DANISH INSTITUTE FOR INTERNATIONAL STUDIES
STRANDGADE 56 • 1401 COPENHAGEN K • DENMARK
TEL +45 32 69 87 87 • diis@diis.dk • www.diis.dk

INDIGENOUS PEOPLES, GENDER, AND NATURAL RESOURCE MANAGEMENT

Cæcilie Mikkelsen

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IGNARM *Network on indigenous peoples, gender and natural resource management*

c/o WWF Danmark, Ryesgade 3F, 2200 Copenhagen K, Denmark

Danish Institute for International Studies, DIIS
Strandgade 56, DK-1401 Copenhagen, Denmark
Ph: +45 32 69 87 87
Fax: +45 32 69 87 00
E-mails: diis@diis.dk
Web: www.diis.dk
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Cæcilie Mikkelsen, BA in Anthropology, DIIS

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Preface

In 2003, five organizations – WWF-Denmark, Nepenthes, IWGIA, K.U.L.U, and DIIS – that all work with aspects of natural resource management, indigenous peoples, and gender, but each having its particular focus and expertise, decided to form a network in order to share, explore and strengthen their experiences and knowledge within the field emerging at the intersection between the three subjects.

The incentive behind creating the network for Indigenous Peoples, Gender and Natural Resource Management (IGNARM) (www.diis.dk/graphics/IGNARM/ignarm) is to gain an understanding of how indigenous gender relations and natural resource use and management influence and depend upon each other, and to contribute to the understanding of how the management of natural resources and indigenous peoples' aspirations of development can be integrated and made more sustainable by including the knowledge, expertise, needs, priorities, and active participation of indigenous women and men.

Within a two-year time frame (2003-2005), the network will:

- Compile experiences – both practical and research-based – concerning the interplay between indigenous peoples, gender and natural resource management. This compilation of experiences will take place in the network organizations themselves and their partner organizations, among indigenous resource persons and in various international institutions
- Build an internet-based database presenting these experiences
- Develop a 'state-of-the-art' paper summarizing these experiences and identifying achievements and gaps in the understanding and practice concerning the interplay of indigenous peoples, gender and natural resource management in project design and implementation as well as in research
- Identify or formulate recommendations, guidelines and practical tools which facilitate the integration of indigenous peoples, gender and natural resource management in practical project design and implementation
- Arrange workshops in order to increase awareness within the network organizations themselves as well as more broadly in donor agencies like Danida and other organizations of the importance of taking into account the interplay between indigenous peoples, gender and natural resource management in practical project design and implementation.

The results of the screenings, seminars and the present working paper are available at the IGNARM network's homepage http://www.cdr.dk/IGNARM/ where one can also find the working definitions of the concepts of indigenous peoples, gender, and natural resource management and links to relevant organizations and web sites and a database of related literature can be found.

Acknowledgements

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Indigenous Peoples, Gender, and Natural Resource Management

ABSTRACT

It is generally assumed that both gender and ethnicity are decisive factors in natural resource management and that changes in access to natural resources have differing effects on men and women and on indigenous and non-indigenous peoples. The issues of ethnicity and gender are, however, rarely explored together in relation to natural resource management. The present paper seeks to provide an overview of the present state of research dealing with indigenous peoples, gender and natural resource management. It examines the position of indigenous women in 'women and environment' literature and the aspect of gender in literature dealing with indigenous peoples natural resource management. It reviews empirical literature specifically dealing with indigenous women's use and knowledge of natural resources, and the relationship between modernization, natural resource degradation and indigenous gender relations. The paper concludes that gender is indeed a relevant factor for understanding indigenous peoples' natural resource management and therefore also critical to consider in relation to planned development and conservation. However, the question of gender equality and equity in relation to indigenous peoples' natural resource management must be situated within the context of continued ethnic discrimination and indigenous peoples struggle for self determination.

INTRODUCTION

Indigenous women, like most poor rural women around the world, are, due to their dependency on the natural environment for sustenance and health, severely affected by environmental degradation and limited access to natural resources. Indigenous women are usually also disadvantaged regarding ownership of and access to land and to control over the resources they produce. Furthermore their ability to exert political influence and control over environmental decisions that affect their livelihood are often limited. Many of these problems indigenous women share with indigenous men, and the issue of gender has long been subordinated to the struggle for collective rights among indigenous peoples. However, it is generally assumed that women face discrimination and disadvantages on top of those faced by men due to unequal gender relations.

The organisations behind IGNARM share the impression that too little is still understood of the ways that indigenous gender relations affect and are affected by natural resource management and especially of the role of indigenous women in everyday natural resource management, and of the potential they have for securing sustainable development.

The present working paper is intended to summarize existing knowledge and identify achievements and gaps in the understanding of the interplay of indigenous peoples, gender, and natural resource management based on a review of primarily academic and empirical literature. The paper is thus intended to serve as a background for IGNARMs further work and hopefully also as an inspiration for others sharing the same interest.

DELIMITATION AND METHODOLOGY

The assumption behind undertaking the present study was that indigenous men and women relate to and use natural resources in different ways, and that gender is an important aspect of indigenous peoples' natural resource management. The literature study has shown that this assumption holds true to a large extent, but it would be premature to say that a review of existing literature on the subject makes it possible to reach a 'state of the art' conclusion as to how gender affects natural resource management among indigenous peoples, and how the ecological, legal, religious and cultural aspects of indigenous peoples' natural resource management affect their gender relations. This is partly caused by the limitations of the study undertaken. Apart from the limited time available and the cultural heterogeneity of indigenous peoples[1], the major problem has been that literature dealing with all three subjects is still limited[2].

Literature has been searched in the network organisations, in public Danish libraries and on the internet using keywords like indigenous/tribal/native, gender/women/woman/men, natural resource management/fishing/hunting/forestry/gathering/agriculture/water

1 According to a recent estimate, there are between 5 and 7000 different ethnic groups defined as indigenous peoples, living in various socio-economic and ecological conditions, and representing a unique cultural diversity (Hughes, 2003). As a consequence, the examples given in this paper can not represent all the varieties of indigenous peoples' gender relations or their management of natural resources.

2 As an example, a search using the multiple keywords 'indigenous peoples', 'natural resource management' and 'gender' in the library at the Danish Centre of International Studies and Human Rights of which DIIS is part, which contains a huge collection on literature dealing with development and environmental issues gave zero hits. When substituting NRM with 'environment' the result amounted to 7 hits, whereof 4 were legal documents dealing separately with the three subjects.

management etc. A problem encountered using this method was that much literature about indigenous peoples is not given a keyword like indigenous peoples. Instead it is often classified under the geographical region, or name of the ethnic group. Likewise it has been found that some literature contains information on gender relations without having this as its main topic, which means that 'gender' is not used as a keyword. Consequently library searches have been supplemented with the 'snowball method', with the inherent risk of concentrating more on one field of research than on others.

The review does not intend to cover the broad range of ethnographic literature on people who *could* be labelled indigenous. Rather it aims to discuss literature directly dealing with both gender and natural resource management among peoples *identified* as indigenous[3]. However, as the literature on all three aspects is still sparse, the review also includes literature that deals with only two of the three aspects of the subject as a means to contextualise the findings of indigenous men and women's natural resource management.

