations and in trade associations. This includes women in companies that control millions of hectares of forests in the Western continents. ITTO, for e.g., has three women chairpersons⁸.

Interestingly, a study⁹ talks about the US Forest Department stating that the USDA Forest Service has been dominated by white, male foresters. The authors state that in the mid-1970s, the agency was compelled legally and morally to begin diversifying its workforce by race, gender, and profession. Concurrent with workforce diversification efforts, the agency confronted demands from the courts, Congress, and interest groups to change national forest management by emphasizing national forest preservation over the production of commodities such as timber and livestock forage. This study examines the role of women as potential organizational change agents by analyzing survey data collected from two national studies of the Forest Service in 1990 and 1996. Results from the 1996 study indicate that women continue to exhibit higher levels of general environmental concern than men, suggesting their role as potential "saviors" in helping the agency to make the transition to increased emphasis on ecosystem management. Conversely, diversification of the Forest Service workforce continues to be highly contentious, with some employees feeling that the recruitment and promotion of women without adequate training and/or experience have left the agency unprepared to meet complex demands. The inability of the Forest Service to satisfy multiple, conflicting constituencies in the face of agency downsizing suggests the role of women as "scapegoats," whose perceived lack of experience is responsible for agency shortcomings. The authors suggest that the historical convergence of workforce diversification with changes in national forest policy inevitably place women in the conflicting roles of both "saviors" and "scapegoats."

The 15th session of the Asia-Pacific Forestry Commission was held in Colombo from 9 to 13 August 1993. At that time, the Commission cited the dearth of women participants at the session as evidence of the failure of the forestry profession to engage women effectively at the highest levels of forestry decision-making, and it pledged to increase the number of women at future sessions¹⁰.

In the forestry profession, women are beginning to make up a substantial part of the forestry student body in many countries. They have also become "practicing foresters in sufficient numbers to have largely dispelled the earlier myths" that women cannot do forestry (FAO 1984). For example, in the Philippines, where the government for many years has given special attention to the advancement of women in teaching, research and extension, an extraordinary 54 per cent of the graduates of the University of the Philippines Los Banos College of Forestry are women. Half a world away, 30 per cent of today's forestry

⁸ Caswell, Stephanie, 1988, *A Sustainable Force: Women in Forestry*, speech given at the International Tropical Timber Organization Conference.

⁹ Brown, G and Harris, C. C., (2001), A Longitudinal Study of Environmental Attitudes of Women and Gender Diversification in the U.S. Forest Service 1990–1996, in *Forest Science*, May 2001, vol. 47, no. 2, pp. 246-257(12).

¹⁰ <http://www.fao.org/docrep/v2900E/v2900e0c.htm>

professionals in the US Forest Service (with 28,000 employees) and 20 per cent of the supervisors are women -- as compared to one per cent in 1976.

There seems a new recognition of the role women can play in achieving sustainable forest management. For example, the proposals for action agreed by the Intergovernmental Panel on Forests (IPF) in February 1997 contain a number of actions that speak to the special needs and contributions of local communities. But this yet needs to directly emphasize on role of women in forest services and to the special needs and contributions of women. In this, as in other issues, the IPF proposals go far beyond the Forest Principles. The Antalya Declaration adopted by the XI World Forestry Congress also recognizes the concerns of women and youth. The Fourth World Conference on Women which was held in Beijing in September 1995 -- and the number of women heads of state and government who spoke there -- bears eloquent witness to the critical and political role of women in shaping the face of the earth.

The Indian scenario

Government policy towards women in the immediate post-Independence era was basically welfarist in orientation. Mahila Mandals or women's centers set up in the context of Community Development Programs featured child nutrition programs and income generating activities, but drew in mainly relatively well-to-do women. The 1970s was a decade of intense political opposition to the government, including feminist activity. In 1974, the Committee on the Status of Women, comprising leading feminists as well as technical experts, drafted the report *Towards Equality* under the aegis of government, as part of its obligation to report on its progress towards women's equality for the 1975 UN Women's Conference. This report is a founding text of the Indian feminist movement. It concluded that, barring the gains made by a minority of middle-class women who had found employment in the expanding public services sector, the situation of women had worsened in many respects, in spite of two or three decades of planned development. Government policy underwent a shift to a typically WID approach with the Sixth Five Year Plan (1980-85), which recognized women's central role in the economy and incorporated a number of the demands of women's organizations, for example, the need to give joint titles to husband and wife where transfers of assets occurred. The Sixth Plan also contained contradictions, however, presenting the family as the basic unit of development whilst supporting the need for women to increase their economic independence. The Seventh Five Year Plan (1986-91) went further, presenting individual women as potential beneficiaries of development schemes and emphasizing the need to raise awareness about women's oppression and to build women's self confidence. It also envisaged an integrated and multi-pronged approach to women's development, incorporating employment, childcare, education, nutrition, health etc. The National Perspective Plan on Women, 1988-2000 -- the government's second major policy document on women -- was also published in this period, combining a review of existing approaches and programs with recommendations for future action, including a strong emphasis on training as a strategy, the separation of welfare and development activities between the Social Welfare Boards and Women's Development Corporations, respectively, as well as an increased role for the voluntary sector. With the Eighth Plan (1992-1997), a decisive shift in overall development strategy has occurred away from centralized planning at a national level. There is now strong emphasis on promoting community participation and people's initiative, and a range of institutional options for the delivery of services, particularly through the increased role of the voluntary sector. However, there is no special

emphasis in the Eighth Plan on the participation of women, nor other marginalized groups. There is a need for greater attention to transforming existing departments from within by working with key personnel over a period of time: this is the challenge of mainstreaming¹¹.

Literature review

Importance of mainstreaming gender

Gender perspectives need to be an integral part of livelihood systems analysis in order to obtain an understanding of interacting factors and their impact on both women and men

Some government reports have identified a significant need for a concerted whole- of-government approach to achieving equity for women in work and training. "It debunks some myths about women's position in the workforce. Women's increased participation in the work force has been held as a great gain but we have found continuing and compounding disadvantage for women - these disadvantages include a significant concentration of women in casualised and insecure employment, persistent occupational segregation, and gender barriers in important emerging industries such as info technology"¹².

In the forestry sector, the World Bank¹³ review looks at gender issues: they have identified a need to provide mechanisms for effective participation of women including employment. However, they view employment at the village level and not at the departmental level. It is more in terms of poverty elimination perspective and a means of livelihood. It also talks of the need for choices women have in forestry sector. Basically, women and the other marginalized sections need consideration. Again, here the stress is on livelihood issues and participation at decision making levels for the local women and other disadvantaged groups.

UNICEF has used the 'Women's Empowerment Framework' as a tool for mainstreaming gender throughout its programs. The current popularity of the empowerment concept mirrors the shift away from top-down planning towards more participatory forms of development and moves by donor agencies to embrace NGOs as partners in development¹⁴.

The process of 'gender mainstreaming' underway in many bilateral and international aid agencies also has implications for promoting women's empowerment¹⁵. Gender

¹¹ Bridge: development and gender: Report No 3. 1995. Background report on gender issues in India: key findings and recommendations in *Development and gender in brief, Issue 5, Approaches to institutionalising gender*. Pub: IDS, UK. This is a short report commissioned by the Overseas Development Administration (DFID), UK. February 1995(revised). <http://www.ids.ac.uk/bridge/Reports/re32c.pdf>.

¹² The Premier's Council for Women's priority project Beyond the Pink Collar - Towards Strategies to Respond to Women and Work Issues in Queensland. State of Queensland (Department of the Premier and Cabinet, Office for Women) 2000. <http://www.qldwoman.qld.gov.au/publications/media/2001/04pinkcollar.html>

¹³ 2000, World Bank Forest Policy Implementation Review and Strategy (FPIRS), Regional Consultation for the South Asia Region, Rajendrapur, Bangladesh, 17 - 19 April 2000

¹⁴ Zoë Oxaal, *Empowerment: swimming into the mainstream?* (Visited website in July 2002, <http://www.ids.ac.uk/bridge/dgb5.html>). Zoë Oxaal is BRIDGE Research Assistant. This article is based on: Oxaal, Z., and Baden, S., 1997, '*Gender and empowerment: definitions, approaches and implications for policy*', BRIDGE Report No. 40, prepared for the Gender Office of The Swedish International Development Cooperation Agency (Sida).

¹⁵ Also see Schalkwyk, J., Thomas, H., and Woroniuk, B., 1996, '*Mainstreaming: a strategy for achieving equality between women and men*', SIDA, Stockholm.

mainstreaming strategies in governments and development agencies may help overcome problems of marginalization of special women's units¹⁶.

According to the United Nations Division for the Advancement of Women, (DESA)¹⁷, the gender differences at work in every culture are reflected in the styles of both men and women decision-makers. In addition, the evidence suggests that once women achieve a critical mass, they have a chance to influence the agenda and to promote gender equality for the benefit of the society or community as a whole. In addition, since the environmental movements of the 1960s and 1970s, some women's advocates have argued that women are natural caretakers of the environment -- largely because in many rural societies, women have managed water, food and fuel resources and employed their knowledge handed down from generation to generation about herbal medicines and other natural products. They talk about the gender biases in the work place that enables or disables women from entering certain job that are traditionally seen as the male domain. This is especially in the public sector¹⁸.

Razavi¹⁹ analyses some of the more prominent strands of gender and development (GAD) discourse that have justified the need for policy attention to women on efficiency and poverty grounds. The analysis is set within the context of organizational politics, as well as the changing national and international policy environment of the past decade which has hastened the need for gender lobbies to forge strategic alliances with like-minded social forces. While admitting the analytical and methodological weaknesses that very often characterize the gender policy discourses, the paper draws attention to the political imperatives and institutional constraints within which these arguments have taken shape. A clearer recognition of these constraints and the fact that gender discourses are context-specific raises questions about the allegations of instrumentalism that are often leveled against them by institutional outsiders. Feminist advocates within bureaucracies find it useful to frame their arguments within the discourse already accepted by their institution, and their arguments should be understood as politically strategic.

Even otherwise, in organizations, it is argued that whilst large amounts of time, money and resources are being poured into Organisational Development (OD), there are limitations in terms of effective organisational change processes can be if they are not contextualised within a gender framework. For organizations to become more efficient and effective they have to address gender inequalities from the outset. A healthy organization is one in which women and men contribute equally²⁰.

Women, natural conservators?

It has also been stated that women are natural protectors of forests and other natural resources as they are more dependent on them for the survival of themselves and their families²¹. Women environmentalists like Vandana Shiva claim that in countries of the third

¹⁶ Oxaal, Z., and Baden, S., 1997, '*Gender and empowerment: definitions, approaches and implications for policy*', BRIDGE Report No. 40, prepared for the Gender Office of The Swedish International Development Cooperation Agency (Sida)

¹⁷ This issue of Women 2000 was compiled by the staff of the United Nations Division for the Advancement of Women from material prepared in connection with expert group meetings organized by the Division and from other sources. October 1997

¹⁸ As also stated by Amartya Sen as "Professional inequality", in *Frontline, Volume 18 - Issue 22*, Oct. 27 - Nov. 09, 2001.

¹⁹ Razavi, S. (1997) 'Fitting gender into development institutions'. *World Development* 25(7):1111-1125.

²⁰ Plowman, Penelope., 2000, 'Organisational change from two perspectives: gender and organisational development' in *Development in Practice, May, 2000*.

²¹ Shiva, Vandana. 1988. *Staying alive: women, ecology and survival in India*. Kali for women, New Delhi.

world, women - are dependent on nature. They take from nature the foundation of their own and their family's lives. That is why, the destruction of nature is the destruction of the source of their lives. Shiva claims that the neglect of women's participation in issues of development is also the cause of the destruction of nature²².

There have been instances when rural women have opposed nature-threatening forces and protected their own natural resources. In other words, women are seen as natural protectors and conservers of nature. The protection talked of here is mainly by the rural women's movement. Women have been seen as not just protectors of nature, but also nature has been seen as more feminine²³.

Caswell²⁴, takes the view that it is the women who can and do save the forests. In her words, "From China and India to Honduras and Cape Verde, from Sudan to Jamaica to Thailand and Indonesia, women are making a difference in their lives and their forests. They are identifying 'sacred' forests to meet household needs -- forests that are off-limits to timber extraction. They are planting trees to stabilize soils and hillsides and produce more forest products. They are creating new nurseries and establishing greenbelts and shelter belts. It is clear that given a chance, rural women the world over will act to conserve forest resources and ensure a long-term supply of the forest goods and services they depend on everyday"²⁵.

Women's attachment/use of resource

Gender is central to participatory forest management in contexts where large numbers of poor women and men are directly dependent on access to common resources for meeting survival needs. This is due to the wide diversity in socially and culturally determined gender differences in forest access and use. Due to so many women having negligible ownership of private resources, poor rural women have a much greater dependence on common resources for meeting survival needs. Participatory forest management, therefore, must not only take into account gender differences in needs and priorities but also ensure women independent access and entitlements to forest resources²⁶.

Organizations²⁷ have recognized the need for involvement of women for any intervention in natural resource regeneration and management in rural areas as it has to address the concerns of women, since the regenerated resources respond to the immediate household needs such as water, fuel, fodder and food. Hence targeted intervention for gender equality is being addressed. Some organizations have established a separate wing for gender and women's promotion²⁸ with a focus to promote their active participation in community / civil society affairs, increase their socio-economic well being and enhance their status in society. One can also see similar efforts in the donor world. In fact there is a step forward in the thought that there should be a gender unit. Now, there is talk about gender mainstreaming in these organizations. The World Bank, UNDP, ILO and other affiliated organizations are

²² Ibid.

²³ Merchant, Carolyn. 1980. *The Death of Nature: Women, Ecology and the Scientific Revolution*. Wildwood house, London

²⁴ Caswell, Stephanie, 1988, *A Sustainable Force: Women in Forestry*, speech given at the International Tropical Timber Organization Conference.

²⁵ Ibid.

²⁶ Sarin, Madhu., 1992, *Gender and Forestry*. Society for the Promotion of Wastelands Development, New Delhi, India.

²⁷ Aga Khan Rural Support Program, a Gujarat based NGO, has a special gender-mission statement. This is separate from the organisational mission statement.

²⁸ WOTR is the official Capacity Building and Support Agency of the [Indo-German Watershed Development Programme \(IGWDP\)](http://www.wotr.org/activiti.htm). It established its women's wing in September 1995. (<http://www.wotr.org/activiti.htm>)

trying to pro actively recognizing the need for women in their programs. In fact there is a move to institutionalize gender issues in the organizations. In a study²⁹ it was found that inequality exists on women's access to and participation in the definition of economic structures, policies and the productive process itself.

Participation of women: the second half of the population

Caswell, 1988, found that the local women are excluded from decision-making, neglected by development programs and ignored by forest management, even when they act as heads of household, which they often do. She has found that when foresters seek local advice, they turn, as men, to the men in the household or village -- men whose perceptions of what is needed or suitable tend to be very different from those of women (FAO 1991)³⁰. This is a situation that is being battled against. More and more foresters are trying to seek women's involvement in their programmes – even regular tree planting exercises³¹.

Forest protection and management policies, including co-management strategies that promote local governance, may inadvertently increase the hardships of women by depriving them of access to forests. Joint Forest Management (JFM)³² strategies must be cognizant of the specific ways women use forests and how those uses may differ from those of men. For JFM to be sustainable, it is vital to recognize that women's multiple use of forests is an important means of ensuring the survival of tribal households as well as conservation of biodiversity (Wickramasinghe, 1994). If the gender dimensions of forest use are overlooked, even well intentioned community management strategies may have negative impact on the lives of tribal women. Research results show that income from forests comprises more than 50 percent of the household income and women are largely responsible for its provision. When rights to control and use of village commons and forests are severely curtailed it undermines the ability of women to deal with forest degradation and limits their ability to take action against unsustainable use of their village forests³³.

Most NGOs report that women's participation is essential for a successful JFM programme. In fact involvement of women has been elicited in the areas where they realize the importance of women in forest protection³⁴.

Mainstreaming Gender in forest sector

Gender mainstreaming within natural resources management projects involves addressing two dimensions: the *differences* in needs and priorities of women, men, girls and boys that arise from their different activities and responsibilities; and the *inequalities* in

²⁹ Razavi, S. and C. Miller., (1995), Gender mainstreaming: A study of efforts by the UNDP, the World Bank and the ILO to institutionalise gender issues. UNRISD Occasional Paper 4. Geneva: UNRISD and UNDP.

³⁰ Caswell, Stephanie, 1988, *A Sustainable Force: Women in Forestry*, speech given at the International Tropical Timber Organization Conference.

³¹ I have seen this happening in some of the areas in Gujarat, where I spent considerable time, to be able to interact with the Forest Department and the villagers at a level that they were comfortable with. As a researcher and in a sense 'outsider' I was able to witness efforts to involve women in decision making process in an objective way. My own presence helped get women to participate in the process of decision making for choice of trees for planning for plantation.

³² Joint Forest Management is a program of the Indian Forest Department. Central to the theme of protection of forest is community participation, with sharing of the benefits derived from the forests between the community and the Forest Department in a ratio that is set by the Department.

³³ Yadama, Gautam N., Pragada, Bhanu R., and Pragada Ravi R., *Forest dependent survival strategies of tribal women: Implications for joint forest management in Andhra Pradesh, India*. Food and Agriculture Organization, Thailand.

³⁴ Teri, *Women as partners in the regeneration of Haryana Siwaliks*.

access to and control over these resources. Gender mainstreaming addresses gender in all cycles of programming. It begins by identifying the gender gaps within the sector, works to eliminate them through programs, and measures effectiveness in terms of gender in the monitoring and evaluation stage. Gender mainstreaming works to achieve gender balance, such as more equitable task sharing. Achieving gender balance often calls for better meeting the *practical* needs and interests of women and girls—such as better access to resources, e.g. forests, to reduce their workload—and also *strategic* gender needs and interests to address inequalities—such as including women in community decision-making³⁵.

DFID emphasizes the importance of considering gender in livelihood systems analysis since women and men: interact in different ways with the natural resource base through their varied roles, work, responsibilities and relationships; have different rights of access, control and ownership of natural resources; are the source of different knowledge and skills; and experience the outcome of policy and environmental changes in gender specific ways. Through an examination of such topics as Forestry, Livestock, Training, and Water, their study explores the issues outlined and examines why women have been and continue to be excluded from livelihood systems analysis, and makes recommendations for best practice³⁶.

Most NGOs that successfully work with women having women extension staff. For example, the Kenya Woodfuel Development Program's rural extension activities were headed by a woman. The ENDA-Zimbabwe project hired women village extension agents. Botswana's horticultural cooperative received technical assistance from the woman extension officer for the Forestry Association of Botswana. The African Network for Integrated Development has women extension officers. Some NGOs, such as SOS Sahel in the Sudan, CARE in Cameroon, and the Overseas Education Fund (OEF) in Somalia, have been successful at recruiting teams of local women and training them for forestry extension work.

Notwithstanding these good examples, in most African countries, nearly all government forestry agents are men and there is a visible reluctance to hire women, even those who have gained valuable experience through work with NGOs. For example, the OEF's International Community Forestry Project in northwestern Somalia involved women at all levels of project management, field implementation and training. Strategies were devised to overcome biases against women's participation in the project, both as project personnel and as beneficiaries. These strategies included staff training courses, which focused on project role definition, technical forestry skills and income generation. A hiring board, established for the project, negotiated for 50 percent of the jobs to go to women (Lewis, 1991). However, when the project ended, neither the government nor the new donor project hired the women extension agents³⁷.

³⁵ UNICEF, *Gender Mainstreaming in Water, Environment and Sanitation*. Publisher: United Nations Children's Fund (UNICEF) <http://www.unicef.org/programme/wes/info/gender.htm>

³⁶ DFID, 1999, *Rural Livelihoods*. Publisher: Department For International Development, UK (DFID)

³⁷ Williams, P. J., *NGOs, women and forestry activities in Africa* in <http://www.fao.org/docrep/u7760E/u7760e08.htm> (site visited in July 2002). Paula J. Williams is a forest sociologist who has been working in sub-Saharan Africa for the past nine years. She now is based in Zanzibar, United Republic of Tanzania. Dr Williams coordinated the Women and Forestry Project referred to in this article.

Need for looking into mainstreaming gender in Forest Department

Professor Bina Aggarwal of the Institute of Economic Growth in Delhi expresses that to understand the relationship between men, women and nature, it is necessary to know the reality of the specific forms of their relationship with the environment. In society, there is division of labour based on sex and class (caste/ race) and distribution of property and power. The relationship between people and nature is based on the structure of sex and class (caste/ race) relations. That is why environmental change is also based on the same. And since experiential knowledge of nature is based on the relationship with it, the impacts of environmental imbalances correspond to it.

Implementation of an empowerment approach in the context of hierarchically organised development organisations may prove difficult, where organisational cultures are biased against the participation and autonomy in decision-making of beneficiaries. This suggests that not just activities and policy frameworks but also organisational structures and processes need to be examined in promoting 'empowerment' and that personnel may need to alter their style of working. Internal agency adoption of gender mainstreaming is often described separately from agency gender policies promoting women's empowerment. The links between strategies of gender mainstreaming and of women's empowerment need further consideration. It may be particularly important to establish links with external organisations working specifically for women's empowerment such as autonomous women's organisations, when WID/gender is integrated throughout an agency³⁸. In other parts of the world, where trees no longer play an essential role in rural family survival, women often have been excluded from the forestry profession and from employment in the forest sector as loggers or pulp and paper workers. In turn, they have often been sidelined on policy and decision-making about forests. "Forestry has traditionally been one of the professions in which men have been most firmly and exclusively entrenched. It is not long since forestry schools -- and hence the profession itself -- were places open only to men. Arguments that the nature of the work make it unsuitable for a women persisted in forestry long after they had disappeared in other 'manly' professions." (FAO 1984).

While women's issues of career and job opportunities in the forestry profession and related decision-making arena may not have the same significance as the issues facing rural women in developing countries, they are still an important aspect of finding lasting solutions to the world's forest crisis. Speaking in 1995 on development issues, Ugandan Vice-President Speciosa Wandira Kazibe put it well when she said what we need is "the achievement of a critical mass of women at the decision-making and managerial levels, in the political field and the public service ... that effects change at all levels." (UN 1995).

³⁸ Oxaal, Z., and Baden, S., 1997, '*Gender and empowerment: definitions, approaches and implications for policy*', BRIDGE Report No. 40, prepared for the Gender Office of The Swedish International Development Cooperation Agency (Sida). See also Goetz, A., 1996, '*Minimum-optimum scenarios - institutional strategies for donor accountability to women in the development process*', DGIS, The Hague. And Goetz, A., 1995, (ed.), '*Getting institutions right for women*', *IDS Bulletin*, Vol. 26, No. 3, IDS, Sussex

Methodology of the study

As is clear from the literature review, work has been done on women's participation in natural resource management. Also the studies on gender mainstreaming have been done in non-government organizations or bi and multilateral agencies. A gap that needs attention is the mainstreaming efforts in government agencies that deal with natural resources, i.e. the Forest Department. There is also hype that inclusion of women in the Forest Department would increase the participation of women at the grass-root level. Hence this also needs to be looked at dispassionately.

Recently, the need for women implementers, more specifically women officers in the Forest Department, has been voiced in many forums, albeit without adequate research. Alongside, there has been an effort on the part of non-governmental organizations to have more women workers on their rolls, trying to ensure the fact that women's perspective is adequately addressed. In this study, an attempt has been made to examine the importance of women forest officers in the Indian Forest Department and the impact of their presence on women's participation at the grassroots for forest conservation, specifically in areas where Joint Forest Management programme is currently practiced. There is hype that inclusion of women in the Forest Department would increase the participation of women at the grass-root level. This needs to be looked at dispassionately. There is also a need to examine the profile of women who form part of the IFS cadre and their strengths as women to be in the position and if there is any kind of difference in the output, being a woman.

The paper is based on both primary data and secondary data, including interviews with men and women officers in the field.

Method of the study and data collection

Interview schedules were made for both men and women officers. The questions were based on identifying information; the officers' postings, roles and responsibilities; perceptions regarding working in the Forest Department being a woman; perceptions of involving women at the grass root level in forest conservation activities. An additional section for women officers dealt with their experiences being a woman officer. Qualitative method was used for analyzing the primary data.

Initially the questions were sent by electronic medium to all parts of the country. Later, due to difficulty in responses, it was based on the responses that the researcher was able to meet and interview the respondents. Hence, the area of the study was reduced to Uttar Pradesh, Uttaranchal, Madhya Pradesh, Gujarat and Delhi.

Sampling was purposive so as to accommodate interviews that could be possible in person only. Responses from Gujarat State Forest Department were received through post only.

The secondary data was collected from the government reports, documents and the data available on the Indian government web-site. Other studies and documents were used to substantiate the data collected. A very vast literature review was carried out to assess the realities in the field.

Gender in Indian Forest Department: Issues of Glass Ceiling Phenomenon

Women officers in Forest Department

Women were initially not recruited in the Forest Department at officers. It was only in 1980 that the first batch of women officers was recruited. Before that, women were given employment at the village level to do forestry manual works as daily wagers – as men were also employed for the same. Nurseries were also managed by men, who were able to employ women, but the control of the nursery was with the men, even at the village level. Non-government organizations, who were working on similar issue, i.e. of forest conservation, followed the same technique. It was much later that gender equality in terms of work opportunities was seen as important and recruiting women nursery raisers became a possibility and a reality³⁹. The Forest Department now has ‘*mahila* nursery’ (Mahila means woman) that is under the DWACRA scheme or the JRY.

The induction of women on Indian Forest Service was initiated with a policy intervention in 1979 examination of UPSC for Indian Forest Service, in which physical standards were altered to facilitate entry of women⁴⁰. Measurement of height and walking distance within given duration of four hours were reduced from 163 to 150 cm and from 25 to 14 km, respectively. This provision in the UPSC notification itself started motivating women candidates to undertake IFS examination and compete successfully.

Roles and responsibilities, financial control and decision making

Almost all the women and men officers interviewed have stated that there was hardly any gender discrimination regarding decision-making roles in the Forest Department. In fact most women officers also went on to say that they were privileged enough to be heard by their superiors and were able to make some decisions without any problems as they got support from male colleagues regarding most of the new activities they wanted to initiate. This was mostly stated by younger women recruited in more recent times. One respondent felt otherwise and stated that to she had to really prove herself and be extra assertive to get her point across. She belonged to one of the earliest batches, where women were required to prove themselves.

It was seen that there was no difference in the amount of financial control by the virtue of gender or seniority. Even in case of a single individual, the officer may have been in control of a higher amount of money in his or her initial term, *vis-à-vis* the current one. The deciding factor in this is the position and the place that one is posted at and the kind of responsibilities one is allotted at that particular station. In effect, if one is posted in the territorial division, the financial control will be higher as compared to the training institute. 'Softer' postings do mean lesser financial control and authority. So where women have been given softer postings, one sees a difference in the financial authority.

³⁹ AKRSP in Gujarat is working on forest conservation. However, it was only in 1993 that the concept of ‘women nurseries’ was conceived and training the women for nursery raising was held.

⁴⁰ Pandey, Gopa, 2001, *Analysis of Gender Perception in Forest Management in India*. Unpublished Paper, IGNFA.

Postings/transfers

Postings or transfer is a state subject, so all of the states have their own norms of transfers. Listing out the postings by men and women, it was found that there was hardly any difference among them. However, there were also cases, where it was clear that women were given 'softer postings' – maybe by choice. Also, when the husband and the wife are both in government service – maybe Forest Department, police or administrative services, there is an attempt to post them in stations near to each other, even if it means 'softer' posting. So it is mostly that the women will be posted in the services that may be possible for both of them to work from one station⁴¹. For example, the woman officer may be posted in the training collage while her husband is in the territorial division in the same area. Mostly the women officers interviewed were of the opinion that no discrimination had been done. This was specially so in the younger generation of the women officers. They felt that since women officers senior to them had set good precedents, their need to prove their worth became easier. However, the fact that the respondents made this statement, itself is significant as it has the underlying meaning that if the seniors had not 'proved themselves', the situation would be different for them. This is not the same for men - it is not a point that was even mentioned in their context.

Multi-tasking work and roles

Looking at a woman's role holistically, i.e. being a homemaker and mother, it has been tough for those who lived in nuclear families. There are no provisions for childcare etc. The senior level officers faced this more - maybe, as the trends required being set. It would also have been a learning time for the Forest Department in the initial period when women officers were recruited. Later, women officers were allowed a lady companion for their child up to five years of age. But again, it is difficult to find women in remote areas for such work. So it again becomes difficult for the women officers to concentrate on her work totally. This then becomes a vicious cycle wherein the woman has to prove her capability at work as well her role as a mother for looking after her children.

There is no such provision for men. Does this have an underlying meaning that men are not expected to take such responsibility for their children? When we are talking of gender, childcare for men seems to be a non-issue.

Aspirations/blockages being a woman

Option of taking up Forest Department

Most of the respondents had opted for both Indian Administrative Services (IAS) as well as Indian Forest Services (IFS) for their careers. Hence, for most it was a second choice. But they all seemed happy with their job profile. A few did express a need to grow more and go to other places on deputation so as to increase their own growth. This expression was found in more number of women than men officers. This is significant as it points to the fact that job satisfaction was more for men than for women. The causes of this could be fulfillment of aspirations, working conditions, work culture and atmosphere. In one case, it was her first choice, reason being that her husband was also in this department and it would be easier to

⁴¹ Personal communication with Dr. Ram Prasad, PCCF, Madhya Pradesh.

work together. It was also seen in a few cases that the women have spent most of their tenure in academic posting or for academic progress.

While some women officers have in general expressed satisfaction regarding their work with the Forest Department, some have also expressed their desire to be posted in more challenging divisions of the Forest Department which they have so far not had the opportunity. They have also expressed a need for more growth-related postings that would satisfy the aspiration of being in more difficult situations.

In most of the cases of male respondents, this was their first choice and they are satisfied with it. In some cases, at the time of joining, they would have preferred other government jobs, but at this point of time, they are happy to be in this department. In only two cases, they would prefer another department.

Aspirations of the women officers gets affected by the family responsibilities that they are in any case expected to carry out. So their choice of work or even opting for certain jobs and postings is often based on such choices, and not necessarily career choices. Here, the glass ceiling for aspirations itself is due to the gendered role, not within the forest department, but due to the patriarchal system at large.

One respondent stated that she has 'managed to do everything she wanted', but that is an individual case wherein the respondent is a very outgoing and exceptional officer, not an average person. In this case it would not be out of place to say that this being an exceptional person has achieved what an average man would tend to achieve. So in a sense the women have to really be exceptional to not have the glass ceiling or to break the glass ceiling that does not exist for men as this would not be there for average women officers. In this case there has also been a trade off between family responsibilities and work. So if the atmosphere at home has allowed this trade off, it was possible, whereas for the others, it is still a struggle. Multi-tasking has to be part of women's personality to be able to meet up with their aspirations.

Woman Forest Department officers: Advantages and disadvantages

Most of the respondents stated that they had a very clear advantage being a lady officer. Since they were mostly in minority, they got adequate attention to be heard. So if they were to suggest any kind of changes, it would get taken up without much ado. Most respondents have had encouraging experiences from their superiors and felt that they have received a lot of support from them. As stated earlier, this was the opinion of younger women in the cadre.

Referring to the field, it was helpful to be a woman as the women in the villages respond much better and come out of their house to meet and greet the lady officer. It helped tremendously to do not only some kind of rapport building, but also ensuring women's participation in their programme. Indeed it was wonderful to hug the village women, hold their hands - both literally and figuratively - enter not just their houses, but also the kitchen and their hearts. The response from the village women has been that of great happiness - often expressing that it was the first time ever that a forest officer has spoken to them and met them. Normally, it would be difficult for men officers to communicate so much with them. This is totally opposite in the case of village seniors/headpersons. Women respondents felt

that the villagers (especially male members) are not sure if they would be able to 'perform' their duties and doubt their capabilities. This is not true for men officers.

The disadvantage they face is mostly related to others' (most often their own male colleagues) reaction and expectations of them - rather lack of expectation. This was specially so in the case of older women. They had to really struggle to establish their credibility. Even to the extent of performing their tasks and responsibilities. They felt that their colleagues had very little confidence in their work. The junior staff, especially for e.g. the drivers and the helpers would rather take orders from the officers' husband. There have also been cases where the Range Forest Officer, a junior officer, has tried to give false reports, presuming that the lady officers will not be able to verify the facts in the field. So in some senses, it has been tough for the women who had to work against a bias of the staff, of their capabilities and stamina. All women officers expressed a disadvantage in communication with other (male) colleagues, after office hours (when sometimes significant information is exchanged in informal manner). Women officers do not have access to these information (unless married to an IFS officer, who would get to hear of these information).

The men officers have generally felt that it is advantageous to be a woman in the Forest Department as one gets adequate attention and voice in most meetings. Most men have stated this, with almost a wistful expression. So it is not necessary that they agree to justify the women's point of view.

One male officer also felt that it would be difficult for women officers to deal with offenders and move in the forest at late hours. Three male respondents and one woman respondent felt that having women at the officer level was possible, but it would be difficult for women to be employed at lower levels where there are lesser facilities and intense field work, involving them to work more often after sunset, e.g. night patrols. Again, dealing with drunken male junior colleagues and other men in the field was seen as a difficult job, something that the men officers have not even had to think about. It was stated by a few women respondents that they require to 'watch their actions' in terms of how late they would talk to the people in the field, otherwise they would tend to get labeled as women with lower moral values (with an underlying meaning of lower capabilities as an officer).

Another point that came up was that it is difficult for women officers to be corrupt. So an increase of women officers will bring about a decrease of corrupt practices in the Forest Department. However, there is no guarantee of this and also of the proportion, but it has made a difference till now.

Impact of women officers in Forest Department

Importance of women forest officers

In government meetings, the stress on gender issues is limited to those that may be directly affected by forests. So the village women's participation is seen as the mainstay for taking gender into consideration. The suggestions that come forth are involving women as labour, share-beneficiaries, decision making in meetings, and even starting Self-help groups

to help the women economically⁴². During the meetings there has also been stress that women be part of the JFM committees. So when there is a mandate to involve people, women are being increasingly seen as important partners for decision making. Recently, there have been discussions for increasing recruitment of women in forestry⁴³.

From discussions and interviews done, it was found that both men and women officers felt that it is important to have women officers in the Forest Department. This was a universal view in light of the participatory practices being adopted, for forest conservation. The respondents were very sure that women officers were able to get the kind of response that was not possible for men officers to even think of the kind of participation by the villagers. Earlier there was a lot of skepticism even by the villagers as to the kind of work women are able to do. Increasingly, there is an indication that it is easier for the younger generation to go ahead in the same field.

Difference in women participation, if any

Most of the respondents have stated that the level of participation of women in forest conservation increased substantially when a woman officer was posted in the area. In fact in a few cases, the participation dropped when the lady officer was transferred out from that place. It is quite clear that the participation has gone up due to the presence of women officers. One response stated that the increase in the level of participation was not because of her as a lady officer, but due to the increased awareness and that people were able to see the gains possible for them.

