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Women's Studies International Forum

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Challenges for women's participation in communal forests: Experience from Nicaragua's in digenous territories



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ARTICLE INFO

Article history: Received 17 October 2015 Received in revised form 10 August 2016 Accepted 25 August 2016 Available online 26 September 2016

Keywords: Gender Indigenous Natural resources Forest governance Participation Nicaragua

ABSTRACT

This paper analyzes sex-differentiated use, decision-making and perceptions regarding communal forests in indigenous communities of Nicaragua's Atlantic coast. Methods include a survey, focus groups, participant observation and adaptive collaborative management processes over a two-year period. Results revealed that while a higher percentage of men than women participate in the harvest of eight forest products, women participate substantially in product sales and have some control over income. A majority of men and women believe that women participate in decision-making, but that participation was of low efficacy. Women face significant obstacles to effective participation in forest decision-making in the community: weak community organization, pressure by spouses, difficulty organizing among themselves and informal sanctions. Improving meaningful participation of women in decision-making requires addressing challenges and obstacles at multiple levels; obstacles at the communal level, where the future of the forests will be decided, cannot be overcome without attention to the household.

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Introduction

Attention to improving the participation of women in decision-making about forest resources has recently gained prominence (Colfer, 2013; Mai, Mwangi, & Wan, 2012), as organizations, researchers and policy makers look to integrate gender strategies and priorities into their research, planning and policy (Manfre & Rubin, 2012). However, improving indigenous women's participation at the local level has proven to be a complicated matter. Studies on the topic have focused on experiences in southeast and southern Asia and Africa (Kusumanto, 2007; Mai et al., 2012; Mutimukuru-Maravanyika & Matose, 2013). There are few studies about improving the participation of women in decisions about the forest in Latin America, and fewer about indigenous women. Empirical research on this topic is needed to better understand participation and decision making as key issues related to gender relations in forest management in indigenous territories. Improving women's participation and decision making provides opportunities to enhance women's wellbeing and livelihoods. However, we do not know enough about rural indigenous women's participation in forest management to understand how addressing gender inequity at the household and community levels could affect women's participation and roles in forest

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governance. Agarwal (2001) explored the exclusion of women in participatory spaces in community forest user groups in India and Nepal and identified multiple obstacles to their participation in public arenas. Mai et al. (2012) found that gender and forests in Latin America have been less studied than in other parts of the world, in spite of the fact that the largest stands of forest are found in this region. Furthermore, in general, more research is needed on gender relations and the factors behind them in order to understand strategies that can meet the needs of both women and men and also prevent backlash against women's participation (Mai et al., 2012).

Little research exists on indigenous women's participation in forest use and management in communal lands or territories (Schmink & Gómez-Garcia, 2015). In general, studies in Nicaragua about women have focused on *mestiza* women (Agurto et al., 2008; Espinoza, 2004; González, 1998; Hagene, 2008; Renzi & Agurto, 1997), either from the middle-class or rural farmers. There are few studies of Mayangna or Miskitu women in the English academic literature, but there are local resources. An example is Cunningham (Cunningham, 2011), who explored the vision of female elders in Miskitu communities; "las abuelas" (grandmothers) argue that indigenous knowledge can make a difference, for instance, in the context of climate change and forest destruction, and advocates for adapting and reinventing ancestral practices to respect the forest.

This article aims to increase knowledge and understanding specifically related to the participation of indigenous women in communal

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lands in Nicaragua where forests are an important natural resource and the source of power conflicts between different social groups. This article is based on findings from the action research project "Gender, Tenure and Community Forests in Uganda and Nicaragua" implemented by the Center for International Forestry Research (CIFOR) with the Nicaraguan research organization Nitlapan of the Universidad Centroamericana. (A similar survey was undertaken in Uganda; those findings are not included here.)

We argue that indigenous women's participation in decision-making about community forest resources depends on a complex and interlinked set of interactions at multiple levels within the community. By analyzing the gender interactions at both community and household levels, we are able to identify the barriers to a more interactive and empowering participation for women. We argue that, while the data suggests that women have some important decision-making power over forest resources and potentially over forest based income at the household level, meaningful participation in decision-making in the communal arena – key to the future of indigenous forests – is very weak; obstacles at the communal level, however, cannot be overcome without attention to the gender relations within household.

In the following sections, we describe the context of the research site, the theoretical framework, material and methods, findings and conclusions. Our analysis of participation uses Agarwal's typology of participation (Agarwal, 2001) and our approach to gender analysis draws on Colfer's Gender Box (Colfer, 2013; Colfer & Minarchek, 2013) and is complemented with theory on gender justice developed by Fraser (2008). The overall goal of the action research has been to improve women's tenure rights to forests. While focusing on participation in community forests - both in decision-making and livelihood benefits - we hoped to develop a clear understanding of the obstacles to, and the motivations and conditions necessary for the emergence of active participation by women in decision-making and in positions of authority over natural resources. Three research questions guided our work: first, how are women participating in decision-making about forest resources (i.e. what does women participation "look like"); second, what are the constraints and opportunities to equitable participation by women in decision-making; and finally, what strategies can improve the participation of women?

Context of the study region

This study is located in the forested Northern Caribbean Autonomous Region (RACCN for its initials in Spanish) of Nicaragua where the indigenous presence is significant. In the last census, 1 Miskitus were the largest group (57%), Mayangnas represented 4% of population,² and *mestizos* comprised 36% (INIDE, 2005). During the colonial period, this region was part of a British protectorate, which established an alliance with Miskitu leaders. At the early 1900s this region was annexed unilaterally as part of the Nicaraguan State in a context of indigenous protests. This region has been historically attractive to non-indigenous people for its natural resources: both foreign and Nicaraguan commercial enterprises extracted timber, gold, fish and other products for export. The rural indigenous population participated as workers, which, together with subsistence agricultural activities, provided their livelihoods. Today, many families continue to meet their needs through subsistence agriculture, fishing and the collection of forest products such as firewood. Hunting for household consumption continues, but at much lower levels as populations of game species have declined.