OUTLINE OF THE TEXT

The paper starts by exploring how indigenous peoples and women respectively have come to be seen as central actors in natural resource management by providing a brief overview of some of the main discourses and theoretical positions of the relationship between gender and the environment on the one hand, and between indigenous peoples and nature on the other. It also explores the position of indigenous women in 'women and environment' literature and the aspect of gender in literature dealing with indigenous peoples natural resource management. Finally, it discusses the role of indigenous women's struggle within the context of indigenous peoples' fight for collective rights and self-determination. The second part reviews empirical literature specifically dealing with indigenous women's use and knowledge of natural resources, and the relationship between modernization, natural resource degradation and indigenous gender relations. Part three provides a discussion of the findings and points to some of the weaknesses in the present state of research and ways forward towards the genuine integration of gender, indigenous people and natural research management as the basis for and part of development interventions.

3 Indigenous peoples claim the rights to self-identification as indigenous peoples, but a common definition is that indigenous peoples are those peoples "which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present State boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions" (ILO Convention (No. 169) concerning Indigenous and Tribal Peoples in Independent Countries) http://www.ilo.org/ilolex/english/convdisp1.htm

PART 1. BACKGROUND

The high levels of biodiversity found in indigenous peoples' territories have made them focal points for environmental conservation. However, the fact that the areas inhabited by indigenous peoples are the areas that contain the highest levels of biodiversity on earth has conventionally not been connected to their traditional natural resource management. On the contrary, indigenous peoples' territories have largely been seen and thus legally described as wastelands, terra nullius, or the world's last pristine ecosystems depending on the perspective, and until recently, indigenous production systems were generally considered backward, unproductive and potentially damaging to the environment. Consequently indigenous peoples have conventionally been treated as obstacles to both economic development and environmental protection (Chatty and Colchester, 2002).

In a similar vein, the role of the world's rural women in natural resource management has long been overlooked in statistics and qualitative research alike. Statistics have mainly focused on the type of work that could be converted into economical output. As many of the tasks undertaken by women have been classified as reproductive or directed at consumption, women's economical contributions have largely been ignored (Shiva, 1992). Another factor leading to the invisibility of women's role in agriculture and natural resource management has been the fact that it is usually men who are recorded as heads of household and owners of property. Consequently, development programmes have conventionally targeted women as housewives, while environmentalists' concern for women mainly has focused on their reproductive role in relation to programmes aiming at limiting environmental degradation through population control.

The present chapter seeks to provide a brief overview of how women and indigenous peoples have come to be seen as central actors for sustainable development and environmental conservation. It is argued that in much of this theoretical literature, indigenous peoples and women hold the same structural position as antitheses to the mainstream Western/male/capitalist development model. However, this common position has, it seems, furthered the invisibility of indigenous women's situation and role in the management of natural resources.

1.1. Women and the Environment

With Boserup's seminal study of women's role in economic development (1989 [1970]), women gained recognition as the main food-producers in third world countries, and thereby as important actors for rural development – a role that was extensively explored and used as a

basis for adding components addressing women's practical needs to existing development programmes and policies. From the 1980s, the concern with women and development was broadened to include environmental aspects. In 1985, ending the UN decade of women, the parallel NGO forum to the official UN women's conference housed a workshop on gender, environment and development which concluded that poor rural women are more severely affected by environmental degradation than men, due to their role as main food-producers and collectors of natural resources such as water, fodder and fuel. Moreover it was concluded that due to their important role as users and managers of natural resources women had the potential to be strategic actors in sustainable development and environmental conservation (Dankelman, 2002). From then on, various studies have been undertaken to analyse the role of women in local natural resource management, the negative effects of conventional development on women's access to natural resources, and their position with regard to property rights and decision-making. The 'Women, Environment and sustainable Development' (WED) approach, as it was to be called, made valuable analyses of general problems faced by women, but for long it treated women as a homogenous group. WED, however, is a broad label for a movement that includes various theoretical and political strands: women from the South have for example criticised the approach for not confronting the problem of the dominant development paradigm with its focus on economic growth and industrialisation, and propagated alternative visions of development based on an assumed, essential or socially constructed, intimate connection between women and the caring for the environment (usually termed 'Ecofeminism'). Essentialist ecofeminists often make use of an analogy between the earth and the female body, and make this an explanation of:

- Women's hardship; both women and nature are seen as oppressed by capitalist, colonist and patriarchal aggression.
- Women's natural advantage as advocates for environmental concerns; they share the experience with nature of being oppressed.
- Women's interest in conserving the environment; what benefits nature also benefits women[4].

The ecofeminist approach has been instrumental in changing the view of women from being part of the problem of environmental destruction to become part of the solution by emphasizing peasant and indigenous women's environmental knowledge and their role as

4 See for example Shiva, 1989; 1992; Mies & Shiva, 1993.

grassroots environmental activists[5]. The idealization of women as 'born environmentalists' and the theoretical interlinkage of environmental problems and women's problems, have, however, been criticized for containing the risk of placing the main burden of fixing environmental problems on poor women. As environmental protection has been assumed to be in women's own interest, women have for example been appointed as unpaid forest guards of protected areas or tree planters in reforestation projects, thereby adding an extra task to their already heavy work load. Moreover, many such projects have not taken into consideration whether or not the restrictions women were expected to enforce would make it impossible for them to secure their basic needs, or whether or not for example trees planted by women would remain under their control (Braidotti et al., 1994; Danielsen, 1996).

1.2. Indigenous Women and the Environment

In general, the theoretical contributions to the women-environment debate referred to above have not focused on indigenous women in their own right. Indigenous societies have merely served as a reference point for both feminist analysis of the historical oppression of women and ecofeminists' search for alternatives to the hierarchical conceptualisation of nature-culture relations inherent in Western science (e.g. Shiva; 1992). As such, indigenous gender relations have been treated as an idealised prehistoric counter image eventually doomed to surrender to patriarchal values as a consequence of the process of modernization (c.f. Boserup, 1989).

The more recent 'Gender, Environment and sustainable Development' approach (GED) seeks like its predecessors to revaluate women's role as main actors in environmental management and conservation, but includes a greater concern for the material basis of women's marginalisation, such as their lack of access to and control over resources. Furthermore it uses a historical and social-constructivist approach to gender relations, which has opened up for a more heterogeneous view of women, than the one presented in WED literature. The GED approach incorporates other factors of social stratification, such as age, class and ethnicity along with gender relations to the analysis of women's role in relation to natural resources and the environment, and consequently accommodates the particularities of

5 Often cited examples are the tree planting Greenbelt Movement in Kenya, and the tree protecting Chipko Movement in India see e.g. Mies & Shiva, 1993; UNEP, 2004

indigenous gender-environment relationships (e.g. Agarwal, 1997; Danielsen, 1996; Leach, 1994)[6].

Still, the GED approach, even when creating a space for indigenous women's situation and stressing the need to address women's strategic needs (e.g. improving their access to decision making power) on top of their practical needs (e.g. improving their working conditions), rarely address indigenous women's collective rights as indigenous peoples. Nor does it analytically distinguish between indigenous women and other groups of poor women. A typical example is the recent book on women-plants relationships edited by Patricia Howard (2003). Despite its special focus on indigenous women it includes various articles on non-indigenous women, in order to show that the special relationship between women and plants, which the compilation claims, is a general trait of womanhood. Here again, although from a different angle, womanhood and indigenousness seem to mutually exclude or encompass each other.

1.3. Indigenous Peoples as Natural Resource Managers

Simultaneously with the recognition of women's rights and importance for natural resource management, there has been a growing international recognition of indigenous peoples' rights and of the positive inter-linkage of indigenous knowledge, traditional practices, and nature conservation leading to an increased interest in indigenous community-based *in situ* conservation and natural resource management.