The men respondents have also felt that it is easier for women to be involved in community based conservation efforts as the women officers have managed to elicit more response from the community at large and more specifically the women at the grass roots.

Profile of the respondents

It was observed that all the women officers came from upper middle class families. Their parents had been or were serving at very high positions in the government departments and/or had retired from high posts. This acted as an encouraging and supportive factor for them to enter into this profession. All the women officers' husbands were either in the forest department or other government post like the Indian Police Service and the Indian Administrative Service.

On the other hand, for the men officers, there were some respondents who also came from the lower middle class background. No trend of the spouse being in any particular service was noticed. However, the men whose wives are working with the government departments are more understanding of the pressures of their work and are generally more supportive. The women officers also stated this fact. So it is easier for women whose husbands are in this service to have some career aspirations, though, not without a cost.

⁴² Proceedings of the JFM Nodal Officers Meeting, 5th December 2001, Van Vigyan Bhavan, New Delhi. www.rupfor.org/jfmc/Proceedings-nodalofficersmeet.doc

⁴³ Minutes of the First JFM Network Consultation, July 27, 2000, Ford Foundation, New Delhi. http://www.rupfor.org/jfm_india04f.htm

In the profile, an interesting trend is noticed. On one hand while there is a requirement of women at different levels in the Forest Department, there are very few women who are at the lower cadres – a strong possibility that there have hardly been applications at the lower cadre levels. Women from better social and economic status would hardly apply for a job in lower cadres. On the other hand, it needs to be seen if women from socio-economically disadvantaged backgrounds are able to apply for employment in the Forest Department, even at a lower post.

Conclusion

Involvement of women at various stages from policy making to implementation is seen as important for the health and wellbeing of forests as well as people dependent on forests.

In India, forests are legally owned and managed by the Forest Department. All land designated as forestland belongs to the Forest Department⁴⁴. It becomes important in the light of the above that women are recruited in the Department responsible for managing forests.

Since the first batch of women in 1980 till 2000, there were 83 officers in IFS, which is about 3 percent of the total strength of 2736 IFS officers⁴⁵. This is the maximum representation in terms of proportion among all the cadres in forest service (Annexure). Examination of last five years⁴⁶, i.e. from 2000 till 2005, reveals that 20 percent of IFS are women. There is a range of approximately 9 to 40 percent women IFS in different years. However, the total percent of women in the Forest Department as IFS officers still stands at 4.28 percent till date. Since Forest Services is also a state subject, different states have different provisions at a lower cadre of Forest Department.

While the current ratio of women and men as IFS officers is far from sufficient to ensure mainstreaming of gender in the Indian Forest Department, there is a lot more ground that needs to be covered for recruitment of women at lower cadres of the Forest Department.

The phenomenon of the Glass Ceiling in theory does not exist in the Forest Department as the promotion, decision-making authority etc. is as per the postings of the officer. In reality, however, what is interesting to note that women have not yet reached the highest posts for want of 'correct' postings that require an officer to have gone through for them. The barrier is more invisible as it is drastically affected by the patriarchal system and social expectations from a woman.

Another new phenomenon emerging is that women are not able to work below a certain level with ease. I would term it as existence of a Glass Floor. In case of forestry and in the Indian Forest Department, the lowest posts themselves have a lot of importance in terms of eliciting participation of women. It also has a direct bearing on employment of women from the local communities in these posts. It further needs to be examined how and the extent to

⁴⁴ GOI, The Indian Forest Act 1927.

⁴⁵ Data from the IFS Civil list till 2000.

⁴⁶ Examination of IFS Civil list from 2000 – 2005.

which the existence of a Glass Floor is detrimental to participation of women at the grassroots.

While it is yet difficult to state that there exists a Glass Ceiling, there is a definite finding of an existence of a Glass Floor for women in the Indian Forest Department.

Annexure

Women in comparison to total recruits⁴⁷

S. No.		TOTAL WOMEN	TOTAL STRENGTH	AGE (%)
1	IFS	83	2736	3.03
2	SFS	9	2507	0.36
3	RO	27	11000	0.25
4	For./DR	125	34147	0.37
5	F.G.	159	73034	0.22
6	F.W.	35		
TOTAL	438	123424		

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⁴⁷ Pandey, Gopa, 2001. Ibid.

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Gender position in the forest sector

Dr. Viera Petrášová, Ing. Mária Poljovková and Ing. Anna Tučeková, PhD.
National Forest Centre, Forest Research Institute
T.G.Masaryka 22, SK-960 92, Zvolen

Abstract:

Gender question in the forestry is a new matter in the Slovak republic. Transformation processes, which were in Slovakia from 1990, and resulted mainly in restructuralization of forest enterprises, did not eliminated the negative position of women foresters from the second half of the last century. This work deals with the creation of new enterprise structure in forestry after year 1990 in Slovakia and its influence on women farmers' position. Present gender situation is elaborated on the basis of analysis of actual work position of women foresters. This is compared to the situation of the 1980s. Education structure of women foresters is elaborated on the basis of total number of women graduates at forestry schools. Gender situation in NGO is presented by the example of activities of women foresters association and by activities of women foresters within Slovak forest chamber.

Keywords: gender, forestry, reprivatization, education, NGO

Introduction

In Slovakia the gender position in the forest sector has noticed the expressive changes since the 1950s of the last century. The gender view could be enforced in the forestry by the chance of study at the university from 1950 to 1990. Women foresters with the university graduate working in the forestry at that time could not utilize their education for their direct own forestland management because of the last socialism regime influence. Use right relationships were preferred to ownership right and this is why forest state enterprises only existed. Thus the change in gender position is very interesting after year 1990. Women could study not only at the university but also at secondary forestry schools. After 1990 new organisation structure of forest enterprises began to form. New private, community and church forest enterprises were established. At present the forest state enterprise is still the most important employer in forestry because much of forestland was not taken to possession.

This work deals with the reasons of forest enterprises restructuralization after 1991. It analysis and compares gender position of the 1980s to present situation, when the part of forestland was given back. This work also describes the present situation in gender policy in forestry non-governmental organisations.

Situation in restructuralization of forest enterprise sector

After the World War II (based on the patent of president of the republic, direction of the presidency of the Slovak National Council, revision of the 1st land reform and the 2nd land reform), the majority of forests (approximately 75%) was passed over to the ownership or use of the state. They were managed by the state organizations of forestry. This process has continued during the further period of time as well. In 1977, almost all forests in Slovakia (99.6%) passed over to use of the state (state organizations of forestry) based on the act. It was a question of change in forest use. Ownership of the forest has been retained as a rule.

In 1989, a change in state regime initiated restitution of ownership and users rights. By adopting the restitution laws state organizations of forestry (mandatory persons) returned back the forests to original owners and users (entitled persons). Through releasing the workers due to reprivatization free human qualified resources are being formed. They can take part in establishing private organisations intended to provide services and goods for the owners and users of forestlands.

Figure 1 shows the progress in reprivatization of forests in Slovakia in particular years until 2002. Table 1 shows the present structure of forests by ownership and use. In 2004 forest state organisations gave back 18 817 of ha of forestland to origin owners what is almost the same area as was given to origin owners in 2002 and 2003.

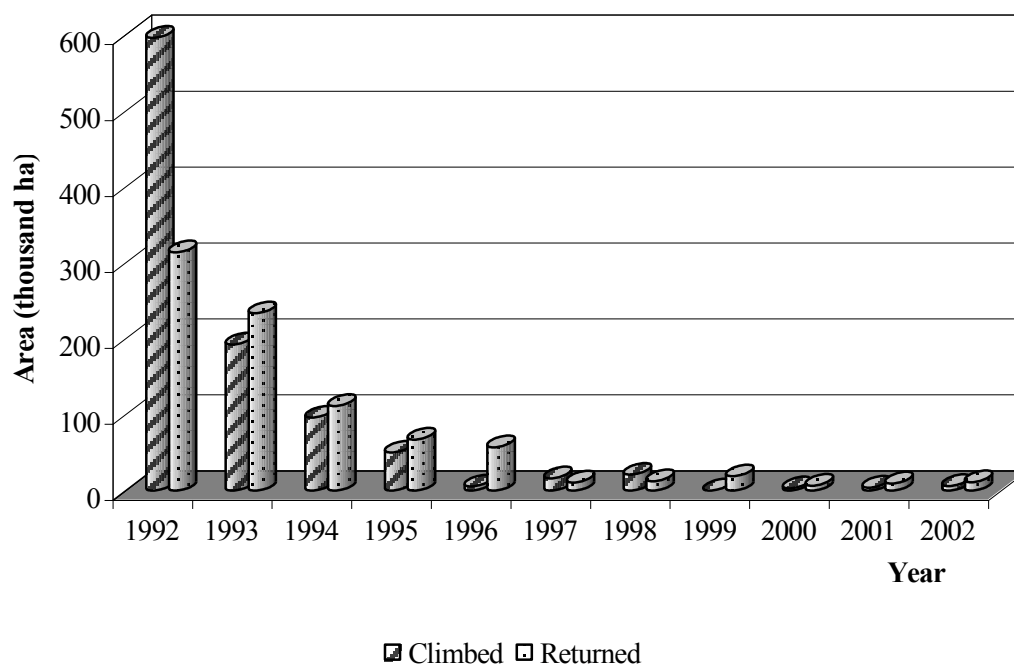


Figure 1. Progress in reprivatization of forests in Slovakia in particular years.
Source: Green Report 2003

Table 1. Structure of forests by ownership and use

Subjects	Area of the forestland (ha)				Share in 2005 (%)	
	To 31. 12. 2004		To 31. 12. 2005			
	ownership	use	ownership	use	ownership	use
State	811 935	1 146 259	807 753	1 130 786	41,8	58,5
Non-state :	1 014 091	784 433	1 011 096	800 859	52,3	41,5
- Private	282 839	119 938	275 243	121 372	14,2	6,3
- Shared ownership	470 900	443 636	480 160	459 162	24,9	23,8
- Church	66 642	48 253	65 242	47 449	3,4	2,5
- Agriculture ownership	3 208	4 793	2 635	4 106	0,1	0,2
- Minicipal	190 502	167 813	187 816	168 770	9,7	8,7
Unknown	104 666	-	112 796	-	5,9	-
Total	1 930 692	1 930 692	1 931 645	1 931 645	100	100

Source: Green Report 2006

From the review of the share of forestland use rights results, that only 6,3 % of the forestland in Slovakia is managed as small farms – forest enterprises. These forest enterprises are economically independent and men represent farmers.

Historical problems in land ownership were not solved for two centuries in Slovakia. Ugrian queen Mária Terézia gave the land (mainly low quality meadow and forest land) to poor liege people. This land ownership is not defined by accurate piece of land ownership, but is expressed in the form of a number data on the ownership of certain land area share. These shared ownership land is managed on almost 24 % of the total forestland area. In Slovakia their management is very perspective in the meaning of gender position improvement in the forestry. Shared ownership lands have also high perspective in diversification of activities in rural areas. At present women are better qualified than men i agriculture and thus there are many perspectives of their exercise (agro-tourism, folk-craftsmen activities, medicinal plants, forest fruits and its packing).

Gender situation in the forest sector

Study at forestry

Forestry study at university level in Slovakia dates back to 1947. What concerns the acceptance of students in the years 1947-1962 there were some restrictions for women. Tradition of forestry profession like a man profession as well as lower qualification level of women of that period caused low interest of women in this study. The interest increased in the 1960s and lasted until the 1980s, mainly due to, for that period typical measure, namely directive number of women for acceptance, which has been valid until the 1980s. Therefore the data given in Table 2 are not directive for the period 1960-1982 for reviewing the quantification of women graduates in forestry (Petrášová, Poljovková 2005).

After the year 1980 the number of accepted women was not restricted, what reflected only in 1984. Starting from this year the number of women graduates in forestry has increased on average by 10%. In 1990 the economy has changed in Slovakia followed by

complete liberalization in accepting students to universities. The number of women graduates in forestry at university has grown again reaching more than 20 % of the total number of graduates. Data for the mentioned period are given in Table 2.

Table 2. Number of women graduates at the Forestry Faculty in 1947 – 2002

Duration of study	Total number of graduates	Women Graduates	%
1953 – 1962	529	37	7.1
1963 – 1972	775	73	9.4
1973 – 1982	960	113	11.7
1983 – 1992	1262	186	14.7
1993 - 2002	1054	238	22.6
Together	3652	465	11.1

At present we can describe the situation of women graduates only in the state sector in the forestry because we cannot describe the situation of women graduates in non-state sector. That is the reason why we describe following situation in employment only in state sector (also Tab.3).

Table 3. Share of women at forest faculty and forest organisations¹

Organization	Together	Men		Women	
		Number	%	Number	%
Forests of SR, state enterprise (technical-managerial staff only)*	3045	2621	86,08	424	13,92
Forestry Faculty of Technical University in Zvolen	153	98	64,05	55	35,95
Forest Research Institute Zvolen	130	73	56,15	57	43,85

¹ In 2003, together 11 478 employees worked in the commercial sphere of the state organizations in forest sector, of those 3914 (34.1%) were technical-managerial staff and 7564 (65.9%) were workers. Total number of employees in the forest sector in Slovakia is estimated on 18 078. (Green Report 2004).

Gender representation in forest state enterprise

Women foresters worked only in the forest state sector from 1947 to 1992. Data are available from year 1982 of this period. Women worked mainly in forest enterprises and their affiliated forest enterprises. They did not work in outside operations. We can see from the comparison of the percentage of women in 1982 and 2006 that number of women increased in associated production divisions, where different activities are diversified. Women thanks to their qualification and expertise proved to maintain in the same number in the organisation sections despite the restructuralization. Unfavourable situation is in occupying of management positions (FAO 2006). Number of women in management positions increases

very slowly. Also the shame is, that data on labour force in non-state forest sector subjects are not available at all, although 41.5 % of forests is in those subjects use right.

Table 4. Gender representation in forest state organisation section in 1982 and 2006

	YEAR 1982				YEAR 2006			
Organisation section	Men		Women		Men		Women	
	Number	%	Number	%	Number	%	Number	%
Headquarters	368	70	160	30	79	65	42	35
Affiliated enterprises	1118	73,5	403	26,5	555	68	259	32
Associated production	92	93	7	7	41	78	10	22

Gender and non-governmental organizations (NGOs)

Currently valid documents of forestry policy “Concept of forestry policy by the year 2005” and “Mid-term concept of agrarian policy for the years 2004-2006 – Forestry” do not specify any particular measures to promote role of women in sustainable forest management. This is the aim of voluntary organization of women foresters “Association of Women Foresters” that has started its activity as a civil association in 2000. It followed up with previous activities of women forestry engineers – members of Forestry Chamber. Activities of the women forestry engineers continue in the form of expert exchange of experience. Activities of this association are aimed mainly at securing women equality at labour market, increasing qualification skills of rural women and creating preconditions for harmonization of their professional and family life. Regarding the aims of the association in rural policy the members of the association are not only women foresters but also women with similar profession in rural areas working in agriculture, ecology, nature protection, economics and other fields. The tasks of the association are mainly following:

- Organize actions to obtain information and exchange of experience in the field of support to women self-implementation in rural areas in enterprising,
- Organize educational and training programmes aimed at improvement of knowledge and skills of the members of the association and collaborating volunteers, including actions to increase knowledge level during maternal leave and unemployment period,
- Provide advisory services for enhancing enterprising in agrarian sector and environment,
- Public relations aimed at increasing the level of knowledge and the number of volunteers for the environment and particularly for the education of children and youth in voluntary clubs of interest

At present the association orientates its activities towards two basic programmes “Women for kids” and Women for women”. In the framework of the programme “Women for women” the association has been cooperating with the “Association of business women” in organizing education programmes for unemployed rural women. They are aimed at increasing knowledge level of women, their skills for the works connected with diversification of rural activities, for example in tourism, handicrafts and traditional rural jobs. Possibilities of combined income of women from different jobs have been developing.

In the framework of the programme “Women for kids” the association organizes different interest clubs of “young foresters” within free time activities of kids and cooperates with the clubs of “young naturalist or hunters”. Kids can test their knowledge and skills at National forestry competitions held every year. In 2006 they were held already for the seventh time. Since 2003 the association cooperates in the competition “Kids to nature” where the most successful kids from the competitions of young foresters, hunters or naturalist meet. In 2006 there was held already the sixth competition “Green objective lens” in collaboration with Forestry and Wood Technology Museum in Zvolen. The association has published leaflets “Public relations in forestry” and “Manual for young forester” as a part of professional assistance for volunteers for the work in the environment conservation.

The mentioned activities are partially funded by the Ministry of Agriculture of SR and voluntary contributions of the supporters of these activities.

Conclusion

This work indicates the improvement of gender position in forestry. The reason of it is the growth in the qualification of women foresters. Despite this, in Slovakia is still not favourable atmosphere for equality improvement and access to management positions in state and non-state sector. Another problem is that women know differences in salary rewarding. This difference performs about 30 %. Thus the role of NGO will have to enhance in Slovakia. These should secure the change in women foresters approach to their work positions. Advance in self-confidence of women foresters can increase their interest in management positions in the forest state sector. This can also start the increase of business activities in the non-state forest sector.

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Gender issues in land use and farm forestry research, Vietnam

by Kajsa Sandewall, SLU

There is a trend of increased farm-based tree plantation in many parts of the world. That development has significant socio-economic and environmental implications. The objective of this ongoing collaborative project is to analyze the characteristics and requirements for the development of a sustainable farm-based plantation forestry derived from case studies in three countries (Vietnam, Ethiopia, Sweden). The ongoing Vietnam case study is introduced herewith. It examines: i) The past and the current trends of change in farmers' land use and tree plantation. ii) The prerequisites and driving forces for the development of a viable farm-based plantation forestry. iii) How farm-based plantation forestry has influenced people's life and livelihood in terms of, e.g. poverty alleviation, socio-economic status, women's situation, income and security. The existing and changing roles of men and women, in this development, have thereby come into focus.

Background of the study

During 1997-2005, research on land use dynamics, policies, local strategies and ecological effects were conducted in the study area in Northern Vietnam by members of the research group. It formed the basis for the new project on farm forestry, which was started with a pilot study carried out in March 2006, at three sites situated on various distance from the major forest industry in the area. The sites have different land-use history and different ethnic composition. The methods included stakeholder interviews, participatory systematic field observations and discussions with sampled households.

Tentative findings of the pilot study:

- 1) Since 1980, it has been a dramatic transformation of natural forests, degraded forests and agricultural bush fallows into farm-based plantations of cash crops and forest trees.
- 2) The land use changes have coincided with rapid economic growth, market economic policies, land tenure reforms and the emergence of new wood consuming industries in the area.
- 3) Households with average or good income possessed much of those plantations but also marginal households had patches of forest land and used it in forestry or, increasingly, in multi crop plantations.
- 4) Poor and rich households had different management strategies as regards e.g. species composition and rotation cycles.
- 5) Men and women had important and different roles in different villages. Different land use history and ethno-cultural composition may explain some of those differences.

6) It "appeared" that in areas close to the markets (with better income opportunities) the initiative was usually from the men, while in remote areas where the potential income from plantations is smaller, women had a more active role in forestry.

Project title: Why do farmers plant trees?

Project core team: Anna-Lena Axelsson (SLU), Melaku Bekele (Wondo Genet), Habtemariam Kassa (CIFOR), Bo Ohlsson (SLU), Kajsa Sandewall (SLU), Mats Sandewall (SLU), Le Sy Viet (Vietnam Forestry University)

Project funding: FORMAS, Sida, SLU

Presented by: Kajsa Sandewall, SLU, 901 83 Umeå, Kajsa.Sandewall@sek.slu.se

Women, Gender and Management of Off-Reserve Forests in Ghana

By Elizabeth Ardayfio-Schandorf
Department of Geography and Resource Development,
University of Ghana, Legon.
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Introduction

The fast environmental degradation of tropical forests in Africa indicates that conservation and management of off-reserve forest is urgently needed for sustainable management. The concept of sustainable forest management is a complex concept. It has been defined thus: “sustainable forest management is involved with the planning and production of wood for commercial purposes as well as meeting local needs for fuelwood, poles, food, and fodder” (FAO, 1994, World Commission on Environment and Development, 1987). Sustainable forest management includes the protection of areas to be managed as plants and wildlife reserves or for recreational or environmental purposes. It is connected with ensuring that conversion of forest lands to agriculture and other uses is done in a properly planned and controlled manner. It also covers the regeneration of wastelands and degraded forests, the integration of trees in the farming landscape and the promotion of agro-forestry. It is the latter aspect of integration of trees in farming systems and its management in off-reserve areas by female and male farmers in forest fringe communities that this paper is concerned about.

Off-reserve Forest Management and State Orientation

The pursuit for agricultural land, timber exploitation and urban expansion, has resulted in worldwide deforestation in tropical countries. As timber exploitation is considered the first step to deforestation, there has been a clamour by the international community against the exploitation of tropical timber. Tropical timber producing countries are challenged to source their timber from sustainably managed forests by 2000. A review by ITTO indicated that Ghana is the only African country likely to achieve this objective. In Asia Pacific, Indonesia and Malaysia are the only countries who were considered likely to attain this goal in the early 2000's. It is important in this connection to develop a management system to satisfy the certification conditions to enable timber and wood exporters to export from sustainable management forests.

Managing local forests sustainably, therefore, becomes one of the critical issues in Africa. In Ghana, the 1948 Forestry Policy became the first formal forestry policy in the country. Its major focus was to maintain the protective purposes of the reserves and apply the concept of productive potential and value on the basis of sustained timber yield. Its preoccupation was in developing scientific systems of management to increase the timber productivity of the forest. The implementation of this policy has had enormous effect on the forests and people and communities in the forest fringe. The forest reserves established were managed with local interest of the people relegated to the background whilst the policy

promoted the timber industry and its values to the exclusion of the protective functions of forests and elements of collaboration. This imbalance was to lead to the revision of the policy in 1994.

One of the new major policy issues highlighted was the collaborative forest management approach that has been adopted as an all-inclusive approach in forest management. This inclusiveness seeks to establish partnership with the local forest fringe people and to respond to the subsistence and economic needs of the growing population in sustainable forest management. Stakeholders identified in this approach are the scientific and technological communities, forest fringe communities, women, farmers, forest owners, governmental and non-governmental organizations among others. The success of this emergent sustainable collaborative forest management approach is seen to be intricately linked to the active participation of all affected individuals, groups and organizations. Needless to say that all the reforms have been on general basis without taking into consideration the gendered interests, relating to participation, decision-making and benefit sharing of resource owners and farmers in the process. Hence, this paper is intended as a contribution to the understanding of gender relations in off-reserve forest management and its implication for strategic interests in the planning and management of off-reserve forests. It discusses gendered patterns in the management of trees on farms and raises issues on equitable access of female and male farmers to the participation and benefit sharing of off-reserve forest management. It excludes non-timber forest products and incentive mechanisms.

The study area

The study area is located in the Goaso Forest District (Brong Ahafo Region) in the High Forest Zone of Ghana which has similar forest characteristics like other high forests elsewhere in Africa. The 28 communities which formed the basis for the field work are located at the forest reserve fringes. In order to maintain the culture and livelihood of the people living within or close to the forest reserves, there is now recognition that livelihood of these people should serve as a main theme in forest management worldwide. The recognition of the people's rights to control and manage their own resources is considered a fundamental issue for the maintenance of their culture and sustainable development in the area. This accounts for one of the major concerns that underlies the purpose of the research conducted in Ghana in the high forest with the involvement of women and men farmers.

The off-reserves are characterized by agricultural land use types giving rise to a landscape of agro- and biodiversity. The farmers are engaged in cash crop farming for both commercial and subsistence purposes. Though there are other occupations ranging from administrative and commerce, those relating to farming and forestry occupations predominate. Farming in this high forest zone is based on traditional practice of shifting cultivation. Since the introduction of cocoa production in Ghana in the nineteenth century, land had been abundant and the system sustainable. Today, with population expansion, increase of farmers and pressure on land, farmers are not able to leave their lands to fallow for long enough to restore fertility. With traditional practice, trees may be retained or planted on the farmland to derive multiple uses. In order to achieve this goal, one acre of cocoa farm should have a maximum of ten trees to allow multiple light penetrations. The trees are intentionally left on the farm during the process of land preparation. These provide the shade required for maximum and sustained yield and also for long-term economic and

environmental benefits. Farmers deliberately leave trees on their farms for economic, environmental, spiritual, medicinal and agricultural livelihood values.

The common indigenous trees within the semi-deciduous forest zone are *Celtis mildbraedii* (Essa) and *Triplochiton scleroxylon* (Wawa), *Ceiba pentandra* (Onyina), *Milicia excelsa* (Odum), *Terminalia ivorensis* (Emire) and *Terminalia superba* (Ofram). The integration of such trees into farming systems is based on the indigenous knowledge of farmers acquired through accumulated long-term practice and use and handed over through generations. One interesting thing about this forest area is that there are more timber trees in farming areas where most of the land is under cultivation for cash crops like cocoa and oil palm and food crops than in the forest reserves.

Methodology

The methodology used for the study is the distance decay factor in terms of use of resources of the forest reserves (see Ardayfio-Schandorf et al., 2006). It is meant to demonstrate the relationship between the management and utilization of off-reserve tree resources and the depletion of these resources in the forest fringe communities in the study area (Fig. 1).

The methodology assumed that the closer the community to the forest, the greater the impact of human activities on the depletion of the forest, and the further away the community the lesser the effect. On the other hand their conservation and management activities will positively impact on the forest. As women and men in the forest fringe communities are characterized by varying gender interests and strategic needs, it is expected that their participation in conservation strategies will vary. It is equally expected that benefits derived from ecological services will benefit both sexes once they live in the same forest fringe communities. The greater the encroachment by communities on the reserves is, the higher the rate of forest degradation. For this purpose three distinct buffers were identified by distance and demarcated from the forest reserves in the region. The first buffer covers communities which are less than one kilometer from the forest reserve, the second one to five kilometers, and the third more than five kilometers. This concept is also expected to demonstrate the land cover types in the buffers and those that are mostly affected by human activities, and how trees could be properly conserved and managed by women and men farmers. In addition, focus group discussions were undertaken to solicit qualitative data whilst household survey from 28 communities generated quantitative data on household management of trees on off-reserves.

Figure 1. Map of Goaso District Showing Land Use in the Buffers

Women in Off-reserve Farming Systems

Various studies have brought to the fore the critical role women play in the management and use of natural resources such as crops and forests which form an integral part of the rural economy of forest-fringe communities. As far back as 1970, women in Africa were described as farmers' par excellence (Boserup, 1970; Vallenga, 1986, Benneh et al, 1995; Ardayfio-Schandorf, 1995). In Africa, women's participation in biodiversity management and the household political economy has been found to vary between various farms, the type of work they do, their access to productive resources like land ownership and the provision of goods and services (Ardayfio-Schandorf and Wrigley, 2001, Gyasi et al., 1996). Though non-timber forest products, their production, management and supply are considered to be integral part of the role of women, these may not be important in all situations in forest communities in Africa. Many women in the high forest are farmers who also manage trees in agro-farming systems.

Of all the population in the study area 66.6% of the 26,347 men are farmers as compared with 33.4% out of the 25,516 women who are farmers. In these communities, forestry activities and livelihood forms outside the forest reserves are considered within the agricultural production system. The diversification requires a holistic approach in addressing

roles and functions of stakeholders and farmers in the effective conservation and management with a focus on sustainable conservation and management of forest trees in farming systems.

Through current governmental policies trees for timber, which provide important revenue, cannot be removed without the prior consent of farmers, be it women or men. The participation of farmers in conservation of forest and tree resources is closely linked to benefits male and female farmers derive from the management of off-reserve forest resources. In the off-reserves, empirical studies were carried out on tree management in farming systems under a system of clear division of labour between men and women. Men tend to be the landowners, the cash crop farmers, plantation owners and big time food crop farmers, whilst women are small-scale subsistence farmers, with only a few owning lands. Under this system the issue is raised about the women's participation and benefits from management of trees in off-reserves, considering the gender differential access to the means of production on off-reserves, where most trees are managed for agro- and biodiversity.

Women, Gender, Land Ownership and Tenure Arrangements

One of the critical resources essentially needed for sustainable management of forest resources and farming is ownership and control of land. Access to land has been found in many studies in Africa to be a source of grave concern to women in farming systems. In Ghana, women's access to land ranges from 50% in the south sector to less than 10% in the North. Mikell has demonstrated in her work in Ghana, the changing fortunes in the access to land and other means of production of female cocoa farmers. She pointed out that during the boom for cocoa, which is the major cash crop in the Brong Ahafo Region, women entered cocoa farming in their own right. They were able to acquire their own land and farms with 42% women she studied working their own farms. The remaining 58% obtained lands from family members. By contrast, among the male 70.25% acquired and worked their own land. Beckett (1994) and other scholars including Arhin (1983) have corroborated these findings. The situation has been modified greatly over time with changing fortunes in the economy, especially since independence in 1957, with the adoption of various national economic development policies.

Historically speaking, women in Ghana never played a traditional role in original land acquisition. As land was acquired under the leadership of stool or lineage heads, women did not play any role in the process. Family headship and stool occupancy have been the prerogative of men. The original role of men in the acquisition of land has given them predominant rights over stool and family land ownership. Traditionally, all members of the stool and lineage in principle have inherent access rights to land regardless of sex. Women in the country have in practical terms not had equal access to inherent land rights. In the farming communities, early marriage is the rule. Related conjugal and domestic obligations limit the chances of these women in acquiring land or comparatively large portions as men. Patriarchy and its related underpinnings are clearly at play in the access and allocation of land. In all aspects, both land ownership and tenure arrangements being practiced in the forest area are in favour of men. A direct focus group discussion, held with women's groups, underscored the difficult land acquisition mechanism for females.

Women's access to land depends on availability which in recent times is also related to access to credit. In this case, credit has increasingly become an indicator of the area extent

women can operate in their farming enterprise. Lack of capital has also resulted in inability of women to develop farms on large scale. This is reflected in the relatively small size of women's annual farms. On the average size of women's farms in relation to that of the men is in the proportion of 8:2 (Table 1).

Table 1. Sizes of Annual farms Owned by Gender

Size (Ha)	Male%	Female %	Total %
1	87.5	12.5	100
2	78.7	21.3	100
3	78.0	22.0	100
4	85.3	14.7	100
5	73.1	26.9	100

Similarly, the number of annual farms owned by individual farmers was higher among men than women. For instance, while the proportion of one farm ownership for males was 81.8% that of the females was less than a quarter represented by 18.2%. For 2 farm ownership, the proportion was 76.2 and 23.8% for men and women respectively. In all respects, the sizes of farms whether large or small favour male farmers. In the same way female ownership continues to dwindle with increase in the numbers of farms. For 5 farm ownership, only males were recorded in this category (Table 2). Added to this is access to technology, and rising labour costs. Many women require this viable labour resource as farmers in order to operate farms on their own account. The lack of the critical means of production has conspired to limit access of women in the study area to acquisition and ownership of land as a source of economic empowerment in local farming systems.

Table 2. Number of Annual farms Owned by Gender

Number of farms	Male %	Female %	Total %
1	81.8	18.2	100
2	76.2	23.8	100
3	80.0	20.0	100
4	80.0	20.0	100
5	100	0	100

Generally, in the south where women's access to resources is supposed to be better, that is not the case in the study area. Gender allocation of land is unfavorable to women and falls below the south sector average even though a greater proportion of the people are farmers. Land for farming in the communities studied could be acquired through purchase, which in this study is considered as self-acquired. It could also be acquired through allocation by the family or the chief, whereby the land is referred to as stool land. Another important means by which farmers acquire land is through share-cropping. By this method, a farmer is granted a plot of land for farming and the owner receives either 50% of the harvest (abunu) or 33.3% (abusa). The remaining percentage goes to the land owner.

Access to land between women and men farmers in the study area is not uniform. Out of a total of 399 farmers studied, self ownership of land among the females was as low as 19.9% as compared with 80.1% for males. Similarly, it was difficult for individual females to enter

into personal tenure arrangement because only 21.7% were able to negotiate for it (Table 3). The higher access of 25.7% to land by women was obtained through the family. This implies that women's access to land is more favorable when allocated as inherited property or gift from family relations like fathers, husbands or brothers.

Table 3. Land Ownership by Gender

Land ownership				Land tenure arrangement			
Acquisition	Male %	Female %	Total %	Tenure-type	Male %	Female %	Total %
Self	80.1	19.9	100	Self	78.3	21.7	100
Family	74.3	25.7	100	Family	76.1	23.9	100
Stool	84.2	15.8	100	Share cropping	79.3	20.7	100
Share cropping	77.8	22.2	100	Lease from Chief	75.0	25.0	100

Land in the study communities is becoming quite scarce, as most lands have been put to cocoa farming. This means that most women, who are into food crop production, compete for the small parcels of land available. In most cases the first person to go to the land owner is more likely to acquire the land. It does not depend on sex, but how fast one gets to the land owner and one's experience in farming. This notwithstanding, females suffer more than their men counterparts in acquiring land for farming, as reported by Focus Group Discussions, Women, 2004. "Most people have the negative notion about women as not being strong enough to farm on their own" Another challenge of women is the lack of money for outright acquisition through land purchase." In view of this, the women reported that "we the women in this part of our country are very poor indeed. We face a lot of challenges in raising enough money to acquire our own land for farming. This is because we have no other income generating activity than farming, which doesn't earn us much" (Focus Group Discussion, Women, 2004). The socio-cultural prejudice and local orientations that introduce certain biases in favour of men in the access to and tenure arrangements for land have implications for tree management.

Almost all the land tenure arrangements were in favour of the males in the area. With the exception of lease from chiefs as a means of tenure arrangement which was 75% and 25% men to women respectively, the proportion of women in the other tenure arrangements were below a quarter of the total respondents. In the same manner, it was equally difficult for the individual females to enter into tenure arrangements with other parties. The proportion of women who hold self tenure was 21.7% which is lower than a quarter of all the respondents (Table 3). This has been supported by the observation that customary practices regarding land are particularly adverse for women, who rarely have full rights in land but must negotiate as secondary claimants through their male relatives— their fathers, husbands, brothers and sons (IIED, 2005).

Furthermore, according to Aidoo (1989), family land tenure is originally encroached holdings by family ancestors, and passed on to subsequent generations along a particular

lineage. This implies that, the present generation is supposed to hold the land in trust of the dead and for countless others yet unborn to the lineage. However, with women, succession and inheritance rights remain problematic, since women usually cannot immediately inherit the matrimonial home on the death of their husbands (IIED, 2005).

Following from the above, it is clear that, women's land tenure rights and hence their active participation in the conservation and management processes of off-reserve forest is greatly limited as compared to men. Whereas men dominated in almost all the modes of ownership and tenureship arrangements, women are disadvantaged, in terms of number of farms owned and size of their farm holdings. These have debilitating effect on their ability to impact meaningfully on the conservation and management of off-reserve agro- biodiversity in the Goaso Forest District.