The territory is covered by pine forest in wide savannas stretching towards the coast as well as broadleaf forests in the inland slopes. Timber extraction, fire for clearing pasture and mining are the primary human drivers of the degradation and destruction of forest ecosystems. Land clearing is driven by colonization by peasants from other parts of the country. For example, census data from 2005 shows that population growth in the coast region was almost double the national rate from 1995 to 2005 (Larson & Mendoza-Lewis, 2009). In addition, Hurricane Felix in 2007 affected wide swaths of the forest, resulting in the destruction of an estimated 562,000 ha of tree cover (FAO, 2007). The indigenous population participates in a range of activities from commercial extraction to subsistence use of the forest; most recently, because of the paucity of commercially valuable trees, there has been little commercial timber harvesting, and most forest use is for basic needs, such as timber for firewood and the construction of houses and boats, and the use of a small plot (typically 1-2 ha) of land to cultivate crops for household consumption. In 2001 the national Map of Extreme Poverty revealed that this region is the poorest in the country, with close to 95% of population in extreme poverty (INIDE, 2001). Since then poverty reduction has been the primary challenge.

In 1987, in the wake of the Sandinista-Contra civil war, the Nicaraguan constitution was amended to recognize the country as multicultural and multi-lingual, with explicit recognition of indigenous rights to their own territory and communal land. In 2003 the National Parliament approved the Autonomy and Communal Lands law for the Atlantic Coast (Law No. 445) which protects the rights of community government institutions, with the latter establishing the basic legal norms regarding both territorial and communal level of indigenous authorities. As of March 2014, 21 of 23 territories had been demarcated and titled for a total of 36,439.98 km², representing 28% of the national territory (CONADETI, 2014). According to the autonomy law the highest-level authority is the community assembly – the adult women and men that comprise each community. The community assembly elects the community leaders; the most important offices are the síndico (similar to a president) and the wihta (community judge). There is no specific mention of women or gender in this law, though in theory indigenous women have equal rights to participate in community decisions and to be elected to these offices. Nevertheless, only a few women have held the position of wihta or síndico historically (Flores, Evans, Larson, Pikitle, & Marchena, 2016).

In general, Nicaraguan laws and policies require the participation of all adults in community decision-making. The Law of Citizen Participation (Law No. 475 of 2003) defines citizen participation such as "the process of involving stakeholders individually and collectively in order to influence and participate in decision-making, in the management and design of public policies at different levels, and in modes of administration of resources" (Asamblea Nacional, 2003). It includes five mechanisms of participation, among them queries and presentation of proposals. The Law of Equal Rights and Opportunities between Women and Men (Law No. 648 of 2008) sets the goal of equality, while the Municipalities Law (Law Nos. 40 and 261) was amended (Law No. 792) in 2012 to require 50% representation of women and men in municipal elections. Due to efforts of the current administration, the National Assembly is 42% female, and 57% of ministerial positions are held by women.³ Largely because of these gains for women, Nicaragua was ranked 6th in 2014 on the World Economic Forum's global gender gap rankings, up from 10th place in 2013.4

In spite of a policy context that on the surface may seem favorable to the political participation of women, mostly urban indigenous women have benefited; those women living in rural communities continue to play a nominal or passive role in formal and informal decision-making processes, particularly about natural resources at the community level.

 $^{^{\}rm 1}$ Nevertheless, mestizo presence has increased steadily over the decade due to immigration from other regions of Nicaragua.

² The Mayangna are comprised of three groups: Panamahka, Tuahka and Ulwa settled in 57 disperse communities within the RACN and estimated population of 17,219 (Gros & Frithz, 2010).

 $^{^3\,}$ http://reports.weforum.org/global-gender-gap-report-2014/economies/#economy=NIC.

⁴ http://reports.weforum.org/global-gender-gap-report-2014.

Table 1Agarwal's typology of participation (Agarwal, 2001).
Source: Agarwal (2001).

Form/level of participation	Characteristic features
Nominal participation Passive participation	Membership in the group. Being informed of decisions ex post facto; or attending meetings and listening in on decision-making, without speaking up.
Consultative participation	Being asked an opinion in specific matters without guarantee of influencing decisions.
Activity-specific participation	Being asked to (or volunteering to) undertake specific tasks.
Active participation	Expressing opinions, whether or not solicited, or taking initiatives of other sorts.
Interactive (empowering) participation	Having voice and influence in the group decisions-making.

The concept of participation

Participation is a term that has received significant attention in the literature from diverse perspectives. Participation has been identified as a catalyst of social change (Fals Borda & Rahman, 1991) and as a process for inclusion of historically marginalized groups such as women and ethnic minorities (Dangol, 2005; Hartanto et al., 2003; Kusumanto, 2007). Conversely, it has been guestioned as a new kind of tyranny (Cooke & Kothari, 2001) as when a guise of participatory approaches is used as tokenism to dissemble systems that empower the elites in the background while purporting to open up participation (Arnstein, 1969). Development agencies such as the Food and Agriculture Organization point out that participatory methods can be effective mechanisms to manage conflicts, to minimize risk of conflict in the future and to strengthen the impact of national forest programs (FAO, 2014). However, in order to strengthen the participation of women in forestry management, gender and social norms must be addressed (FAO, 2014). Campbell, Chicchon, Schmink, & Piland (2005) observed that women's participation in timber extraction in the Peruvian and Brazilian Amazon is limited to parallel activities. For instance, in a husband-wife household, the woman is in charge of finding workers to help her husband in the forest, cooking for her spouse and workers, and occasionally marketing wood. These arrangements proved to be relatively inflexible: "Despite all efforts to involve women in agroforestry...men became more, not less predominant in that activity over time" (Campbell et al., 2005, p. 226).