Two main approaches to indigenous peoples' role and rights as natural resource managers of their traditional territories can be identified; The first is a 'rights-based approach' that claims, that indigenous peoples have an unquestionable right to their ancestral territory and self-determination and that the Western world holds a historical responsibility to support these rights. The second approach could be labelled a 'performance-based approach'. It argues that indigenous peoples should be granted access to and control over their traditional territories and the natural resources therein so far as they act in a sustainable way towards endangered environments. The rights-based approach has led to strategies to protect indigenous peoples from outside intrusion as well as efforts to empower them in gaining control over their own social, cultural and economic development, recognizing their role as historical agents, and their right to self defined development. Where the rights-based approach takes its departure in a

6 For broad introductions to the WED and GED approach see Braidotti el al., 1994; Dankelman, 2002; Hombergh, 1993; Sontheimer, 1991; and UNEP, 2004.

humanistic tradition and most often has been advocated by anthropologists and human rights lawyers[7], the performance-based approach stems from a global concern with the preservation of biological diversity and a growing recognition of the strategic importance of indigenous peoples for environmental conservation. It has, broadly speaking, produced two ways[8] of looking at indigenous peoples as either potential destroyers or 'natural' guardians of the environment[9].

The view of indigenous peoples as guardians of the environment has opened up for an alliance between indigenous peoples and environmentalists that, especially over the last decade, has been taken up by indigenous peoples. By emphasising the link between indigenous peoples' animist spirituality and their close relationship with the environment, indigenous peoples and their advocates have succeeded in creating a popular image of indigenous peoples as relatively isolated groups living in harmony with nature. This image has been backed up by extensive research showing the sustainability of indigenous natural resource use and indigenous peoples' intimate and detailed knowledge of their environment. An important finding of such research has been that the high levels of biodiversity found in indigenous territories are not of a pristine nature, but rather a result of indigenous peoples' active natural resource management (Balée, 1994; Clay, 1988; Posey, 2002).

Involving indigenous peoples in the conservation and management of natural resources is thus increasingly considered an advantage from both a human rights and an environmentalist point

7 Of major international organizations supporting indigenous peoples' rights can be mentioned IWGIA, Cultural Survival and Survival International.

8 While the idealists assume that indigenous peoples act sustainably, pragmatists "recognizes the need to address the social and economical requirements of communities who otherwise threaten biodiversity and the natural resource base in general" (Flintan, 2003: 3).

9 Alison Brysk (2000) talks about 'conservationists environmentalists', 'indigenous environmentalists' and 'conditional indigenists'. Here I am concerned with the latter two, The first group, - the indigenous environmentalists – she identify as politicized environmentalist groups (e.g. Friend of the Earth and Rainforest Action Network,) that prioritize the interest of indigenous peoples and their rights, but at the same time base their support on an assumed concordance between indigenous interest and alternative (sustainable) development models. The second group - 'the conditional indigenists' - she identify as organisations (e.g. WWF and Worldwide Fund for Nature) which are sympathetic to indigenous interest but do not automatically accept indigenous priorities.

of view. Consequently many natural resource management and conservation projects aim at being community-based and participatory, as it is assumed that the involvement of local populations in planning, implementation and monitoring secures a higher degree of local ownerships to projects, and that the inclusion of indigenous or local environmental knowledge ensures greater environmental, social, and cultural sustainability (Emery, 2000; Furze et al. 1996).

1.4. The Lacking Gender Approach

The community-based approach, though considered a step in the right direction towards the inclusion of local peoples in planning and implementation of development and natural resource management projects, has been heavily criticized for being too idealistic in its tendency to view communities as homogenous harmonic entities, and for consequently neglecting the views and needs of women and other marginalized groups (e.g. Agarwal, 1997; Guijit and Shah, 1998; Mearns et al., 1998).

In relation to indigenous peoples, the tendency to treat communities as homogenous seems particularly pronounced. Even though policies, guidelines and strategies increasingly recognize that indigenous environmental knowledge is not evenly distributed, that it often take gendered forms, and that indigenous men and women do not have equal access to sharing the benefits from its commercial use (Emery, 2000; IFAD, 2003), research-wise, the subject of gender is still largely ignored in relation to indigenous peoples and the environment, biodiversity, ecology, wildlife and natural resource management as a sample of recent literature dealing with these subjects shows (e.g. AIPP, 2004; Clay, 1988; Denevan, 2001; Freeman et al.,1998; Gray, 1991; Gray et al., 1998; Howitt, 2001; Knight, 2000; Redford and Padoch, 1992; Reed, 1997; Robinson and Redford, 1991; Posey, 2002). Indigenous peoples are usually either treated as internally homogenous entities, being referred to in gender neutral terms such as local dwellers, farmers, the X people, or the different roles of indigenous men and women are mentioned only in passing in relation to brief descriptions of the sexual division of labour.

1.5. Summing up

As can be seen, the issue of women and the issue of indigenous peoples have followed a similar route in public discourses and ecological theory. Women and indigenous peoples usually share the same position vis-à-vis environmental discourses and paradigms. They are depicted as being closer to nature, more spiritual in their dealings with the environment, and consequently both victims of environmental degradation and at the same time important actors for ensuring alternative models for sustainable development. Indigenous women can consequently be seen not only as *doubly oppressed* but also as *doubly idealised* natural resource

managers. It should therefore be expected that research on natural resource management and related projects would have focused especially on indigenous women's role as natural resource managers. On the contrary, it seems as if their position as both women and indigenous have somehow made them *doubly invisible* as both groups in general have been treated as homogenous entities.

The question of gender equality has long been a muted subject in indigenous peoples' organisations as well as within organisations supporting the rights of indigenous peoples. The muteness seems to stem from a fear that the question of women's rights should take the focus away from the struggle for collective rights and create internal division (Deree and León, 2002). Moreover, complementarity between the sexes often functions as an ethnic marker, and gender inequality has therefore in general been treated as a non-indigenous cultural trait and consequently irrelevant in an indigenous context (Ibid; Eikjok, 2004)[10]. However, indigenous women have, especially over the last decade, increasingly begun to claim their right to be included in political decision-making both locally and in international fora. As indigenous women's social position is closely linked to their traditional roles as gatherers, agriculturalists, and healers, which are all activities tied to the use and management of natural resources, concern for the environment is not surprisingly one of the issues advocated by indigenous women (AIWC, 2004; AIWN, 2004; Bouba, 2004; IWBN[11], 2004). While some of the assumptions made in women-environment theory can be criticized for being too simplistic, the positive image of (indigenous) women as closely related to the environment has been instrumental in providing indigenous women access to the political women-environment platform, and given them a strategic tool for gaining visibility and recognition. However, in international environmental fora, while imbuing it with the legitimacy of being prime users of natural resources, it seems that indigenous women are largely appropriating the mainstream indigenous rights discourse. Thus, they continuously stress that before anything else they demand collective land rights, intellectual property rights, the right to prior informed consent

10 Hitchcock et al. (2004) notes, that for the San of Botswana, who have only recently begun to address the gender differentiated effects of modern development, the gender equality of traditional San society has long made it seem unnecessary to both men and women to develop a political gender strategy.

11 The Indigenous Women's Biodiversity Network was created in 1998 in relation to the fourth Conference of the Parties of the Convention on Biological Diversity, and has worked for the recognition of indigenous women's crucial role for enhancement and preservation of biodiversity and for their increased inclusion in policies and decision-making bodies. Source :
http://www.un.org/esa/socdev/pfii/documents/other%20docs/Doc%20Netherlands%20Centre.htm

and self-determination together with their men as indigenous peoples (Ibid; Tauli Corpuz, 2004).