Gender and Tree Management Practices

There are more women farmers generally than men, but most land is owned by men. It then follows, as is the custom in farming communities elsewhere in the country, that most women are farmers but not on their own account. They farm in support of their husbands or family. Where they are able to acquire land, they are in a position to manage the trees on their farms. Normally, men tend to be more involved in all the forms of management practices. Though women are engaged in a limited manner in these processes, when it comes to pruning, lopping and ringing which demand extra energy, women were found to be almost absent in such activities. It is possible for them to engage labour for management activities, but again lack of finance precludes them in these affairs.

In all the various management practices, the engagement of men respondents was far greater than that of women. For pruning as a measure of tree management, a considerable percentage of 82.7% were men, while only 17.3% were women. The management activities in which women are engaged, to some extent, are singling and weeding.

Gender, Knowledge and Utility of Trees

Through tree management, women have acquired knowledge of trees which impact on their conservation practices. Based on indigenous knowledge, trees were classified as ecological, economic, cultural and subsistence. Among them were the uses of trees for the protection of watershed, prevention of soil erosion, soil fertility improvement and provision of shade categorized as ecological. For economic purposes, trees were used for the provision of food, timber for furniture and for construction. Other economic derivatives from tree species were household goods and fuelwood whilst other trees were useful for socio-cultural utilities such as medicine and herbs.

Knowledge and utility of trees seem to be gendered. Generally, most men are more knowledgeable about trees on farms than women. The men tend to be more knowledgeable about ecological uses than women. All men indicated that they use trees for preventing soil erosion; no women mentioned this use. In the case of use for watershed protection, 82% men utilize it as against 18% women (Table 4).

Table 4. Utility of Trees by Gender

Tree uses	Male	Female	Total %
Prevention of soil erosion	100	0	100
Protecting watershed	81.9	18.1	100
Providing shade	78.7	21.3	100
Timber and furniture	50	50	100
Fuelwood	82.4	17.6	100
Charcoal	74.2	25.8	100
Medicine/herbs	77.6	22.4	100
Food	61.1	38.9	100
Household goods	0	100	100

It was only in knowledge about use of forest products for furniture that women exhibited utility knowledge pattern equal to that of men. One area where women's knowledge on utility by far surpassed that of men is in the use of trees for household goods like mortar and pestles. All the women respondents demonstrate knowledge on these goods, with none of the male having similar knowledge. In addition, women demonstrate general knowledge about trees in their farming practices. In their own words, they cited some of the benefits they derive from the presence of trees on their farms as follows: "Some of the trees help the cocoa to grow. From the beginning the trees protect the cocoa from excessive sunshine. The Ceiba pentadra (Onyina) tree, for example, helps crops to grow well by giving ventilation (air) to the crops. It also protects the plantain tree from breaking during storms. Fiscus spp. (Dormah) and Alstonia boonei (Nyamedua) provide the land with water, which could be seen around the plant".

Tree Conservation Practices in the Forest Buffers

Knowledge and utility of trees are applied by farmers in effective tree conservation practices. It is also generally believed by development agencies in the country that active beneficiary participation in forestry projects is a vehicle for ensuring better conservation practices (Owusu, 1999). This is viewed in the buffers with a gender-perspective to determine the extent of participation by women and its implications.

Tree conservation practices in the study area become more important and imperative during periods of hazards, such as in periods of drought, bush fires and dry season. It is assumed that the need for conservation will be greater and closer to the forest reserve than away from it. The evidence does not seem to provide a firm basis to support this assumption. What is clear is that during periods of bush fire, more tree conservation is undertaken in the second and third buffers, but not in the first buffer. The situation changes in the drought period where most tree conservation takes place in the first buffer with none in the second and third buffers. This is also the area where all farmers ensure compliance with bush fire laws in order to prevent fire outbreak on their farms and homes. During the normal dry season, it appears deliberate conservation practices diminish in all the three buffers with no plant conservation in any of the buffers. But with regards to compliance to bush fire laws, all the male farmers in the three buffers confirmed compliance.

In the identified buffers, gender disparities in conservation practices are very clear. Women are less involved in conservation strategies, be it fire prevention, regular patrols, plant conservation or compliance with bush fire laws. In regular patrols for example, their participation decreases from 19.1% in the first buffer to 11.1% in the third buffer (Table 5).

Table 5. Tree Conservation Practices during Bush Fire by Buffer in Percentages

Conservation practice	1 st Buffer		2 nd Buffer		3 rd Buffer	
	Male	Female	Male	Female	Male	Female
Fire prevention	79.5	20.5	82.1	17.9	80.6	19.4
Regular patrols	82.9	19.1	78.6	21.4	88.9	11.1
Tree conservation	Na	Na	100	0	100	0
Compliance with bush fire laws	87.0	13.0	57.1	42.9	87.5	12.5
No conservation	87.5	12.5	73.7	26.3	100	0

With regards to tree conservation women are not involved in the practice in any of the buffers. Conservation practices are generally those associated with the roles of men. On the issue of conservation practices during bush fires in the buffers, where conservation generally takes place in the third buffer, the pattern of women participation shows an interesting trend. Amongst the women, the highest practice recorded was in the second buffer where 42.9 % complied with bush fire laws as against 13.0% and 12.5% in the first and second buffers respectively.

Bush fires could be disastrous in times of drought. It should, therefore, be expected that farmers would take extra precaution during such periods against bush fires and to prevent them from spreading and completely destroying cultivated crops and valuable trees.

Table 6. Tree Conservation during Period of Drought by Buffer in Percentages

Conservation practice	1 st Buffer		2 nd Buffer		3 rd Buffer	
	Male	Female	Male	Female	Male	Female
Fire prevention	78.4	21.6	82.5	17.5	79.4	20.6
Regular patrols	88.6	11.4	92.3	7.7	86.7	13.3
Tree conservation	100	0	0	0	0	0
Compliance with bush fire laws	100	0	66.7	33.3	0	0
No conservation	86.7	13.3	71.4	28.6	100	0

Accordingly, comparing Tables 6 and 7 shows that conservation is more practiced in the first buffer during the drought period. This could be attributed to the observation that farmers prefer taking precautionary measures against bush fires during the drought period. The highest level of practice was undertaken by men with all male respondents undertaking tree conservation and complying with bush fire laws.

By stark contrast, no women in the first buffer undertook any of these two conservation practices. In the second buffer, two-thirds of the men and one-third of the women actually complied with the bush fire laws.

Table 7. Tree Conservation during Dry season by Buffer in Percentages

Conservation practice	1 st Buffer		2 nd Buffer		3 rd Buffer	
	Male	Female	Male	Female	Male	Female
Fire prevention	76.9	23.1	76.6	23.4	77.8	22.2
Regular patrols	81.8	18.2	87.0	13.0	95.7	4.3
Plant conservation	0	00	0	0	0	0
Compliance with bush fire laws	71.4	28.6	50.0	50.0	100	0
No conservation	92.3	7.7	70.0	30.0	88.9	11.1

Tree Conservation and Beneficiaries

So far, the general patterns in conservation support the long held notion that direct forestry activities in the formal and informal sectors have been identified with men since time immemorial. The hard work and the dangers, which used to expose people while working in the forest, have influence society to believe that women cannot work alone in forests far away from the settlement. The fear in the past of wild animals and hostile groups in the forest meant that female family members were encouraged to remain and work nearer home.

The implication of this coupled with other constraints of women in forest management is that women may not benefit from the new Timber Rights Bill introduced by the government in 1997. This provides the enabling environment for exploiting off-reserve timber resources for sustainable production. As traditional farmers and landowners have been caring for trees, it is felt that they should obtain some benefits and rights over tended trees for their efforts to encourage them to continue to do so. With this, farmers are going to be compensated for trees conserved on their farms. The limited involvement of women in forestry activities meant that their interests and benefits are marginalized since land owners/farmers are mostly male, taking decisions on land acquisition and ownership, crops and trees to be grown and farming activities.

Both women and men farmers suffer from tree depletion activities whereby they lose valuable trees due to illegal logging undertaken in all the buffers. Some of the destructions caused to the farms and trees by the activities of chainsaw operators and illegal loggers were severe depending on the extent of the destruction. These call for the need for some form of compensation to affected farmers. There was some form of compensation given out to the victims whose farms and trees are destroyed but the amount and levels of compensations are inadequate in comparison with the losses incurred. Some of the reasons for the non-compensation are refusal on the part of the loggers and relatives of chainsaw operators to pay. In other cases, farmers were ignorant about the need to claim compensation or were absent when the trees were felled so it was difficult to identify the perpetrators of the crime.

Such experiences, where they occurred, had discouraged farmers to conserve trees in the off-reserves. The women affirmed, “If we are compensated, every farmer will be encouraged to protect the trees well. But if we know that we will never get anything from the sales of the trees we will continue to destroy them in our farms” (Women Focus Group Discussions, 2004). Now with a local policy that recognizes the landowner as the owner for compensation, farmers including women on the off-reserves may be increasingly encouraged to preserve trees on their farms.

Conclusion

Forestry has been a male-dominated activity in Africa prior to colonial government rule. It continues to follow the same pattern in the forest-fringe communities and has been worsened by colonial forestry policies. In the off-reserve forests, trees are managed and conserved in farming systems, based on gender division of labour as a result of patriarchal structures that still characterize African societies. Women throughout the rural areas are actively engaged in farming systems and management practices. One of their major constraints, which is also of general fundamental concern, is legislation that governs land and tree tenure and farmer rights, especially in the rural and high forest areas of Ghana. Tenure reform is crucial in all attempts aimed at improving governance in customary land management institutions especially where women are concerned. Equally important are the existing incentive mechanisms which should be further revised to ensure more effective collaborative management and benefits to farmers. Monitoring and stringent enforcement of illegal logging operations, which undermine tree conservation and deprive farmers of livelihoods, should be strictly enforced.

Equity in forest benefit sharing has tended to be top-down with the Forestry Commission, stool landowners and farmers benefiting most in that order. Women who are at the bottom of the hierarchy receive least consideration if any. The traditional system and the family structure, which used to guarantee women’s access to land, is breaking down as the result of increasing commercialization, and with it diminishing access to land by women. Corporate efforts in some parts of Africa have assisted women as it has succeeded to guarantee access of women to land and possibly credit and labour. However, to ensure empowerment of women on similar terms as men, national plans with gender mainstreaming perspectives are needed to focus on ways of increasing women’s economic participation and control in farming management systems.

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Sustainable harvesting of non-timber forest products: The role of gender in the Philippines

Arsenio B. Ella⁴⁸

Abstract

Harvesting of some important non-timber forest products (NTFPs) is considered a major conservation strategy because it deals with both conservation and development, thus focusing more on product, farmers and forest settlers, especially the indigenous people (IP) and forest. There are about 18 million forest dwellers, mostly IPs, in the Philippines, who are primarily dependent on the collection and sale of NTFPs for their livelihood. Research and investigations were therefore undertaken to address the apparent lack of documented information available on NTFPs in the country, i.e. their availability, volumes, and the revenues and marketing practices associated with them. The major NTFPs identified include among others: rattan, bamboo, resins (almaciga and Canarium), vine, erect palms, anahaw leaves and tiger grass. These NTFPs play a significant role in sustaining interest and motivation among IPs. Women and children constitute the majority of NTFP gatherers in the Philippines. The benefits that will be derived from the investigation would directly relate to the economic, social and ecological dimensions of the forest settlers. The forest occupants will gain technical knowledge and skills in the collection and processing of NTFPs to maintain and improved their income. They would further acquire some know-how on sustained-yield collection practices and observation measures for sustainable supply of identified NTFPs. The benefits and other social impact that may be derived would not remain isolated but will find ways to reach other forest communities in which the occupants would likewise adopt for their common welfare. The sustained yield collection practices for the sustainable supply of important NTFPs in the Philippines have a direct and strong linkage to the handicraft and furniture industry sector. The primary intention of this paper is to improve our understanding about the role and potential of harvesting of some NTFPs through improved conservation management for the livelihood of the IPs and sustainable forest management.

Introduction

Until recently non-timber forest products (NTFPs) were known as minor forest products. They are also alternatively known as non-wood forest products, other forest products or other economic products because of their meager contribution to the country and forest revenues (Table 1). In the past, timber was recognized in the Philippines as a major product from the forest. As forest cover dwindled and with the excesses of logging operations in the 1980s, the Philippines woke up to the implications of the loss of their forest resources and introduced widespread logging bans to preserve the remaining tracts of forest. Against the background of the logging bans, emphasis on community forest participation has focused attention on those

⁴⁸ Arsenio B. Ella, Scientist III, Forest Products Research & Development Institute (FPRDI), Department of Science & Technology (DOST), College, Laguna 4031, Fax: 63 049536-3630, E-mail: Arsie_Ella@yahoo.com

products of the forest, the non-timber forest products upon which many communities are, at least partially, dependent. Efforts are now being made to examine the potential of these non-timber forest products, to support not only the subsistence needs of these people but also to offer commercial opportunities which will provide the communities with reliable sources of income. Doing so will highlight the wider value of the forest resource. Some of the important NTFPs in the Philippines include bamboo, rattan, erect palms, vines, honey, medicinal plants, bast fiber plants and other plants producing gums and resins. Statistics show that the 1998 export of furniture and handicraft from bamboo, buri (*Corypha* sp.) and rattan were US\$81.22 million and US\$32.37 million respectively. In 1999, exports of similar commodities using bamboo, buri and rattan increased to US\$86.93 million and US\$73.44 million respectively. The Philippine Forestry Statistics reported that 319 000 kg of almaciga resins valued at US\$242 000 and 377 000 kg of *Canarium* resins valued at US\$696 000 were exported in 2000. The collection, utilization and trade of NTFPs provide employment and livelihood not only to the forest dwellers but also to the local communities and urban areas (Table 2).

Table 1. Commercially important NTFPs

Category	Products
Forest products	<ol style="list-style-type: none"> 1. Nuts (Brazil-nut, walnut, and chestnut) 2. Fruits (ginkgo) 3. Edible fungi (morels, mushrooms) 4. Vegetables (bamboo shoots) 5. Starches (sago) 6. Bird's nests 7. Oils 8. Maple sugar 9. Juice (noni)
Spices, condiments and culinary herbs	<ol style="list-style-type: none"> 1. Nutmeg 2. Cardamon 3. Oregano 4. Cinnamon 5. Bay leaves
Industrial plant oils and waxes	Tung oil, neem oil, jojoba oil, candle or
Plant gums	lumbang oil
	<ol style="list-style-type: none"> 1. Gums for food, gum Arabic, gum Tragacanth 2. Technological grade gums
Natural pigments	Annato seeds, logwood
Oleoresins	<ol style="list-style-type: none"> 1. Pine oleorein 2. Copal, dammar 3. Amber
Fibers and flosses	<ol style="list-style-type: none"> 1. Fibres, bamboo, rattan, raffia, cork, broom-grass 2. Flosses, kapok or silk cottons
Vegetable tanning materials	Quebracho, mimosa, catha/cuth
Latex	Natural rubber, gutta percha, chickie

Incense woods	Sandalwood
Essential oils	Ilang-ilang
Plant insecticides	Pyrethrum, derris
Medicinal plants	<i>Taxus sp.</i> , <i>Cinchona</i> , <i>Vitex sp.</i>
Wild plants	
Miscellaneous products	Betel-nut, bidi leaves, lacquer

Sources: Iqbal (1993), Razal (2000).

Table 2. Resource availability in the various regions of the Philippines for selected NTFP-based livelihood options

Livelihood options	Resources availability in regions															
	1	2	3	4	5	6	7	8	9	10	11	12	13	CAR	NCR	
Abaca for paper				X	X	X	X						X		X	
Buri fiber extraction and processing	X	X	X	X	X	X	X	X	X	X	X	X	X			
Salago fiber extraction			X	X	X	X	X	X	X	X	X	X				
Hinggi harvesting and handicraft-making			X			X			X							
Rattan furniture	X	X	X	X	X	X	X	X	X	X	X	X	X			
Bamboo (deformed bamboo and utilization into other products)	X	X	X	X	X	X	X	X	X	X	X	X	X			
Pili (fruit/nut and elemi production)				X	X	X										

Source: DENR (1997). Sustainable Livelihood Options of the Philippines.

In a gathering of experts in Rio de Janeiro, Brazil, in 1992 at the United Nations Conference on Environment and Development (UNCED), Agenda 21 and forest principles identified forest products other than wood as an important area that requires more attention, as a source of environmentally sound and sustainable development. Over the past two decades, various organizations, such as people's organizations, of both common and indigenous people and forest settlers, government and non-government institutions including private sectors have become involved with the promotion and utilization of NTFPs and their effects on the sustainability of products as well as forests. It suffices to say that NTFPs have been recognized to play an important role for the local communities in and around the forests.

This paper intends to enlighten our vision about the role and potential of harvesting NTFPs in improved conservation and management for employment and income generation of the local or indigenous people (IP). Foremost is the role played by women in sustainable harvesting of NTFPs for increased socio-economic status.

Background

In 1996, about 17.8 million of the Philippines' population lived within the forest zone. The major segment of the population belongs to the poorest of the poor. Historically, these upland dwellers or forest occupants have contributed significantly to the degradation of the forest, but more importantly, they have the potential and they present a great challenge to be harnessed, motivated, mobilized and sustained to become an effective force in forest rehabilitation and conservation.

At present there are almost 18 million forest dwellers in the Philippines who are primarily dependent on the collection and sale of NTFPs for their livelihoods. The majority of these forest dwellers belong to the so-called Filipino indigenous cultural communities (ICCs). Rattan, vines and other non-timber forest production are for generations part of the life and culture of the country's indigenous people, viz. the Alangan Mangyans of Mindoro, the Batak-Tagbanuas of Palawan, Agta-Dumagats of Cagayan Valley, Manobo of Agusan, Tiboli of South Cotabato, and Bilaan of Davao. Their traditional utilization of NTFPs has transcended time; despite modernization, many IPs still cling to their old beliefs and practices. These are reflected in the use and manufacture of NTFPs into household wares and other indigenous articles.

The rapid loss of NTFPs in recent years has continuously stripped these tribes of potential-sources of livelihood necessary to augment their basic needs. They have no choice but to practice proper harvesting and utilization for sustainability of supply. Being closely associated with the forest for generations, they should be regarded as the rightful forest inhabitants amidst our flora and fauna.

The impetus of gender issues has been increasingly popular in our society, hence the centerfold by the women in sustainable harvesting of NTFPs is hereby given emphasis in this presentation. In recent years, a number of investigations, workshops and seminars on gender roles have been conducted here and abroad. However, those studies focused mainly on gender relation in farming activities across the country. No studies have ever been conducted on gender concerns in harvesting NTFPs. Since the NTFPs' contribution to the economic development is significant, it is essential that the needs, resources and constraints of forest product collectors be identified to further improve their efficiency and productivity.

NTFPs as Alternate Livelihood Sources - the Case of the FPRDI-ITTO Project

The "Collection, Utilization and Trade of Tropical Non-timber Forest Products in the Philippines", ITTO Project PD-15/96, was undertaken by the Forest Products Research and Development Institute of the Philippines. The objective of this project is to address the apparent lack of documented information available on NTFPs in the country, their availability, volumes and regeneration cycles, and the revenues and marketing practices associated with them. The project activities were undertaken in the four project areas located in the concession areas of the Industries Development corporation (IDC), Aurora Province; the San Jose Timber Corporation (SJTC), Western Samar, Surigao Development Corporation (SUDECOR), Surigao; and in an area granted by the government to the Nagkakaisang Tribong Palawan (NATRIPAL). Other satellite areas were also established in the provinces of Quezon, Masbate and Bukidnon. Table 3 shows some of the collected NTFPs by forest occupants in the project site and selected areas.

NTFPs-COLLECTION AND SUSTAINABLE PRACTICES

NATRIPAL in Palawan

Palawan is the largest of the Philippines' provinces with a land area of 1.49 million ha comprising about 1,300 islands. It is also one of the country's least developed provinces, but recent national transmigration policies, civil unrest in neighboring Mindanao and a developing oil business have all contributed to an increase in the population which now totals around 700,000 growing at a rate of 3.5 per annum (comprising 50 percent immigrants).

Palawan was actually exempted from the nationwide logging ban imposed in 1989. However, under the 1994 Strategic Environmental Plan for Palawan, logging has since been banned, and through this Plan, emphasis is being given to the integration of communities within the forest management framework. In effect, the result has been that large areas of what was previously timber resource land are now being claimed by native people under the Plan's social forestry programme. An example of this is found in Punta Baja, a community located about 200 km southwest of Puerto Princesa, the capital city of Palawan. Here, with the assistance of NATRIPAL, an association of indigenous groups of Palawan, over 15,000 ha of former forest concession have been granted to the local community.

The important products for the Punta Baja community are NTFPs. Foremost is almaciga resin and it was for this, primarily, that the land was granted. The almaciga trees (*Agathis philippinensis* Warb.) are located a day's walk from the village and around 75 percent of the community, both men and women, are involved in collecting the resin over the four-month harvesting season from January to April. Tapping is strenuous work. Steep slopes have to be scaled to reach almaciga trees growing at elevations of up to 2000 m. A tapper does 15 to 22 trees in one day and may actually cover as much as 600 trees during his stay in the forest. The demanding nature of this activity, however, does not preclude the participation of women and sometime children from tapping. According to one man, women join tapping forays if they need money to buy something they fancy. The volume of resin gathered and carried on their backs is much less; however, women or wives of tappers are more involved in the lighter side of making/preparing the resins for sale like sorting, grading and packing. But what really is considered the sole domain of the women or wives of tappers is the overseeing of financial matters like buying the materials for packing the resins, paying wages and giving cash advances to the helpers. In other words, the female is in charge of the financial and quality control aspects. The sacks of resin collected, which normally weight 45 kg each, are transported initially to the warehouse at Punta Baja and from there on to NATRIPAL in Puerto Princesa. NATRIPAL pays the community five pesos (US\$0.12) per kg of resin. It is then sold to exporters in Manila or Cebu for double that price. Most of the resin is sent abroad for processing into paints and varnishes.

Almaciga resin tapping is only permitted under license; all harvested resin has to be registered with the Department of Environment and Natural Resources (DENR) prior to its sale. In granting the land to the people of Punta Baja, the community was also granted the license to harvest almaciga.

Rattan: an invaluable product to the IPs

Rattan, the most economically important forest species after timber, plays a pivotal role in the life and culture of the indigenous people. The harvesting of rattan in the Philippines also requires a license. In Punta Baja, at least seven different rattan species are harvested; the species and quality are determined by specific orders received from wholesalers in Puerto Princesa. Like other Filipino indigenous cultural groups, the Batak-Tagbanua in Palawan regard rattan as a major source of livelihood. The government awarded the natives a permit to operate a 10,000 ha rattan plantation in the area. Bundles of rattan are gathered in the forest by groups of men. Each group is designated an identified and definite area to work on. Before a rattan pole is cut, the group assesses first if it can be collected in full length. Otherwise, it is left for seed production. A harvesting cycle of two years is being followed by rattan gatherers in each particular area. Rattans are transported either by foot or by carabao skidding and/or with the assistance of rivers and creeks in the area. This permits the natives to transport rattan poles using rafts to pre-arranged collection points. The participation of women and sometimes children in the rattan industry cannot be overlooked. The women perform the cleaning which include scraping, sorting, grading, splitting and drying. Foremost, however, is that women play a very important role in weaving and fabricating rattans into baskets, backpacks, containers and other useful handicrafts. On the other hand, children, especially out-of-school youths help their parents in collecting rattan poles and in cleaning in preparation for binding and stacking. Split rattan is sold at around ₱25 (US\$0.60) per 100 pieces and the community members who harvest the rattan are paid half the selling price. Assorted rattan species of 12-feet long and ¾-inch diameter are sold at ₱4 (US\$0.70) per pole and ₱6 (US\$0.12) per pole for 5/8-inch diameter poles. A gatherer gets an average income of ₱500 (US\$9.26) per month. The species of rattan found in the area are *Calamus* and *Daemonorops*.

Another NTFP available in the project areas is bamboo, especially buho (*Schizostachyum lumampao*). It is used widely, particularly for making “sawali” mats that are woven by the women of the community and used for walls, doors and flooring. The standard size of a sawali is approximately 8 x 2.5 m; about 75 percent of those produced in Punta Baja are sold at ₱300 (US\$5.56) each and the rest are used domestically. Buho is harvested from the ancestral domain of the IP. A gatherer can cut 200 pieces of 2-m long buho a day. Buho is sold to the traders in the market at ₱35 (US\$0.65) for a bundle of 50 pieces. For 200 pieces the gatherer gets P140 as gross income. He spends P15 (US\$0.28) for transportation and ₱5 (US\$0.09) for the permit from the DENR. A gatherer earns a net income of ₱120 (US\$2.22) from trading buho piles. Flattened bamboo shingles are also traded at ₱60 (US\$1.10) per bundle of 10 pieces.

Tiger grass, or locally known as lasa (*Thysanolaena maxima*), is also available in the project area. This grass is a very suitable material for making brooms. Previously this grass was simply collected and sold in bundles in Puerto Princesa for ₱5 (US\$0.09) each. However, a recent training session by the EU funded Palawan Tropical Forest Protection Programme has enabled the community to increase their profits in the fuller utilization of lasa. The programme has demonstrated to the women of the community how they can make brooms from the tiger grass. The women sell the brooms instead at ₱35 (US\$0.65) each, a significant increase in the value added to the raw material.

Another economically important forest product for the Punta Baja community is honey. Honey gathering in Palawan is a male-dominated activity with the women participating only in processing and marketing. A typical honey gathering expedition starts with an individual or a group of two to three members (usually family members) who go out to the forest and locate dense areas of flowering trees. Foremost of these are manggis trees (*Koompassia excelsa*). Manggis is found widely in Palawan but not elsewhere in the Philippines and this honey is therefore a local specialty. With the assistance of rattan hoists, the trees are climbed and the nests lowered on pulleys. Usually this takes place at night when the bees are less active. Up to four different nests may be found on one tree, each could yield around 4 litres of honey; 20 litres of honey sell at around ₱250 (US\$4.62). Among all forms of NTFP gathering in Palawan, honey gathering is considered a premium activity. It brings the gatherers a quick cash conversion per unit time spent, there is not much capital and equipment needed and the job is considered light since the most laborious part is only the climbing and the work is looked upon as an enjoyable activity. For these reasons, the honey season is a period much anticipated among the indigenous communities.

Other NTFPs collected by the IPs as alternative livelihood sources

Vines gathered and traded by the IPs especially in Aurora Province are hagnaya (*Stenochlaena palustris*) and hinggiw (*Ichnocarpus ovati*). These vines are mostly fathered from the higher elevations. Long before the scarcity of rattan was felt by the natives, vines, aside from other benefits derived from them, were used to accentuate the rattan's natural beauty. For instance, nito (*Lygodium* spp.) is used to wrap the 200-m rattan coil of the yakis worn by the Alangan women. Collection of vines is usually done by men. The women do the cleaning, sorting, and splitting of vines into desired sizes prior to weaving into baskets, decorative items and other handicrafts. Most of the time, the quality of vines harvested is determined by the demand placed on them. Vine gatherers are willing to supply the buyers with the needed volume of orders, be they for manufactured items or not.

Canarium resin

Tapping of resin from *Canarium* species provides livelihood for the people of the Bondoc Peninsula, Alabat Island and Masbate, where the trees abound in between coconut plantations and occasionally in secondary forests. Each family owns and taps an average of 15 trees found in their backyard. Because of the availability of *Canarium* trees in the communities, unlike almaciga trees where steep slopes have to be scaled to reach the naturally growing trees at elevations of up to 2,000 m, participation of women and even children in tapping *Canarium* resin activity is common. Tapping methods were crude and unscientific but have been improved. An average of 28 kg of resin is collected every 15 days from 15 trees. A family generate an income of P1770 (US\$32.78) per month from the sale of *Canarium* resins. Resin traders, on the other hand, store their purchased resin in warehouses where they finally sell it to buyers in Metro Manila at P40 to P45 (US\$0.74 to 0.83) per kg. A leading buyer of *Canarium* resin based in Gumaca, Quezon Province, normally exports 8 tonnes of *Canarium* resin per month to Europe, specifically France. To rectify the crude practices of tapping and harvesting *Canarium* resins and likewise avert possible loss of *Canarium* trees in the areas, the Project Management of the FPRDI-ITTO Project has conducted seminars/workshops on the proper techniques of tapping *Canarium* resins, with the international trade name of "Manila Elemi" (Table 4).

Anahaw leaves

Anahaw (*Livistonia rotundifolia*) is a palm species reaching a height of 20 m. Its large fan-shaped leaves are used by the natives, the Agta-Dumagats, as the main material for building their houses' roofs and walls. A mature anahaw plant yields an average of 30 saleable leaves. The total number of leaves harvested depends mostly on the orders placed by the buyers. A big leaf cost ₱1 (US\$0.02), while a small one costs 80 centavos (US\$0.01). A partial advanced payment for the ordered anahaw leaves is usually requested by the Agta-Dumagats to support their daily necessities. The remaining balance of payment is made upon delivery of the product. Anahaw leaves are transported in bundles of 100 leaves per bundle using a sled pulled by a carabao. Collections are performed by men and husbands of Agta-Dumagats. In the case of farmers and forest settlers in Bondoc Peninsula, collection of anahaw leaves is a strong alternative source of income. The frequency of collections is once a week with 300 pieces of anahaw leaves per collection of 1,200 leaves per month. The collected leaves are transported from the collection site to the weavers' houses either by foot or carabao skidding. Weaving of anahaw leaves into fancy fans, wall decors and other decorative items is normally done by women and children. They weave 2,000 pieces of export quality fans per month and sell them at ₱1.10 (US\$0.03) a piece. Though the system is on order basis, a family of anahaw fan weaver earns ₱2000 (US\$37.03) per month.

SUSTAINABLE PRACTICES

Rattan

In harvesting rattan, specific areas are assigned to a particular group. Cutting is done in groups. The poles are carefully selected and are cut every two years. The IPs spare young and juvenile rattans from being cut. Replanting is required a year before harvesting is done. They replant seedlings from fallen germinants to replenish what have been cut or harvested. Further, they are also responsible for weeding the area around the rattan clumps and providing trees for clinging.

Bamboos

Sustainable practices in the course of harvesting bamboos like that for spiny bamboo include the removal of spiny branches in and around the lower portion of the clumps and decongestion of the clumps. The latter involves the removal of high stumps from previous harvestings and cutting of deformed and overmature culms. For all species of bamboos, harvesting mature culms and in the right season sustains their productivity. Further, the people, like in the case of rattan, replenish what have been cut or harvested by continued replanting of bamboos.

Almaciga and *Canarium* resins

In the course of tapping or extracting resins, the IPs normally injure the trees to the extent of reaching the cambial layer. With a damaged cambium, the cut will not heal or if does, very slowly, exposing it to insect and fungal attacks. They deep tap, overtap and frequently rechip causing extensive wounds through which wood-rotting organisms can enter and colonize the trees. To rectify the crude practices of tapping and harvesting almaciga and *Canarium* exudates and avert possible loss of the trees in the areas, seminars/workshops and training on proper techniques of tapping resins have been carried out. The training also aimed for sustained productivity of resins.

Anahaw leaves

While most of the forest settlers do not practice any system of sustaining the NTFPs at their disposal, it is interesting to note, however, that their harvesting and trading activity are based only on the number of orders dictated by buyers. As in the case of Anahaw leaves, they only utilize what is needed. Gathering of Anahaw leaves is a good source of income for the farmers and forest settlers considering the availability of resources. The IPs extract only leaves from the tall and mature palms, which are usually found in the interior of the mountain. Moreover, leaves of young Anahaw palms are spared from being cut.

Tiger grass

Massive planting of tiger grass has been practiced by the forest dwellers to have a continued supply of raw material for making brooms and other fancy products, like souvenirs.

Gender roles in harvesting NTFP

It was observed that women play a significant role in harvesting some of the country's NTFPs. In the past, collection of resin by tapping the trees was solely performed by men due to the strenuous work involved. Nowadays, however, tapping for resin is already done by women and even children, especially for *Canarium* resins. The most common role of the women in the harvesting scheme is scrapping and gathering of NTFPs like resins from the forest floor. It was estimated that out of the total collection of NTFPs, about 75 percent is executed by women alone. Most of their participation, however, is mostly on cleaning, scrapping, sorting and weaving for handicrafts. Further, it was observed that the productivity of the NTFPs collected by women and children is relatively stable in the project sites visited.

Concluding Remarks

The Punta Baja community in Palawan Province is just one example of a group of IPs who are capitalizing on the diversity of local forest products. Other activities of the same origin are also being carried out not only in Palawan but throughout the archipelago. Not all the products collected will justify significant investment, but in some cases, simple development techniques will be enough to make a significant increase to the incomes of the communities.

The role of NTFPs in the economic subsistence of the indigenous cultural communities cannot be set aside. The dearth of information available on NTFPs, viz population, occurrence, distribution, regeneration, productivity and marketing practices associated with them, is apparent. It is imperative therefore that the traditional forest dwellers should actively participate in the control and management of NTFPs, based on a certain level of knowledge on sustainable development.