In this article, we seek to understand the different modes of participation in varied spheres of interaction within an indigenous community. To define and analyze participation, we draw on Agarwal's typology (Agarwal, 2001), which identifies six degrees of participatory behavior, ranging from "nominal participation" which is equivalent to simple membership in a group, to "interactive (empowering) participation" which means having voice or influence in a group's decisions (see Table 1). In this article, we apply this typology in order to provide a deeper granularity to the use of the term.

Analyzing gender at the "micro level"

The governance system of forest resources in indigenous communities in the RACCN is based on the recognition of the rights of all of the inhabitants, including women, to participate as social actors with voice and rights under a common property regime. Although in this region, the indigenous world view includes the idea that both men and women have equal rights in the community, in practice there are

important differences established between women and men based on the role socially assigned to the women as mothers, wives and minders of the hearth and the family. Women also produce food, gather fruits of the forest, and catch and prepare products to generate income. In Latin America, studies on the Peruvian and Brazilian Amazonia (Campbell et al., 2005) highlight that women's roles in forest organizations, however, are limited or non-existent.

In spite of the existence of formal and informal conditions for equity - in the communal property regime, in the legal framework and in traditional governance – this does not always exist in practice. Mairena et al. (2012) examined the policy frameworks for gender inclusion in both governments and NGOs in Nicaragua. While on the surface, gender appears to be addressed, there is little genuine analysis or inclusion of women in the development processes in indigenous communities; at best the participation is "incipient and superficial" (Mairena et al., 2012). Nonetheless, within the RACCN, it is mainly urban-based Miskitu women who have been involved in empowerment processes that have moved them into important spheres of political power.⁶ Herlihy (2013, p. 97) for instance highlights the situation of indigenous and Afro-descendant women of this region, their political participation and access to leadership posts. She points out, "the Miskitu and Creole women in Nicaragua have catapulted into leadership positions in the matrilocal group in high political posts. Data collected in Bilwi-Puerto Cabezas shows that Miskitu and Creole women leaders, in the past 30 years, have had access to political leadership positions through their involvement with the Moravian Church, the Sandinista revolution, and after 1990 due to development organizations. These stages of empowerment can be combined to promote women's leadership". There are some fields, however, where women do not seem to be involved in active leadership, such as in forest management; in this area, research suggests that even their participation as a community member is lacking.

In order to bridge that gap, we draw on Colfer's "Gender Box" conceptual framework (Colfer, 2013) to define our scope of analysis of the role of gender in forest management. Colfer identifies three levels of analysis - macro, meso and micro (see Fig. 1). We adjust Colfer's typology by distinguishing the community from the household - characterizing the community at the meso level - because, in the context of the RACCN, the community functions as the primary force in the landscape where gender norms are determined and enforced and where access to natural resources is decided. The importance of the distinction between gender dynamics at the household and community level is a core finding of our study. Analysis of the meso and micro scales – the community and household - is complicated, yet change at the micro scale also has the most power to affect people's behavior. It includes day to day economic roles, demographic issues, domestic roles, intra-household power dynamics and available economic alternatives. In this paper we focus on the meso and micro scales, specifically on the economic role of forest products at the household level, household power dynamics, community power dynamics, norms of behavior, and access to natural resources (Colfer & Minarchek, 2013). (See Fig. 2.)

Gender is a relation among socially constituted subjects in specifiable contexts. Gender acts as an organizing principle of social relations in different spheres of life and is affected by cultural beliefs (Ridgeway & Correll, 2004). It is supported by ideology, expressed in social relations and ends up taking shape in the physical bodies that give meaning to the social construction of masculine and feminine (Marchand & Runyan,

^{5 &}quot;Ley del Régimen de Propiedad Comunal de los Pueblos Indígenas y Comunidades Étnicas de las Regiones Autónomas de la Costa Atlántica de Nicaragua y de los Ríos Bocay, Coco, Indio y Maíz". Law 445.

⁶ The political empowerment of women has been part of the political agenda of feminist-based women's movements. In the RACCN, women's organizations have focused on motivating political participation by seeking positions in elected offices, addressing intra-household violence and promoting educational and health issues. In these fields, Miskitu women and Creole women are the two more dominant women's groups, particularly those with university educations. According to Mohammed (1986) and Wekker (2006) cited by Herlihy (2013, p. 100) Caribbean women have a vision based on motherhood leadership and empowerment which diverges from Western feminism and it is more in line with the black feminist perspective, a main characteristic of the indigenous feminism in the Atlantic Coast of Nicaragua.

Gender Constraints Macro Political lack of support for gender policies (training, priority, funding) Cultural lack of support for women's organizations National political conflict Global traditional gender roles Meso weak community governance lack of leadership capacity among women Community weak women's organization Territory Local economy sanctions/prohibitions by spouses Micro domestic violence Household Forest younger single mothers

Fig. 1. Gender level of analysis and type of constraints imposed. Source: adapted from Colfer (2013).

2010). Power dynamics overlap among family relationships, households and community. Household is the place where gender norms are not only learnt and internalized, but also where they are reinforced or modified. As Hagene (2008) points out, the classical patriarchy, which mandates differentiated roles for women and men, although durable in time is variable across space; in Afro-Caribbean societies where women assume the primary breadwinner role, women's subordination takes place in the emotional field instead of in the material one. Nevertheless, Aviles (2008) and McCallum (2001), in their studies of Amazonian societies, argue that distinct roles for men and women do not necessarily equate with a power structure in which men dominate women (Schmink & Gómez-Garcia, 2015).