Notwithstanding the positive tendencies in terms of consulting indigenous peoples about planned development and including them as partners of conservation and natural resource management projects, colonisation, forced assimilation, and development schemes aimed at the commercial extraction of oil, timber, minerals and other natural resources on the one hand, and expropriation of territories for wildlife and biodiversity sanctuaries enforced by international agents or state policies on the other, continue to force indigenous men and women away from their lands, destroy, deteriorate or change their livelihood and threaten their continued physical and cultural survival (Chatty and Colchester, 2002). The issue of indigenous peoples' role in natural resource management remains a contested domain characterized by differing politicised agendas and discourses and unequal access to define problems and solutions (Berglund and Anderson, 2003). While also actively shaped by indigenous peoples' organisations, the Western environmentalist discourse remains hegemonic and does not easily accommodate indigenous conceptualisations of human-environment relationships (Conklin and Graham, 1995)[12]. It is against this backdrop that the discussion of securing equality and equity of indigenous men and women in natural resource management must be taken.

Even though most environmental agencies and NGOs today have taken a rights-based approach (e.g. WWF, UNEP and IUCN)[13], the main argument used for granting indigenous peoples the rights to manage their own natural resources remains their assumed sustainable performance, while, according to Flintan (2003), the pragmatic approach still governs most integrated development and conservation projects established in buffer-zones to protected areas and National Parks. When taking a rights-based approach to indigenous peoples and natural resource management and conservation it is necessary to recognize that this "means a shift from conceiving indigenous peoples as *stakeholders* to seeing them as rights holders" (Erni 2001:188). The implication is that indigenous peoples are entitled to rights over their lands and

12 For indigenous world views and conceptualizations of human-environment relationships see e.g. Descola, 1994; Descola & Pálsson, 1996; Fajans, 1998; Novellino, 2003; Posey, 1999 – especially chap. 3; and Surrallés & García Hierro, 2004. For nuanced accounts of modern day indigenous natural resource management and how it is shaped by the wider political economy and unequal power relations see e.g. Fisher, 2000; Frost and Wrangham, 2003.

13 See for example IUCN, 1997 and WWF, 1996.

territories without conditions of their compliance with traditional or sustainable use, and accepting their right to self-determine the concept of sustainability (cf. Gray et al. 1998). Such an approach changes the power structure between outside agents and local peoples in attempts to initiate community-based natural resource management or conservation projects. It means that outsiders will have to redefine their role from one of project-manager to one of facilitator and advisor while changing their view of indigenous peoples (including both men and women) from one of users to one of decision makers.

PART 2. RESEARCH FINDINGS

General references to indigenous men's and women's current gender roles can be found in most ethnographic descriptions of specific indigenous peoples; depending on the socio-economical, cultural and ecological conditions, the general pattern is that indigenous men hunt, herd, fish, clear gardens and fields, build houses, and make tools. They may also engage in timber extraction, cash crop production, livestock production, migrant work or other wage labour, and be the shaman, medicine man, priest and village authority, and sometimes help take care of children, fetch firewood and perform other domestic tasks. Indigenous women, on the other hand, do most of the agricultural work, collect non timber forest products including tubers, fruits, nuts, straw, fodder, fibres, firewood, raisin, dye, clay and herbal medicine, and work as artisans; making fabrics, clothes, baskets and pottery for both own consumption and sale. They may hunt small animals on their way to or in their gardens, and engage in fishing and aquaculture. In general they are responsible for fetching water, cooking and caring for the children, the sick and the old. They are often knowledgeable about herbal medicine for curing daily ailments, and may act as midwives, herbalists and shamans or assistants to such. Indigenous women may also take part in the market economy; sell products on the market, engage in cash crop or livestock production and wage labour. They may be trusted with the administration of the household income, but seldom with political authority or decision-making power.

Even though such descriptions rarely deal specifically with indigenous gender relations and how they affect the management of natural resources and vice versa, they provide valuable insights into indigenous men's and women's practices in relation to natural resource management of different ecological zones, which can serve as a starting point for project specific gender assessments. However, many general ethnographic descriptions of specific indigenous peoples are found to represent a male bias, meaning that male activities are described in more detail and as requiring more skills, than those of women. Moreover, much traditional ethnography is written in the ethnographic present – leaving out analysis of how historical change has influenced gender relations and indigenous women's position.

On the other hand, feminist anthropology and women's studies have provided insight into the effects of modernization and natural resource degradation on indigenous gender relations, while there is a growing interest within the fields of ethno-botany, ecology, and development and women's studies to focus on indigenous women's role as enhancers and conservers of plant biodiversity.

2.1. Indigenous Women as Natural Resource Managers

> "[O]ver much of the world, it is mainly women who are wild plant gatherers, and managers, homegardeners and plant domesticators, herbalist and healers, as well as seed custodians. In several regions and cultures, women are also principal farmers and informal plant breeders, particularly of indigenous crops" (Howard 2003:7).

The research on indigenous women's natural resource management and use has first of all shown that indigenous women depend upon a wide range of ecosystems and natural resources in order to provide their families with food, health and income. The recent compilation "Women & Plants: Gender Relations in Biodiversity Management & Conservation" edited by Patricia L Howard (2003), is an important contribution to making the importance of indigenous women's role as natural resource managers visible - not just in relation to agriculture, where they are often reported to be the main food producers, but also in relation to their roles as gatherers and herbalists. Howard claims that female spheres of production have often been overlooked with the result that women's needs and priorities with respect to land-use have been neglected in natural resource management and conservation planning.

Ecosystems which often from an outside economical point of view are mainly seen as repositories of timber, fodder or simply as wastelands, represent a major source of nutrients, medicine and marketable products, that are crucial for securing the well-being of indigenous women and their families. Daniggelis' study (2003) shows that wild food plants provide an important nutritional supplement (mineral, vitamins, fat and protein) to local diets in combined farming-foraging livelihood systems, and act as a buffer in times of need. Indigenous women have extensive knowledge on collection times and techniques, of managing growth, and of processing and storing wild food plants. However, because wild food plants are conventionally classified as weeds and consequently considered low status or inferior food by outsiders, the nutritional and cultural importance of the products and women's knowledge thereof is rarely recognized and taken into consideration when planning national parks, natural resource management projects, etc. A realistic estimation of the actual importance of wild food plants can also be hampered by the fact that people do not always include wild food in dietary surveys, as they are merely considered as snacks eaten along the way. The amount of time used for gathering can also be hard to assess by interviewing people, as noted by Gram (1998). When comparing data gained from observation with data gained from interviews, he found that people would generally underestimate the time spent on

gathering activities as they did not consider gathering a separate activity, but something done between other (main) activities.

Research shows that indigenous women not only gather wild plants; they also often transfer them to their gardens where they experiment with them. Apart from the obvious advantages which a re-evaluation of female production systems has for assessing women's needs and priorities, a closer look at domestic spheres of production reveals that they are of high relevance to the enhancement and conservation of plant biodiversity. According to Howard et al. home gardens and house lots for example contain an often overlooked wealth of biodiversity. That home gardens and house lots are particularly resistant to change and thereby valuable sites of conservation and dispersal of plant genetic material is argued by Greenberg (2003), who shows how immigrant Mayan women continue to grow native plant species in their house lots in order to secure special ingredients necessary for the preparation of traditional food, and thereby the maintenance of their ethnic identity. The immigrant community as such has largely given up agriculture or replaced traditional farming systems with monoculture, but through the women's management of traditional crop varieties in home gardens, plant genetic resources as well as part of the traditional knowledge related to natural resource management are conserved.