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Appendix

Table 3. Information gathered from project sites and selected areas where occupants are engaged in the collection of selected NTFPs*

NTFP	Collected	Vol. extracted month (average)	per	Average income divided month (per family)	per	System training	of	Frequency of collection
Almaciga resin	Solely by men	90 kg		P400 (US\$7.40) (during months of Jan., Feb., Mar. and Apr. P250 (US\$4.60) (for the rest of the year)		Via licensee		Per advised by "kapatás" or middleman
Rattan (12 ft. long, assorted species)	Jointly by men and women	120 poles		P600 (US\$11.10)		Contract basis		As order comes from "kapatás" and traders
Wild honey	Solely by men	30 containers (5 gal each container)		P7500 (US\$138.90) (for the whole honey gathering season, viz. March, April and May)		Contract basis		seasonal (March to May)
Bamboos	Jointly by men and women	3000 pcs.		P1200 (US\$22.20)		Contract basis		As order comes
Canarium resins	Jointly by men and women	50 kg		P1700 (US\$31.50)		Contract basis		Every 15 days or as per advised by "kapatás" or middlemen
Anahaw leaves	Jointly by men and women	2000 pcs. of leaves		P2000 (US\$37.00)		Contract basis		As order comes
Vines								
• <i>hinggiw</i>	Jointly by men and women	700 pcs. at 30 ft long (P140/100 pcs.) US\$ 2.6/100 pcs.		P900 (US\$16.65)		Contract basis		As order comes
• <i>lukmoy</i> and <i>hagnaya</i>	Jointly by men and women	800 pcs. at 30 ft long (P85/100 pcs.) US\$ 1.58/100 pcs.		P700 (US\$13.00)		Contract basis		As order comes

*US\$1.00 = P54

Table 4. Impact assessment of harvesting/training and seminar conducted on selected NTFPs

NTFP	Economic impact	Environmental impact	Social impact
Canarium resin tapping	<ul style="list-style-type: none"> Increased income of tappers which could be attributed to higher quality resin yield Increase resin yield/volume of resin production 	<ul style="list-style-type: none"> Lessened environmental problem by minimizing the unscrupulous system of resin tapping, thus helps in the conservation programme of the government 	<ul style="list-style-type: none"> Generated more employment to engage in resin tapping Increased/improved ties among Canarium permittees/tappers and concerned government officials
Almaciga resin tapping	<ul style="list-style-type: none"> Increased income of tappers owing to good quality resin produced Improved resin yield especially as far as cleanliness of resin is concerned 	<ul style="list-style-type: none"> Prolonged life of the tree Sustained production of resin by minimizing crude system of resin tapping 	<ul style="list-style-type: none"> Increase number of resin tappers/generated more employment Developed stronger camaraderie among resin licensees, traders, tappers and concerned government officials
Honey processing	<ul style="list-style-type: none"> Less effect on the part of honey collectors, especially IPs because they believed that other form of cleaning or healing destroys the honey's taste and medicinal value 	<ul style="list-style-type: none"> Hygienic practice of honey processing is environmentally friendly 	<ul style="list-style-type: none"> Less patronized by people especially IPs who still appreciate the old and traditional practices of processing by pressing the honey-comb to extract the honey
Anahaw leaves and weaving them into fancy and decorative items	<ul style="list-style-type: none"> As primary source of income farmers became full time anahaw fan weavers 	<ul style="list-style-type: none"> Sustained production of more anahaw leaves by selective process of collecting anahaw leaves 	<ul style="list-style-type: none"> Generated employment
Bamboo processing (for house and poultry cage construction, bamboo mats or sawali and bamboo crafts)	<ul style="list-style-type: none"> Abundance in the country, especially kauayan tinik and buho species, offered a big potential for its utilization thereby a source of living for people especially in the rural areas 	<ul style="list-style-type: none"> Proper collection of the material sustained its production and likewise reduced health hazard problems of the people and the community 	<ul style="list-style-type: none"> Generated employment and developed strong ties among bamboo growers, traders, entrepreneurs and private and government officials working on bamboos either on production or utilization aspect
Rattan processing (for furniture handicrafts)	<ul style="list-style-type: none"> High potential and lucrative furniture/handicraft for both export and domestic purposes, hence increase income of rattan growers and entrepreneurs and ultimately the national income of the government 	<ul style="list-style-type: none"> Maximizing the processing of rattan is environmentally friendly and helps in the conservation programmed of the government 	<ul style="list-style-type: none"> Generated employment

Gender and Poverty Issues in the Forest Regions of Northern Lao PDR⁴⁹

Calub BM⁵⁰, Simouckda K⁵¹, Vongsoumphu T⁵⁰, Soudarak H⁵⁰ and Chanthilath K⁵²

Abstract

Participatory Poverty Assessment (livelihood matrix, food seasonal calendars, mobility maps, SWOT analysis and problem cause analysis) was conducted in the 12 project sites of the Lao-Swedish Upland Agriculture and Forestry Research Program in order to assess the poverty status and its effect on livelihood opportunities of poorest men and women ethnic groups in relation to forest resource access and control in Northern Lao PDR. Additionally, the study analyzed constraints to finding workable options for sustainable farm and forest resource management.

The poorer a family is, the more they are dependent on forest resources. Because land allocated by government is small (1-2 ha), degraded and far from homes, crop production is difficult. Rice shortages and sickness are highest from March to October. In order to survive, men, women and children collect non-timber products from the surrounding forests for food and some income. Overharvesting and lack of knowledge on sustainable harvesting methods resulted to decline in forest productivity and greater demands for labor and time spent gathering and walking further into the forest. Slash-and-burn agriculture also contributes to forest destruction.

Men seek employment in the cities while women are left to take on men's activities in the farm in addition to their household and child-rearing chores. Men separated from their wives are easily tempted to take on different partners thus increasing risks to the spread of HIV/AIDS. With acute poverty, girls instead of studying or farming are driven to work in cities but could likely end up in entertainment night bars, again risking HIV/AIDS and STDs.

Review of the land allocation program, better health and education facilities, domestication and sustainable harvesting of non-timber forest products, integrated farming systems technologies, income-generating activities both from farming and non-farming enterprises can alleviate poverty. Involvement and capacity building of more women development workers on gender-sensitive poverty assessment, participatory action planning, implementation, monitoring and evaluation plus sustained institutional support can lead to improvements among Lao uplanders.

1. Introduction

⁴⁹ Paper presentation at the IUFRO 6.08.01 International Workshop on Gender Research in Forestry with focus on Africa, Asia, Australia and Latin America, June 17-21, 2006, Umeå, Sweden.

⁵⁰ Former Farming Systems Research/Extension Adviser, LSUAFRP; currently University Researcher, Integrated Farming Systems and Agricultural Extension Division, Agricultural Systems Cluster, University of the Philippines Los Baños, College, Laguna 4031 Philippines (bmcalub@gmail.com).

⁵¹ Research staff, Researcher and Director, respectively, Northern Region Agriculture and Forestry Research Center, Houykhhot District, Luang Prabang, Lao PDR.

⁵² Head of Farming Systems Research Component, LSUAFRP, NAFRI, Lao PDR.

The Lao People's Democratic Republic is faced with the challenge of reducing poverty among 80% of its total population of 5.6 million (GoL 2004). About 45% of the poorest communities in the country are concentrated in the Northern provinces bordering Myanmar, China and North Vietnam. These poor uplanders belonging to various ethnic groups are mainly engaged in subsistence "slash-and-burn" agriculture, fishing, hunting, gathering and forestry.

Reducing poverty, through wise use of natural resources and adoption of appropriate upland farming technologies, is the goal of most upland development and poverty alleviation programs. However, the challenge is complex and solutions are not simple. Poverty reduction and food security in the Lao uplands becomes more attainable and sustainable if greater gender sensitivity is applied in understanding the important elements, dynamics, problems and opportunities of women and men in these communities. New technologies and alternative options for agriculture and forestry need to be sensitive to the differences in the roles, behaviors, relationships, needs and constraints of women and men. Additionally, instead of being passive recipients, women and men need to be empowered as active participants and responsible decision-makers in planning, implementing, monitoring and evaluating programs to share the outcomes and benefits (Calub 2005).

Articles 22 and 24 of the Lao PDR Constitution promote gender equality as an important national goal. The National Commission for the Advancement of Women was recently established to guide ministries, agencies and mass organizations in developing strategies and action plans to promote gender equality at national, provincial, district and village levels. But as with other development initiatives, both local and international, there exists gender-focused knowledge gaps between program policy, planning and implementation.

The Special Programme for Food Security (SPFS) of the UN-FAO noted that available data on the diverse rural society in Laos is limited and rarely indicates women's responsibilities and decision-making in the family farm. Data also fails to reveal many important food production and processing activities that women commonly perform (Baken et al, 2005).

In a modest attempt to contribute to a deeper understanding of gender dynamics among poorest upland communities of Northern Laos, the Lao-Swedish Upland Agriculture and Forestry Research Program (LSUAFRP) initiated a Participatory Poverty Assessment of poorest households in its twelve project sites in Luang Prabang and Oudomxay provinces. Using participatory tools and techniques, the study aimed to assess the poverty status and its effect on livelihood opportunities of poorest women and men ethnic groups in relation to access and control of agricultural and forest resources. Additionally, the study analyzed constraints faced by women in finding workable solutions for sustainable farm and forest resource management.

This paper provides an overview of the results of the above LSUAFRP study. Where indicated, most of the specific data presented in this paper are from only one village since the rest of the PPA reports remain written in the Lao language and are awaiting translation. Results discussed about the other villages are based from actual participation and interaction with villagers during the conduct of the PPAs. While aware of specific differences due to ethnicity, local environment, natural resources, economic opportunities and politico-institutional aspects, the findings from Ban Houayman give us some ideas of the gender and poverty situation in the forest regions of Northern Laos.

The discussions and analysis provided here also refer to results from earlier Participatory Rural Appraisal, household diagnostic surveys and on-farm research conducted by LSUAFRP. Suggestions for promoting gender sensitive approaches in the uplands of Northern Laos are discussed.

2. Conducting the Participatory Poverty Assessment (PPA)

In preparation for the field work, selected staff of the Northern Region Agriculture and Forestry Research Center (NAFReC) and the District Agriculture and Forestry Extension Office (DAFEO) were given an on-the-job training on how to conduct PPA. Through role play and guided plenary discussion the staff learned facilitation methods using such tools as gender clocks, well-being ranking, food availability calendar, income/expense calendar, mobility maps, SWOT (Strengths-Weaknesses-Opportunities-Threats) analysis, problem identification and ranking, problem cause analysis, possible solution ranking and technology option ranking. A review of behavioral “dos and don’ts” for eliciting active participation of villagers were given during the staff training. Additional training was given on process documentation during field work and report writing after the field work.

Before actual field work, pre-arrangements were made by consulting the village council in terms of identifying the poorest households of the village and getting their participation in the PPA. Based on village standards, the well-being status of a family is based on the number of months per year when rice supply is sufficient or insufficient for the family. For example, better off farmers, have sufficient rice supply throughout the whole year while poorest farmers have a rice supply that lasts only for 3-4 months in a year. In the case of the villages studied, about 10-15 families were identified as “poorest” per village. These were the people who were sought for the PPA.

It is customary that women stay quietly on the sides while men dominate discussions during group meetings. To avert this, we formed separate groups of women and men. The women felt more at ease and spontaneous when discussing among themselves. Female facilitators were assigned to the women’s group and male facilitators to the men’s group. This grouping also made it possible to clearly distinguish by gender the outputs of the PPA. Later in the activity, a joint group validation was done where outputs from both the women and men groups were displayed, compared and analyzed together.

The first PPA was conducted in Ban Houayman village in Phonsay District, Luang Prabang. The same methodology was used for the remaining four villages in Phonsay District and seven villages in Namo District, Oudomxay.

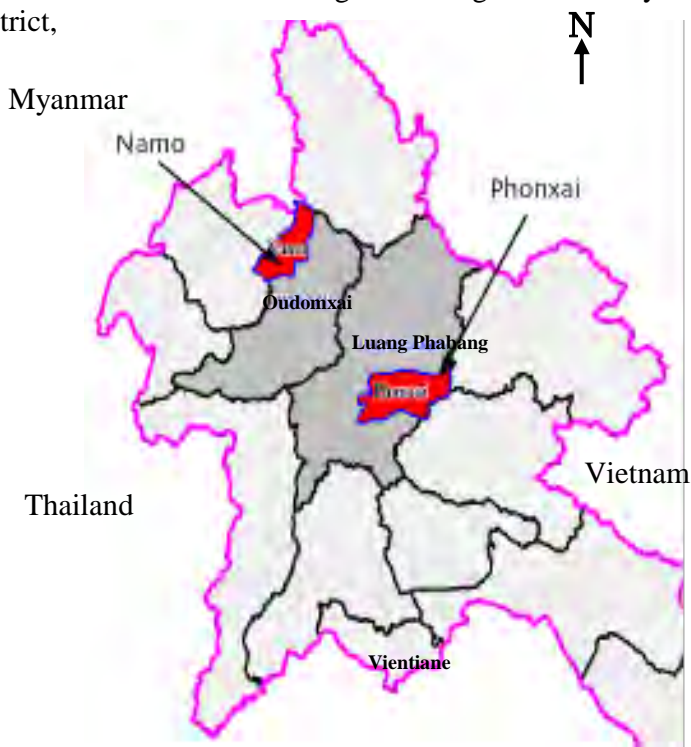


Figure 1. Location map of LSUAFRP project areas in Northern Lao PDR (2002-2006)

3. Brief background of Ban Houayman

Ban Houayman is one of the poorest villages in Phonsay District, Luang Prabang province. Phonsay District itself is one of the 10 priority poorest districts classified under the National Poverty Eradication Program (GoL 2004). Of the 51 households in Houayman, 11 are classified as poorest meaning they have enough rice harvest for only 3-4 months of the year.

Ban Houayman consists mainly of the Khamu ethnic group with some Hmong ethnic families who settled here from the surrounding villages. The Khamu belong to the *Lao Theung* or middle slopes ethnic group while the Hmong belong to the *Lao Sung* or highland ethnic groups. It is common knowledge that the Hmong are normally better-off compared to Khamu because they are more hardworking, business-minded, know-how to rear cattle herds and in the past grew opium poppies.

Among the 11 poorest households, two were Hmong and the rest were Khamu. Houayman is one of the many villages currently under the government program of village merging and village relocation. In accordance with the focal area strategy, small scattered villages are amalgamated into larger villages near main roads with the idea of making it easier to provide basic services like water, transportation, health clinics and schools. This was welcomed by some communities but not by others especially where the expected benefits and services have not been realized. Many villages were not happy to be uprooted from their old villages nor were they happy to merge with other villages particularly if from a different ethnic group. The receiving village is likewise not happy to share their already limited land area to the new comers (Jones 2005).

Houayman expects to receive 20 new families from another nearby village by 2006. The village council is planning to clear an area presently planted to teak in order to accommodate the new batch of relocated families.

4. Understanding poorest households with a gender perspective

4.1. Well-being status

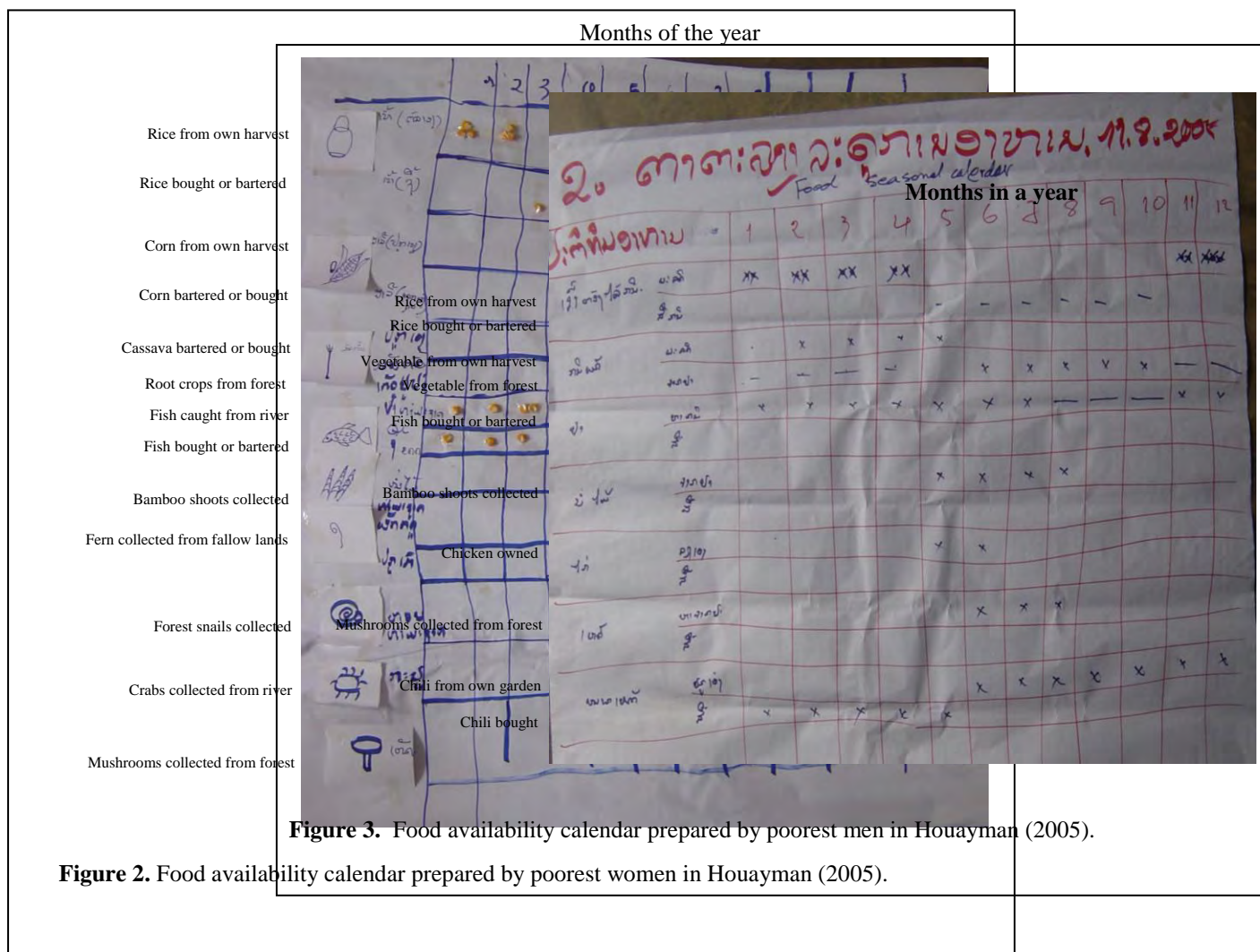
The well-being status of the poorest households were ranked based on number of parcels of agricultural land allocated to them, the number of animals owned, the house construction, food deficit, and the number of children they are able to send to school. All households have at least 1 parcel of land, 2-3 parcels on the average and one household with 4 parcels. Nobody owns a buffalo but 3 of the households own a cow. Except for 3 households, they raise 1-2 pigs and some chickens. Houses are mainly made of light materials like bamboo and thatch roof except for one who used some wood for posts and flooring. All claimed that rice and other food are insufficient for their family. Nine of the households cannot send 1-2 of their children to school because they do not have the money to buy school needs or the children have to help in the house or farm work.

4.2. Food security

For the poorest households, finding food is a daily preoccupation especially for mothers whose main task is to “put something on the table”. Poor households survive periods of rice deficit, by collecting non-timber forest products like wild vegetables, ferns, mushrooms, bamboo shoots, roots, tubers, yams, snails, frogs, rodents, snakes and insects. The streams and rivers are important sources of fish and crabs. While we have actually observed consumption of wildlife once in a while, it was denied by the women during the PPA, perhaps because they know that it is banned by government. Forest foods are consumed directly or used for barter or for sale.

Both women and men, acknowledge their great dependence on the forest for food and survival. The forests in fact provide the needed diversity of nutrients in the Lao diet. The constraint lies in the amount of food products that can be obtained from the forest. The “tragedy of the commons” seems to prevail in collecting food from the forest. There is a common belief anybody can just take anything and that these forest resources will regrow by themselves; that if you don’t take it now somebody else will. This results to over harvesting, unsustainable harvest frequencies and sometimes destructive harvesting methods. With increasing population pressure, this practice can undermine the sustainability of the forest. In fact villagers have observed a marked decline in the forest foods that they can harvest. They have to spend more time and travel longer distances in order to find enough food.

Rice insufficiency is the commonly used indicator of poverty but on closer look, people survive even if rice is lacking. Upland rice is usually harvested in November-December (Figures 2 and 3). At this time rice is available for the household. Beginning February- March until the next rice harvest, the households have to find other food, barter or engage in seasonal wage earning activities to enable them to buy rice. Comparing the food seasonal calendars prepared by the women and men, it seems that women are more aware of the deficits in rice and the shifting to other food like corn, cassava and root crops. These alternative food crops were not mentioned in the men’s food calendar. This may also be attributed to the custom that women usually defer eating rice (the most important food) in favor of providing first for the children and her husband. So it could be the case when the husband eats rice (so he thinks there is no deficit yet) while the wife eats whatever is left or eats something else later. Note that chili was mentioned by the men but not by women in their food calendar.



4.3. Income Sources

The various sources of income among poorest households in Houayman are presented in Figures 4 and 5. Proper estimates of actual income from the sale of these crops are difficult to make because many of the women are not able to recall well how much they were able to harvest. Likewise, the harvests are measured in terms of bundles, cans, baskets or bags instead of kilograms. The PPA team could have taken samples to estimate equivalent weights but the harvested products were not available at the time of the field work. Table 1 presents some idea on the prices and estimated volume of the products they are able to sell. The estimated income range is US\$251-624 per household per year.

Table 1. Estimated income among poorest households of Houayman, 2005

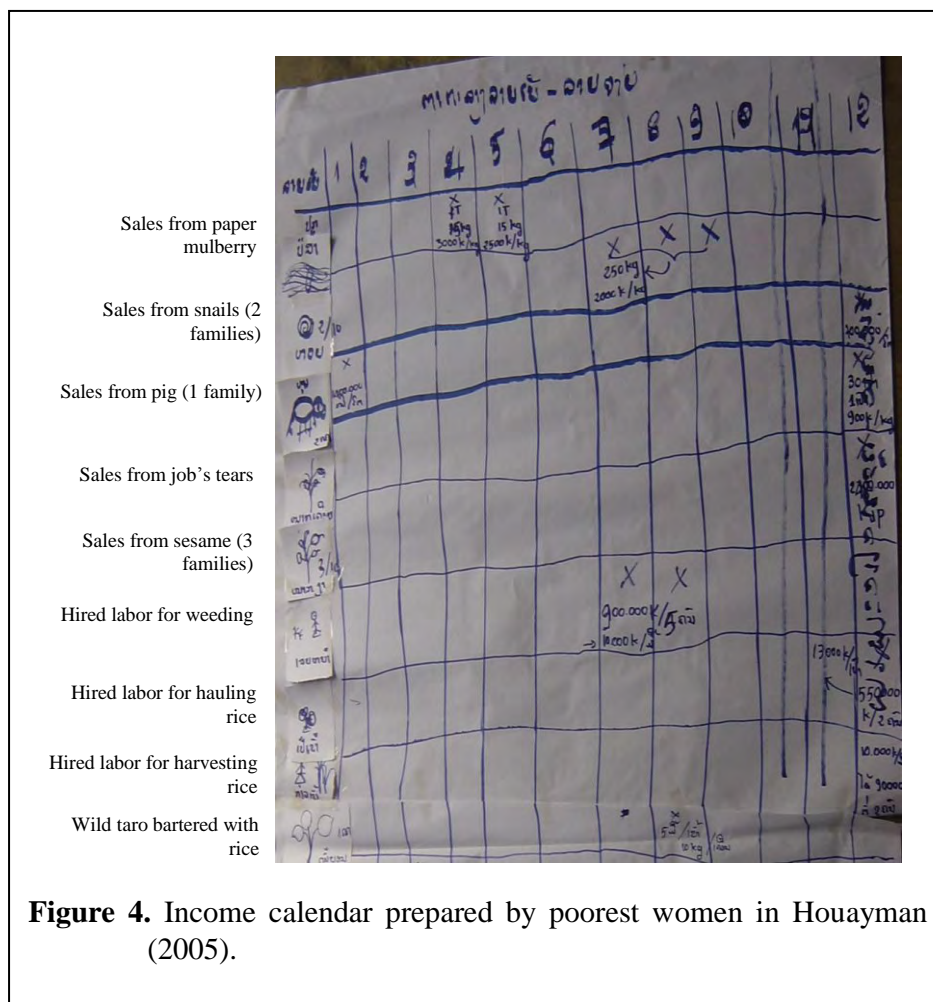
Products sold	Price as of 2005 (US\$)	Estimated amount sold or work done/yr	Estimated Income (US\$/yr)
Crops			
Job’s tears	0.07-0.09/kg	30-900 kg	2.70-63.00
Sesame	0.50/kg	30-75 kg	15.00-37.50
Chili			
Non-timber forest product (NTFP)			
Paper Mulberry	0.25-0.30/kg	80-1,000 kg	24.00-250.00
“Tou tiang” bark	0.30-0.60/kg	10-70 kg	6.00-21.00
Broom grass	0.30/kg	20-55 kg	6.00-16.50
Taro	0.10/kg	10-50 kg	1.00-5.00
Bamboo shoots	Not frequently sold so price is unknown; mainly collected for home consumption		
Mushrooms			
Livestock			
Pigs	\$140.00/head	1hd	\$140.00/hd
Fish	1.60/kg	10-30kg	16.00-30.00
Hired Labor			
Weeding (W)	1.00/day/person	20-30days	20.00-30.00
Harvesting (W)	1.00/day/person	3-7 days	3.00-7.00
Hauling (W)	1.30/day/person	3-7 days	3.90-9.10
Hauling (M)	2.00/day/person	7-10 days	14.00-20.00
Estimated Income (US\$/year)			252.00-629.00

Because of the relatively good income from "Posa" or paper mulberry (*Broussonetia papyrifera*) some women have planted them in their lands. What they are able to collect from the forest is supplemented by those harvested from their own plots. Some women complain however that some people surreptitiously collect paper mulberry from their plots. This has discouraged some of them to continue establishment of paper mulberry plots. The same is true for establishment of bamboo shoot plots. "Tou tiang" (*Boehmeria malabarica*) is an important NTFP being exported to China. Both men and women observe that this is becoming scarcer thus they have to go further into the forest to collect them. "Khem" or broom grass (*Thysanolaena latifolia*) another important NTFP can be collected from forest fringes or planted along plot boundaries.

Job's tears and sesame are mainly grown as cash crops. However, income derived from the sale of these products in general is subject to price fluctuations depending on supply and demand and as dictated by traders. In the case of job's tears, trading is controlled by middle men who have obtained exclusive license from the District. Farmers are not allowed to sell their job's tears to other traders. Farmers see this as a constraint because the prices given to them are often lower than prevailing market prices.

While in the other LSUAFRP project sites, women engage in traditional silkworm rearing and weaving, this is not done actively in Houayman. The women said they are so preoccupied working to

bring food on the table that they rarely have time to engage in handicraft making and weaving, except perhaps for home use. They have not seen this as something they can sell and get income.



Men usually go fishing for home consumption and for sale. During peak fish season, women may also go fishing in small groups by drawing nets across the stream. Additionally, women take care of pigs and chickens. Pigs are intended for sale to pay for children's school fees. Chickens are normally for home consumption although when they have a good number they may also sell them for additional income. Selling to traders who come to the village or bringing the produce to the towns or cities is done usually by the men since they are more literate and can speak more fluently the "official Lao" language.

and

Sales from sesame

Sales from job's tears

Sales from chili

Sales from wild taro

Sales from paper mulberry

Sales from broom grass
(*Thysanolaena maxima*)

Sales from "tou tiang"
(*Boehmeria malabarica*)

Hired labor for hauling sawn
wood

Sales from fish

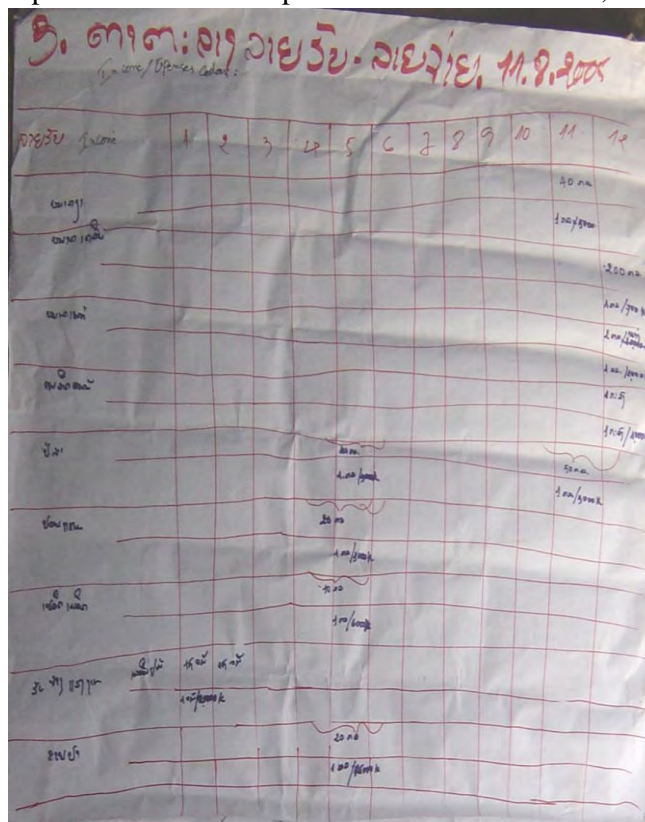


Figure 5. Income calendar prepared by poorest men in Houayman (2005).

Income from hired labor is seasonal and is usually not enough for rice basic household needs.

Doing farm work in other people's fields is

preferred by both men and women than working in their own fields because at the end of the day they earn something to buy rice for the family. Poor people, particularly the Khamu ethnic group are often regarded as lazy because most often they are not able to weed and take care of fields allocated to them. On closer view, they are not able to take care of their own fields because cropping needs a waiting time (for plants to grow) as compared to the immediate daily cash available when they work in another person's field.

Women earn income from weeding, harvesting and hauling rice harvests from the mountainous fields to the village. Normally a bag of unhulled rice weighs 30 kg per sack. Depending on distance, they can make 1-2 trips a day. Men also earn wages by sawing and hauling timber. Usually in January–February after the rice harvest season and before the land preparation activities, men go to the towns to work as hired laborers, usually in construction projects. Sometimes young girls also go to the towns or cities to work in factories, restaurants or entertainment shops. One of the households during the PPA has a daughter working in Vientiane. The mother says she doesn't know exactly the kind of work her daughter is engaged in since she rarely visits home. The mother is thankful however that her daughter sends money and clothes once or twice a year.

4.4. Expenditures

Table 2 presents the main expenditures of these poor households. The biggest expense is on food which includes rice, salt, fermented fish and seasoning (monosodium glutamate, MSG). A quite high consumption of salt (1.5-2.0kg/month) and MSG (0.5-1.0kg/month) was noted among these households. Purchase of medicines is high in May-July coinciding with the rainy season. According

to them this is the period when labor demand for farm work is heavy and exposure to cold and rain makes household members highly susceptible to respiratory diseases. School expenses include school supplies, uniforms and some fees. Additional expenses for transport are incurred when the children go to secondary school in another district. Usually parents are more willing to spend for secondary education of sons than of daughters. Clothes are bought during the cold months of November-December and sometimes during special occasions. Owing to the light construction materials of houses, regular repairs are done regularly before the rainy months come. A small amount is spent for purchase of agricultural tools. When they have extra income, they like to buy young goats and pigs to raise and sell later.

Table 2. Estimated expenditures among poorest households of Houayman, 2005

Items	Minimum expense (US\$/yr)	Maximum expense (US\$/yr)
Food	279.00	480.00
Medicines	7.00	80.00
School	40.00	70.00
Clothes	10.00	50.00
House repair	5.00	8.00
Agric tools	2.00	4.00
Animal to raise	30.00	45.00
Estimated total expenses (US\$/household/year)	373.00	747.00

During the PPA, the men are better able to provide information on expenses than women. Perhaps because it is the men who are able to go more frequently to the town, thus men do the spending especially for food items, medicines, agricultural tools and materials for house repair. Basic household needs like rice, salt and MSG can be bought from the village shops. Perhaps it is also because men have better numeral skills than women.

4.5. Work Responsibilities

While many literatures depict women as overworked while the men relax and enjoy life, this was not necessarily true in Houayman, except for one Hmong household where the wife was regularly beaten by the husband (domestic violence). Normally, husbands and wives share the work responsibilities in the house, the farm and forest although the kind of work done could be different. It is noted however that women normally wake up earlier (4:00 am), spend more hours working and do multiple tasks than men.

In a typical day, women cook breakfast, feed the chickens and feed the family before going to the farm. The men fetch water and help feed the animals. The rest of the day, both husband and wife work in the fields or collect forest foods, firewood and NTFPs. When they get back home, the wife again cooks, feeds the animals and serves the meals. The husband may go fishing or help feed the animals. After dinner the wife usually checks the children and goes to bed while the husband sometimes meets with other villagers for a smoke or drink of the local rice whisky.

In a cropping season in the upland farms, men usually do the “slash-and-burn” operation for land clearing. At planting time, the men usually dig the holes using a dibbling pole while women follow closely by dropping the seeds. Weeding is mainly a woman’s job. Usually, weeding is done 3 times in

a cropping season. Pest control is done by both. Men make the traps while women set them in the fields. During the waiting period before crop harvesting, some men go elsewhere for seasonal non-farm employment. When there is high labor demand from other farms, women and men of poorer households will likely go while work in their own farms is given less priority. Harvesting is mainly done by women. Hauling of farm products are done by women with some help from the men.

Single-headed households find difficulty in attending to all the work needed to support their families. In one of the Khamu households, the wife has died and the children are still young. The husband says it is difficult for him to cope with the farm and household work by himself. In another Hmong household, the wife with young children is so impoverished by having a husband who does not help but instead beats her often. She reveals sometimes the beating gets harsh that she could not get up for work.

Women and men go to the forest to collect food or non-food products that they can eat or sell. Harvesting of bamboo shoots, ferns, mushrooms, snails, paper mulberry and broom grass is usually done by women and girls. Hunting of small wildlife is commonly done by men. Gathering of “tou tiang” and other NTFPs for sale are done by both women and men.

4.6. Access to natural resources

4.6.1. Access to land

Majority of the poorest households in Houayman were merged from another village. When they came to Houayman, by government decree they were allocated a piece of land for housing and about 2-3 hectares of agricultural land. According to these families, they had no choice but to accept what was allocated to them, even if the area seems not suitable for farming. Land rights are granted in the name of the husband, not the wife. Newly married couples are not granted land rights. They have to share the land granted to their parents.

During initial discussions in the PPA, we directly asked why they cannot produce enough rice. These households said they do not have land. Upon further discussions, they revealed later that they actually have land (because it is mandated by government for them to be allocated land). However, these lands are too far from their homes, of small area consisting of several parcels, stony, degraded and heavily infested with weeds. As expected, crops yields are very low while labor requirement for weeding is high. There is a tendency for them to abandon their fields when weeds become too aggressive. Because of this and due to need for immediate cash, some households in the nearby village have been tempted to sell their land rights to the Hmong ethnic groups. In some areas, the new owners hire the former land owners to work in the same land, this time as hired laborers.

Aside from uplands, some of these households have land near the riverbanks. These riverbed gardens are relatively good for farming because of better soil fertility and more flat terrain. However, during the rainy season there is always the danger of flooding and crops being washed away by strong river current.

4.6.2. Access to forest resources

Forests serve both as source of food and also of income. Both women and men have free access to forest resources. Each village sets aside a communal forest where access is free for all members of that village. The “rule of the commons” pervades such that there is a tendency to collect as much as they can to the point of overharvesting. Greater pressure on forest resources is becoming a serious problem as village populations grow and the demand for forest foods and products increases.

Whenever people are not able to harvest enough food from their farms, the forest becomes the “savior”. Too much pressure on certain preferred NTFPs can lead to possible extinction.

Some conflicts arise when boundaries between village forests are not clear. Sometimes people from one village access and collect NTFPs from forests of another village. In this case, village heads need to negotiate and the District staff can mediate.

4.6.3. Access to water bodies

Rivers, streams and springs are openly accessible to both women and men. More commonly it is the men who do the fishing while women collect snails, shellfish and a certain type of river moss which they can process and eat or sell. Sometimes, women also group together to do some fishing.

There are no restrictions to the use of water bodies. Women however wash clothes in streams and rivers which to some degree can cause pollution due to the detergents they use. There is also some concern that the use of herbicides and pesticides in riverbed gardens can affect aquatic resources. Aside from overfishing, pesticides are one of the major causes of decline in fish population along the Nam Pa River which runs through Houayman (Fidloczky and Peto 2005). In this study, villagers say that the fish population has greatly been reduced.

4.7. Access to basic services

Houayman is relative fortunate because the main road linking Luang Prabang town to the District center passes through it. Transport of products to and from the village is therefore quite easy and takes about 1.5 hours to Luang Prabang town.

The health center is located in the next village of Nambo. It is usually the women who go to the health centers for minor ailments though they say that most of the time there is no health staff and medicines. Major sicknesses are brought to Luang Prabang if they have the money. Many of them who cannot afford the medicines try to get credit from relatives. Otherwise they just take a rest at home or consult a traditional village doctor.