Taking part in decision-making is fundamental to gender equity and equality. Equality is related to gender justice. According to Fraser (2001)⁷ social inequality should be overcome with equitable policies, both material (redistribution) and cultural (recognition). Fraser proposes parity of participation as a normative core of social justice, understood as the existence of social systems that allow all adult members of society to interact under equal conditions. In order to materialize this, she points out two objective social conditions. The first condition is the distribution of material resources to ensure the independence and 'voice' of the participants, prohibiting systems that institutionalize deprivation, exploitation and large differences in wealth, income, employment and leisure time. The second condition requires institutionalized systems of cultural values that express equal respect for all participants and ensure equal opportunity for achieving social esteem. This implies challenging the cultural patterns that systematically devalue certain categories of persons and qualities, or that fail to recognize those differences.

Fraser (2008, 2009) proposes revealing the disparities in participation and power, and particularly the embedded obstacles in social relations. In this respect, she encourages the analysis of the structural conditions that impede participatory parity, a situation that persists in practice, even when there is political will to establish legal frameworks that codify principles of participation.

Materials and methods

This RACCN region interested us because there is a notable historical shift in forests from a more integral part of the indigenous cosmovision to a source of products and resources like timber. According to the 2007–08 forest inventory of the National Forestry Institute (INAFOR, 2008), the RACCN has the highest percent forest cover in the country at 43.4%. Anecdotal evidence and experience in the region suggested that women had little say over how forests were being managed. There was also evidence of illegal and informal sales of land and resources, secrecy even within communities and problems with *sindicos* regarding land and forest decisions.

Our methods include adaptive collaborative management (ACM), household surveys and semi-structured interviews. We chose to implement ACM methodologies as our action research approach because ACM had demonstrated prior success at opening participatory spaces for marginalized groups such as women (Colfer, 2005a; Fisher, Prabhu, & McDougall, 2007; Kusumanto, 2007). Shortly after initiating the ACM activities, we recognized that there was no baseline information regarding the participation of women in decision-making in the study area; therefore we implemented a household survey in order to measure project impact. In 2012 we surveyed 300 households in 11 communities in nine indigenous territories within five municipalities in the RACN.

The 11 participating communities were selected as follows. Originally, 18 communities were purposefully selected for initial focus group studies aimed at scoping out sites for the ACM work. These 18 were selected to represent the distribution of ethnic groups and pressures on forests found in the RACN. Then, nine were selected for participation in the ACM project, assuring the coverage of three Mayangna and six Miskitu communities, the distribution of drivers of deforestation, and willingness to work with the project. Since the survey was designed as a baseline for the impact study, the 11 communities, as well as the households within participating communities, were randomly selected from groups that participated in ACM.

Of those surveyed, 142 (47%) were male and 158 (53%) were female, selected randomly by alternating households. The survey asked questions about gender roles regarding extraction and sale of forest products as well as perceptions on the participation of women in decision-making arenas. It became evident that the information in the survey did not exist elsewhere and provided important insights into an

⁷ See reference in https://docs.google.com/document/d/1p8MIZSavgsBfIRKUnXt8RZn-Q9Jr6Tpw6K8hQJHV_R8/edit?hl=en.

Gender and decision-making Macro Political Laws requiring Cultural representation National Global Meso Community Organization Territorial Local econony Micro Selling Using forest Household products products

Consultative Activity-specific Level of participation (Agarwal 2001)

Fig. 2. Gender and decision-making.

understudied topic: the participation of indigenous women in forest resource management.

Forest

The insights from the survey were further explored and tested through the series of ACM activities that sought to open spaces for the participation of women in decision-making. ACM is a methodology for managing forests developed by CIFOR and other partners and is based on participatory action research methodologies, social learning, collaboration between diverse stakeholders and adaptation to complex systems. ACM was chosen because the methods explicitly recognize the importance of collaboration at various levels and seeks to create opportunities for the participation of marginalized stakeholders – including women – in forest-related decision-making (Colfer, 2005a: Evans et al., 2014). ACM approaches have been used in other contexts to improve the participation of women (Colfer, 2005b; Kusumanto, 2007). The ACM methodologies included a series of participatory workshops in visioning about current forest problems, priority-setting for the future and planning how to enhance the communal organization and the women's participation in the process of decision-making in the governance of natural resources (Evans et al., 2006). Both women and men participated in the workshops and field activities. At times, they worked separately; in other instances, groups were mixed gender.

During the ACM implementation in each community, participating community members planned and executed a project and related activities based on the priorities and workplans established in the workshops. These activities varied depending on the interest expressed by the group; among the activities were tree planting, setting up tree nurseries and workshops to strengthen community governance. Participants carried out related monitoring activities to encourage reflection on the activities and on the participation of women, with the objective of learning from mistakes and redirecting their actions towards efforts more effective and congruent with the interests of the majority of the people, groups or entities that participated. The ACM activities provided opportunities for participant observation by the research team to explore the dimensions of the limitations that affected participation of women in decision-making with regard to forest products in the multiple spheres of the community: personal, family and communal (Evans et al., 2014).

Semi-structured interviews with individuals provided additional insights into the observations in order to understand at a deeper level the situations and perception about gender and the principal obstacles that confront women. These interviews were performed with key informants of both genders: community leaders and authorities, representatives of the women's organizations, elders, teachers, and religious leaders. Questions addressed roles and behaviors at the household level, gender and power relationships and community level interactions. These finding are presented in the next section.

Findings

Survey results

The household survey had two main objectives: 1) to understand the roles of men and women in forest activities and 2) to understand perceptions of women's participation in decision-making about forest resources. Although this survey was not initially structured to assess women's participation based on Agarwal's typology, we subsequently used Agarwal's framework to interpret main survey findings. We found that the typology was useful, but has some limitations to interpreting constraints or barriers to participation.