The article by Greenberg documents the often neglected importance of culinary traditions to the conservation and enhancement of biodiversity and supports the assumption that men's and women's priorities regarding natural resources are influenced by their gendered responsibilities. Gender disaggregated studies show that women's agricultural choices often are primarily governed by culinary preferences, including preparation, storage and nutritional qualities, and only secondly by criteria such as yield, pest resistance and monetary value (Howard, 2003). Hoffman (2003) writing on Arawakan women of the Venezuelan Amazon, who are primarily cultivators of swidden fields and home gardens, adds aesthetics, emotions and status to the criteria women choose from. Apart from the need for securing a timely distribution of yields, she finds that the impetus behind Arawakan women's traditional enhancement of biodiversity, which includes experimenting with new varieties and exchange of seeds and plants, is found in the aesthetic and emotional value of controlling a rich crop variety, from which women gain personal pleasure and social recognition.

Even though gender is usually not treated to any large extent in research dealing with indigenous knowledge, there is an increased recognition that the gender division of labour results in differentiated knowledge of natural resources (e.g. Emery, 2000). For instance it has been found that indigenous women, in their role as primary caretakers of children, the elderly,

and the sick, have extensive lay knowledge of medicinal plants, which due to a traditional male bias have long gone unnoticed by ethnobotanists (Kothari, 2003). Likewise, indigenous women are found to be particularly knowledgeable about other aspects of health such as sanitation, nutrition, and storage of food and water (Kelkar, 1995). However, indigenous women's knowledge outside the realm of plant biodiversity and agriculture remains largely unexplored. Their role in wildlife management is, for instance, a subject that needs further investigation. So far little is understood of women's direct influence on wildlife management, and the extent to which they are affected by depletion of stocks and hunting restrictions. Hunting is usually investigated as a male activity, but indigenous women often play the main part in preparation, distribution and sale of wild meat, which they of course also consume. Descola's study on the Ecuadorian Achuar (1994) shows that women often accompany their husbands on hunting expeditions, and that they are the ones who bring up and train the hunting dogs. If not traded for male produced items or favours, women maintain the control over their dogs and continue to play important roles in hunts where their dogs participate. As an example, Achuar women protect the dogs against evil and enhance their hunting ability by the use of magical songs. Among the South African San, women, even when usually not directly involved in the hunt provide valuable information about animal tracks, which are used by the male hunters (Draper, 1975; Shostak, 1983). For the Arctic region, where most research on natural resource management has focused on men's role as hunters, Nuttall (1998) notes that *"*[w]omen play vital roles in the spiritual, economic and social aspects of hunting, observing taboos before men go in search of game, ensuring that the soul and spirit of hunted animals are respected, preparing meats and skin, and sharing meat within families and between households" (Nuttall, 1998:164). Women among the Inuit have also been reported to play a significant spiritual role in relation to whaling; "(….).The [whaling] captain's wife … is the main catcher…She "brings in" the whale….She makes it easier for the captain to harvest a whale, but the woman has to be in a proper state of mind because she is actually the "bearer" of the crew and is called a "crew captain." The women who stay at home with the children and the family along with the whole community are what I call "callers of whales"." (Male whaler quoted by Freeman et al., 1998:34).

Despite a growing recognition of the importance of researching women's roles and knowledge, few studies include more than curiosity provoking statements such as the above, which hint at how much is still unexplored. As Nuttall concludes;

> "[t]here is urgent need for more research on how far men and women have different environmental knowledge, how far decisions that relate to the use of resources and particular geographical locations lie with women, whether women

> are more environmentally protective than men, how women and men experience environmental change, seasonality and family size, how women organise, preserve and transmit environmental knowledge, the kinds of experiences women associate with local landscapes, and the way greater gender awareness in the social differentiation of local knowledge is used in a strategic way to further women's interests" (Nuttall 1998: 165).

The implications of not recognizing women's contributions to the household economy and conservation of biodiversity, the domains from which they gain a living, and the knowledge stemming from their gendered experiences, are manifold. As Howard (2003) points out, the neglect of women as informants – either because they are not considered important, are perceived as difficult to work with due to cultural restrictions on their interaction with outsiders, their lack of time and language skills, or because they do not hold specialist positions within their communities – entails the danger that the researcher, planner or policy-maker will gain only partial or unreliable information on indigenous natural resource management. Often with the effect that development and conservation projects fail to ensure sustainability (Flintan, 2003; Rojas, 2000). The recognition and restoration of indigenous women's knowledge, through support of their efforts to practise and pass it on to future generations would, it seems, be an important way towards enhancement of sustainable use of natural resources.

2.2. Gendered Impacts of Modernisation and Natural Resource Degradation

Apart from enabling indigenous women to care for their families' wellbeing, their knowledge and skills related to traditional natural resource management provide them with the status of autonomous producers and give them the means to participate in social relationships of sharing, exchanging, and transmitting of knowledge and products (e.g. Draper, 1975; Hamilton, 2003; Leacock, 2002 [1978]; McCallum, 2002; Murray Li, 1998; Overing et al. 2001; Perruchon, 2003; Shostak, 1983). While the environmental knowledge of indigenous women is increasingly recognized, so is the concern that it risks being lost before being fully understood and described, as a consequence of the rapid changes of the production systems and social institutions that it is bound up with. Apart from the obvious disadvantages such a loss represents for science and the environment, social and economical changes also seem to represent a serious threat to the status of indigenous women. As an example, Draper's comparative study of the gender relations in a traditional hunter-gathering and a sedentarised San community shows a marked difference in women's mobility, economic autonomy and political influence. Where San women in the traditional mobile hunting-gathering community took equally part in productive activities, had equal access to the common land of the group,

and enjoyed recognition for their skills in gathering and tracking game, the production in the newly sedentarised community was based on individual ownership to land and cattle, which were in the hands of men, while social prestige and influence was increasingly based on knowledge of the outside world, to which women had less access, as their work was increasingly confined to the village (Draper, 1975).

Kelkar and Nathan (1991) writing on tribal societies in India, report how the combination of cultural factors such as traditional ownership to land being bestowed on the one who prepares the field, taboos that prohibit women from touching a plough, and inheritance patterns favouring men over women in regard to agricultural land, have placed women in a vulnerable position in relation to change from a hunting-gathering cum shifting cultivation economy to sedentarized plough agriculture on privatized land. State enforced restrictions on access to common property forest-land, from where tribal women have been able to maintain an independent income, have furthered their subordination to and dependence upon men, as they increasingly find themselves working on land to which they hold no rights.

Such findings echoes the thesis put forward by Boserup (1989 [1970]), who found cross-cultural proof of female farming systems loosing importance as a consequence of the shift from extensive shifting cultivation to intensive plough agriculture, which has characterised the modernization of agriculture worldwide. She mainly explains the incentives behind this shift with natural factors such as population growth and deterioration of soil fertility, but also mentions, with special reference to Africa, European colonizers' introduction of new tenure systems, technology and market conditions as a push factor. Moreover, part of the European 'modernisation project' was to model agricultural production after the sexual division of labour that they found to be 'natural', i.e. men as the breadwinners and women as housewives. As a result, extension service and land tenure reforms were designed in a way that favoured men over women. Most Third world women, however, continued to work in agricultural production, but with the difference that they had lost their customary rights over the land they cultivated and over the products they produced.