Houayman has an elementary school where children from neighboring villages also come to study. Both young boys and girls are encouraged by parents to go to school. But when girls become older and are able to help well in the household and in the farms, there is a tendency for them not to continue schooling. This especially happens when there are younger children who need to be taken cared of while the mothers are working in the fields or forests.

Farmers are grateful for the active DAFEO staff and “khong khan Sida” (Sida project referring to the LSUAFRP) stationed in Nambo. They mentioned the skills they learned and inputs like seeds, fruit tree seedlings and livestock provided by the project to them. Of the 11 poorest households, three were able to participate in the project.

5. Remaining Issues and Challenges

From the PPA, the women identified the following problems that contribute to their poverty: (1) lack of rice due to declining rice yields caused by poor soil, poor germination of rice seeds, lack of labor for weeding, crop diseases and rats, lack of planting materials, lack of knowledge about suitable alternative crops and how to plant them, other people surreptitiously harvesting their crops and NTFP gardens, price fluctuation of crops (2) high livestock mortality due to pests and diseases, lack of knowledge how to prevent pests, (3) receding supply of NTFPs, (4) frequent sickness, (5) having too many children and (6) domestic violence (1 case).

According to the men, the main problems are lack of money, rice, labor, and livestock for raising. They identified lack of land for farming because the land allocated to them is not enough to support their families. Most are too far and degraded that they have left it fallow. Meanwhile, they have no land to farm. They said DAFEO staff should review and allocate more lands to them. Lack of markets to sell their products is another identified constraint.

While men mentioned mostly practical needs, it is interesting to note that the women mentioned strategic gender constraints like (1) having too many children because they have to oblige to their husbands (reproductive rights), (2) domestic violence, and (3) lack of knowledge (right to information).

Majority of ethnic women in upland areas are not able to read, write, speak or understand Lao language (Baken 2005). This makes it more difficult for them to access information.

Table 3 shows that in the LSUAFRP project villages including Houayman in Phonsay District, women have lower rates of literacy than males. Young girls especially in poor households become tied up with house work. While mother is away working in the farm or forests, the eldest girl takes care of her younger siblings, cooks, cleans the house and washes clothes. This happens at the expense of attending school. By the time the siblings can be left on their own, the girl has been left behind by her school peers. She becomes too shy to continue going to school with classmates much younger than her. Most often they decide not to continue schooling. They become fulltime members of the family labor force. A few ones get the chance to find non-agricultural work in town and city centers while most become mothers themselves, often at very young ages. Because they themselves are illiterate, these new mothers are not able to teach basic reading, writing or arithmetic to their children. Thus, this starts again another cycle of illiteracy. Lack of access to education leads to less livelihood opportunities and less participation in decision-making.

Table 3. Rates of illiteracy among households sampled from farmers participating in on-farm trials of LSUAFRP in Phonsay District

Location	Literacy Rates* (%)		
	2002	2003	2004
Phonsay District			
Males	77	70	71
Females	23	30	29

*Mean of 4 project villages under LSUAFRP including Houayman

6. Promoting gender sensitive development approaches

Studies showed that higher levels of education for women have the greatest direct effects on women's empowerment. This includes improved ability to earn income, better informed decision-making, ability to bargain for resources, control over their own fertility and better participation in concerns within and outside the household. Education transforms attitudes, beliefs and norms that perpetuate discrimination and inequality (Earthscan 2005).

Providing information to women and men to meet both practical and strategic gender needs is imperative. To address practical needs, capacity building for income-generation and ensuring food availability for the family can be built through training topics on integrated farming systems, crop-animal integration, agroforestry technologies, soil fertility management, soil and water conservation, domestication and sustainable harvesting of non-timber products, post harvest storage, food processing and management of small business.

Taking note of the low literacy of poor households, lectures and print media will not be effective. Audio-visual tools, interactive methods and experiential learning will be better, for example radio, video, theaters, role plays, field days, cross farm visits, farmer field schools and simple on-farm trials. It is critical to upgrade women's functional literacy especially in simple arithmetic (necessary for trading), reading/writing (for record keeping of sales and production) and speaking (for negotiating and decision-making).

Given women's busy work schedule, the timing is important. Bergh 2004 found that women suggested early mornings as their "free time" to participate in meetings, seminars or group work. Likewise, scheduling field trips and similar activities should not coincide with periods of peak farm labor demand.

Building the capacity of project staff not only on technical aspects but also in facilitating participatory process is a must. Increasing hiring of women staff preferably of the same ethnic group as the villages should be preferred. Women are more at ease working with women staff compared to male project staff.

While we try to empower women, husbands should be part of the transformation process. They should be involved as active partners so they do not feel threatened. There had been cases where men prevented their wives to participate in development projects. The Gender and Development (GAD) approach espouses understanding women, men and the relationships between them as influenced by social, economic, political and cultural forces (www.un-instraw.org).

Migration of men and women to find work in towns and cities has social and health implications. Though not openly discussed, men separated from their wives are easily tempted to take on different partners which can predispose them to HIV/AIDS and STDs. In the case of girls, some have ended up working in entertainment night bars, again risking HIV/AIDS and STDs. Cases of this in Lao PDR are said to be not as rampant as in neighboring countries thus all the more important to put in the necessary mechanisms before it gets out of hand.

Conclusions

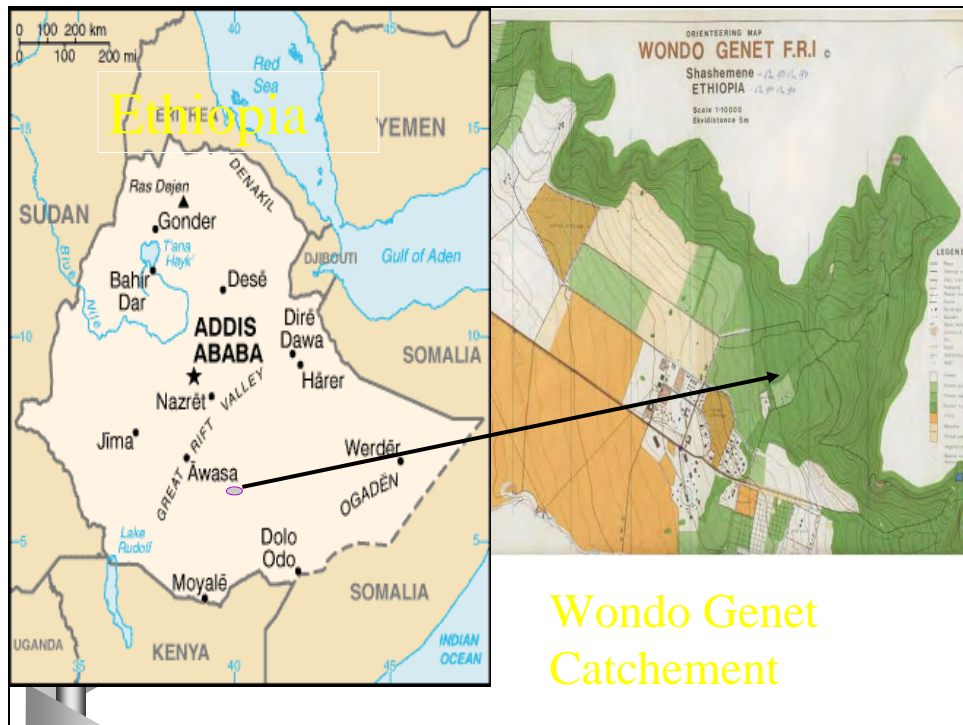
The importance of closer examination of gender issues especially among poorest households in Lao PDR is increasingly being recognized by the Lao government as well as development donors as effective poverty reduction and sustainable development are envisioned. However, Lao PDR is an ethnically diverse country, each community has its own gender and poverty issues. It is difficult and in fact inappropriate to make generalizations. Participatory methods of assessment encourage rural women and men to analyze jointly with project staff their particular conditions, constraints and possible ways to overcome them. Joint learning provides deeper understanding which becomes the starting point for improved gender sensitive participatory action planning, implementation, monitoring and evaluation that can lead to better lives for Lao uplanders.

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Sustainable Forest Resource Management Wondo Genet Catchment

Mersha Gebrehiwot





Introduction

Ethiopia is rich in its biodiversity from arid lowland in the east, high tropical forest in the west and high altitude Afro-Alpine vegetation in the central highlands.

This diversity is however severely threatened by environmental degradation.



Introduction con----

One of the few remnant natural forests that are facing such continued threat is Wondo Genet catchement

The catchemnt is the major wealth of resources offering multiple uses and values, water, forest products, wildlife resources, recreation, etc.



Introduction Con---

- Women in Ethiopia are the least powerful elements of society suffer first from loss of forest resources because of their primary responsibilities for household subsistence.
- They are also fully responsible for domestic work which is unpaid and largely unrecognized.



DOIT-AR

DOIT-AR project was initiated between SLU and WGCF to act on the above mentioned problem.

What does DOIT AR means?

- **Development Oriented:** Contributing to factual development including having local impact
- **Interdisciplinary:** Involving researchers from different disciplines who interact throughout the research process (single discipline will not solve the real world problems)
- **Thematic :** The work and the various studies are undertaken within defined geographic areas(our definition)
- **Action research:** Planning, implementation and reevaluation done in a continuous, step wise and interactive process (learning by doing). Does not stop with a report and letting someone else take over before validation.

Project goals and objectives

Contribute to poverty alleviation through participatory natural resources interventions, increase profitability and efficiency of forestry related or dependent enterprises, and achieve ecologically, socially and economically sustainable use and conservation of natural resources.

Problem

- Poverty
- women involved in problem identification



General Objective

To improve the livelihood of the female who depend on fuel wood collection and to involve women in sustainable forest management of the catchement.



Specific Objectives

- To evaluate ecological, economical and social problems related with deforestation of Wondo Genet catchment.
- To identify opportunities to minimize impact of short supply of fuel wood on the livelihood of the rural women.
- Involving women in problem identification and decision making



Specific Objectives cont---

- To identify relevant economic interventions which will lead towards the improvement of the working and living conditions of women and enable them to be self-sufficient.



Method

- A baseline survey was made using community leaders and a well represented female elders in the community.
- Female fuelwood gatherers who depend on wood collection for their livelihood were identified.
- Problem identification and priority setting was made by the female group.



Method Cont---

- An intensive discussion was made between the female group and other stake holders on how to improve the livelihood of the female who depend up on fuel wood collection and the establishment of sustainable forest management.
- Different opportunities and scenarios were designed.

Output

- Develop trust









Mersha Gebrehiwot

Female Forestry Officials' Roles – Forewomen or Mothers?

Tiina Suopajarvi, University of Oulu, Finland

In Finland women were allowed to enter forestry schools for the first time in 1965, when military service was no longer required for the admission. Nowadays women are still a 10 per cent's minority among the profession. I got interested in them while working as an interviewer in an oral history project (1999–2002) called *Forestry Professions in the Changing Society*⁵³, which resulted with over 1000 interviews of forestry professionals. The empirical research material of my paper consists thus of 31 interviews of Finnish female forestry officials⁵⁴. Interviews were constructed from themes like childhood, school years and working life concentrating especially on the most effective issues in forestry like changes in machinery, in forest usage and in gender relations. In this paper I discuss especially the female forestry officials' experiences in male dominated forestry; what kind of roles and positions they have or are given, and the effects these roles have on their working methods.

The gendered segregation of professions is one of the obstacles of equality. Therefore it is extremely contradictory that in countries which are famous for their gender equality, like Sweden and Finland the occupational segregation is strongest compared with other European countries. In Nordic Countries even 50 % of all women work in so called female occupations, like cleaners, nurses and in childcare, whereas in other countries the average number is 25 %. The concentration on female occupations in Finland grew between 1970 and 1990, while on male occupations it diminished. Researchers see this culturally related: in Finland it is more allowed for women to step into male territory than the opposite. Even so, the opportunities for women to work in male dominated professions have barely increased. It is therefore important to study the women's positions, statuses and opportunities in working life through their own experiences, from their own perspectives.⁵⁵ It should though be kept in mind that analyzing interviews results always with interpretations, the experiences of interviewees are always filtered through theories, methods and concepts by the researcher.

Gender relatedness in Finnish working life is based on cultural definitions of gender. In Finnish society this means neutralisation of gender and gendered hierarchies among other things, because of the prevailing attitude of "already reached equality". These two are entwined, and can put down the resistance or even strengthen unconsciously – or intentionally – gendered hierarchies. Neutralisation is though important in receiving cultural competence; it helps adjusting in new situations. Problematic it becomes when neutralisation and gendered hierarchies are considered self-evident or something so abstract that they don't concern people in their daily (working) life. The neutralisation of gender means, in practice, that people don't consider things to depend on gender rather they depend on people's own attitudes and personalities. People want to avoid gender conflicts and they think working and acting together (with men) is the only solution in resolving problems. Consequently,

⁵³ See <http://www.lusto.fi/seura/mmm-hanke/english/index.html>; I worked in the project as an interviewer.

⁵⁴ Forestry officials are educated in forestry schools and are forestry technicians or forestry engineers. Earlier they could also educate themselves by working in the field. Nowadays forestry officials work with forestry planning, buying and harvesting, as executive directors, advisers, teachers, experts etc.

⁵⁵ Lehto 1999: 103, 112–113.

Finnish business organisations are considered to have gender disabilities: there exists “gender blindness, deafness and muteness”.⁵⁶

In addition to gender relatedness in work the concept of role is essential in this paper. Role is formed by the internalized expectations others have for us, but also the ones we have for ourselves. It is used to define what is appropriate and what is inappropriate for individuals and groups. From functionalist perspective role defines how we behave/act or how we should behave/act in different situations, whereas status defines what we are. In social sciences, like in social action theory, role has since been seen more flexible and constantly negotiated and reformed concept compared with functionalists’ more static conception of role. Life as a whole is constructed by outgrowing the prevailing roles and by adopting the new ones, according to role theory. Consequently, roles dominate our lives ever since childhood’s socialisations, for example in adopting gender roles. We change our roles constantly, though some of them may be quite permanent, so called semi-permanent, most of them are changeable.⁵⁷

Though the changing of roles may well be more flexible than functionalists present it, the content of role, of its being seems quite solid, especially when it comes to gendered role expectations and definitions. Some of these expectations change even more slowly than social practices, so role as a construction may be even more rigid than society, though the changes in society are also forming role definitions. This rigidity causes role conflicts, e.g. when women enter traditionally male dominated and masculine considered branches. In role theory the concept of role fixture is also interesting. It means properties defining the role, like dressing, right kinds of talking manners, expressions and gestures, even concrete artefacts, by which a person is qualified to play her/his role. In the role of forestry official gender is part of the fixture, since the right gender of forestry professionals has been/is male, and the changes in definitions have barely started. Roles and their definitions are also tools of power: not everyone has equal opportunities to define roles, even though she/he herself/himself is playing the role in question. Role theories have sometimes been criticized for the lack of the consideration of power relations, though role expectations and the division of roles besides the social conventions produce systematic differences in power.⁵⁸

Every third of Finnish wage-earners has a forewoman; Finns seem to trust more in female executives than the other European citizens. There are nevertheless differences between genders: over half of the Finnish female workers have female executive, but the amount is only 10 % among male workers. The European working condition study (1996) showed also differences between forewomen and foremen: women were considered better in supporting and encouraging, in inspiring and being emotionally receptive and empathetic, and most of all in encouraging her workers to study and evolve in their work.⁵⁹ The good characters of forewoman resemble undeniably the good characters of a mother, but do female forestry officials play a maternal role in their work? What other roles do they play, voluntarily or forced? Do they themselves try to negotiate new kinds of role definitions, and if so where does it lead to?

The role of a forewoman

Over half of the interviewed female forestry officials were working as forewomen, nearly third as forestry planners and the rest as teachers, advisers, reporters and guides. One of the main themes in

⁵⁶ Heiskanen & Rantalaiho 1997: 195–197.

⁵⁷ See e.g. Erving Goffman.

⁵⁸ Eriksen 2004: 79.

⁵⁹ Lehto 1999: 121–122.

their narrations considering fore(wo)man's position was the authority, respect and trust as important parts of role expectations, and how these are gender related. A commonly shared view was that forewomen themselves had to work harder and fulfil the role expectations with their own actions and earnings. For foremen these characteristics were self-evident, they got them automatically when entering the foreman's positions. Based on women's interviews it can be said that the role of a fore(wo)man in forestry includes the expectation of a gender, male gender, and when this expectation is not fulfilled the roles get into a conflict. Women themselves are expected to prove wrong and dissolve occurring conflict with their own know-how. The conflict is often anticipated and it puts great strain on women even before taking the leading assignment.

*I can say that I myself have enormous pressures and I bet many have extremely great expectations, or expectations with a question-mark, on how the gal is going to cope in there. But at this point I don't think I have failed anyhow. On the contrary, I think I have earned my place with my own work.*⁶⁰

*But it was then, when I worked in forestry in the field, that woman had to do comparatively a lot more work to get the appreciation that a man got. I told them that it's easy for you since you have those balls [laughs]. That is one third of your work contribution.*⁶¹

The lack of traditional authority can also be seen as a positive thing. One of the female forestry officials had witnessed many changes during her managerial time, that were most positive, like more relaxed atmosphere and comfortable relationships between her and her employees. She thought these changes were due to distinctions between her and her predecessor's working methods:

*Well it is probably if you think...Me and my predecessor in this position, we are two different types of persons...We represent two extremes in many ways... I mean age, gender, plus the working methods...The traditions we have to take care of things are very different...(...) And I think, as a whole we have quite more relaxed atmosphere now, that...I don't think people are afraid of me like...Or be afraid to talk to me, and the interaction is quite unreserved.*⁶²

Women had experienced the demands of proving their skills in fore(wo)man's general role-expectations but also in the expectations in expertise. They felt their expertise had been questioned, and again it was themselves that had to break down the old expectations by proving to be good enough for forestry, good enough to be experts of forestry. The doubters of their knowledge and skills women had confronted among their colleagues, but also among forest owners, especially among male forest owners:

(...)You were let to do your work, but that I could sense, that the older forest-owners then, they questioned whether that gal can do anything. When you were with marking axe, because then we chopped the trees and coppiced and everything else, not like...You had to

⁶⁰ AO2001:291/N1952. (N=Female, 1952 year of birth). I have translated the citations in English, and they are here already full of my interpretations. Some phrases in Finnish are quite impossible to translate without somehow changing their meanings and nuances. I have though tried to be as faithful as possible to the original Finnish texts.

⁶¹ AO2001:531/N1961.

⁶² AO2001:489/N1961.

*break down the prejudices, and you had to show with your own work and skills that you were in a right place.*⁶³

*In felling (...) they looked in suspicion, before. They like expected me to take a saw in one hand and show them, which I don't believe men have to do, they are expected with no doubt to know how to saw, if he's teaching them.*⁶⁴

The gendered working methods of forewomen/men

In functionalist role theories role is seen as an action, role is played, performed, it is verified and strengthened by actions. The interviewed women often compared their own action and methods to men's, and they generally thought there were both similarities in and differences between them. In the interviews people were asked directly whether they thought that since more women had entered forestry it had made some difference in the branch. Therefore this issue was discussed quite broadly and sometimes quite thoroughly. Women told how their employees had noticed that forewomen take better care of them than foremen:

*Yes, one of the contractors said, that it's weird that in here forest you see only forewomen, that those men don't come here at all. Yes, it is probably so that you do these things somehow more carefully, but on the other hand I have thought that because I'm so young in this business, I don't have a lot of work experience, that it depends on that too. But yes, I do actually recognize those features.*⁶⁵

Interviewed women associated the concept of softness with femininity and women, and told this connection was both advantage and disadvantage, but mainly the softness women have brought into the business has been a positive and helpful thing. Women were said to be able to bring up the softer side of men as well which leads to confidential conversations between (male)employees and forewomen. Softness is also associated with the fact that forewomen are interested in employees' personal life and wellbeing and they are encouraged to talk of their life. Women seem to take notice of their workers more comprehensively and worry how they manage in their jobs. Softness also makes forewomen to give negative feedback more tenderly.

- Well, there's nothing there. In the beginning there were few those stubborn, you could say, but you could say, that the attitude has changed completely different, that many think it is better to have a woman in those jobs.

- Yes, well why?[Interviewer]

*- I don't know, is it then however, when you get complaint or you have to complain, it is kind of, it isn't, it is somehow softer. And then it is, I know almost everyone's life stories, and once when I was already leaving the harvester then suddenly the harvester operator says that his mother-in-law is dying. So they can talk of other things like, when they think, they are all alone in the forest for 8–10 hours, and then anyway they can talk about their own things, what is bothering them, they can probably talk about them more easily.*⁶⁶

⁶³ AO2001:291/N1952.

⁶⁴ AO2001:475/N1954.

⁶⁵ AO2001:463/N1972.

⁶⁶ AO2001:490/N1967.

Softness can though also be seen as a negative feature, as a lack of character, courtesy of the role expectation of forestry professional as a good or even tough logger/lad⁶⁷. If a female forestry official doesn't agree to be a logger/lad, and if she on top of that brings up the uneven treatment, she can be labelled to be too soft for the forestry:

*And certainly here is exactly the kind of good girl...When you work in forestry, a woman you can't start to complain about these things. It becomes soon that well what kind of a sissy has come here? I would say that now afterwards. I didn't think of that then.*⁶⁸

Forewomen are seen to be better talkers and better to talk to and their relationships with employees are more personal than foremen. Differences in conversational cultures of women and men can cause misunderstandings and therefore difficulties in working life. But in the interviews women also tell how male colleagues are straightforward and honest, and how they could not even imagine to be working in female dominated branch, because women tend plot more than men on their opinion. Women can also be too emotionally involved in their work, which can be problematic as well:

*Well I like it here. It may be that I'm enjoying better than in female dominated business. In working life men are straightforward, which is a good thing. They don't come up with any strange ideas like women easily can do. I think it is probably 'cause women are more emotionally involved in everything, but with men it doesn't have a similar effect, and it is so easy to work then. I like it yes. And well actually in gardening [in which has worked before] we had more women and I didn't feel it there either. Maybe gender isn't so decisive factor after all.*⁶⁹

Private people own over 60 % of Finnish forests, and forestry officials often work precisely with private forest owners in forest planning, harvesting and wood sales. Over third of all forest owners are nowadays women, and the amount is expected to grow in near future. The group of forest owners is though becoming more dominated by women but it's also urbanizing, and these two facts are challenging forestry professionals in new ways. In small studies it's been discovered that female forest owners' values of forest are more conservational than males', though the common support for more diverse use of forests has also grown.⁷⁰ Many of the interviewed female forestry officials brought up the gendered changes among forest owners, and they thought having a female forestry planner helped to integrate forest owning women to forestry, to wood felling and sales. Woman dares to ask "silly" questions more easily from a female planner.

*And then perhaps the fact that, I think that, when I myself worked in male-dominated branch, I held very firmly on the principle to take women also in consideration. I explained things both to the man and to the woman, both wife and husband (...) that I didn't talk just with husband, which would have easily been the situation had it gone in traditional way.*⁷¹

⁶⁷ In Finnish term 'jätkä' means both a lad and a logger.

⁶⁸ AO2001:435/N1960.

⁶⁹ AO2001:335/N1965.

⁷⁰ See e.g.: *Female Forest Ownership and Survival* -study 1999–2001.

⁷¹ AO2001:463/N1972.

The role of a mother or a little girl

Sociologist Rosabeth Moss Kanter has studied female economists as minorities in American firms from gender perspective. She suggest that women try to control the stereotypical attitudes towards female gender in five ways: 1) by making their own gender as invisible as possible or underlining their own masculinity; 2) by making their own gender useless, e.g. by stressing the meaning of one's abilities and skills; 3) by separating themselves from other women and by seeking male company, in other words hetero-sociality; 4) by emphasizing their own sexuality playing a role of a seductress or a little girl or 5) by adopting the role of a mother. The last one, the role of a mother is socially accepted feminine role, since it is defined to be a (hetero)sexual role.⁷² All of these control mechanisms can be found in my research material, but here I'm discussing only two following roles as examples: the role of a mother and a little girl.⁷³

The softness, personal relationships and the comprehensive looking after her employees forewomen are said to have brought into forestry can also be associated with maternal features, the role of a mother. Women themselves accept it, and think it has positive effects most of the times, but this role can not be too prevailing, at least not in everyone's opinion:

And then, I don't know does it come from the fact that women naturally has this nurturing thing and like, that they can explain things perhaps better, if it on the other side doesn't go to, that it goes to some kind of too meticulous putters and that kind of stuff.⁷⁴

The role expectations of a little girl are inequality, because the other one plays the role of a child and the other one the role of a parent. Playing by the role means in this case, asking questions, admitting one's own ignorance, but also getting underestimated. On the other side it consist of a fatherly guidance, explicitly fatherly, since little girl's role is most of the time given by older male colleagues, sometimes also by male forest owners. Most of the interviewed women stressed being named as a girl has a kind tone in it, so they don't mind the naming, and sometimes they even use the role for their own benefit. Nevertheless the role of little girl is a role of a child, who is not yet an adult, not yet equal. Adulthood is something little girl is aiming at, and a child is still depending on the adults, she/he is subordinate to an adult.

(...) I was quite independent and stubborn person and I didn't adjust to the fact that someone was always criticising my doings or my things that way. I didn't get along with my foreman well, the closest foreman, but with the regional forester I got along well. And there you can probably say, that it was kind of, that they thought of me a little bit, they underestimated me a little bit, that they thought of me as a girl. And I felt really low there for that year, and after that I went to work as a teacher.⁷⁵

(...) But maybe as a woman it was even easier to go there, that I little girl I don't quite understand yet that where was your border [of forest]. It was so easy to admit your ignorance and incapability in that kind of stuff, which you couldn't know anyhow the border of landowner's plot and that kind of that you didn't know, and couldn't know.⁷⁶

⁷² Kanter 1977: 219–237.

⁷³ See Suopajärvi 2004.

⁷⁴ AO2001:515/N1959.

⁷⁵ AO2001:434 /N1956.

⁷⁶ AO2001:498/N1966.

The role of a mother and of a father is gendered. In forestry the relationship between a mother/a father and a child seems to have double gender relatedness since in both cases the child is of opposite sex. Interviewed women consider their maternal features having almost entirely positive effects on their work and on forestry as a whole. Some though see the risk of getting too emotional, which can cause problems, especially for the women in forestry themselves. The role of a father from a little girl's point-of-view seems however more contradictory: being treated as a little girl feels being both underestimated and guided with kindness. Motherhood is thus defined by softness, emotionality and care-taking, whereas fatherhood by authority, expertise and care-taking.

Glass ceiling

There seems to be certain places and positions of men, certain male-tasks, and certain women's places, positions and tasks in forestry even today. Women work often for example in planning, because they are considered to be conscientious and precise, men instead are in charge of economical and larger tasks while working as executive directors, because they are said to be able to control vaster, more general issues. These female and male characteristics are predetermined, and women themselves don't consider them, and the tasks following being fair.

*The position I applied for, it wasn't a position of a planner, but of a forestry adviser, in other words the kind of supervising the forest law. And of course that position was given to a man, and it was self-evident for everyone that [in this region] a woman wouldn't be chosen for that kind of. That it was completely self-evident that it was a man. This planner's position was sort of consolation price then and on the other hand they had had good experiences of female planners. Here was a girl-planner even earlier, who was known to be conscientious and proper and there existed evidently the kind of apprehension that women are very conscientious in planning-tasks then. But still then there was a clear division of women's positions, and the positions which in any case were not for women. (...)*⁷⁷

The glass ceiling phenomenon is often talked of in the studies of forewomen, or the glass ceiling discourse meaning that there exist invisible obstacles to how high can a woman proceed in her career. In these discussions it's sometimes been also asked how high do women actually want to promote, is a glass ceiling build both on women's own wants and on uneven gendered constructions in society? This of course isn't an essential question keeping in mind that the equality in working life means equal opportunities regardless of gender, nevertheless it is interesting. Interviews of female forestry officials show in fact that women do want to proceed in their careers, at some point it just stops for some reason. They themselves see the reason being their gender, not their own capabilities. This is interesting considering how these women through the interviews stress that gender doesn't matter, and that getting job opportunities and positions depend on their skills and their own earnings entirely. They don't want to get compensation for their gender, but they don't expect it to hinder them either. This doesn't seem to be happening in forestry according to female forestry officials' interviews:

*The bad side is that when I entered this business I imagined that there are a lot of possibilities to do different kinds of jobs, different jobs. But then I don't even understand myself why I have stuck A) in [this town] and B) I have worked for over ten years officially in the same job, but likely because of me myself it has changed. It's really a wonder. A little bit I think, that there exists some sort of chauvinism, now that kind. (...)*⁷⁸

⁷⁷ AO2001:498/N1966.

⁷⁸ AO2001:482/N1957.

I must admit that let's say when you're making your career I have noticed that some kind of chauvinism can be seen, and not always just a little bit. And then when you have wanted to move forward and proceed in your career, then you have had to show in a certain way that you are much, much more qualified than a man. Men have got on more easily, that I can say.⁷⁹

Changing role expectations?

The role expectations of women working in forestry are firstly based on their gender, and only secondly on their role as a forestry professional. Women try to control their gender sometimes by fading it out, by being "neutral", sometimes by stressing their own masculine features, by being a good and sporty logger/lad, but sometimes by stressing their own feminine characteristics by being maternal or girlish. The role(s) of a forestry official is affected by gendered role expectations; and since forestry official is expected firstly to be male, women have to compare their professional identities to male norm. Consequently, there is a contradiction between the status of a woman and the role of a forestry official, and combining these two leads to a conflict. This can also be seen in women's interviews: they describe the contradiction of their female status and forestry official's role themselves. On the one hand they try to change the old role expectations; on the other they try to squeeze themselves into them.

Well it is something I've always felt being left out of. And that I think it is also due to the fact that I'm a woman. I don't have that kind of, it has always been like an outsider. That I'm not like the hardcore of the men of the woods. That is one thing also that many think you should hunt if you work in forestry. But I don't see it that way that you must hunt, and I don't hunt. Of course it is like that I haven't really internalized it.⁸⁰

One of the essential things in defining roles and role expectations is power: the one who can make these definitions, has also power. Forewomen in forestry aim to have an effect on new definitions of their roles, and the contradictions in their many roles seem to be in change. At least they seem to be constantly negotiated. They still feel though some sort of outsiders, who can not fit in the prevailing role expectations, but at the same time they feel to be in an important position in changing these traditional expectations by their own examples:

(...) And I feel that as a woman in this kind of working community that it --- it encourages these people to be different. That you don't have to be a prototype of a man of the woods. And this I think that in working community it is a good thing to have a woman in it. And it is quite easy to be here as a woman. That it has a positive effect.⁸¹

Female forestry officials take voluntarily certain roles in forestry, like the role of a mother; certain roles are given, and sometimes even accepted by women themselves, like the one of a little girl; and certain roles, like the non-expert, are always rejected by the role players, thus they are forced either to play the role or they try to change it by their own actions. Interviews show how women try to negotiate their roles and the prevailing role expectations, which has already led to some results,

⁷⁹AO2001:291/N1952.

⁸⁰AO2001:397/N1957.

⁸¹AO2001:335/N1965.

since some of them feel comfortable and even respected in the business. Gendered power relations may be in change along with the role definitions.

The action are said to verify the roles and in the interviews women commonly talked of the differences between their own and men's working methods. Women's actions strengthen their roles as mothers and little girls, but they seem to question their roles as non-experts and non-professionals. Women gain respected positions by working hard and proving their expertise skills, for men this seems to be easier, they are often "naturally" considered to be good forestry professionals, in women's opinion. Bodies and e.g. clothes are part of the gendered role fixture of forestry official. The empirical material offers great possibilities to analyse the roles, role fixtures and the power relations even further, and I'm going to discuss these issues in the future by analyzing both female and male forestry officials' interviews.

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Labour protection: a case of woman employed in the State Forests in Poland

By Wiesława Ł. Nowacka (PhD)

Faculty of Forestry, Department of Forest Utilisation, Nowoursynowska 159, 02-776 Warsaw, Poland

Abstract

In Poland women and men are offered equal conditions for education, employment, professional careers and salaries. This is the law and theoretically this is also the rule in Polish forestry sector too. Substantial differences between women's and men's earnings, difficulties with achieving goals of professional career faced by women, the employment rate not matching gender ratio of graduates from different levels of education – this is typical situation in the forestry sector offering employment in our country. The mid-nineties of the twentieth century were characterized by restructuring and reduction of employment in forestry. Women were and still are at the front of such reductions.

The researches were held in two State Forest Districts (SFDs) in Poland. The main objective of this women oriented research was to analyze and evaluate practical realization of aspects of ergonomics, equality and labour protection. The aim was also to analyze pros and cons of work conditions at SFDs. The tools used in the investigation were: the questionnaire with comprised of more than 60 questions, anthropometric measurements, measurements of dimensions at the work places (especially for work with a computer) and elements important for body position during work, measurements of selected parameters of work environment (temperature, humidity, lighting).

Twenty two female employees, it means almost 90 percent of employed in these SFDs, who agreed to be a subject of the study took part in all aspects of investigation. The obtained results indicate the importance of changes that need to be done to improve work conditions and minimize harmful work factors. This study also showed levels of equality and problems regarding discrimination at work .

Key words: women in forestry, employment, ergonomics, labour protection, gender equality.

Introduktion and background

Women have always played an important role in the Polish history. They have not been only wives and mothers, limited to various domestic duties, but also they have taken remarkable part in social and political life of the country.

In many countries, and among them in Poland, forests no longer play their former role of a provider of wood only. Emphasis has shifted to other uses of forests beyond industry. Special importance has become attached to their ecological functions (e.g. conservation of biodiversity and protection of soil, water and air) and social dimensions (e.g. possibilities of employment in forestry).

The contemporary concept of sustainable and balanced development of forests is based on the management and use of forests and forest areas in a manner and at a rate ensuring also the preservation of their social potential in a long run. The relevance of social aspects, including labour, for European forestry and forest industry was highlighted in the declarations and resolutions adopted at the Ministerial Conferences on the Protection of Forests in Europe (MCPFE), convened in Helsinki in 1993 and in Lisbon in 1998. Gender aspects have been increasingly recognized as an integral part of sustainable development, and therefore of sustainable management of forests (SFM). The implementation of the principles of this concept entails formulation and fulfillment of the following requirements:

- -guarantee that socialization of the decision-making process in forestry will proceed,
- -assumption that the whole forestry sector should be the subject of society involvement,
- -assurance that women activity in the sector is possible at the same level as other participants,
- -the need of rural women involvement as important part of rural and local communities in forestry policy aspects,
- -monitoring, reducing or as better- excluding -all constraints regarding women participation in servicing, management, education, training in forestry,
- -assurance that employment equality means also wages equality.

In spite of a decline in employment volumes, the forestry sector is likely to be faced with difficulties in finding adequate work for women. Improvements in employment equality, such as wages, training and career prospects, as well as working environment and safety, will be critical to maintain adequate levels of women workers.