Roles of women and men in extraction and sale of forest resources

The survey asked men and women a series of questions about resource extraction, including who extracts forest resources, who sells

Table 2 Forest resources extracted. Source: Survey data.

	% respondents extracting			
Forest products	Households	Males	Females	
Timber	51.0	48.3	2.7	
Posts	38.3	37.7	0.7	
Firewood	71.3	68.7	2.7	
Animals	42.3	42.0	0.3	
Fruits	36.3	32.3	4.0	
Artisan materials	10.7	8.7	2.0	
Herbs	35.3	27.7	7.7	
Honey	20.3	20.3	0.0	

Table 3Forest product sales and control of resources.
Source: survey data.

			Of those selling, who sells		Who controls money from sales?		
Resource	that sell	Man	Woman	Both	Man	Woman	Both
Wood	33.3	55.6	37.4	7.0	28.3	20.2	51.5
Posts	12.0	58.3	38.9	2.8	38.9	16.7	44.4
Firewood	5.7	35.3	23.5	41.2	17.6	11.8	70.6
Animals	16.7	40.8	26.5	32.6	20.4	22.4	57.1
Fruits	12.7	23.7	36.8	39.5	13.2	39.5	47.4
Artisan materials	5.3	25.0	62.5	12.5	6.2	59.2	37.5
Herbs	3.7	36.4	45.4	18.2	18.2	54.6	27.3
Honey	3.0	44.4	44.4	11.1	22.2	55.6	22.2

resources, who controls the income from the sales and who makes decisions in different arenas.

The data presented in Table 2 shows that households use a large variety of forest resources, with more than half extracting both firewood (71%) and timber (51%). Contrary to our expectations, we were surprised to find that men are more often the ones undertaking the extraction for all of the forest resources mentioned. In order from highest to lowest, these include firewood, timber, wild animals and wood posts for house construction. Few women participate in extraction of any resource listed indicating that most of them are excluded from extraction.

Nevertheless, women also use and benefit from forest resources. Women and children make use of the firewood for cooking as well as many of the other products for household subsistence. Perhaps surprisingly, though women are not extracting much, they participate substantially in sales (see Table 3) meaning that although they may not take part of extraction, that does not mean that they are excluded from other processes, such as the use or sale of some resources.

According to those interviewed, all of the products extracted are used more for household subsistence than for sale, of which firewood is the most noteworthy, especially for its crucial role in food preparation. Nevertheless, a third of households are involved in timber sales, and noteworthy percentages of families also sell bushmeat or other animals, fruits and posts. With regard to sex-differentiation in sales, men more often sell the timber resources (timber and posts for construction) and fauna, while women sell other non-timber products like fruits, artisan materials and herbs.

With regard to control of the income from sales, though men still more often control the income from timber products, 44 to 71% interviewed report that the income is controlled by both. This is an important finding. However, it needs further inquiry as studies reporting similar results elsewhere in Nicaragua revealed a different story when more detailed questions were asked (unpublished data). Finally, women are more likely to control the income from the products they sell.⁸

Perceptions about the participation of women in decision-making about natural resources

The survey explored the involvement of women in decision-making about the forest in four arenas a) household b) as a member of a community group c) in community structures or meetings and d) in connection with other actors such as NGOs. The results demonstrated that both women and men believe there is substantial involvement by women (Table 4).

Women's participation in decision-making about forest management is highest for those decisions made within the household. Outside the household, female participation in decision-making also appears to

Table 4Opinion of level of involvement of women in decision-making about the forest. Source: Survey data.

omen are involved in decision-making at the following		% who agreed by gender		
level	All	Male	Female	
Household	84.3	88.7	80.5	
As a member of a community group	78.0	80.9	75.5	
In local council meetings	76.0	78.7	73.6	
In meetings with other stakeholders e.g. NGOs, researchers etc.	69.3	76.6	62.9	
The capacity or quality of women's participation in forest management decisions is good or very good.	26.0	26.2	25.8	

be relatively high, but declines from community groups to local community meetings and again to decisions made in meetings with other stakeholders (such as NGOs). Each of these arenas moves further from the household and more into the public sphere, though still local. Interestingly, men were consistently more likely to state that women were involved; this is statistically significant in the case of the household and in meetings with other stakeholders.

While at first glance, these rates of participation may seem strong, the last question in the table raises a key issue: while the majority of women are participating in decision-making in these various spheres, only 26%, of both men and women, believe that women's participation in decision-making is of a "good" or "very good" quality or capacity; 74% believe it is not. This suggests that respondents are making a distinction between "participation" and "good participation" – not unlike Agarwal (2001) in her typology of participation – and that in most cases women are not achieving the latter.

In Table 5, different types of participation are explored. Regarding women's ability to participate in and benefit from the use or sale of forest products, 90–95% of both men and women "agree" or "totally agree". However, when asked about whether women are adequately included in decision-making, only 66% of women and 71% of men agreed. This portion is still relatively high. However, it is worth pointing out that fully one third of women believe their participation in local forest decision-making is inadequate.

During the survey, "participation" was left up to the respondent to define. We suggest, based on interviews and participant observation that the definition of participation most commonly understood by respondents is based on whether women are present in the decision-making process; it assumes that simply being present allows them to have information regarding the topics covered, and that this is sufficient for their involvement in decision-making. However, according to Agarwal (2001) this level of participation is passive, because being present does not necessarily include influence on decisions made.

Hence, at best, we know that women are present to some degree when decisions are made. However, there is little indication that women are interactive and empowered participants. For instance, we observed that in 2012, from a total of nine communities, only three women held one of the key community leadership positions (*síndico* or *wihta*). In territorial governments, women mostly held low level positions. In general, it was clear that women who held some kind of leadership position, whether or not they held any real power, tended to believe women's participation was better than those who did not.