The linear development pattern described by Boserup does not directly apply to the many present day indigenous societies that maintain a livelihood system of hunting-gathering, agroforesty, animal husbandry and shifting cultivation, but even in places where a collective property regime gives women equal use-right over and access to land and natural resources, the gendered division of labour and gender ideology pertaining to both the local culture and the dominant society, place indigenous men and women in different positions to take advantage of social and economic changes, especially the change from subsistence-oriented to

market-oriented production. The research done by the indigenous women's NGO, Sanomaro Esa, on the gendered division of labour among indigenous peoples of Suriname, for example documents that men's increased engagement in wage labour have legitimized the neglect of their traditional obligation of opening fields for their wives, who, lacking the tools for doing it themselves, have become increasingly economically dependent on their husbands cash income (Kambel, 1999). A similar situation is reported by Nicholas et al. (2003) for the Orang Asli. As men increasingly engage in wage labour, many traditional subsistence activities that were carried out together by men and women have been given up, and women are increasingly restricted to a role as housewives. Apart from making Orang Asli women more economically dependent on men, their decreasing importance in productive activities has led to a loss of their former political and religious importance related to natural resource management.

Male biased state laws and development programmes often further the disruption of traditional gender complementarity and legitimise the exclusion of indigenous women from political institutions (Kelkar and Nathan, 2003; Sarin, 2003). Among the Lauje, for instance, rights over property are established by direct labour investment, such as opening of fields, planting of trees and tending of crops. Traditionally Lauje men and women have had equal and interdependent means of establishing such claims due to the sex-sequential organisation of agricultural labour, but recently, development programmes have given Lauje men a comparative advantage over women in relation to acquiring rights over land and forest resources through the provision of free inputs, such as fertilizers, seedlings and tool. Lauje women have on the basis of being classified as housewives been ignored in official registrations of landownership, and have consequently been excluded from membership of the farmers' groups through which development programmes are implemented (Murray Li, 1998).

Likewise, conventional conservation and natural resource management projects have often ignored and thereby marginalised the role of indigenous women, restricted their livelihood options and excluded them from decision making (Flintan, 2003). The reason can partly be found in the aim and design of projects; many conservation projects have had a very limited conservation scope, focusing on for example the protection of wildlife or regeneration of forest. In relation to wildlife projects, while indigenous women have been able to get some economic benefits from working in the tourist industry or selling handicrafts, indigenous men have usually raped the greatest economical benefit from working as park guards or tourist guides (e.g. Hitchcock, 2004). Natural resource management projects, which for example have concentrated exclusively on the sustainable production of timber, may have secured employment for indigenous men, but, on the other hand, restricted women's access to non timber forest products (e.g. Kelkar and Nathan, 2003). Moreover, institutional set-ups

favouring formal organisations have largely ignored indigenous women's informal networks and efforts to conserve or restore degraded resources (Sarin, 2003).

As can be seen from these examples, a change in livelihood patterns enforced by natural or social factors can have serious gendered consequences and tend to disrupt the traditional interdependence and cooperation between indigenous men and women. However, the specific outcome is a result of a complex interplay of economical, ecological, social and cultural factors. Hamilton's study (1998) from the Ecuadorian Andes, for instance, shows how cultural values such as the complementarity and interdependence of husband and wife has counteracted the gender imbalance introduced by national development programmes, which has favoured men in relation to extension service, credits and wage labour. Similarly, Murray Li (cf. above) relates how Lauje men to a large extent continue to share their resources with women, and women continue to claim property rights by the active investment of their labour, which in practice, so far, has limited the negative impacts of the male development bias.

While the favouring of a male perspective on natural resources usually results in disadvantages for indigenous women, it may also limit indigenous men's livelihood choices. Eikjok (2004) notes how the public discourse on nature among the Norwegian Sámi has been masculinised simultaneously with the marginalization of Sámi women from the traditional sphere of production. While neglecting the interests, experiences and understandings of Sámi women, the masculine discourse on Sámi concepts of nature ties Sámi men's identity to the traditional occupations of hunter, fisherman and reindeer herder. Sámi women, on the other hand, have been forced to redefine their occupational identity. With the integration into the Norwegian society, Sámi women have lost much of their traditional status within their own societies. But given economic changes that have made reindeer hunting an unprofitable occupation, the greater flexibility of modern Sámi notions of femininity has, combined with Norwegian women's possibilities for acquiring education, resulted in a situation where Sámi women have higher educations and incomes than Sámi men, who in turn increasingly find themselves depending on their wives for economic support.

The last examples are included, not to question whether indigenous women suffer the adverse affect of modernisation to a larger extent than indigenous men, indeed, the general picture is that they do, but as a reminder that changes do not follow a linear and universal pattern, and that gender relations vary locally. The changing nature of indigenous peoples' gender relations is an important finding so far as the low involvement of indigenous women in community-based projects perhaps stems from a certain sensibility towards interfering with indigenous gender relations on the side of outside planners, who may fear to intervene in the culture of

indigenous peoples and their right to self-determination. It shows that gender relations are not unchangeable; they are continually constructed and also contested. A common statement made by indigenous women is that their present subordinate position in society is largely the products of outside interventions – which have tended to be gender blind – but, as can be seen, definitely not without gendered consequences.

Ironically, it seems that the process of political organisation, through which indigenous peoples as groups have been empowered, has, so far, furthered the marginalisation of indigenous women within their own societies. In spite of the fact that indigenous women are getting ever more visible in national and international indigenous organisations, they are still a minority. When it comes to the local and community level, it seems that indigenous women's participation is often limited to special women's issues, if not altogether excluded. No general study was found on indigenous women's role in political institutions, nor on modern indigenous organisational culture and how it affects women's participation[14], but, while the exclusion of indigenous women from the modern sphere of indigenous politics may be explained with internal cultural factors and traditions, the fact that most modern day indigenous peoples' political organisations are modelled after a patriarchal institutional structure pertaining to the dominant society seems to have furthered their exclusion if not enforced it.

2.3 Summing up

The review shows that gender plays an important role in indigenous natural resource management. First of all because gender is decisive to what tasks indigenous men and women engage in. This means that men and women have different responsibilities and therefore also different priorities in relation to for example which crops to cultivate, the value they put on certain resources and the extent to which they are concerned about conserving different ecosystems. The different daily tasks also influence what kind of knowledge indigenous men and women have of natural resources, and the social and cultural norms which underlie gender relations affect how this gendered knowledge is transmitted and exchanged. Consequently indigenous men and women are affected in different ways when natural resources become scarce, either because of natural degradation or because restrictions are put on their use by means of privatization of the commons or by the establishment of protected

14 However IWGIA has published various documents that give a general insight into the present situation and aspirations of indigenous women around the world e.g. IWGIA, 1988; Vinding, 1998, and Wessendorf, 2004. See also Meentzen, 2001 and CEIMM, 2002a on indigenous women in Latin America.

areas. Land reforms often neglect indigenous women's customary tenure rights, and they may have to walk longer distances or steal their way into restricted areas in order to fetch water, fodder, firewood and other non-timber forest products and they may not have the means to substitute these activities. Consequently, indigenous women often become more dependent on men, who are usually favoured in relation to both private landownership and access to paid jobs, credits and extension service. Introduction of 'modern' healthcare and education often also undermines indigenous women's knowledge and their roles as healers and educators (Carino, nd; Hoffmann, 2003; Munshi, 2003; Porodong, 2003). Gender-blind planned development consequently has gendered impacts, which tend to marginalise indigenous women's traditional sources of autonomy and status.