Substantial differences between women's and men's earnings, difficulties with achieving goals of professional career faced by women, the employment rate not matching gender ratio of graduates from different levels of education – this is typical situation in the forestry sector offering employment in our country.

The change-over to free-market economy had a dramatic effect on employees of the State Forests who had previously enjoyed stable employment. At the beginning of the 1990ies large number of workers were dismissed and re-employed as contractors. Overall employment in Polish forestry decreased from 158 900 in 1985 to 64 400 in 1994 (www.lasypanstwowe). In 2003, the State Forests employed only 27 500 people . The decline in employment in the forestry sector affected especially women. Female employment was estimated to amount for about 18 %.

In 2003, among professional groups, the group of office workers was most feminized with 235 women coinciding with 100 men (Nowacka 2001, MPiPS 01 – Report on labour market...). This also concerned the forestry sector. It is well known that sitting position is leading to many health problems when the workplace is not appropriately designed. It refers especially to women workers. Ergonomics can be applied to office work in several ways. More important issues are how the office is arranged, including where people sit in relation to equipment, windows, doors and each other. Equipment and

furniture must be suitable for the type of work that people are performing. This includes seating, desks, computers, and any other equipment that is used. The environment must be properly assessed, it means the temperature, ventilation, lighting, decoration. These aspects of an office work are considered in relation to the individuals in the office with emphasis on their safety, health, comfort and productivity. Work factors must be designed equally for all workers. But gender differentiation in law is done for specific situation of women in the moment before motherhood and when having babies and bringing them up.

General characteristics of Poland's forests and forestry administration

The area of forests in Poland is 8 918 000 ha (source: Central Statistical Office-GUS 2002). This is equivalent to 28.5% of the country's area. Large forested areas are located in the western, northeastern, and southeastern parts of Poland, but the only remaining stands of old forest are in the northeast.

State owned forests predominate in Poland and account for 82.6% of its total land area (7.2 mln ha). Within this, 78.4% is under the management of the National Forest Holding "State Forests". Privately owned forests in Poland account for 1.5 million ha being managed by nearly 1.5 million owners (www.lp.gov.pl). National Forest Holding "State Forests" is a great employer especially in rural areas.

In Poland, the mid-nineties of the twentieth century were characterized, on the one hand, by intensive restructuring of the economic system with a departure from the centralized economy to the market economy and, on the other hand, by maintaining the consolidated structure of the State Forests, which secured basic environmental safety for the entire country. It is expected that, during this decade, the forestry sector will further reduce employment. As it was earlier, women are at the front of such reductions.

In Poland, the rate of unemployment is higher for women than for men. There are more than 300 forestry graduates every year. The number of women students and graduates does not reflect their further employment, their professional careers and the positions achieved in the forestry sector. Men are more able to find employment in the sector than women. Women who want to come back to forestry or enter the forestry sector face more problems than men.

Objectives

The objective of this women oriented research was to analyze and evaluate practical realization of aspects of ergonomics, equality and labour protection. The aim was also to analyze pros and cons of work conditions at SFDs. Organization of work analysis and researches show that office design and work environment have substantial effects on job performance and job satisfaction.

The utilitarian objective of the study was to give at work training for all women participants of the study, regarding proper workplace design and ergonomic intervention necessities. Many of health problems related to computer work are caused by or aggravated by work related stressors that could be identified and removed. It is taken into consideration that the majority of ergonomic problems can

be satisfactorily dissolved by low cost interventions utilizing in-institution resources. It was one of the objectives to incorporate the ergonomic knowledge to the group of forestry office workers.

Subject, materials and methods

The data presented in this study were collected during a study performed in two State Forest Districts in central part of Poland in 2005. These SFDs were selected for case studies as they represent typical for Poland stuff characteristics, forest cover, utilized wood assortments, employees lessening, women involved, earnings, etc. Therefore the presented results could be regarded as representative for the situation in Poland.

The tools used in the investigation were: the questionnaire comprised of more than 60 questions (Bojarski 2005), anthropometric measurements, measurements of dimensions at the work places (especially for work with a computer) and elements important for body position during work, measurements of selected parameters of work environment. Detailed methodology is described in earlier Nowacka's publications and materials (Nowacka 1990, 1999). All measurements and questionnaires providing information for the survey were done during usual workday. Registered parameters of work place are presented in table below (Table 1).

Table 1. Parameters and data registration during studies

Object	Parameter and data
Working room	All dimensions of the room and equipment in it, number of workers, factors of threats (heat, noise, etc.)
Computer work station and seating design	All dimensions important for working with monitor and computer
Work organization	Job demands, remuneration, job schedules
Work environment (checking done twice – in spring and summer)	Temperature, humidity, lighting, noise

The characteristics of women engaged in the studies are shown in table below (Table.2.). Twenty two women were investigated. Almost 80 % of them had children.

Table 2. The characteristics of research subjects (N=22)

Characteristic	Number [%]
Age	
Below 30	9,1
31-40	9,1
41-50	63,6
above 51	18,2
Professional experience in years	
below 15	18,2
16-25	18,2
above 25	63,6

Education level	
high school	32,0
university level	68,0

Results and discussion

Similar to other countries, in Poland women and men are offered equal conditions for education, employment, professional careers and salaries. This is the law and theoretically this is the way it is. The following data are the results of conducted investigation regarding equality at work and specific situation when being a mother. Twenty two female employees who agreed to be a subject of the study took part in this investigation. One of the tools used in the investigation was a questionnaire. Among other the following questions were asked:

- a) Can you decide on term of your holiday absence or is this limited in any way? (89% of women responded – YES I can decide myself),
- b) Is your job stressful for you? (39% of women answered – mentally YES),
- c) Were your work conditions changed due to your pregnancy? (18% of women answered – YES),
- d) Did you fully use your maternity leave? (100% of women said- YES),
- e) Did you have any problems coming back to work after your maternity leave? (only one woman answered – YES),
- f) Did you take a long-term maternity leave? (35 % of women said –YES, 18% of women said – NO, and 47% answered YES, but did not use it in full extent),
- g) Did you have any problems coming back to work after your long-term maternity leave? (12% of women said – YES),
- h) Did you feel any pressure at your work place due to your pregnancy (100% women said – NO),
- i) Were you afraid of losing your job when planning having a baby? (12% of women said – YES),
- j) Does your job interfere bringing up your children? (18% of women said – YES),
- k) Do you think that your enterprise helped you bringing up your children (70% of women said – YES, meaning: summer camps, presents, subvention of holidays and participation in cultural and sport events),
- l) Being a woman do you feel discriminated at your work place? (17% of women said – YES),
- m) Do you think that your prospects for further development of professional career are equal with men's? (50% of women said –YES),
- n) Does your enterprise promote your professional development? (72 % of women said – YES).

Results show that there do exist some aspects of inequality in forestry administration work. Seventeen percent of respondents were witness or experienced discrimination in work. Every second women ascertained, that in their place of work her prospects for further development of professional career are not equal with men. They know that in case of the same with men job position they can count on a salary which will be less when compared with the salary of men. Important thing that must be taken into consideration in discussion of obtained materials is that there are almost no young women in this survey. It must be stated that investigation of women participation and situation in forestry must proceed to check the situation of young women on the start of the motherhood.

The main health problems notified by investigated women are regarding long lasting fixed sitting position and working with a computer. The table below (Table 3.) shows some chosen data related to the self-evaluation of the health problems.

Table 3. Health status, experienced ailments

Health problems, disorders	[%]
Asthenia, testiness (fatigue of eyes)	100
Shoulder, hands and arms	83
Back problems and pain	78
Neck ache and pain	61
Fatigue	94
Wrists and palms ailments	39

Results of investigations regarding working space and work environment show that:

1. there is sufficient free space and area for almost every worker in the room,
2. there are no well fitted seats for the range of users (height, width, armrest positioning, etc),
3. the knowledge regarding ergonomics of the sitting work position is completely not sufficient,
4. more than 60% of desks are not sufficient regarding surface and height,
5. there is not enough light in working rooms (in almost 90% of office rooms),
6. equableness of lighting is not sufficient regarding working rules,
7. the humidity in the half of the work places is not sufficient for the computer tasks.

Results obtained in the course of carried out investigation allow to draw the main conclusion and recommendation:

- There is a great need of practical training with simple and clear instructions. It is important that everyone user of a computer work place understands how to adjust their seats, what posture should be used, what does it mean well adjusted work surface and workplace, and how to achieve all in terms of best practice for workers posture and method of work.
- Answers given by respondents in this investigation must be compared with those given by new, young women staff in forestry. Until than the situation is unclear. The research must go on.

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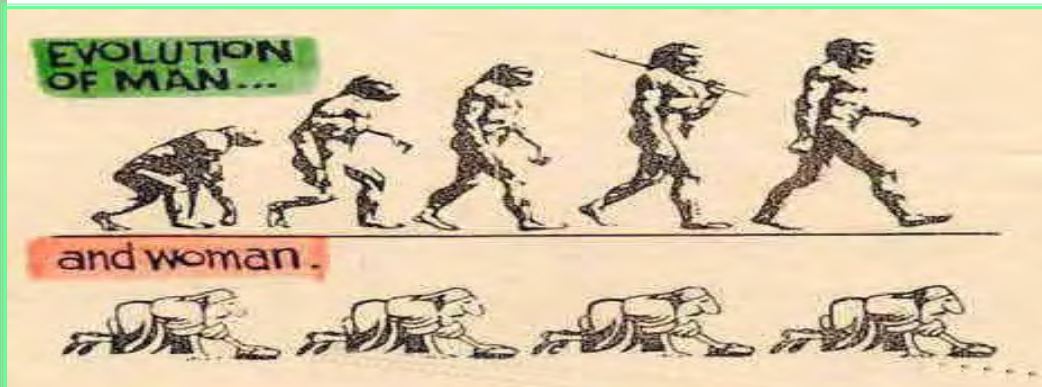
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Gender Issues in Armenian Forestry

Inna Hakobjanyan

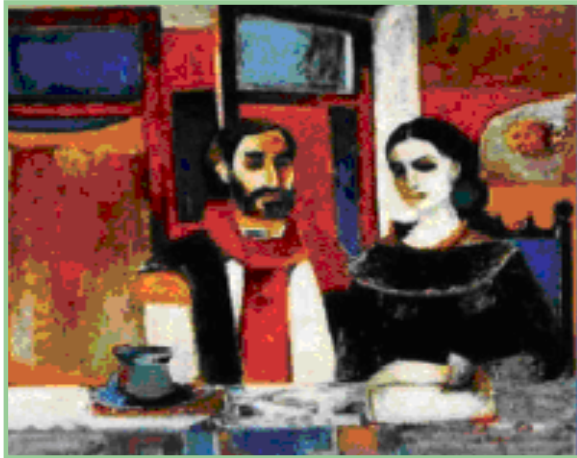
“When the sea is rough, those aboard a ship suddenly realize that there are no blacks and whites, no rich and poor, no women and men, no elders and youth. They suddenly realize that they are all passengers sharing the same destiny”.

Leonardo da Vinci



GENDER ISSUES IN ARMENIAN FORESTRY

Workshop, June 21, 2006



Inna Hakobjanyan - Researcher, Forestry Department, State
Agrarian University of Armenia (SAUA)
inna_hakob@yahoo.com


A large landscape photograph showing Mount Ararat in the background, covered in snow. In the foreground, there is a green field and a small building on a hillside. The sky is blue with some clouds.

*And the Ark rested in the Seventh Month, on the Seventh Day of
Month upon the Mountains of Ararat*

ARMENIA

and the Armenians

1700 years
of Christianity
in Armenia

 **April, 1918**
September, 1991

Hayastani Hanrapetuttsyun, Republic of Armenia
Legislative branch: Azgayin Zhoghov
Head of State: President
Capital: Yerevan
Area: 29,800sq.km
Administrative divisions (Marz): 11
Official language: Armenian, southern branch of Indo-Europ. family
Nat. holiday: Independence Day, 21 September
National currency: Dram (=100 lumma)
Highest mountain: Aragats, 4090m
Lowest point: Valley of Debet, 380m
Max distance north-south: 360km
Max distance east-west: 200km
Natural hazards: severe earthquakes; droughts

DEMOGRAPHIC COMPOSITION OF THE POPULATION (2003)

	THOUSANDS	PERCENTAGE
TOTAL POPULATION	3,212	100
Urban	2,062	64,2
Rural	1,148	35,8
Female	1,666	51,9
Male	1,543	48,1


BY AGE GROUP

0-15	0,723
16-59	2,048
60 and up	0,441

CLIMATE

Av. t., (C0)	January	July
Vanadzor	-3,1	+18,2
Yerevan	-3,2	+24,6
Goris	-0,9	+18,8

Daylight	January1	July1
Vanadzor	8 hours 30min	14 hours
Yerevan	9 hours	15 hours
Goris	9hours 30min	16 hours

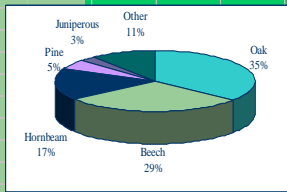


ARMENIAN NATURE IS VERY DIVERSE



Biomes range from a semi-desert in the Ararat plain to sub-alpine and alpine on the summits of the Aragats Mountains. There are c. 3600 species of high vascular plants in the country. In Tran Caucasian region there are 6000 spec. of high vascular plants.

THE CHARACTERISTICS OF ARMENIAN FORESTS 1993



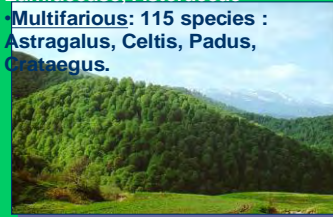
Dominant tree species

- Forest cover-334 100 ha
- Average volume-125m³/ha
- Standing volume-41,74 mln. m³
- Mean annual increment-1,3m³/ha
- Annual growing stock-0,43 mln.m³
- Annual harvest-1mln.m³
- Average bonitet-III-6
- Mean canopy closure-0,53
- Mean age-99



The dendroflora is composed of 110 tree and 152 bush species.

- 130 wild fruit or berry bearing , and other woody species: walnut, hazel, apple, pear, fig, pomegranate, cherry plum
- **Medical plants:** theoretically possible to be used 800 species in medicine. About 60 species used in pharmacology and folk medicine, about 40 species are selling in drugstore: sea-buckthorn, dog rose, hawthorn, juniper, barberry
- **Fungi:** 314 species in mixed forest, 266 in deciduous woodland: meadow mushroom, milky agaric.
- **Oil plants:** 35 species: Lamiaceae, Asteraceae
- **Multifarious:** 115 species : Astragalus, Celtis, Padus, Crataegus.



FOREST SECTOR PROBLEMS IN ARMENIA



Illegal logging in the territory of Dilijan National Park



Forest fires

- Lack of forestry specialists
- Lack of reliable information on forest resources.
- Gender issue
- Absence of applicable forest policy, legislation and NFP
- Non-efficient forest management system and lack of responsibility
- Forest cover transformation due to climate change
- Full absence of integrated pest and diseases management
- Very poor state of machinery park and forest roads



Overgrazing almost in all forested regions

General information on Gender in Armenia

- There are 3.2 million people living in Armenia; about 52 per cent are women
- In Armenia, women are more likely to live below the poverty line than men
- One third of the Armenian population lives in rural areas; about half of these rural inhabitants are women
- Women constitute 66 per cent of the unemployed workers in Armenia
- On average, women earn about 30 per cent less than their male counterparts
- Nearly 1 million people have migrated from Armenia since 1991; the vast majority of these migrants are men
- About 83 per cent of the country's educators are women
- **Women spend on average of 1 hour and 40min. in gainful employment, men-5 hours and 18 min.**
- **Women spent 5 times more time overall than men on housework or unpaid work**
- **Average free time for men is approximately 6 hours, for women-4 hours and 20 min.**



Employed population by economic branches, 2002

Thousand people / percentage to total

	W		M		Distribution by sex, %	
	thousand people	%	thousand people	%	W	M
Industry	62	12	81	14	43	57
Agriculture	223	42	276	48	45	55
Forestry	1	0	1	0	50	50
Construction	6	1	30	5	17	83
Transport and communication	12	2	28	5	30	70
Trade, public catering	38	7	62	11	38	62
Housing and communal services	7	1	23	4	23	77
Health, physical culture and social security	54	10	13	2	80	20
Education	90	17	27	5	77	23
Culture and art	15	3	6	1	71	29
Science and scientific services	6	1	7	1	46	54
Crediting, state insurance	3	1	2	0	60	40
Government bodies	9	2	15	3	38	62
Other	2	1	7	1	22	78
Total	528	100	578	100	48	52

Source: Labor Statistics, NSS of RA

Average wages by branches of economy, 2002

Branches	Distribution by sex, (%)		Wages, thousand dram		Wages ratio of women and men, %
	W	M	W	M	
Industry	43	57	35,509	60,992	58
Agriculture	45	55	17,616	25,122	70
Forestry	50	50	14,546	14,691	99
Construction	17	83	41,618	47,569	87
Transport and communication	30	70	37,061	67,937	55
Trade, public catering	38	62	16,594	22,111	75
Housing and communal services	23	77	38,995	49,055	79
Health, physical culture and social security	80	20	11,943	20,593	58
Education	77	23	14,576	23,208	63
Culture and art	71	29	11,502	19,198	60
Science and scientific services	46	54	21,237	38,827	55
Crediting, state insurance	60	40	99,808	256,190	39
Government bodies	38	62	44,337	70,423	63
Others	22	78	29,369	38,671	76
Total	48	52	19,756	50,278	39

Source: Labor Statistics, NSS of RA

Is Gender an important issue for Armenia?

According to survey conducted by the Armenian Association of Women with University Education

49,7% - equality between women and men are important issue for Armenia,

32,2% -more or less important,

10,3% it is not actual for society,

only 4,9%-there is not gender inequality

Gender issue in Armenia

- 1. Gender in rural areas**
- 2. Gender in urban areas**
- 3. Gender in forest sector/organizations**

1. Gender in rural areas



- About 237 rural communities are close to forest area (total number is about 900)
- Women are responsible for all forest-related and subsistence activities: tree planting, gathering NWFPs, upbringing children, storing food for winter season and for sell, tree planting, etc.
- Absence or small opportunity to influent on decision-making on village level:
- Female-headed households constitute about 27 per cent of Armenian households
- Agriculture employs 45 per cent of the work force in Armenia; almost half of these workers are women
- Nearly 1 million people have migrated from Armenia since 1991; the vast majority of these migrants are men. Most of them are from rural area. Women become head of household



2. Gender in urban areas

- Less than 5 % of deputies in National Assembly
- No Minister, 3 Deputies of Minister
- In the Central Bank, there is one woman – member of the Board. Women are widely represented in the middle levels of decision-making.
- About 70 per cent of officials employed in such important fields as health, culture and education are women.
- Situation in the judicial branch is the similar to the executive.
- In general, women comprise about 13% of judges. In the Supreme Court one out of 9 judges was a woman, who, upon nomination by the Government, was approved as a judge of the European Court of Human Rights in 2002 by the Parliamentary Assembly of the Council of Europe, now she was changed by man.



3. Gender in Main forest management agency/Hayantar

- Central office: Total number of staff is 52, from which 22 are women.
- There are 926 persons in regional forestry enterprises.

Composition of women in the forest enterprises

Forest enterprise	Total employees	% women
Ijevan	50	12
Gougark	85	14
Hrazdan	58	5
Eghegis	30	> 2

- In all these cases there are no professional women foresters.

Gender structures in Forest-related organizations

Name organization	Man, N of pers.	Woman, N of pers.	Women Activities
Hayantar/central office	30	22	Secretary, accouter, computer operator, tree planting
Forest research and Experimental Center/MNP	2	-	Secretary, computer operator, translator
Forest Monitoring Center/MoA	4	1	Secretaries, computer operator
Institute of Botany	-	-	Research
State Agrarian University of Armenia/forestry department	6	6	Teacher, Researcher, assistant
Bio resources Agency ,MNP	19	8	Secretary, computer operator

3/ Gender in forestry education



Student distribution over Forestry Courses at ASAU (2002/2003 academic year)

<i>Specialization</i>	<i>Course</i>	<i>Total enrolment</i>	<i>Men</i>	<i>Women</i>
<i>Forest Engineering</i>	1 st course	24	23	1
	2 nd course	25	19	6
	3 rd course	18	16	2
	4 th course	13	8	5
<i>Forest park gardening</i>	1 st course	24	14	10
	2 nd course	15	10	5
	3 rd course	18	8	10
	4 th course	12	6	6

MSc level study:

Specialization “Forest engineering”: 1 course: 1-man, 3-women; 2 course: 2-men, 4-women

Specialization “Forest park- gardening”: 1 course: 1-man, 3-women; 2 course: 1-man

It was initiating distance-learning education in forestry in 2005.
The number of this course 22 persons, from which women are 4.

Organizations on Women Studies in Armenia

1. About 1700 NGOs are registered in Armenia, 12% of which dealing with women's and children's issues
2. There are about 60 women's organizations promoting women's political, social and cultural rights.

GOVERNMENTAL

- Department of Women's Affairs Ministry of Social Security

NGO

- Armenian NGO "Armenian Women for Health and Healthy Environment" (AWHHE) in partnership with Women in Europe for a Common Future (WECF, the Netherlands) started the TMF project "Tapping resources" in Armenia,
- "Zartonk-89" NGO
- Association of Women with University Education
- League of Armenian Women
- Union of the Protection of Women's, Children and Family Rights
- Women's Alliance
- UNICEF,
- Women's Council
- Women's Rights Centre
- Youth Centre for Gender Research
- Armenian Constitutional Right-Protection Centre
- Association of Women with University Education
- Avangard Humanitarian Research Centre
- Center for Gender Studies of Democracy Union
- League of Armenian Women
- Union of the Protection of Women's, Children and Family Rights
- Third Millennium without Wars Union

UNITED NATIONS

- United Nations Development Programme Regional Bureau for Europe and the CIS Regional Support Center

United Nations Development Programme (UNDP) - Armenia

United Nations Development Programme (UNDP) Country Office in Armenia

Info sources on Gender in Armenia

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- Armenia Action Plan on Improving the Status of Women (rasskazat vkratce)
- Unpaid work and gender inequality in Armenia, NSS
- Network and Capacity Building for Rural Women
- Gender Issues in Armenian forestry, research paper
- Etc

Conclusions

- Lack of foresters with international meaning of it
- No developed stereotype of woman-forester
- No female-decision-maker in Armenian forestry sector
- Preference to have man forester in Armenian State Agency/Hayantar and other forestry organizations

Recommendations

- Integration of gender perspectives at the policy level
- Implementation of gender perspectives at the institutional and project level
- Governments and forest management organisations must provide training and credit for women to improve efficiency of land and forest use for food production.
- Develop and promote personal-skills training courses for rural women on leadership, public speaking, decision-making and self-assertion
- Change in legislation is still required to ensure the equal rights of women and men to forestry
- Traditional roles of women have to be recognised.
- Change authorities attitude towards “woman in forestry” stereotype through attraction of female international experts for forestry-related project development

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Gender issue in Armenian forestry to such a skilled
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exchange and share of your experience in this field.

Welcome to Armenia

Additional Papers

Female Perceptions towards Collaborative Ecotourism Management in Thailand

Subas P. Dhakal⁸²

Collaborative Ecotourism Management (CEM) has increasingly been embraced by rural communities in developing countries across the globe as a tool for sustainable community development. While the role of women in CEM is often emphasized, little attention has been paid to integrate their perceptions in formulating CEM strategies in Southeast Asia. In that milieu, study was designed to investigate whether or not the female members perceive and desire CEM differently in and around Pailom and Ampuvararam Temple Wildlife Non Hunting Area. Located in an outskirt of Bangkok, pristine swamp forests, thousands of migratory birds and two ancient Buddhist temples in the vicinity have made this IUCN Category VI Protected Area (PA) a popular ecotourism destination. However, neither the PA nor the communities in and around it have been able to tap the economic benefits accruing from ecotourism opportunities due to the lack of systematic institutional management. Therefore, a semi-structured questionnaire was administered in a community adjacent to PA to elicit resident's perceptions regarding their willingness to participate and willingness to pay towards potential CEM. Quantitative analysis of responses indicated that female respondents a) perceived there were less benefits from PA, b) were less willing to participate and c) were willing to pay less towards CEM compared to the male counterparts. Qualitative analysis indicated that heterogeneous gender perceptions were shaped by the excluding nature of the stakeholders towards female members of the community. Ambiguous mandate for the PA management to involve community in the decision-makings was the primary concern of the stakeholders that could eventually affect CEM outcomes. Study recommended that existing national protected area policy be amended to facilitate deliberative participation and integrate gender specific perceptions to ensure sustainability of CEM.

⁸² Program Officer, Conservation Education, PO Box 5710 Kathmandu, Nepal. conservationeducation@rediffmail.com

“Gender Dynamics and Equity from Women’s Perspectives in Nepalese Community Forestry”

Krishnahari Homagain
kbhom@hotmail.com

This is an exploratory case study of Baidol Community Forest User Group of Kabhrepalanchok district of Central Nepal. In the context of second generation issue of gender in Nepal’s Community Forestry management, this study was aimed to analyse women’s involvement in community forest management and to assess the equity in community forestry from their perspective in terms of common property (community forest) management. The study area is basically a village where agriculture based farming and livestock are the main occupation of the majority of people as forest is an integral component of Nepalese farming system. The sources of primary data were: a two-week long social survey followed by fifty-one separate interviews with female members, researcher’s own observation of Forest User Group (FUG) meetings and other Community Forestry (CF) activities which were further supported by secondary information extracted from the study of meeting minutes, FUG records, periodic progress reports and literature review. The study revealed that under homogenous socio-economic condition and with rare socio-political conflicts the women’s involvement in CF management can be increased. Women of study area are managing the governed assigned block of forest for their daily benefit of forest firewood, fodder and small timber. Women of homogenous interest and socio-economic status perceive that equality with consensus of all members is Equity. The major decisive factors for these findings were mainly: acute need of forest products; constant support from male members of the community; Bounding social norms and future opportunities of the forest. Women can collect/save a significant amount of money and create an excellent source of revolving fund for their social development in small cohesive saving-credit groups. This is a result of women’s interactive group work which found to be a major strength of the studied forest user group which is being considered as a successful indicator of Nepal’s community forestry.

Inclusive Community Forestry: Sustainable Institution for Livelihood Improvement

Kalpana Ghimire, NACRMLP, kalpanaghimire@hotmail.com and Rishi Ram Bastakoti, RIMS-Nepal, Post Box 2464, rishibastakoti@hotmail.com

Abstract

Community forestry in Nepal is one of the successful programmes and best example of devolution of right to the local communities. It has widely been recognized as people-centered forestry approach. Despite its immense success in conservation of forest and generation of revenue; problems of social inequity and exclusion of the poor, women and other disadvantaged groups from gaining access to and control over community forest resources and incentive derived from it are some of the emerging issues observed in community forestry programme. Both the men and women have equal concern on the local forest and its products. So, both of them should equally participate in planning and implementation of the activities. A quick glance at the national level database shows that 24% of the community forestry user group executive committee members are women, which proves the poor representation of women in community forestry decision-making. This scenario provokes the need of more inclusive community forestry with gender mainstreaming. Success of community forestry cannot really be held as success when those acclaimed issues including the imbalance in the benefit sharing and decision-making power between men and women and elites and poor groups, are considered. Different facilitating organizations have taken initiatives for gender and social inclusion in community forestry. This paper reviews the approaches and initiatives of these facilitating organizations in Nepal to make community forestry more inclusive and provides evidences how the inclusion of women and poor is possible in community forestry through process oriented approach and micro-macro level advocacy. Based on the empirical evidences from the field, this paper argues for inclusive community forestry to make it socially institutionalized program for livelihood improvement.

Key words: Community forestry, gender, inclusion, institution, livelihoods

Gender and Forestry in Developing West Africa State, Nigeria as a Case Study

Adisa-Balogun M.F.

Project officer, Tropical Forest Network (TFN) Nigeria, tfnnigeria95@yahoo.co.uk

Abstract

Forestry began in Nigeria with the massive exploitation of the then highly biodiversity forest of the sub-region by the colonial government, mostly for exportation this continue even after the Independence of the Nation as it was in most African states one to the task involved in opening up the thick forest to harvest these timber, it is generally regarded as a Man's job.

This era was followed by reforestation/afforestation period, a lot of degraded forest land was replanted with trees though exotic species in most cases, this activities was also done with Man as the major focus as the stakeholder

The failure of most reforestation/afforestation project, the continue degradation of the few remaining Natural/secondary forest brings women and youths into focus as also a major stakeholder in sustainable management/utilization of the forest in the sub region.

In the last decade various attempt to involve women and youth into forestry developmental programmes have begun yielding positive response.

Gender and Equity Issues in Community Forestry: A Case Study of Bamdibhir Community Forestry User Group: Western Region of Nepal

Krishna Prasad Lamichhane

Chairperson, FECOFUN, Kaski, Pokhara, Nepal, E-mail: Krishna_lamichhane81@yahoo.com

Abstract

In the two past decades, forest policy has taken steps to include forest users in management and protection of forests. As results of this change in policy over a million hectares of forests are being managed by more than 14300 use groups. Community Forest User Groups make one of the largest organized sectors in the country. While this achievement seems appealing, within community forestry, there are questions of governance, equality and women's access to decision-making and benefits sharing that need further attention. These questions need to be answered to make community forestry more democratic and successful. They have drawn attention of policy-makers.

This paper presents some background information of these aspects and highlights some of the important measures adopted by Forest User Groups and an intervention of different stakeholders to the forest user group and its impact to address these questions and to enhance women's access to decision-making in community forestry.

An Overview of Women Participation in Social Forestry Program in Bangladesh

Md. Wasiul Islam⁸³

Abstract

The population of Bangladesh is estimated at some 137 million of which about 49% is female. About 92% of the households are male-headed and the rest 8% female-headed. Islam is the principal religion and 89.7% of the population is Muslims. In Bangladesh the share of women in the total economically active population is 39%, representing a relatively lower economic contribution by women. Most often, women are exclusively responsible in activities like care of livestock and poultry, vegetable growing, social forestry, post-harvest processing and preservation in the farm households in addition to their compulsory duties of becoming a mother, rearing children, cooking meals for 2-4 times per day, collecting water and fuelwood, washing cloth and other household activities which are considered uneconomic. Rapid forest degradation has enforced women and girls to go further a field to accumulate fuelwood which along with the other tasks that has abridged the opportunities of girls to attend school. Women usually work for about 14-hour in comparison to men who work 6-8-hour/day. Social forestry has acquired immense implication in Bangladesh as an approach for both forest resource management and rural development. Trees grown on homestead land provide 85% of the wood consumed in Bangladesh. Within the homestead area women are actively involved in the cultivation of tree species. Gender differences in preference in choice of species, location, cultivation techniques and management practices within homestead cultivation are known to exist, but empirical evidence which confirms this is deficient. Many Government and NGOs are conducting reforestation programs by social forestry in all over the country and most of these have been specifically targeted at women participation and empowerment. Examples of social forestry programs suggest that there is a tendency for women participation to revolve around labor provision. Practically nothing can fully be achieved without the active participation of women community particularly of rural women. There are many opportunities and scopes in the country to involve the women in social forestry activities by which they can change their living standard and empowerment structure of the society that will bring Bangladesh into a economically and socially more prosperous country.

Key words: Women participation, social forestry, Bangladesh, empowerment, rural development.

Introduction

Bangladesh is one of the third world countries in the world that covers 147570 km² of area having 137 million of population and its density is 928/km. The population growth rate is 1.48. Literacy rate is 65% and female are less literate than man. Per capita income per year is only US\$ 470. Islam is the predominant religion and 89.7% of the population is Muslims (Bangladesh Economic Review, 2005). About 92% of the households are male-headed and the remaining 8%

⁸³ Assistant Professor, Forestry and Wood Technology Discipline, Khulna University, Khulna-9208, Bangladesh. E-mail: wasiulislam7@yahoo.com , Phone: 880-41-720171-3, Ext: 228, Cell: 880-1711-457687, Fax: 880-41-731244.

female-headed (BBS, 1993). The total forestland area in Bangladesh is 2.56 million ha which is 17.8% of the total area of the country (GoB, 1993). But the actual area under forest vegetation is only 6% (Chowdhury, 1999). The Government of Bangladesh promulgated Forest Policy in 1994. The Forest Policy laid emphasis on people oriented programs (social forestry) to manage forest, preserving existing cultural values, conserve biodiversity, maximize benefits to local people and uplifting environment. The Government approved the 20-year Forestry Sector Master Plan (FSMP) in 1995. The objective of the FSMP is to optimize the contribution of forest resources for environmental stability, economical and social development. The plantation raised under the Community Forestry Project, Upazila/Thana Afforestation and Nursery Development Project are now being harvested under the Forestry Sector Project. The participants are getting their long awaited shares as per the Participatory Benefit Sharing Agreement. In these forestry activities man are the active role player for decision making, plantation, marketing, etc. activities. On the other hand about half of the population i.e., women are deprived to take part the social forestry activities as men and as a result they are not involved in economic activities, decision making process, etc.

Agroforestry in Bangladesh mostly based on traditional farming methods such as ploughing with draught animals and manual sowing. Men generally execute these activities and women are also involved in farming activities but mainly in home gardens. In certain regions, women are involved in harvesting activities. In all parts of Bangladesh, women are active in post-harvesting activities such as parboiling and drying paddy. In these cases of tree production, women are actively involved in raising seedlings in tree nurseries. Some are also involved in contract farming, such as establishing block plantations on a contractual basis, while others are involved in maintaining roadside tree plantations. So taking these in considerations, the objective of the study is to review the overall women participation status in social forestry program in Bangladesh.

Materials and methods

This paper is a review of women participation in social forestry program in Bangladesh and hence the data and information of the paper has been collected from different sources i.e., Khulna University library, Bangladesh Forest Department, personal collection, websites and based on my experiences. The collected data and information are carefully reviewed and sorted according to the sequence and analyzed for explaining it easily. The sorted information and data are then compiled sequentially and systematically. The compiled part is the present paper.

Social forestry activities in Bangladesh

Social forestry is a subsystem of forestry. Social forestry is "social" because it is primarily oriented to promoting social equity in forest development. Social forestry is basically an interaction of three interdependent elements i.e., land, people and technology in a particular space and time (Salehuddin and Rebugio, 1990). The interactions of functioning of a resource system are influenced not only by the state of elements but also by some characteristics of relevant environmental system, both bio-physical and socio-cultural aspects. It is there fore oriented toward achieving any combination of the following goals or values (Ahmed, 1994):

- Productivity and efficiency
- Stability and harmony
- Equity and welfare

- Sustainability.

Hence if women strongly participate in social forestry activities then certain targets will be achieved as for examples: poverty alleviation, increase national income, improved standard life, reduction dependency on male etc.