The survey prompted us to explore these issues further, using qualitative methods in two areas: 1) what does "participation" mean and 2) what are the factors that limit the participation of women in the various spheres of decision-making. In the following sections, we explore these two issues in greater detail by drawing on our observations, results of the ACM process and interviews.

⁸ This is a statistically significant finding when the research from Nicaragua and Uganda is combined

⁹ Except the territory of Tuahka, where a woman was vice president.

Table 5Perceptions about women's participation in forest management decision-making and benefits from the forest.
Source: survey data.

	Percentage of respondent type who agreed or totally agreed		
Statement	All	Male	Female
Women are adequately included in local forest management decision-making	68.3	70.9	66.0
Women are able to participate in use of forest products in this village	94.3	95.0	93.7
Women are able to benefit from use/sales of forest products in this village	90.3	90.1	90.6

Qualitative research results

From 2011 to 2014 we implemented a series of ACM activities in six Miskitu and three Mayangna communities. The rationale of using ACM was to create new opportunities for the participation of women in decision-making about the forest through the ACM workshops, trainings and field activities. Women were encouraged to attend, speak out at meetings and participate in the activities. Their participation was monitored by both the field team and by the community members. Discussion and reflection on the participation of women was integrated into the process.

Over the course of the activities, we saw a moderate increase in the percentage of women attending the project meetings and activities, as the workshops progressed through four different stages over the first year (47% in workshop 1 to 56%-60% in workshops 2, 3 and 4). We also saw modestly more active contribution by women in meetings, however, we observed little change in the level or degree of influence in decision-making in workshops or community meetings, or in their participation in positions of authority within the community. Several women became more active leaders during the process, only to be sanctioned by the community or their husbands. Simply opening opportunities for participation was not sufficient; other barriers made it difficult for women to step into those opportunities to participate in a more substantive way in decision-making about forest resources in the community. Meetings continued to be dominated by men, while women were more likely to actively participate in the forest activities than in meetings and workshops. In fact, in the forest we observed that women exhibited significantly more confidence and greater leadership in initiating discussions, and in general participated with more parity.

The ACM process revealed that the barriers to participation are complex and multi-dimensional. In fact, the ACM activities arguably did more to reveal the complexity of the barriers to participation than they did to lift those barriers.

We followed up on the ACM activities with a series of semi-structured interviews to elicit opinions about the participation of women, the barriers to participation, and how relationships within the household – a private sphere that had not been broached in the ACM activities – affected participation in the public sphere. We discuss those findings below.

Traditional community leaders

At the community level, traditional leaders have the power to control participation, and were seen to do so in ways to limit the participation of women. The ACM activities (such as meeting, workshops, training) were never "open to everyone" because of the traditional processes within the community where the *wihta*¹⁰ determined who could

attend the workshops and activities. Therefore, it is a key point to understand which factors are influencing the context of participation. Though an elected post, in local indigenous culture the wihta often acts as the "cacique" whose words and decisions carry substantial weight. People from outside the community, such as our project, who wish to organize an activity must first communicate with the wihta and obtain authorization; he (or she) will determine if the activity occurs and who is invited, though some were more open than others. Usually participation in ACM activities was limited to those community members approved by the wihta. In the case of the men, participants typically included the leaders such as the wihta, the síndico, pastors, teachers and elders. In the case of the women, participants included the ACM co-facilitators, teachers and representatives of women's groups, with limitations on open community participation. This power over participation was sometimes exercised to exclude women who were viewed as stepping outside the bounds of accepted gender roles. For example, in community K, Ms. E had actively participated as the ACM co-facilitator. She had begun to demand accountability from the leaders about financial accounts and inquire into their activities. She also successfully argued for the opening of community meetings to women. However, her activities provoked a backlash by male community leaders, who decided that she should no longer participate in the ACM process. Ms. E was forced to stop participating in ACM, and so she dedicated her energies to selling vegetables in the neighboring town and gave up her community leadership activities.

In a very real way, this control by the traditional leaders over the participation in the ACM process reflects how the public spaces in the community - meetings, assemblies, workshops - are spheres that are very much under the control of men, and male leaders in particular. For instance, in a meeting organized just with women in order to evaluate the women's participation, the wihta argued that he needed to participate and also invited another man, in spite of our insistence that only women should be present. There were 19 women and 2 men at the meeting, and most of the time, the two men and six women spoke, while the rest were silent. We also saw how male leaders influenced women's opinion and did not allow them to talk freely; one man said, "if you don't know, you don't talk" (personal communication, September 2014). We have also noted the striking contrast in the levels of participation of women during activities in the forest versus in community meetings. This was unexpected, as we had been warned by various male community members that women would not want to work in the forest at all. In contrast, during monitoring activities in the field, women participated enthusiastically in the activities, and there were instances when women took the initiative to lead reflective discussions. Upon returning to the community for a meeting, the same women assumed passive roles and limited their participation to muted attendance. This demonstrates that the poor level of women's participation in some public decision-making spaces - like meetings - needs to be understood in the context of power relations and analyzed through the gender lens. It also highlights that Agarwal's typology has some limitations in describing the barriers or constraints to different levels of participation.

Pressure by spouses

We frequently heard from respondents that the support (or lack thereof) by the spouse is a deciding factor as to whether women participate in the public sphere. In community I, the pressure on Ms. X, the cofacilitator and former *wihta*, came from her own husband, who was also a *wihta*. He felt that his wife's participation in development activities with other NGOs and in ACM had undermined his authority, because organizations would come to the house in search of her instead of him. He encouraged other community leaders to demand that she leave her leadership role in the ACM process. In spite of her leadership skills and effective collaboration with various projects, she was also criticized by some other community women, who apparently resented that she was originally from another community. The conflict resulted in

¹⁰ The "judge" in the community in the Miskitu language. Law 28, the law of Autonomy defines the judge as the traditional authority of the indigenous and ethnic communities, elected in community assembly according to the customs and traditions, in order to represent and govern.

physical aggression on the part of the husband, and he threatened separation unless she abandoned her leadership responsibilities.