PART 3. DISCUSSION

Research have, so far, primarily focused on indigenous women's role in relation to main female tasks such as farming, gathering, curing, and water management. Studies such as these provide valuable insights into the differences in priorities that may govern indigenous men's and women's livelihood choices, but as pointed out by Leach (1994), there is a tendency to over-emphasize the distinction between men's interest in the marketing value of natural resources and women's interest in their subsistence utility and other more emotional qualities pertaining to aesthetics, identity and taste. The common statement about the different priorities of indigenous men and women regarding cash-oriented and subsistence-oriented production does not take into consideration that many indigenous women are involved or interested in income-generating activities. Rather than lack of interest the problem may be that women have less control over the means of production and the outcome of their work, and therefore lack the incentives or possibilities to engage in the cash-economy to the same extent as men. In this connection, it is interesting to examine the main concern expressed by indigenous women from four Latin American countries in a consultation made by the Inter-American Development Bank. Besides their wish for being included more equally in decision-making at all levels, the women wished for improved market access and a general increase in their possibilities to get cash income (Meentzen, 2001). The tendency to emphasize distinctions between the interests of men and women furthermore contributes to reproducing a simplistic and rigid men/women; productive/reproductive dichotomy, that leaves the impression that indigenous men's and women's tasks, responsibilities, domains and knowledge are highly separate in the sense that men and women work in different spheres and that their production is aimed at different goals. Research indicates that indigenous men's greater possibilities of gaining an independent income tend to result in a redefinition of indigenous women's work as reproductive. However, the fact that many indigenous women participate to an equal or even higher extent than indigenous men in productive activities challenges the appropriateness of imposing a productive-reproductive dichotomy as a framework for analysis of indigenous gender relations (Kambel, 1999). It has also been argued that indigenous men's and women's work is directed towards the same goals - that of reproducing kinship and fecundity (Overing et al. 2000). Moreover, the rigidity implied may never be found in practice. Perruchon (2003) writing on the Ecuadorian Shuar, for example, makes the observation, that while a strict gendered division of labour is claimed in formal discourse, in practise men and women share most tasks without paying notice to it. McCallum (2001) likewise observes that both men and women perform tasks considered appropriate to the opposite sex if no one of the "right" sex is available among the Brazilian Cashinahua. This makes her conclude that while gender ideology sets the standards for proper behaviour it provides some flexibility for

individual men and women's performance (for other examples of gender flexibility see Alderete (1998) on the Andes, Kelkar and Nathan (1991) on hunter-gatherer tribes in India, and Draper (1975) on the South African San)[15]. With a considerable amount of men being absent from their communities due to for example migration and militarization, indigenous women are moreover increasingly forced to take over many tasks traditionally considered male.

The dichotomisation of men's and women's role in relation to natural resource management is particularly marked in much feminist research that for instance usually takes for granted that women's work is more dependent on natural resources than men's and that as a consequence women are more vulnerable to environmental degradation. This difference in men's and women's conditions is, however, often treated as a fact that needs no verification apart from general references to statistics in line with 'poor people are more prone to environmental degradation and pollution than rich people, and women are statistically poorer than men, consequently women are more prone to environmental degradation and pollution than men' (Buckingham-Hatfield, 2000). While such reasoning may prove statistically true, it certainly does not consider the male indigenous hunter, fisherman, pastoralist, farmer or herbalist who to an extent equal to indigenous women depends on abundant and healthy natural resources. (Indigenous) men are generally assumed to be better able to find other sources of income when their traditional subsistence activities are restricted, because of their higher mobility and better education, and the structures of the job market offering more opportunities for male unskilled labour. Simultaneously, men are often described as irresponsibly wasting their money on drinks while their wives are left alone with the sole or main responsibility for bringing up the family (e.g. UNEP, 2004). While there is probably some truth in this generalisation too, it is nevertheless an oversimplification leaving out the many hardworking indigenous men, who take an active part in securing the livelihood of their families, not to mention the extent to which women's needs may act as a push factor in men's engagement in the labour market.

From a conventional development perspective, leaving subsistence agriculture, hunting and fishing behind for an underpaid job in the urban periphery may be seen as a step up the economic ladder. The extent to which traditional modes of production are embedded in social

15 The extent to which the gender flexibility applies to both sexes has on the other hand been questioned by e.g. Lorrain (2001), who reports only to have observed men performing 'female tasks' among the Peruvian Kulina, leading her to conclude that Kulina women are more dependent on males than men on women, as women for instance need men to clear their gardens in order to sow.

relations and represent cultural value for *both* men and women that are not readily substituted by other income gaining activities, is seldom recognized. As reflected in indigenous peoples' political struggle and indigenous rights advocacy, both indigenous men and women are closely related to the environment, both are dependent on natural resources to secure a livelihood, and both are negatively affected by natural deterioration and lack of land. Moreover, in relation to cultural survival, it is crucial for both indigenous men and women to be able to maintain their traditional livelihood and relationship with the natural environment, making the right to territory and self-determination a central issue for empowerment of both genders.

Women and environment literature indicates that women are more concerned about the long term sustainability of natural resources than men – but it is still – research-wise – more of a hypothesis than a proven fact when it comes to indigenous peoples, who are otherwise generally stereotyped as being 'natural conservationists' (Conklin and Graham, 1995). Focusing on indigenous women's natural resource management as a distinct subject of research certainly has increased the visibility of indigenous women's role and served to further heighten the recognition of the importance of including women in planning of natural resource management projects (Emery, 2000). However, treating indigenous men and women as separate entities with different responsibilities, needs, priorities, and knowledge, entails the risk of overlooking the interdependence of men's and women's activities. In regards to projects, such an approach has often led to the creation of special women's activities, which have remained separate from the main project activities (e.g. Flintan, 2003; Yrogoyen, 2003).

Today there is a growing consensus that in order to enhance gender equality, women should not just be assisted as separate interest groups, but also empowered in order to change the structural inequalities constraining their decision-making power. The fact that indigenous women have often played important and valued roles in their communities in relation to traditional natural resource management, and continue to play a vital role in household economy through their use of natural resources means that the active involvement and recognition of indigenous women as natural resource managers can be a strategic tool for the empowerment of indigenous women (cf. Emery, 2000). Another important tool is the

continued effort to secure indigenous women a space in international fora from where they can create their own platforms[16].

3.1 Lessons Learned and Ways Forward

In recognition of the fact that most conventional conservation and NRM projects have had adverse negative affects on indigenous women and indigenous gender relations, there is a growing concern for actively addressing gendered impacts of projects and of securing gender equity by furthering the inclusion of indigenous women (Emery, 2000; Flintan, 2003; IFAD, 2004; Rojas, 2000; Yrogoyen, 2003). Project evaluations and guidelines, however, identify various constraints that hamper the equal inclusion of indigenous women; women are often monolinguals and have less formal schooling than men, they may not have time to participate in meetings, and their participation and mobility may be seen as a threat by their husbands and male leaders Furthermore, the use of the concept 'gender' seems often to create more confusion than clarity, as it is seldom understood by either project staff or target population. Apart from the need of securing that project staff are gender sensitive and recognize the importance of women's engagement, that proper participatory gender assessment are made before planning, and that gender is considered as a cross cutting issue, it is recommended to:

- Demystify 'gender'. It has proven easier for both project staff and target populations to understand the issue when it is based in the concrete relationship between men and women, and between male and female tasks and responsibilities.
- Treat gender as a subject that includes both men and women. This has proven a valuable strategy towards gaining the acceptance of men, who may otherwise fear that they are being left out.
- Organize project activities around existing user groups instead of forming new women's groups. Such an approach can, apart from appearing less threatening to men, ensure that women's informal networks and initiatives are not undermined.
- Require, where acceptable, women's inclusion in project planning and management committees, e.g. by the use of quotas. However, it should be recognized that quotas may give women focussed access to decision making, but is no guarantee towards achieving genuine participation in decision making..