Social forestry is the mainstay of public forestry in Bangladesh and a good number of social forestry projects are currently being implemented including the Forestry Sector Project (1998-2006), Coastal Greenbelt Project (1995-2002), and the Sundarbans Biodiversity Conservation Project (1999-2004). Previously Betagi Social Forestry Project (launched in 1979) and the Pomora Social Forestry Project (launched in 1980) (situated at Rangunia upazila/sub-district in Chittagong Hill Tracts district-the south-eastern region of Bangladesh), Upazila/Thana Afforestation and Nursery Development Project (1989-1996), Forest Resources Management Project (1992-2001), Chandra Agroforestry Research and Demonstration Project at Kaliakair upazila of Gazipur district in central Bangladesh became operational in May 1992 (funded by Ford Foundation) etc. projects have made commendable progress in achieving their physical goals such as plantation establishment, seedling distribution and associated infrastructure building (After Khan, 2001). Social forestry has acquired great significance in Bangladesh as a strategy for both forest resource management and rural development.

Women in Bangladesh

Changes in land-population patterns in rural areas are having an impact on gender relations and on the position of women throughout Bangladesh. First, the continuing fragmentation of holdings is leading to fewer households being constituted in the form of the extended family. This is associated with a loss of security for women from the family network and with reduction in the scope for sharing household tasks. Concurrently, women's normative entitlements to social support beyond the family are weakening. Thus women are becoming more vulnerable to extreme poverty and destitution. Second, women's work possibilities outside the homestead have declined: the increase observed in women's involvement in field wage labour is outweighed by technological displacement of paddy husking, rice milling and other work. Inside the household, women's work is of increasingly low productivity among the poorest deciles as the asset base of more households declines (BRIDGE, 1994).

In Bangladesh the share of women in the total economically active population is 39%, indicating a relatively lower economic participation by women. Overall, women's earnings are around 42% those of men. Nevertheless, female earnings are vital to the well being of poor households, particularly given that women's income is largely spent on family consumption, unlike that of men, of which a high proportion goes on personal items. In female-headed households, women's incomes may be the sole source of household support (BRIDGE, 1994).

Social forestry and women

Trees grown on homestead land provide 85% of the wood consumed nation-wide (Timm, 1993). Within the homestead area women are actively involved in the cultivation of tree species. Outside this arena, tree cultivation is apparently the preserve of men, although it is unclear whether this is attributable to prevailing land tenure arrangements, or cultural factors (World Bank, 1990). Gender differences in preference in choice of species, location, cultivation techniques and management

practices within homestead cultivation are known to exist, but empirical evidence which confirms this is lacking (Hussain *et. al.*, 1988).

Tree and shrub species which can be managed and accessed by women, (i.e., planted within or adjacent to homestead areas) and which fulfill multiple purposes (i.e., fruit trees and vegetable species for consumption, house construction, sale, and fuel for cooking) are vital. However, baseline information on the relative rights, interests and opportunities of women and men in relation to the natural resource base is a prerequisite to understanding gender specific preferences.

Women are largely responsible for tree cultivation within the homestead. Beyond the homestead, tree growing is largely a male preserve. Gender preferences in choice of species, tree cultivation techniques and management practices are thought to exist but there is little evidence on this.

Necessity of women involvement in social forestry

Moreover, participation of women in social forestry is essential for the following main points:

- Improves the socio-economic condition of the society
- Develops the infra-structure of the society
- Supervises and take care of the planted seedlings
- Controls the theft and their illegal use of trees
- Provides lands for growing plants
- Increases the survival rate of planted crops
- Increases the affinity of people towards planting trees.

Role of women in social forestry

In Bangladesh a traditional bound structured, subsistence oriented socio-economic frame, women for centuries are subjugated under the male domination, suffer from an inferior status and occupy a subordinate position in the society (Yasmin, 1994). For many years, development activities are centered around men only and women are considered as the burdens of the family. Each and everyday, women encounter different types of social, cultural and economic exploitation and are deprived of education, health and optimum nutrition. Still now they are confined to less remunerative activities. In many developing countries, female-headed households are the poorest of the poor (UNDP, 1991).

Women in Bangladesh constitute about 49% of the total population of Bangladesh and most of them are illiterate. In spite of the havoc illiteracy and constant social and cultural hazard women contribute the gross domestic product to a great extent through a wide spectrum of unrecognized and unquantified activities. Women are solely responsible in post-harvest activities, poultry and livestock rearing, homestead vegetation in addition to their compulsory duties of giving child birth, rearing children, 2-4 times cooking meals/day, collecting water and fuelwood, washing cloths and other household activities. Women usually work about 14 hours when men work for 6-8 hours per day (Burch and Rahman, 1990). It is believed that as women constitute about half of the total population nothing can fully be achieved without the active participation of women force. In practice women are the managers of the production, consumption and protection of natural resources. But the degree of involvement of women in sustainable use of renewable resources is low (Khandakar, 1991). It is also noted that different programs of government and non-government agencies demonstrated that the potential of becoming self confident for the active contribution to the national economy (Khandakar,

1994). By agroforestry activities the women are getting relief as most of NGOs and also the GoB realize that the without the women, the agroforestry activities can not run well in sustainable way.

Government and Non-government Organization in social forestry

Many Government and NGO-run reforestation schemes are currently in operation. The Rangpur and Dinajpur Rural Service Project (RDRS) and Proshika Kendra have initiated many social forestry projects, some of which have been specifically targeted at women (Wilson-Smillie *et al.*, 1990). However, targeting alone does not necessarily mean that women will benefit from such schemes. Examples of social forestry schemes elsewhere suggest that there is a tendency for women's participation to revolve around labor provision. However, women's labor input into these schemes usually involves a diversion of labor from other tasks and responsibilities. In the short-term it is vital that women are rewarded, whether in money or kind, for their participation and, in the long-term, that they are ensured some access to and control over the future benefits, including the products, of reforestation programs. Proshika, an NGO currently operating throughout 22 districts of Bangladesh, has a long record of initiating reforestation projects. In 1992, approximately 50 percent of the 25,000 groups belonging to the organization had an exclusively female membership (Kramsjo, 1992). Taking into account disincentives to plant trees on leased land, reforestation programs have been geared towards tree planting on homesteads, common property resources and state property such as roadsides, embankments and government forests. Nurseries for the cultivation of tree seedlings are a central feature of Proshika projects. Factors such as the accessibility of nurseries to women have influenced project design and, to this end, many nurseries have been established within remote rural areas close to homesteads (Khan, 1991). Multi-purpose and fast growing tree species, which meet subsistence needs for fuel, fodder and food, are promoted. Gender-specific needs are apparently recognized within the program. Proshika is also promoting the uptake of organic agricultural cultivation. However, if assetless women have limited or no access to organic materials such as cow dung for fertilizer use, environmental interests and gender interests within these projects may not intersect. In this instance, poor women may be forced to trade off the use of cow dung for agricultural purposes against their requirements for other, perhaps more immediate, needs (i.e., cooking) (Khan, 2001).

Scopes of work for women in social forestry program

Due to the physical and cultural barriers women in our country can't do hard physical labor. But they can extensively participate in low labor work like raising seedlings in nurseries, plantation seedlings in gardens, care and protection of seedlings etc. It has a great scope to implement social forestry program successfully by involving women in the following activities (After Dey, 1996):

- Preparation of seed bed in nursery, filling mud in poly bag, collection of seed, sowing of seed, replacement of seedling, irrigation, fertilization and weeding etc.
- Dig hole in garden, application of fertilizer, transportation of seedling, plantation of seedling, making fence etc.
- Care and maintenance of seedling.
- Weeding and different types of tending operation.
- Direct participation in agroforestry, woodlot and strip plantation and produce agri-crops, viz., taungya type of garden where especially tribal women are directly involve in raising of seedling and cultivation of agricultural crops and vegetables, etc.
- Women can act as an extension worker in social forestry programs.
- Planting trees in homesteads and its protection.

- Establishment of family nursery and sell in the market as an extra income source in her family.
- Women can work as a watcher in government and non-government oriented strip garden.
- They can actively participate in the apiculture, bamboo, cane, hogla cultivation around their home.
- Development of consciousness of family and others about trees.
- Participation in bamboo, cane based cottage industries.
- Production of silk by sericulture and silkworm rearing.

Though many of the women of Bangladesh are presently involved in some of the above-mentioned activities in social forestry but that should be magnified in many folds thus they can avail their full scopes and contribute a lot to their family and to the nation.

Approaches of organizing women's in social forestry programs

The following steps can organize poor, assetless and destitute women in the rural areas (Dey, 1996):

- Forming of informal women's cooperative society in the village.
- Weekly meeting with the women.
- Habituated to weekly private saving.
- Evaluate personal efficiency and encouragement.
- To identify what types of business is safe and welfare for the women.
- To make positive for credit when necessary.
- To help in the concerned activities to be continued until they become self-dependent.
- To transfer the concept of social forestry to them when a reliable environment is created.
- To assist in establishing nursery by supplying good seed and poly bag.
- To make measures for the marketing of the produced goods.
- Give technical and realistic assistance to them.

The promotion of tree and shrub species which can be managed and accessed by women (i.e., planted within or adjacent to homestead areas) and which fulfill multiple purposes (fuelwood, consumption needs, house construction, sale etc.) is vital. However, baseline information on the relative rights, interests and opportunities of women and men in relation to the natural resource base is a prerequisite to understanding gender-specific preferences. A number of afforestation schemes currently in operation are targeted at women, but little information is available on these. Evidence from elsewhere shows that women's participation in such schemes is seen largely in terms of labor inputs. There is a need to reward women's labor inputs in afforestation schemes and to promote their involvement in decision-making and longer-term control over products and assets.

Constraints for women's participation in social forestry

There are the following constraints which create barriers for participation of women in social forestry activities in Bangladesh:

- Man headed family and dominance of man in a family.
- Involvement of women in employment is not encouraged.
- Contribution of women to economic development is not recognized.

- Access to resources for women is not equal as men.
- Different inputs and technologies are not reached to women.

Recommendations for participating women in social forestry

These are the following recommendations which can solve the above stated problems for participation of women in social forestry activities in Bangladesh:

- Man headed family should be reformed thus women can also get the priority in decision-making process in a family.
- Involvement of women in social forestry should be encouraged.
- Contribution of women to economic development should be recognized.
- Access to resources for women needed to be equal as men. There is a need for policies to protect and improve women's access to and control over the natural resource base as a vital part of poverty alleviation strategies.
- Women resource development capacity should be increased through training and other constructive programs.
- Different inputs and technologies are to be reached to women.

Conclusion

Since men earn, they automatically become powerful and control the family. If we analyze a family, then we can get the gender imbalance of a family, which gives the general picture of a society. The men are the decision maker of a family and the guardian who work outside and also the resource collectors. On the other hand women work at the households and look after her children. So it is needed to change the position of women in a family by re-organize it rather to break the existing system thus they can contribute the family as the man and can improve the socio-economic and cultural status of our society. In this case women will be capable to take decision also which will help her husband to take the proper decision.

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Gender roles of the *Mro* tribe in forestry activities in Chittagong Hill Tracts, Bangladesh

Md. Danesh Miah⁸⁴, Mohammad Shaheed Hossain Chowdhury* and Man Yong Shin

Department of Forest Resources, Kookmin University, 861-1, Chongnung-dong, Songbuk-gu, Seoul,
136-702 South Korea

Abstract

An exploratory study was conducted on the gender roles of the *Mro* tribe in Chittagong Hill Tracts, Bangladesh, Highlighting their forestry activities. A total of 36 farms were assessed using different participatory appraisals through semi-structured questionnaire. It was found that all the activities regarding farming, housing, weaving, food preparing, festival etc. were gendered in the *Mro* community. Almost all the adult females were reported to be engaged in food, fuelwood, fodder and medicine collection from the forests, harvesting water from the streams or waterfall, ginning, spinning, dying and weaving clothes in the handloom. The poultry and piggery were found to be managed by women. Women had more direct interest than man in choice of species, which meet subsistence need. In most of the cases, they not only collected food, fodder, fuel and medicines from the forests but also disposed those in the nearby markets. House construction, basketry, hunting, decoration for festival, cutting jungles for shifting cultivation, were reported to be performed by men. Gender involvement concerned with farming and other tasks were found to be regulated in an annual cycle. The highest intensity of labor involvement was observed from April to October during which period the farmers prepared, sowed and planted, managed and harvested the shifting cultivation. The policy makers to develop the *Mro* community in Bangladesh can use the findings of this study.

Keywords: Gender, *Mro*, Forest utilization, Chittagong Hill Tracts, Bangladesh

⁸⁴ Author for all correspondence [dansmiah@yahoo.com]

* Institute of Forestry and Environmental Sciences, University of Chittagong, Chittagong 4331, Bangladesh

Posters

Female Foresters' Employment and Career Development in Finland

Introduktion:

- here, forester refers to university graduate – M.Sc. (For.)
- forestry training since 1862, first woman student in 1918
- 34 women foresters by 1960 (1.6% of foresters); women students intake increased strongly in the 80s
- over 700 women foresters in 2006 (26% of the total); women constitute approx. 50% in the youngest age groups

Employment by sector:

- from the 1920s to the 40s, 1/3 of women foresters were employed in forestry, 1/3 in teaching jobs (after getting married), 1/3 as housewives and in other jobs
- in the 90s, 20% of women and 9% of men foresters employed outside forestry
- in 2005:
 - private sector: women 40%, men 56%; median salary of all 4000 €
 - government: women 43%, men 28%; median salary of all 3300 €
 - universities, women >7%, men <7%, median salary of all 2700 €
- no difference in unemployment figures between women and men

Employment contracts in 2005:

- fixed term contracts: all 18%, women 30%, men 15%
 - in private sector women 22%, men 9%
 - in government women 28%, men 13%
 - in universities women 74%, men 78%

Salary structures:

- in mid 80s, women foresters' average monthly salary 82% of men's; but taking into consideration men's longer working hours, 85%. The difference between men's and women's salaries increased with the number of years in employment
- in 2000, women's salaries in the public sector were 10.5%, in the private sector 9.4% lower than men's

Career development

- in 1998, 1/3 of women and 5% of men thought their gender makes it difficult to get a job. Women felt they got jobs because of good luck, relationships or personal characteristics. Men felt they got jobs because of their work experience and specific skills
- women have been less ambitious to aim at leading positions
- there have been significant differences between employers' support to male and female foresters' on-the-job training
- in 2003, of those who had graduated <4 years earlier, 21% of women and 3% of men were employed outside traditional forestry

- forestry student intakes have been and still are up to 150% of anticipated forestry job vacancies; hence tightening competition, more temporary, fixed-term contracts and more moving to jobs outside forestry

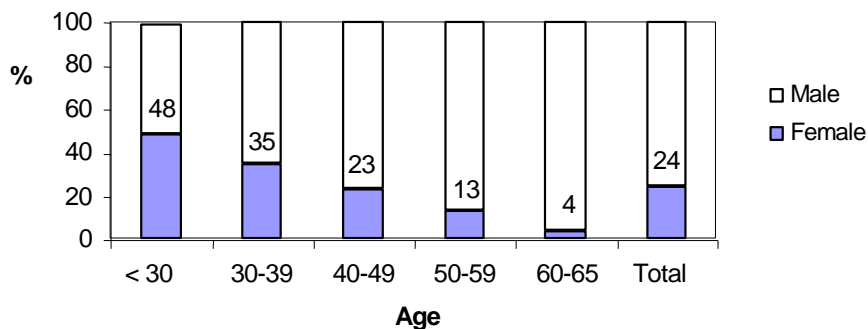
Women's and men's different choices in forestry student years

- women students have chosen silviculture, forest ecology and peatland forestry more frequently than men, who have preferred forest engineering and wood technology
- women have learnt more languages and participated in international student exchange programmes; men have studied more information technology
- after graduation, men have got permanent jobs more often than women (there is a correlation between the type of first job and career development)

Recommended measures to further women foresters' careers

- mentoring programme for female foresters - was started in 2005, ongoing
- career planning for female students – yet to be started
- leadership training for female students – yet to be started
- creation of forestry women's network - has been started
- more women to the committees of the Society of Professional Foresters – ongoing

**Finnish foresters' gender structure in age groups
1/2004**



For further information, contact:

Ms. Tuula Jusko, Chairperson, Female Foresters' Association, tuula.jusko@tapio.fi

Mr. Tapio Hankala, Director, Society of Professional Foresters, tapio.hankala@metsanhoitajat.fi

Forest services as a male domain: evaluation of corporate culture and the possibilities for gender sensitive reforms

Siegfried Lewark, Maria Hehn, Till Westermayer, Eva Wonneberger

Gender and Forestry - International Seminar. Umeå, Sweden, June 18 – 20, 2006 *



ALBERT-LUDWIGS-
UNIVERSITÄT FREIBURG
INSTITUTE OF FOREST UTILIZATION AND WORK SCIENCE

Werderring 6
79085 Freiburg
Germany
<http://www.fobawi.uni-freiburg.de>

Prof. Dr. Siegfried Lewark, + 49 761 203-3768
siegfried.lewark@fobawi.uni-freiburg.de

Dr. Maria Hehn, + 49 761 203-3773
maria.hehn@fobawi.uni-freiburg.de

Till Westermayer M.A., + 49 761 203-3761
till.westermayer@pluto.uni-freiburg.de

Dr. Eva Wonneberger, + 49 761 203-3773
eva.wonneberger@fobawi.uni-freiburg.de

Project organisation and objectives

“wa’gen” (Wald = forest and gender) is a joint research project of the German Universities of Lüneburg and Freiburg. It focuses on the role that gender relations and perceptions of nature have on forestry and environmental education. Main questions are:

- Which influence have perceptions of nature on forestry organizations, the practice of forestry and the transfer of knowledge in the field of forestry?
- Which influence have perceptions of nature and forests on gender relations in forestry organizations?
- How can we recognize gender-specific aspects and how can we incorporate this in knowledge transfer, in the management of forests and in the organization of the state forest services?

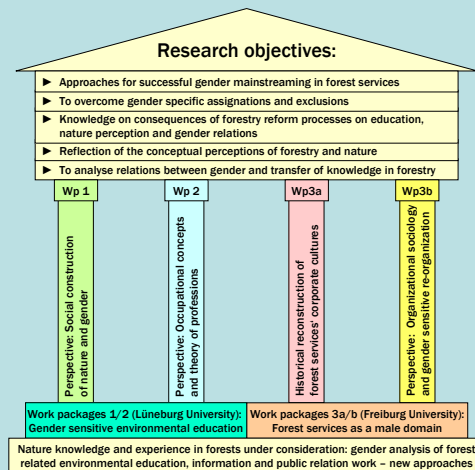


Fig. 1: The organisation of project “wa’gen”

At *Lüneburg University*, the main focus is on the perceptions of nature and gender, respectively, on the one hand and the dialectics of occupational images and their reality in environmental education, on the other hand. — At *Freiburg University*, research is focused on gender distributions and gender relations against the backdrop of the stated political goal of equal opportunities for both sexes and the ongoing structural reform of the state forest services. The project also aims specifically at developing recommendations for a gender-sensitive implementation (and realization) of the ongoing reform processes in the forest services.

For more information on the project, see www.wa-gen.de.

Gender in German forestry: an example

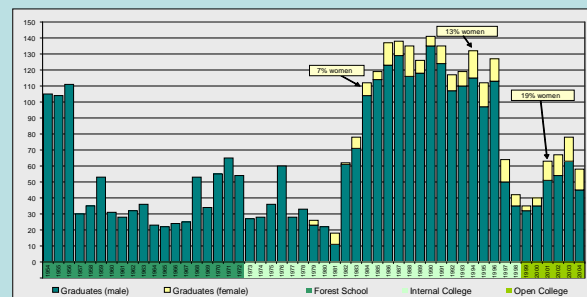


Fig. 2: Distribution of male and female graduates from the Applied Forestry School of Rottenburg from 1954 till 2004 (Source: B. Kaiser, Rottenburg)

The gender situation in the German forest services is exemplified by the distribution of male and female graduates in a German Forestry School in the last 50 years (fig. 2). From 1954 till 1972 this school educated foresters employed by the Baden-Württemberg state forest service. No women were admitted in this period. In 1973 the school gained the status of a university of applied science (“internal college”). From then till 1998 students were recruited exclusively from the state forest services of Baden-Württemberg, Rheinland-Pfalz, Saarland and from the federal forest services. The first females graduated in 1979. Since then, an average of 10 % of the graduates was female. In the mid-nineties, job opportunities in the state forest services declined dramatically. Since 1998, the university has an open admission policy (“open college”). Nowadays, 20 to 25 % of the students are female. However, employment opportunities in the in the state forest services dramatically decreased. In essence, the forest services are still a male domain.

Gender research in project “wa’gen”

To understand current gender relations, patterns of corporate culture in state forest services will be identified and analyzed, using an historical approach to reconstruct underlying mechanisms. We hypothesize that these patterns not only led and still lead to the exclusion of women, but also to an utilitarian view of nature, both restricting the potential for change. This approach will be complemented with the study of current gender relations in the forest services, with the help of theories and methods of organizational sociology. The processes of daily work and communication will be reconstructed by means of qualitative interviews. The results of both approaches will then be used for workshops to improve sensitivity for gender issues in selected groups of the forest services.

* Poster first presented at: IUFO Pre-Congress Meeting of IUFO Unit “Gender Research in Forestry”, Australia, 2005



Research project “Nature Knowledge and Experience in Forests under Consideration: Gender Analysis of Forest Related Environmental Education, Information and Public Relation Work, Evolving New Approaches” (wa’gen)



Funded by the German Federal Ministry for Education and Research as part of the programme “Sustainable Forestry”

(No. 0330607)

Historical reconstruction of the forestry education as a prerequisite for the access of women to the leading positions of state forestry in the federal state of Baden- Württemberg

Results of a diploma thesis

Astrid Kühnel

Poster for the Gender and Forestry Seminar, Umeå, Sweden 2006



Werdenzing 6
79085 Freiburg
Germany
<http://www.fobaw.uni-freiburg.de>



project wa'gen:
(Wald = forest and gender)
<http://www.wa-gen.de>

Astrid Kühnel, cand. forest., +49 761 203 3773
astrid.kuehnel@fobaw.uni-freiburg.de

Introduction

In the federal state of Baden- Württemberg just 7.5 % of the people working in leading positions in the state forestry administration are women.

The small share of women can be explained by the historical access of women to forestry education as prerequisite for professional work in the forestry sector.

Method

The prescriptions for the forestry education since the Second World War were analyzed under the aspect whether there existed equal opportunities for all applicants to receive the professional training.

The results had to be contextualized to the general contemporary history and especially the woman's history to find out if the developments in the forestry sector complied with the general societal trends.

Results

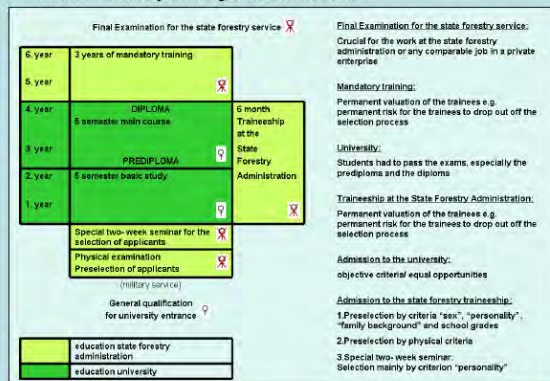
Up to the 70s women were excluded from the complete forestry education.

While it was possible for women to study forestry sciences at the universities since 1939 they had no access to the mandatory training at the state forestry administration until the middle of the seventies. This was because the training rules at the state forestry administration in Baden- Württemberg did not change significantly in a time period from 1940 till 1977.

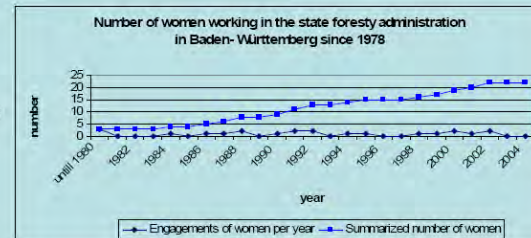
Characteristic for these rules was that the training period was not only used to qualify the aspirants but also to select the persons that were hired later by the state forestry administration.

The sourcing of staff was a multistage process that continued during the entire time of forestry education. (See graphic below)

As a consequence only the aspirants that fulfilled the employment criteria of the state forestry administration were allowed to participate at the mandatory training or to conclude it.



Graphic: The multistage selection and forestry training process during the 60s in Baden- Württemberg



Moreover the criteria which were used to select the applicants showed the following characteristics:

1. The criteria were formulated imprecisely. Consequently they could be interpreted in any direction.
2. The criterion specialist knowledge was not the most important criterion. In spite of that the three criteria: "sex", "personality" and "family background" were the determining criteria.
3. Especially the criterion "personality" was defined by the values of the organisation culture of the state forestry.

Consequently only applicants that conformed to the values of the organisation culture of the state forestry organisation in Baden- Württemberg were allowed to participate the mandatory training.

As women traditionally did not "occur" in the selection and training methods of the state forestry, they were simply not admitted to the mandatory training.

Only strong societal political pressure during the seventies made it possible to change the training rules and to allow women to take part in the complete forestry training. Therefore the first woman was hired as late as 1978 in the state forestry administration of Baden- Württemberg.

The following increase of women that were qualified for the leading positions in the state forestry administration concurred with the strong decline of jobs. Therefore the number of women working in the leading positions of state forestry administration in Baden- Württemberg is still extreme small. (See graphic above)

Reference

Diploma thesis of Astrid Kühnel 2006

The diploma thesis is part of the project wa'gen. wa'gen (Wald = forest and gender) is a joint research project of the German Universities of Lüneburg and Freiburg. It focuses on the role that gender relations and perceptions of nature have on forestry and environmental education.

For further information: www.wa-gen.de





Gender Perspective on Non-Industrial Private Forest Ownership as a Natural Resource Dependent Local Small Business



- Are Women a Key to Local Business Development?

Camilla Thellbro

SLU, Dept. of Forest Resource Management and Geomatics/Vindeln Experimental Forests

Research program UTILISATION OF THE BOREAL FOREST / BALTIC FOREST

Background

In a Swedish rural boreal municipality small businesses are crucial to the socioeconomy and 50% of the local businesses are non-industrial private forest (NIPF) farming businesses, which indicates the importance of forest ownership to the local society. From a gender perspective the questions are:

- Are there differences between male and female forest owner businesses and if so; what does that imply in relation to local business development?

Material and Method

Survey (questionnaires supported by telephone interviews) **among a randomly selected 50% of the unique local workplaces – ULWps** (small businesses with unique personal or organisational numbers covering all kinds of activities including NIPF owning) **within a case study municipality**. Data on **resident NIPF farmers descriptively summarised from a gender perspective** and related to existing understandings.

Vilhelmina

Case Study Municipality

- 7 300 inhabitants
- 8 740 km²
- 1 077 ULWps – 53% resident NIPF farmers

Results from Vilhelmina

% (if not specified)		♀	♂	
Population		26	74	
Owner	Age (yrs)	56	56	
	Time in Vilhelmina; Since birth	70	80	
Ownership:	Estate;			
	< 20 (ha)	87	80	
	Time;			
	> 10 (yrs)	65	88	
	Type;			
	Single	52	55	
	Reason;			
	By inheritance	74	52	
	Significance;			
	Hobby	74	54	
* Engagements:	Total	24	76	
	(Ca. 760 in pop.)			
	All-year;			
	Full-time	18		
	Part-time	56	63	
	Season;			
	Full-time	11	7	
	Part-time	33	12	
Location	Reason;			
	Residency	74	52	
Vilhelmina:				
	Location of estate	17	39	

* Based on survey statements and no. scaled to population level

- ☞ Results in concordance with previous research
- ☞ % women higher than in previous research
- ☞ % women lower than in previous research
- ☞ "new" results

Natural Resource Dependency

Dependency on different types of natural resources and the access to them; **no difference between men and women**.

Highly prioritised in both gender categories:

- **Ownership** (100%)
- **Cultivable land** (90%), snow and frozen ground (50%), game hunting (30%)
- **Non-wood resources** (90%), wood resources (45%)
- Untouched nature (10%)
- The municipality landscape (20-30%) – the **forest landscape** (50%).

Example: Could the higher and, regarding forest ownership, more distanced proficiency among women be an asset in developing a "modern" forest ownership, where more non-traditional forest qualities (natural resources) are in focus? What would it take and what would it give?

% (if not specified)		♀	♂	
Activity:	Forestry	61	47	
	Agriculture	13	11	
	Forestry/			
	agriculture	9	19	
	Other	17	23	
Additional activity		13	46	
Development:	Closing	20	11	
	Positive;			
	Current activity	55	50	
	New activity	10	31	
Education:	Compulsory	15	42	
	*Upper secondary	30	49	
	**University	55	9	
Additional qualifications		40	72	

* ♂; Building, vehicle/transportation, forest/agriculture

** ♀; Care-taking, education

Comments

- General characteristics of survey population; similar to national level!
- Deviating numbers; effect from study population excluding non-resident owners?

♂ Forest businesses with varying/various, traditionally based farming related activities.

♂ Low but adequate education →

forest ownership of high value in life mode and livelihood.

Positive regarding development of forest business.

♀ Ownership focussed on forest.

♀ High education, but current livelihood from other branches.

Positive regarding development of forest business.

Thoughts

What would further research on future prospects, desires and wishes reveal? Are there individually experienced necessary preconditions for development that also could promote positive forest ownership/business development from a local society perspective?



Gender Perspective on NIPF* Management - *Do Female Forest Owners Need Less Money than Male Forest Owners?*



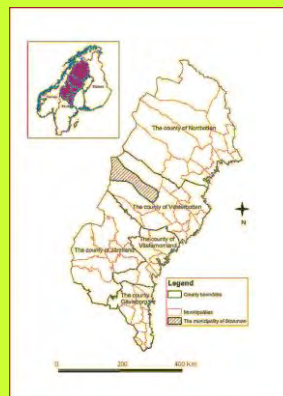
Lina Holmgren
SLU, Dept. of Forest Resource Management and Geomatics
Utilisation of the Boreal Forest/Baltic Forest

Background

Previous research has shown that regeneration felling, planting and cleaning are undertaken to a less extent on properties owned by women. Consequently, the question addressed here was if there are differences between male and female non-industrial private forest (NIPF) owners economic activity considering sales, operating costs and investments in non-industrial private forest ownership? The question why is roused, which in turn can be crucial - since forest ownership and related property rights can be considered as a key basis for development.

Material and Method

Agricultural property data, within the typical boreal municipality of Storuman, were combined with personal and income tax return data, all from Statistics Sweden, for the income year 2000. This facilitated definition of Non-Industrial Private Forest (NIPF) owners based on agricultural property ownership, business activity organized as private firm, productive forestland on the property and definition of the activity within the firm - as well as quantification of their sales, operating costs and investments. NIPF owners were divided in female and male owners and results were related to existing understandings about forest management from a gender perspective.



Results

Table 1.

Sex	N	% of total N	Productive forest land (ha)	Mean forest area (ha)	% of productive forest land (ha)
♂	1 003	63	64 375	64	72
♀	580	37	25 105	43	28
Total	1 583	100	89 480	57	100

Comments on table 1:

-Share of women owners (37%) coincides with studies on national level.

- In spite of a population share of 37%, only 28% as to individual shares of the forestland is owned by women. These figures coincides with studies on a national level, and can be a result of inheritance patterns where previous research show that women more often inherit together with siblings.

- The average individual share of forestland held by women is here larger compared to previous results on a national level (22.3 ha). The same pertains for the average forestland area held by men (34.1 ha). However, the relation between men and female average area between the studies are in concordance.

Table 2.

Sex	Cost/revenue category (SEK)/hectare productive forest land		
	Sales	Operating Costs	Investments
♂	434	311	113
♀	257	180	34
Total	385	274	91

Comments on table 2 and 3:

-Results presented in table 2 coincide with previous research. Female forest owners have less sales revenue in absolute terms but also per area of productive forestland. The same pertains for operating costs and investments. One explanation could be the female forest owners' generally smaller properties. It has also been shown that the economic activity is lower on non-resident owned properties compared to resident owned, and women are non-residents to a larger extent than men. However, here non-resident female forest owners, in spite of the smaller properties, in average have higher sales revenue compared to male non-residents and female residents. Rather, it seems as if resident male forest owners are deviant with high values on sales (not presented in tables).

- When it comes to returns of sales (table 3), female and male owner returns corresponding shares as operating costs. However, investments differ.

Table 3.

Sex	Cost category as percentage (%) of sales revenue	
	Operating costs	Investment
♂	72	26
♀	70	13
Total	71	24

Conclusions/Further Research?

To return to the question addressed in the heading; *Do Female Forest Owners Need Less Money than Male Forest Owners?* Results indicate that if women are residents the answer is yes - and if women are non-residents the answer is no. The remaining question then is why? Previous research indicates that women take over their properties as a legacy meanwhile men buy their properties to a greater extent, and that this could generate higher incentives among men to actively manage their forests. However, results here indicate that this could pertain for non-resident women as well.

To conclude; more empirical research is needed. Such an empirical study should, as indicated here, necessarily grasp the perspectives; gender, inheritance forms and patterns, and resident and non-resident ownership.

*Non-Industrial Private Forest

Swedish Forest Owners' Gender Conceptions

Background and aim

Forest owning and forestry has traditionally been associated with men. Women in Sweden has been able to own and administrate forest since 1921, yet relatively few females takes a traditional part in forestry. The aim with this doctoral thesis is to study how genderisation takes place within the culture of forest owning. Changes in the owner structure, but also the surrounding Swedish society with increased demands of gender equality effects the culture of forestry, but how and in which ways?

Method and study design

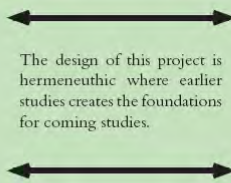
By using both qualitative and quantitative methods the culture of forest owning is captured. The overall theory and perspective derives from discourse theory.

Printed media material



Two pages of our appearance in a local newspaper

By first using critical discourse analysis to study selected journalistic articles and second using quantitative content analysis on a wider printed material conceptions of the forest owner is studied. What kind of work and tasks is connected to forest owning and which conceptions of the forest owners are expressed?



Observations and interviews



People gathered from the study area



Using videocam and observations trade fairs is studied with focus on how discourses of male and female forest owner is created and re-created. As a last part of this study forest owners are interviewed with the purpose to study how (forest owner) identities is created.



Patrik Haggqvist
Ph.D. Student
Department of Forest Resource Management and Geomatics
Division of forest technology, SLU, Sweden.
E-mail: patrik.haggqvist@kultmed.umu.se

“The Branches Network”- Grenverket

Female forest owners in Blekinge

Welcome to the Branches Network!

We are an independent association of women interested in forestry, based in the county of Blekinge in SE Sweden.

We want to bring out the women to take part in decisions in the family forestry.

We also want to encourage young woman to take interest in forestry studies.

We provide education in forms of “study-circles”, excursions and so on to give women chance to study in community with other women

Each year we choose “the forest woman of the year”, to encourage and inspire other women.

We support and take an active part in rural development activities, in co-operation with other organisations in the region.

We spend a lot of pleasant, stimulating and instructive time together!

All women are welcome, with or without experience and knowledge of forestry!