The pervasive incidence of domestic violence in indigenous households (Rose Cunningham, personal communication, June 2014) can create an environment of intimidation and fear that effectively quells the participation of women. We mentioned the situation of Ms. X above, where her husband resorted to violence to stop her participation in community activities. Ms. X told us that women must get permission of their spouses to participate: "In order for women to participate, they have to find a way to negotiate with and convince their husbands." The sanctions can be severe. In community C (outside of our study area), a group of women organized to nominate a female wihta. They were then beaten by their husbands as punishment (Rose Cunningham, personal communication, June 2014). This demonstrates that gender relations at household or at the micro level not only determine women's participation but also could manifest barriers to opportunities to be involved in governance at the community level. In these cases, it appears that the men felt insecure in their traditional masculine identity and, assuming that they could lose some degree of power or control over women, fought back with domestic violence.

Weak natural resource governance

One of the constraints for the management of the forest, as identified by women (focus group, 2011), is that natural resources – timber, traditional medicine, fruits, agricultural practices, hunting, fishing – are used without sufficient regulation and control at the community level. The breakdown of traditional management rules; lack of norms, enforcement and sanction; incursions by outsiders; and elite capture have led to loss of resources. In the survey, respondents were more likely to blame the community (60%) than outsiders (43%) for overuse of resources, though most also blamed natural phenomena (76%, hurricane Felix in 2007). 11

In some communities, such as community T, interviewees highlighted the loss of traditional values and indigenous knowledge and changes in ancestral practices and culture. For instance, traditional native seeds have been replaced by seeds produced outside the community; lab-produced drugs have replaced natural medicine based on rainforest plants. Young people are influenced by more urban oriented lifestyles; they no longer appreciate community life, or want to cultivate the land or maintain ancestral practices related to forests. Many women believe that community leaders are not doing their job and that is why natural resources are disappearing.

Weak community governance and conflict

Internal political conflicts within communities and at the territorial level dominate the current landscape of the indigenous communities in the region. In general, community governance has been stunted by the conflicts, creating an inauspicious environment for welcoming women or strengthening women's organizations or their participation. In fact, women leaders can become more vulnerable in an environment of conflict. In community A, Ms. R had shown exemplary leadership as an ACM co-facilitator. However, when her community became politically divided, opposing political interests argued that she should be removed because of her political affiliation.

Women also censor themselves to avoid conflict. For example, in a meeting where women overtly stated that leaders do not to do their job, have many weaknesses and are unable to solve problems, male leaders responded defensively, blaming "those who do not participate". After that, the women were silent and then changed the topic.

Weak organization among women

Few communities have women's groups, and virtually none are functioning as such. In community A, a Mayangna community, the internal political conflicts have divided the women into three different groups, with the result that none are effective. Four problems are considered in turn: a) lack of initiative, b) leadership problems, c) lack of resources available to work, and d) divisions among women because of political party differences.

In the opinion of several people interviewed, the problem with the organization of women is related to the lack of their own initiative regarding what they would like to do: "there are few initiatives from the women themselves because the one who coordinates does not have initiatives," commented one territorial president. For other people interviewed, the women who are organized do not take any action: "...in the community there is an organization of women, but in my opinion, it exists only in name, there are no projects." Women complain that the women's organizations are weak and ineffective organizationally: "...there is no plan to help women" (Ms. L, member of the organization of women).

A second problem lies with leadership. Several interviewees stated that the leaders of the women's organization tend to be self-serving and appropriate the resources provided to the organization: "[the leaders] are working more for their personal interest. Not long ago they received a sewing machine, but they took it home for personal use, even though the other women complained." Some of the opinions attribute the problems of the organization of women to a lack of capacity to work as a collective and to manage resources: "...they need more knowledge about how to work in a more united way, which is to say that the women's group does not manage and has little capacity to manage and that is why they are not working for the development of their organization." (Mr. S, community wihta). This lack of capacity and training means that the group has not acquired basic experience about self-development: "They have never had experiences in planning projects for their benefit." (Mr. S, territorial government leader).

However, several respondents point to the lack of resources as a key factor. "In reality, the organization of women is not doing anything because they don't have a program or budget for advocacy at the community or institutional level", said Ms. P, a member of one women's organization. Others agreed: "...they don't have any funds, that's why they cannot assume any responsibilities, and when there is a problem, they cannot do anything." (Mr. S., community wihta). Providing resources is explicitly a responsibility of the community authorities, but they do not support the women's organizations. These organizations may also be short on human resources, related to their traditional gender role within the family. In rural communities, being single mothers or family heads is a social condition that constrains time and resources for meeting family responsibilities.

Finally, the internal division among women because of party politics is also an external factor influencing the local governance. Various respondents reported that many communities have two women's organizations divided along political party lines: "... one for YATAMA [a local political party] and the other for the Sandinista Front [the governing political party], which is a problem for the women and for the community in general," said Ms. P of one women's organization.

Overt strategies to discourage the participation of women

We observed situations of intimidation and discouragement where leaders actively created an environment hostile to women's participation in leadership positions. It is common for male community leaders to claim that women simply choose not to participate: "The assembly [all-community meeting] provides the opportunity for women to take on leadership positions or nominate themselves for [leadership] positions, but women are the ones who choose not to participate" (Community leader, personal communication, May 2014). This is only one

¹¹ Respondents could choose 1, 2 or all 3 responses, hence the total does not add to 100%.

version of reality; while women may choose not to participate in leadership positions for a variety of reasons, in some cases leaders have also taken active steps to discourage it.