[16] Indigenous peoples as groups have successfully used international fora to gain recognition at the local and national level. The same strategy seems to be appropriated by indigenous women, who for example have used the UN Permanent Forum on Indigenous Issues, the third session of which (held in May 2004) focused on indigenous women, to question some of the internal cultural traits that are disempowering to women.

- Ensure a greater participation of women through empowering activities that strengthen their economical independence, enhance their technical skills and self-esteem.
- Enable women to participate by ensuring that meetings and training activities are organized at times and in ways that take into consideration women's work-hours and responsibilities.
- Engage women more actively by ensuring that meetings are held in the local language or translated, and that training materials etc. reflect women's experiences. To have meetings in settings where women normally interact has also proven to ease women's active participation.
- Combine conservation efforts with projects that target women's immediate needs, in order to free their time for conservational efforts, and to make them realise the positive interlinkage of conservation and development.

While such recommendations can serve as guiding principles for a more equal inclusion of women and thereby enhance the sustainability of projects, few guidelines discuss the empowerment of women within a rights-based approach to natural resource management. As pointed out by Kambel (1999), in order for an empowerment approach to be meaningful in an indigenous context, it is necessary to link it to indigenous peoples' collective rights and the issue of self-determination. A one-sided focus on enhancing gender equality for its own sake (or for the sake of the environment) risks depoliticizing the issues confronting indigenous women and their struggle against ethnic discrimination (Beijing Declaration of Indigenous Peoples (Paragraph 16) NGO Forum, 1995).

Many of the concerns of indigenous women are similar to those of mainstream feminists, but they often consider feminist agendas with ambivalence as they seldom take into consideration claims based on ethnicity and indigenous women's culturally and politically different priorities (Chikap, 1995; Eikjok, 2004; McKinley 1998.)[17]. The antagonistic gender discourse dominant among Western feminists can moreover be seen as problematic as it does not accommodate indigenous women's vision of participating in a common struggle together with their men (CEIMM, 2002b)[18]. From a mainstream feminist point of view, a struggle for diversity,

17 Moreover, indigenous women often report to feel discriminated against in national women's movements that are dominated by upper and middle class women pertaining to the dominant society (Sherpa, 2004; Tamang, 2004).

18 Deere and León (2002) suggest that indigenous women's claim to fight for collective rights before women's rights has been a necessary strategy to gain entry into mixed political organisations.

difference and self-determination is often accused of legitimising traditions that oppress women. But from an indigenous women's perspective, colonization and the introduction of foreign patriarchal values and not-indigenous traditions, are at the root of their present marginalisation[19], and lack of collective rights to territory and self determination as well as poverty are usually considered more urgent problems than internal gender inequality (c.f. AIWN, 2004; CEIMM, 2002b; Tauli-Corpuz, 2001).

Recognizing that indigenous women's struggle is not just about gender equality, but situated in a wider historical and political context of socio-cultural and economic discrimination, Kambel suggest that empowerment of indigenous women should be linked to the concept of self-determination, which implies that:

- Gender assessment should be situated in the wider historical and political context as the situation of indigenous women relates as much to external as internal inequalities.
- Empowerment of indigenous women should aim at enabling them to take part in the process of self-determination. Gender analyses should therefore be combined with analyses of ethnic discrimination, and awareness about individual human rights should be raised simultaneously with awareness of collective rights.
- Health care, education, income generating activities and introduction of new technologies should be carefully adapted to local cultural values, ecosystems and needs in order not to undermine traditional resource use and knowledge and thereby create further dependence.

CONCLUDING REMARKS

The review shows an increasing interest in linking the issues of indigenous peoples, gender, and natural resource management. Recent research, especially in the fields of ethno-botany, ecology, and development and women's studies, focuses on indigenous women's role as enhancers and conservers of plant biodiversity, while feminist anthropology and women's studies have provided insight into the effects of modernization and natural resource degradation on indigenous gender relations. It is, however, a fact that most research on the

19 Even though the discourse of indigenous gender complementarity may not reflect actual local practices, the reference to an idealized past makes the struggle for gender equality part of the struggle for cultural self-determination. Given the discursive frame of indigenous politics, this may prove a more forceful strategy than opting for individual liberation.

environment, natural resource management, and indigenous peoples produced so far has been 'gender blind' as it often does not make explicit which part of indigenous natural resource management is undertaken by men and women respectively, or the extent to which indigenous environmental knowledge is differentiated by gender. On the other hand, research and policies on indigenous peoples and natural resource management/environment that include a gender perspective, do so mainly by including a separate section of women (often mentioned together with children and the old (e.g. IUCN, 1997)), or by focusing particularly on indigenous women. In that sense, women still seem to be the only sex termed as gender. The result is a marked lack of genuine gender analyses of indigenous peoples' natural resource management, which potentially could serve as guiding principles for furthering the involvement of indigenous women in natural resource management and conservation projects. Moreover, as much feminist research focusing on the relationship between gender and the environment remains 'ethnicity blind', it is difficult to assess if significant differences exist between indigenous women's and non-indigenous women's relationship with the environment. This may impede the identification of culturally sensitive interventions. Finally, as both women's and indigenous peoples' relationship with the environment are discussed within highly politicized fields, there is a marked tendency to reproduce stereotypes and rigid dichotomies, which stands in the way of reaching a workable approach that includes the visions, knowledge and needs of both indigenous men and women.

The literature illustrates the great differences that exist as to rigidity, as well as to the implications of the gender division of labour found in indigenous societies. Whereas in some indigenous societies women are restricted from performing the same tasks as men by strict taboos or social sanctions, in other societies there exists a great flexibility, and they are "only" limited in their performance by internalised cultural norms or by a "simple" lack of the appropriate tools. Such limitations are, of course, by no means simple, and whether sanctioned by external or internal taboos or by structural inequalities in relation to access to and control over the means of production, the ideologies behind the gendered division of labour constrain indigenous women's (and men's) livelihood choices. However, as the discussion shows, it is necessary to critically question the applicability of western dichotomies as valid frameworks for interpretation of gender relations in indigenous societies.

Bearing in mind that even anthropologists living in indigenous societies for an extended period of time have tended to only record the "official" gender discourse of male informants and interpreted it in ethnocentric terms (cf. Slocum, 1975), it is a true challenge for consultants, development workers and planners, who often only spend limited time in the field to recognise the multivocality of indigenous gender relations. Surely much more work is

needed to gain a full understanding of the complexities of women's current role among indigenous peoples, the variations in their livelihood strategies, and the extent to which and how ideology informs practice with a view to historical changes. In this relation it seems of particular importance to analyse how ecological, social and economical changes have differentiated impacts on different groups (in terms of age, civil status and education) of indigenous men and women. Notwithstanding the egalitarian nature of many traditional indigenous societies, rapid ecological, economic and social changes including scarcity of resources, privatization of land, and monetarization of the economy pose the risk of increasing or creating social differentiation and disrupting social institutions based on solidarity and mutual interdependence (cf. Fisher, 2000; Gram, 1998; Kambel, 1999; Århem, 2001).

The confluence of indigenous peoples' rights, environment, and gender, each issue being advocated from different, highly politicised, and traditionally opposed camps, is a challenging endeavour. The present paper suggests that one way to start is to deconstruct some of the prevailing stereotypes of both indigenous gender relations and indigenous peoples relationship with the natural environment, and aim for a more nuanced view of indigenous peoples' gendered involvement in natural resource management - taking as a point of departure the recognition of indigenous men and women as historical actors and the respect for indigenous men's and women's collective rights to self-determination, territory and self-defined development. As the above review has shown, researchers, policy-makers and planners are increasingly embarking on such endeavour but much work still lies ahead.

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