Welcome to our web site www.grenverket.se

Contact: helene.reiter@ipbolaget.se Telephone +46 708 207408

Abstract

Grenverket = the Branches Network in Blekinge

The association started as a loose network in 1992, sprung from a series of study-circles for 50 female forest owners. None of the participants in the circles wanted to end the studies, so the leaders had to continue by arranging a series of excursions. In the first 7 years the network was sponsored by the local forest organisations, such as the Forestry Commission, all the local forest companies and LRF (farmers association). The loose network was 1999 replaced by a regular association. President ever since the start has been Helene Reiter, vice president is Cecilia Rooth. Both were leaders of the first study-circles, and both started their forestry career in the local forestry school 1972.

The vision of Grenverket is:

Female forest owners should in the same extent as male take interest in their rural heritage and feel that they are able to use and develop their properties.

The aim of Grenverket is:

To fortify and strengthen reliance, self esteem and self-confidence and educational knowledge in all forestry aspects. Women should venture/ dare to take decisions and regard themselves as rural enterprisers.

The activities in Grenverket are:

Study circles, excursions, “forest woman of the year”, participation in all kinds of rural activities, lectures, education of entrepreneurs etcetera.

The results of Grenverket are:

- 90 members, half of them frequently participating in all activities.
- Sisters, widows, single women daring to take over the family property without any male “back up”.
- Wives and daughters enthusiastic sharing forestry decisions and practice side by side with equally enthusiastic men.
- Higher business and silviculture activity in the forest, specially appreciated by the timber buyers in the region.
- The most active women have developed a group of entrepreneurs, planning to work together in different kind of activities in a rural development project.
- All nominations and elected women for the local boards of forest owners association Södra are recruited from Grenverket
- A contribution to development for native women in Ecuador

More about the Ecuador exchange project

In 2003 Grenverket together with the regional LRF-women (LRF is the federation of Swedish farmers) joined a project started by a Swedish aid organisation called UBV (a Swedish aid organisation working for civil rights and education). Six women from the organisation FENOCIN (Federation of native small farmers in Ecuador) from the Cayambe-area visited six forestry farming women in Blekinge. In common for all these organisations is to work for a sustainable situation for women.

The purpose of the project was to exchange experiences from working locally in small networks. It was also meant to strengthen and inspire women in both countries working in organisations with focus on democracy and sustainable use of rural land.

The project was arranged so that each of the women from Ecuador teamed up with one of the six women from Blekinge. During their three week stay in August, they took part of the everyday life of their team mates, to promote cultural exchange. They visited several female farmers and forest owners, to give a picture of the rural heritage and development in rural areas in our county. At their

study visit they also got to participate in forest planning, tractor driving, the milking of cows with milking machine and so on.

We also spent a lot of time discussing the aspects of the Swedish society such as the political system, democracy in general, social welfare and the cultural similarities and differences between the two countries. The Woman from Ecuador were particularly interested in how the global problem with violence against women was handled in a welfare country such as Sweden, and of course noticed that we have not solved that problem at all.

In November the same year six women from Sweden made an unforgettable journey to Ecuador. They followed the Ecuadorian women as close as possible in their daily work. They found of course a lot of differences but also a lot of common problems and issues in the work for developing a sustainable situation for women.

The result of the exchange project for the Swedish women was:

- Respect for the culture of the indigenous (natives) of Ecuador
- Knowledge of the problems of the women in South America
- Experience of working with international issues and developing countries
- A strong feeling of solidarity with the native women in FENOCIN
- A commitment to go on supporting new projects in the Cayambe-area

The results for the Ecuadorian women were, as well as we can understand from our further contacts and a re-visit 2005 from Manuela Copacango, now secretary in FENOCIN:

- Most of the participating women still work in women's projects. They have strengthen their positions and made achievements in their breeding of guinea pigs and in their production of vegetables.
- The level of education has increased among the participating women.
- The greatest benefit for the women involved in the project is probably that they actually got to visit a developed country and that they could bring back a lot of ideas and thoughts. It also seems that they are well respected, and they are listened to in the region were they are active.

We want women to take an active part in family forestry. Welcome to join the Branches Network in Blekinge!

Helene Reiter

Arserio B. Elio, Moreno, L. Santodomingo, Jr.
and Mario DR. Ramos
Forest Products Research and Development
Institute
Department of Science and Technology
College, 4031 Laguna, marcos@nrc.gov

ROLE OF GENDER IN SUSTAINABLE HARVESTING OF NON-WOOD FOREST PRODUCTS (NWFPs)

NWFPs are goods of biological origin other than wood, derived from forests and allied land uses (FAO 1995). They include bamboo, rattan, erect palms, vines, bast fibers, resins, gums, honey, pandan and anahaw leaves.

In 2001, the country's export of handicraft products from forest woody vines, from bamboo and rattan earned USD 32,369.28; furniture from bamboo, buri and rattan, USD 66.93 million; Almaciga and Canarium resins USD 689,000 (Philippine Forestry Statistics 2001).

Men tend to concentrate on almaciga resin, rattan and wild honey collection.

The major tasks of women and children center on tapping Canarium resin and collection of bamboo, vines and anahaw leaves.

NWFP	Task Performer	Pattern of use
Almaciga resins	Men since almaciga trees are found in higher elevations and are a day's walk from villages	For sale
Canarium resins	Mostly women and children since trees are in the backyard and in between coconut plantations	For sale and for household consumption; for kindling fire
Rattan	Men, because of the thorns and inflexibility	For sale
Bamboo	Men and women	2/3 for sale and 1/3 for house construction
Vines	Men and women	For sale
Anahaw leaves	Men and women	For sale
Wild honey	Men; women process and market the honey	2/3 for sale and 1/3 for household consumption

NWFPs are essential to the survival of people in the local forest communities, as well as in meeting their socio-economic needs.

Ecological Factors

- Forest Area
- Forest Laws and Regulation
- Harvesting Methods
- Effects of Harvesting

Economic Factors

- Availability
- Accessibility
- Access to Market
- Competitiveness

Socio Cultural Acceptability

- Socio cultural Tradition
- Traditional Rights
- Participatory Approach

TOWARDS AN INTEGRATED MODEL OF NWFPs HARVESTING

There is an apparent need to pay attention to the socio-cultural tradition, aside from the ecological and economic factors. Sustainable harvesting of NWFP combines concerns for the product (value), people and forest.

Women play a central role in the household economics of local communities, as well as non-destructive harvesting of NWFP. Consequently, efforts to achieve sustainable forest management through participatory forest management should involve women. The identification of socio-cultural traditions should also be evaluated.

Forest environments used for rehabilitation of persons with stress related exhaustion syndromes. A coming project with gender aspects.

PhD Ylva Lundell, Dept of Forest Ecology, SLU, 901 83 Umeå, Sweden (Ylva.Lundell@sek.slu.se)

PhD Ann Dolling, Dept of Forest Veg. Ecology, SLU, 901 83 Umeå, Sweden (Ann.Dolling@svek.slu.se)

MD Lisbeth Stunga Birgander, Dept of Public Health and Clinical Medicine, Umeå University, 901 87 Umeå, Sweden (Lisbeth.Birgander@envmed.umu.se)



A large long time sick leave in Sweden is usually caused by stress related disease and burnout syndroms. In Sweden there is an ongoing research project on the effects of garden settings for people with stress related disease. But we lack knowledge about the effects of forest settings in medical and psychosocial rehabilitation. Is it possible to accelerate the healing of stress related disease in restorative forest environments? According to the Forestry Act the forest shall be managed in such a way as to preserve biodiversity. By using ecologically sustainable stands as well as production forest stands for alternative purposes, it may improve the economical benefits for the society (multiple use of forest), and improve the will to protect the stands since they have an economical value (rehabilitation).



Specific aims of the project, which will start with a pilot study in September 2006, are

- 1) to create ecological sustainable as well as production forest settings for rehabilitation
- 2) to investigate if the forest settings have health effects on persons with stress related exhaustion syndromes
- 3) to investigate the preferences of different forest settings for persons with different degrees of exhaustion
- 4) to assess the different properties of the forest settings that have positive or negative effects on exhausted persons

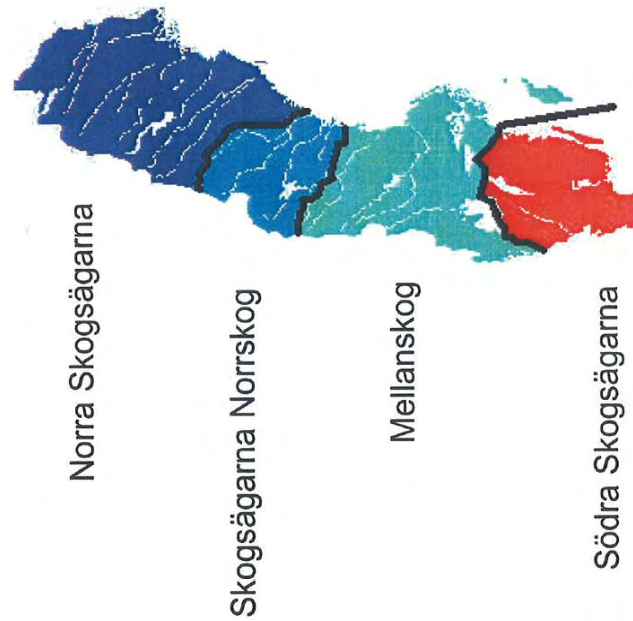


Stress related exhaustion syndromes are most frequent among women. Will we find gender differences in treatments? Will forest settings preferred by the patients also be regarded as safe and secure environments by women?

The Swedish Forest Owners Associations and the Women Forest Owners

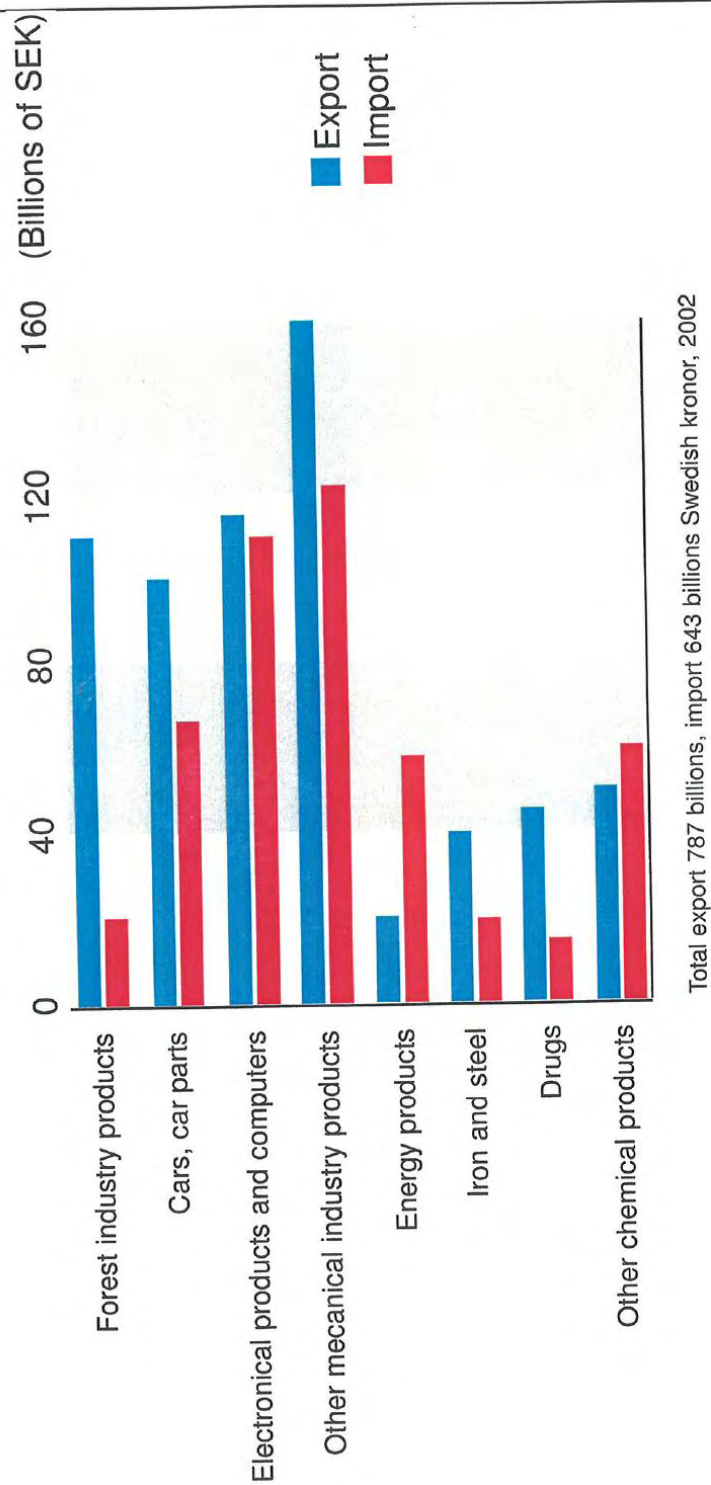
Mari Sander

The Forest Owners Associations



LRF skogsägarna

The importance of forest for Sweden's economy

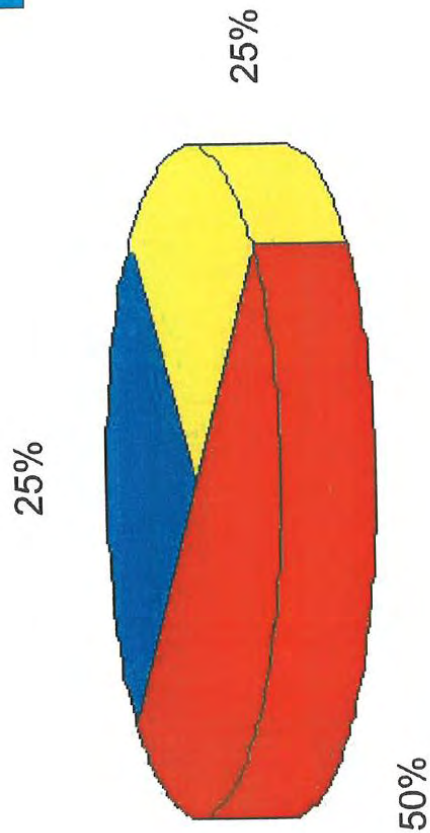
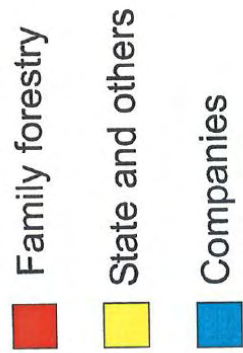


Source: Skogsindustrierna

The Swedish forest

Total land area	41 mil ha
Forest land	27 milj ha
Productive forest land	23 milj ha
Stocks of timber	3000 milj m ³ sk
Annual felling	80-83 milj m ³ sk

The Forest Land (million ha)



Total area of
family forestry
12 mil ha

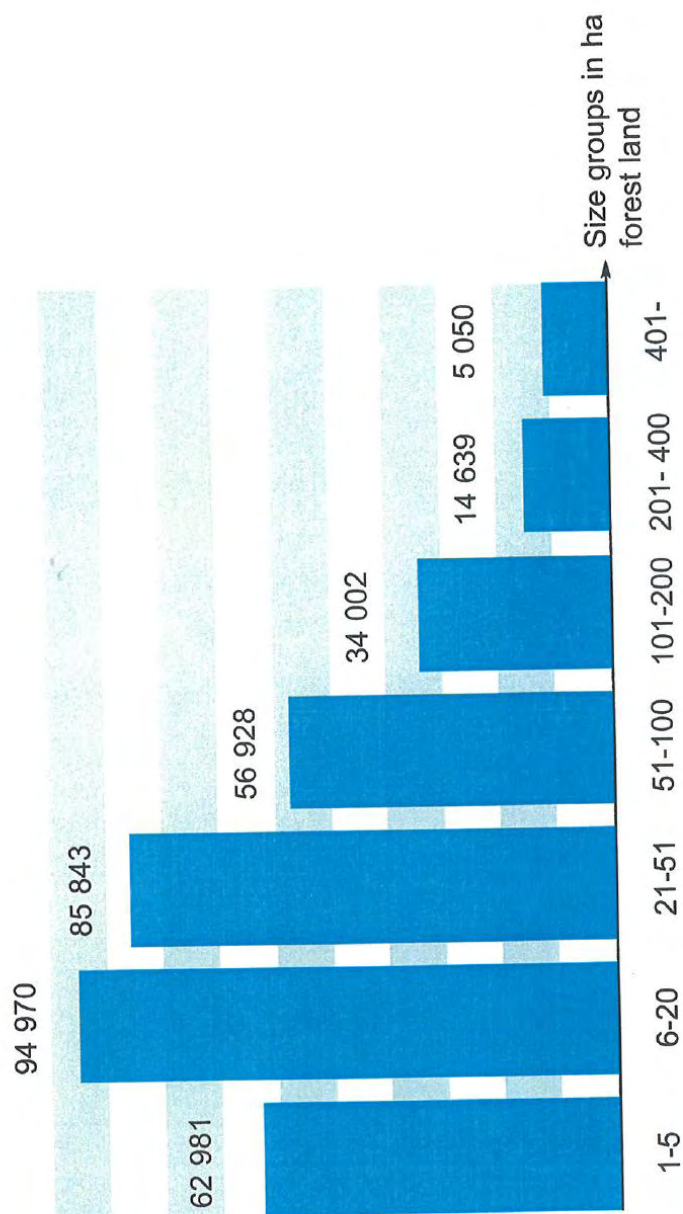
Average for
family forestry
ca 45 ha



Ca 50% of the private forest land is owned by
members in the forest owners associations

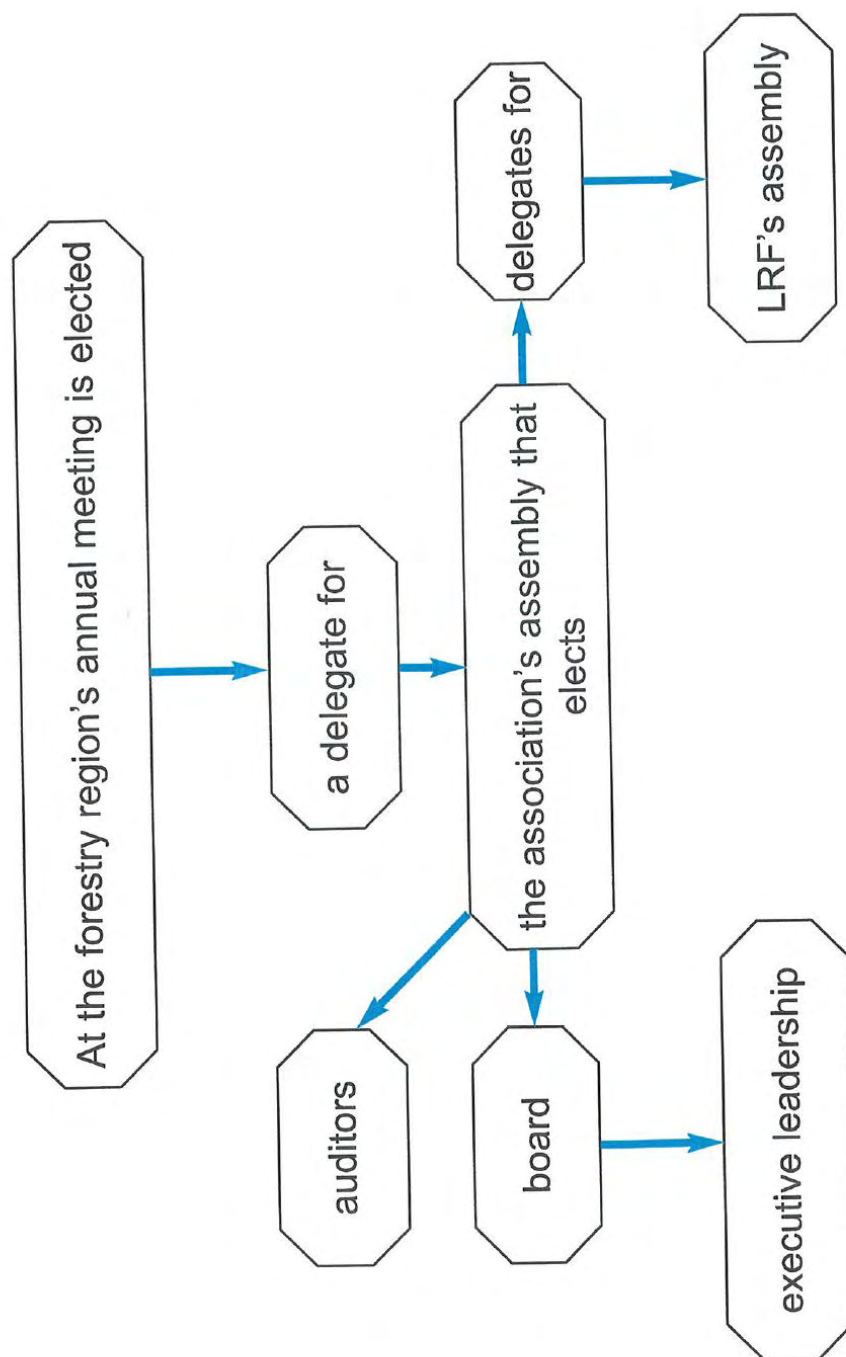
LRF skogsägarna

Number of individual forest owners



38% of the individual forest owners are women

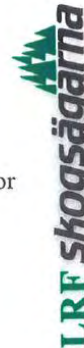
One member one vote



The Forest Owners Associations

Association	Number of members	Associated area (1000 ha)
Norra Skogsägarna	12 733	1 118
Skogsägarna Norrskog	13 183	1 083
Mellanskog	27 525	1 809
Södra	34 777	2 132
Totalt 2003	88 207	6 142

SKOGSÄGARKVINNORNA **WOMEN FOREST OWNERS**



Women Forest Owners

is a network that covers the whole Swedish nation. The network consists of women that are members in one of the Swedish Forest Owner Associations connected to LRF Skogsägarna or own properties that are members. All these women have access to the network and are welcome to become active.

The network has a control group consisting of one member from each of our four Forest Owner Associations. The local shaping of the network will be flexible.

Our vision is

to create a forum to increase the engagement for female forest owners in family forestry and to make the female perspective more focused and emphasized within the Forest Owner Associations as well as in the forestry industry.

Our goal is

to create possibilities for women to grow in their roll as forest owners.
to make women visible and present women that can serve as models in the forestry sector.
to increase the number of women that are elected representatives in our Forest Owner Associations.

The procedure

will differ between our areas depending on what the women want and are in need of. Cooperation and co-ordination will be given priority. We work for example with making the election committees aware of the need for them to take advantage of female competence.

The women

Both women and men are needed to, through their different values and opinions, enrich and develop the forestry industry.
Possibilities shall be created to make it possible to live where you find your quality in life.
The whole of Sweden shall be full of life and without female competence development will be poorer. Possibilities to increase competence an exchange experience shall be created.

The forest

is vital to Sweden. Without a functioning forestry the development will stop. That is why we want to be spokeswomen for active family forestry where the biological variety as well as the cultural differences are preserved.
We also strive for increased safety in forestry.

Skogsägarkvinnorna



Hedersomnämmande 2005

Tilldelas

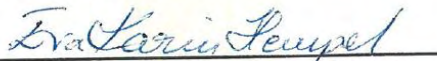
Nätverket Skogsägarkvinnorna

För att nätverket Skogsägarkvinnorna varit en stark motor för kvinnans nya roll som skogsägare, företagare och medlem i skogsägareföreningar och Kooperationen.

Med fötterna på jorden har nätverket en tydlig företagarlinje för ett uthålligt ekonomiskt skogsbruk med goda miljöhänsyn.

Konkret och med realistiska mål har nätverket arbetat för att kvinnor i ökad grad ska få och ta ansvar som förtroendevalda i skogsägarrörelsen.

Stockholm den 12 oktober 2005



**Eva-Karin Hempel
LRF Kvinnor riks**

Mari Sander

Study tour

Skogsnolia - Meeting point in the middle of the world's most compact forest machine accumulation.



There is an almost unique accumulation of world leading forest companies and associations in the Umeå-region. Komatsu Forest, Olofsfors, Cranab and Vimek acts at the same arena as Indexator, Oryx Simulations and several new companies. Most of them are well-known for their experience and good market knowledge. Others contribute to development and new advanced technology because of their successful cooperation with the University of Umeå and the Swedish University of Agricultural Sciences. Together they represent the world's most compact forest machine accumulation with more than 1,000 employees. In the center of this, Skogsnolia as one of the most well-known trade fairs in Sweden was developed. Skogsnolia in short numbers: 161 stands + 54 partner exhibitors = 215 companies.

Content Analysis Skogsnolia Saturday 17/6-2006

To be able to compare your data with the general distribution of visitors we will have people counting how many men and women that visit the fair.

Design of this study

We will be divided into four groups and each group will be responsible for studying about 50-60 companies.--

- Each group is equipped with a palm handheld, code schedule and some plastic folders for collected material. You observe each stand for 5 minutes according the code schedule.
- One person is responsible for collecting the exhibitors printed information material and to put this in a plastic folder which also should be marked with the name of the exhibitor. In the same folder you can also put any hand made notes concerning the exhibitor.
- One person is responsible for asking the direct questions to the exhibitor (see code schedule).
- At least one person counts how many men and women that visits the exhibitor.
- At least one person counts how many men and women that communicate directly with the exhibitor.
- At least one person in the group counts how many men and women that communicates directly with the exhibitor.
- The group together discusses what target group concerning gender you find that the exhibitor has.
- One person is responsible for putting the results into the excel-file on the palm handheld.
- One person in the group is responsible for counting obvious cases where female and male visitors are made invisible by the exhibitor.

Code schedule

Questions directly to the exhibitor:

1. To whom does the exhibitor turn?
 1. Only men
 2. Mostly men
 3. Men and women to the same extent
 4. Mostly women
 5. Only women
2. Who does the exhibitor experience visits him?
 1. Only men
 2. Mostly men
 3. Men and women to the same extent
 4. Mostly women
 5. Only women

Observation:

3. How many men visit the exhibitor during 5 minutes. Actual numbers.
4. How many women visit the exhibitor during 5 minutes. Actual numbers.
5. How many men communicate directly with the exhibitor during 5 minutes. Actual numbers.
6. How many women communicate directly with the exhibitor during 5 minutes. Actual numbers.
7. What target group does the group find that the exhibitor has?
 1. Only men
 2. Mostly men
 3. Men and women to the same extent
 4. Mostly women
 5. Only women
8. How many obvious cases of women made invisible by the exhibitor occurs during 5 minutes. Actual numbers.
9. How many obvious cases of men made invisible by the exhibitor occurs during 5 minutes. Actual numbers.

Questions directly to the exhibitor:

1. To whom does the exhibitor turn?

1. Only men
2. Mostly men
3. Men and women to the same extent
4. Mostly women
5. Only women

2. Who does the exhibitor experience visit him?

1. Only men
2. Mostly men
3. Men and women to the same extent
4. Mostly women
5. Only women

Observation:

3. How many men visit the exhibitor during 5 minutes? Actual numbers.

4. How many women visit the exhibitor during 5 minutes? Actual numbers.

5. How many men communicate directly with the exhibitor during 5 minutes? Actual numbers.

6. How many women communicate directly with the exhibitor during 5 minutes? Actual numbers.

7. What target group does the group find that the exhibitor has?

1. Only men
2. Mostly men
3. Men and women to the same extent
4. Mostly women
5. Only women

8. How many obvious cases of women made invisible by the exhibitor occurs during 5 minutes? Actual numbers.

9. How many obvious cases of men made invisible by the exhibitor occurs during 5 minutes? Actual numbers.

Visit at the Elk House in Bjurholm



In Bjurholm, 45 minutes by bus from Umeå, you may mix business with pleasure at the Elk House. Here you can experience the elk in a way you have never done before, anywhere in the world. You can touch and see the Elk in reality as well as on pictures, VCR and exhibits. It is also possible to combine this with a meal at their restaurant.



Parken Hällnäs



The evening and night was spent in 'Parken Hällnäs' which is beautifully situated near the river Vindelälven. The Park was historically a hospital but is nowadays used as a conference hotel. It was in these historical surroundings, the field survey data was compiled and analyzed.

Visit to Vindeln Experimental Forest - June 18

Vindeln Experimental Forests (latitude 64°10' elevation 160-320 meters a.s.l.) is situated in Vindeln 60 km west of Umeå in the Province of Västerbotten. Since 1998, Ätnarova Experimental Forest situated 23 km south-west of Gällivare, is also administrated by Vindeln Experimental Forests. The forest land is owned by Sveaskog. The experimental forests and the Svartberget research station belongs to the [Unit for field-based forest research](#) at the [Faculty of Forest Science](#).



Mixed coniferous forest is the dominating forest type in the experimental forests in Vindeln. The bedrock consists almost entirely of gneiss. The dominating type of soil is moraine of various thicknesses. The climate is an important limiting factor due to the northern position of the forests. The region is in-between coastal climate and inland climate.

Svartberget research station is a modern research station built in 1979/80 with 15 employees all year round including PhD students and additional seasonal employees. Vindeln Experimental Forests is a well-developed research infrastructure with modern and functional equipment for research activities (e.g. Portable Photosynthesis System LI-6400, spectroradiometer LI-1800, climate stations, data loggers, GPS, GIS, etc.) and logistics (e.g. cars, snowmobiles, sky lift, VIMEK mini-forwarder, etc.). Vindeln Experimental Forests is an important resource for students at the Forestry MSc programme at SLU in Umeå. Excursions and education are organised also for other categories of visitors. Trainee positions can be arranged.

Appendix 1 – About Team of Specialists

About Team of Specialists on Gender and Forestry

Background

In order to raise visibility of women and women's involvement in the forestry sector as well as to understand more about the gender structures throughout the sector, a Team of Specialists on Gender and Forestry was established by the Joint FAO/ECE/ILO Committee on Forest Technology, Management and Training. The establishment of this Team is an outcome of the seminar on "Women in Forestry - Strategies to increase women's participation in the Forestry sector in Europe & North America" held in Portugal in April 2001. It was then agreed that the Joint Committee should play an active role in advocacy of the gender perspective in forestry, and remind countries of their obligation to promote equal opportunities between men and women, which is in direct alignment with the outcome of the UN Women's Conference in Beijing in 1995. Then, the world's countries agreed to adopt and implement gender mainstreaming, as a strategy for involving and integrating gender equality into all major policy and decision-making processes. Such a strategy is intended to ensure that gender considerations permeate all aspects and areas of governmental policy.

Members and Mandate

Team Members were selected either directly contacted by the Joint Committee secretariat or through nomination by their respective countries. The nomination process resulted in the following composition of the Team:

Liz Agpaoa	US
Skadrite Albertina	Latvia
Merete Furuberg	IUFRO
Natalie Hufnagl	CEPF
Marion Karmann	Germany
Bozena Kornatowska	MCPEF
Siegfried Lewark	Germany
Gun Lidestav	Sweden
Wieslawa Novacka	Poland
Anne Nicolaysen	FAO
Anna Springfors /Simmons' Rose	FAO
Berit Sanness	Norway
Renate Spaeth	Germany
Patricia Tomlin	The UK
Gunilla Törnqvist	Sweden
Eriks Zakis	Latvia

The mandate of the Team was developed from the recommendations of the seminar in Portugal and should be regarded as a strategic framework rather than the target.

- Review relevant data
- Develop criteria and indicators to reflect gender aspects in sustainable forest management.
- Launch case studies into specific aspects of gender and forestry, including family-owned forests.
- Disseminate information about national experiences, in particular success measures and good practices.
- Promote national networks of women in forestry.
- Organise follow-up meeting to the seminar in Portugal focusing on gender in forestry. It should be used as an opportunity to monitor change in gender balance and equal opportunities.

Five meetings/workshops have been held during the term of office. The work have been organised by three sub-themes/sub-groups;

- i) Gender structure in forestry organisations
- ii) Gender structures in forest ownership
- iii) Gender and the perceptions of forests and forestry

About IUFRO 6.08.01 WP - Gender Research in Forestry

This IUFRO Working Party was established at the World Congress in Kuala Lumpur 2000. The aim of the WP is to develop projects, methods, theories and other tools in order to deal with a number of aspects and issues of forestry in a gender perspective such as:

- Ownership and Property Rights
- Management and Work Organisation,
- Distribution of benefits
- Legislation, Traditions, Education and Institutions

The WP is co-ordinated by Dr Gun Lidestav (Sweden) assisted by Dr Carol Colfer (CIFOR), Dr Janet Chaseling (Australia) and Dr Punam (India).

The Workshop in Umeå June 21st, was the fourth in our short history. Special attention was given to gender research going on in Africa, Asia, Australia and Latin America.

Appendix 2 - Participants

Participant	Country		Participant	Country
Lena Abrahamsson	Sweden		Astrid Kühnel	Germany
Liz Agpaoa	USA		Siegfried Lewark	Germany
Agnes Amir	Switzerland		Gun Lidestav	Sweden
Eje Andersson	Sweden		Ylva Lundell	Sweden
Elisabeth Ardayfio-Schandorf	Ghana		Lillemor Lyrén	Sweden
Ann-Marie Andersson	Sweden		Adisa-Balogun Mutiat Folshade	Nigeria
Sofia Backéus	Sweden		Godfred Nana Attakora	Ghana
Åke Barklund	Sweden		Birgitta Naumburg	Sweden
Patricia Bergh	Sweden		Relindis Ngum	Cameroon
Astrid Bergquist	Sweden		Wieslawa L. Nowacka	Poland
Beverly Bjerke	Sweden		Gert Nyberg	Sweden
Sofia Blomquist	Sweden		Gunnar Olofsson	Sweden
Armonia Borrego	Spain		Kristin Olsson	Sweden
Blesilda M. Calub	Philippines		Viera Petrášová	Slovakia
Carol Colfer	Indonesia		Anna-Liisa Raunio	Finland
Subas Dhakal	Nepal		Maureen Reed	Canada
Arsenio Ella	Philippines		Helene Reiter	Sweden
Karin Ericsson	Sweden		Simmone Rose	Italy
Katarina Eriksson	Sweden		Dan Rugabira	Italy
Nasiru Ganiyu	Nigeria		Mari Sander	Sweden
Mersha Gebrehiwot	Ethiopia		Kajsa Sandewall	Sweden
Christine Maria Grapentin	Germany		Mats Sandewall	Sweden
Inna Hakobjanyan	Armenia		Hovik Sayadyan	Armenia
Göran Hallsby	Sweden		Lisa Sennerby-Forse	Sweden
Sofia Hedström	Sweden		Monika Singh	India
Reinhard Herder	Germany		Renate Spaeth	Germany
Eva Holmgren	Sweden		Lars Henrik Sundby	Norway
Natalie Hufnagl	Belgium		Tiina Suopajarvi	Finland
Patrik Häggqvist	Sweden		Bengt Toresson	Sweden
Jan-Erik Hällgren	Sweden		Alicia Trezise-Segervall	Finland
Jenny Jakobsson	Sweden		Anna Tučeková	Slovakia
Maarit Kaela-Brundin	Sweden		Gunilla Törnquist-Hedström	Sweden
Marion Karmann	Germany		Karin Vestlund	Sweden
Margareta Kelemen	Sweden		Ida Wigrup	Sweden
Anja Kjellsson	Sweden		Akomeah Yaw Boadu	Ghana



Forskningsrådet Formas