In community S, a woman was elected wihta by the men in the community. However, upon investigation, it became clear that she was nominated and voted in by the men to create an example of a weak female leader who would be certain to fail: "so that the women would see how difficult it is to hold a leadership position and make decisions in the community." (personal communication, March 2014). The strategy seemed to work — her poor performance caused her to lose the support of the other women in the community, and created a negative impression of female leaders, as expressed by one woman: "How am I going to respect a woman who is my equal? She makes laws, but nobody pays attention because she is a woman" (focus group, March 2014). Following this comment, 10 to 12 women in the group nodded their heads in agreement. This strategy is characterized as to esquivar, or to avoid by mounting barriers, in this case, to women's participation.

Another strategy to *esquivar* is to create an environment where women are intimidated out of seeking leadership positions by telling them that they do not have the necessary experience or knowledge. As one male leader told us: "women do not have experience in these subjects and should leave them in the hands of men" (personal communication, May 2014).

Discussion and conclusion

This article has used mixed methods to explore the barriers to indigenous women's participation in use, benefits and decisions regarding communal forests and forest resources. The use of mixed methods allowed us to examine micro level gender relations (Colfer, 2013).

The survey provided insights on the material distribution of resources, while more qualitative observation, interviews and ACM allowed us to explore cultural patterns of gender relations (Fraser, 2008) that directly influence women's participation in forest management, particularly at the community level.

The survey demonstrated that, at the household level, women in the communities studied are directly involved in the extraction of few forest resources, yet in many cases they participate in the use of forest products as well as, in some cases, their sale. Overwhelming majorities of both men and women agreed that women are able to participate in and benefit from the use and sale of forest products. Women also have some control over the use of income derived from these activities. Importantly, though the numbers are low, women are more likely to control the income from the activities in which they also control the sale.

Relatively high proportions of both men and women interviewed – though consistently a higher portion of men – perceived women's participation in decision-making as relatively high, but declining from the household sphere into more public arenas. A high proportion saw women's participation in decisions as "adequate" — though a third of women did not. Finally, the opinion of 26% of both men and women that the quality and capacity of women's participation in forest management decisions is good or very good suggests broad agreement on the weakness of this participation.

Colfer's Gender Box combined with Agarwal's participation continuum provides a useful way to summarize the findings in a framework that attempts to capture the multidimensionality of the interaction between gender and participation. At the macro level, laws guarantee participation of women as nominal members of indigenous communities and law and government policy have generated substantial gender parity in elected offices around the country (though not at communal or territorial levels) and in national ministries. Hence important numbers of women sit on governing bodies that could eventually lead to meaningful representation and active or interactive participation, but this is not yet the case.

At the micro level, the survey suggests what we could consider activity-specific and active participation at least in some households

regarding the use and sale of forest products and of related income. However, it is the meso level – the community sphere, understood as a place where norms are solidified into daily, concrete practices – that has the mandate to manage, regulate and thus shape the future of communal forests. Here the data suggests that women's participation is, in most cases, passive.

It is important to note that the specifics vary from community to community and territory to territory, but one point in common is the lack of women's direct participation in leadership positions at community and territory levels. It is unclear if the standards set at other government levels will trickle down to indigenous communities and have any meaning for the future.

Currently, women encounter significant barriers that continue to exclude them from such positions and from more active participation (empowered participation) in the community sphere in general. These are linked to exclusion by men and opt-out by women themselves. There is also a complex interplay between the family (micro) and community (meso) spheres, and the research suggests that it is not possible to understand or address one without the other. The obstacles interact in both spheres: lack of confidence, gender conflicts, experience, time, spousal support and community support make participation a challenge for women. Women's responsibilities in the household limit their opportunities to attend community meetings, and time demands at home make it even more difficult for women to leave the community to carry out the requirements of a leader. The support – even permission – of the spouse is often necessary for women to participate in community-level decisions. On the other hand, what is spoken at a community meeting can have repercussions at the household level: if the spouse disapproves, sanctions can be severe. In several cases that we observed where individual women sought to exercise greater influence, they were subjected to exclusion (community) and even violence (household). In the extreme case mentioned by Cunningham (personal communication 2014), the violence carried out at the household level was an organized response by men at the community level. We learned that Agarwal's typology has limitations in understanding barriers or constraints to participation. Defining participation as continuum within a set of activities that is proscribed by the context of a public meeting limits the multi-dimensionality of the networks of influence that comprise participation in decision-making. We learned that the household level played a key role in defining who and how decisions are made with regard to natural resources, and it was necessary to adopt additional research methods – interviews, participant observation – to understand the dynamics at the household level in greater depth.

Though authors mentioned previously argue that differentiated gender roles do not necessarily lead to women's subordination, and though there is a strong current of discourse defending this position in the RACCN, the evidence in this case suggests otherwise. Women suffer sanctions not just for the act of stepping out of pre-defined social boundaries but also for the specific, legitimate concerns they raise about community leadership and governance. Hence gender becomes a smokescreen that helps hide the lack of accountability of community leaders.

Full internalization of women's fundamental rights, as guaranteed by law and embraced in spirit by community tradition, would mean that women's participation would transcend from simply being present at meetings to more influential activities, such as generating proposals, planning and developing strategies of collaboration and negotiation, not only for the use and access of natural resources, but also on decision-making regarding the future of the region's communal forests. Supporting such changes will require profound cultural sensitivity, long term engagement and greater awareness of gender relations on the part of all actors engaging in indigenous communities.

Acknowledgements

We are grateful to the women and men of the participating communities who have provided their insights and perspectives for this study.

We thank Jeff Alwang and Carmen Collado Solis for their invaluable contributions in the analysis of the survey data. We express our sincere thanks to the Austrian Development Agency (ADA grant number: CIFOR (2012/02)) for providing funding for this research.

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