



Under the canopy

Gender and forests in Amazonia

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A 100-year-old farmer in the Juma Reserve in the Brazilian Amazon.

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1 Introduction

Amazonian forests are a growing focus of global attention due to concerns about tropical deforestation, climate change, greenhouse gasses and REDD+ (initiatives to reduce emissions from deforestation and forest degradation), energy security, agribusiness and food security, and indigenous land rights (Mai et al. 2011, 246; Vazquez 2013, 11). Encompassing the largest expanses of remaining tropical forests in the world, which make up about 6 million km² of the region's total area of 6.5 million km², Amazonian forests were also home to an estimated 33 million inhabitants in 2009 (UNEP 2009, 133; De Jong et al. 2010). The diverse types of forests (rain forest, flooded forests, seasonal and deciduous forests, grasslands) and the varied groups of human inhabitants are largely hidden from view under the Amazonian rain forest canopy. Despite their relative invisibility to the outside world, the Amazonian rain forest is a cultural landscape historically shaped and managed by a range of rural inhabitants including indigenous peoples, rubber tappers, neo-native groups, peasants, riverside dwellers, agricultural colonists and urban dwellers (Vadjunc and Schmink 2012). These groups and communities actively manage Amazonian forests for their livelihoods and as an essential component of their identity and their socioeconomic and spiritual lives. Within these communities, men and women use multiple strategies to manage the forests to provide for their subsistence livelihoods and respond to market demands for food, medicine, handicrafts, construction materials, fuelwood, timber and environmental services. They draw on deep cultural traditions and knowledge while constantly innovating in response to changing ecological and socioeconomic conditions. These diverse traditions and innovations are key resources for continuing adaptation to global changes, although they are relatively invisible to outside markets and policy makers.

Despite the importance of forests for global processes and the long tradition of forest management by local Amazonian peoples, there is surprisingly little available literature on gender and forests in the Amazon region. Gender roles and relationships are important components of key emerging forest-related issues, such as climate change and the differential risks and opportunities faced by women and men in different contexts (Masika 2002, 4). Historically determined gender differences and other cultural practices in terms of access to property, education, health care, income-generating activities and mobility may influence definitions of 'appropriate' behavior for men and women and their ability to respond to changing conditions in local forest management. Gender relations in Amazonia are changing rapidly in different ways and this has important implications for forest management practices, community food security, sustainable livelihoods and the capacity of Amazonian men and women to address the impacts of global market pressures and climate change.

The importance of gender issues is beginning to be recognized in the literature on global forests. The journal *Gender and Development* published a special issue on climate change in July 2002; *International Forestry Review* had a special issue on forests and gender in 2011; a special issue on gender of *Agroforestry* was published in January 2012. Like other literature, these volumes devote almost no attention to the Amazon, and relatively little to Latin America (Mai et al. 2011, 254; Bose and van Dijk 2013, 7). A recent review of literature on gender and access to forests and farms in Latin America produced surprisingly little recent work and few new researchers; most of the solid analysis had been carried out by a handful of scientists, and there was a resulting lack of data from Latin America on legal, cultural, political, and racial/ethnic differences in women's access to

property (Bose and van Dijk 2013, 3). A recent review of English language literature on “gender and forests” in the Web of Knowledge found only 22 of 121 publications that focused on Latin America (Mai et al. 2011, 246). In this review, references specifically related to “community forest management” included only one source on Latin America, and not a single reference was found on “tenure and/or property rights” in the region. The only topics in which Latin America was more prominently represented in the gender literature reviewed were “traditional knowledge” (twelve references) and “forest resource degradation,” of which two of the six sources identified were focused on Latin America.

Key issues remaining to be addressed in the literature on gender and forests in Latin America include: access and rights to resources, livelihoods,

governance, and intra-household dynamics and interests in forest resources (Mai et al. 2011, 247). Bose and van Dijk (2013, 9) point out that there is little knowledge from Latin America on: integration of indigenous women’s perceptions into policy; data disaggregated by gender, age, class, ethnicity in census and other sources such as demographic and health surveys; resource data on access and ownership, especially within collective lands; social movement participation and impacts; and forest conflicts and their impacts. The gaps are many. Moreover, there is a lack of comparative research on the important differences related to gender and forests among the Amazonian countries. Identifying and addressing these many gaps in understanding gender and forests is crucial to future efforts for sustainable Amazonian forest management.

2 Reviewing the literature on gender and forests in Amazonia

In 2013 the Center for International Forestry Research (CIFOR) Forests and Livelihoods team commissioned a review of gender research on forest and property rights in the Amazon to help guide future research programs. As a contribution to addressing these serious gaps in the literature, we conducted a wide-ranging search for literature (in English, Spanish and Portuguese) using a diverse set of key words (Gender and forest in Latin America; gender and forest; access to land in Latin America; gender and forest in the Amazon; *mujer y Amazonia*; *mulher e Amazonia*; *mujer y bosque en Latinoamérica*; *mulheres e florestas na América Latina*). The search was carried out online in the Web of Knowledge/ Web of Science; Google Scholar; Hispanic American Periodicals Index (HIPI); and the Latin American Network Information Clearinghouse (LANIC), as well as in the holdings of the University of Florida Latin American Collection and on the personal bookshelves of the authors. Moreover we sought information on websites and blogs from different institutions linked with gender, such as FAO, CIFOR, UICN, among others; most of the documents found there were guides, frameworks and manuals without a geographic focus (e.g. IFAD 2008; Colfer and Minarchek 2012).

We also contacted 32 knowledgeable individuals (listed in Appendix 1) who provided us with additional references. As we reviewed the materials identified, we followed their bibliographies to new sources whenever possible.

The final list of materials compiled consisted of 67 items that directly addressed gender and forests in the Amazon region – a relatively small and dispersed set of sources. Appendix 2 contains a descriptive list of these references, ordered chronologically. Nearly half of these materials were in English (30), 20 were in Portuguese, and 17 were in Spanish (two items were in all three languages). The focus of the references included Brazil (28), Bolivia (13), Peru (13), Colombia (5), Ecuador (5) and Venezuela (2) (Figure 1). Many sources were available on the Internet, but others were published in books, reports or journals that were not always readily available; we excluded references for which we did not have sufficient information to find the source or were unable to access the text. It was beyond the scope of this study to include website publications, university theses and dissertations and the valuable gray literature that can be found in each local site.

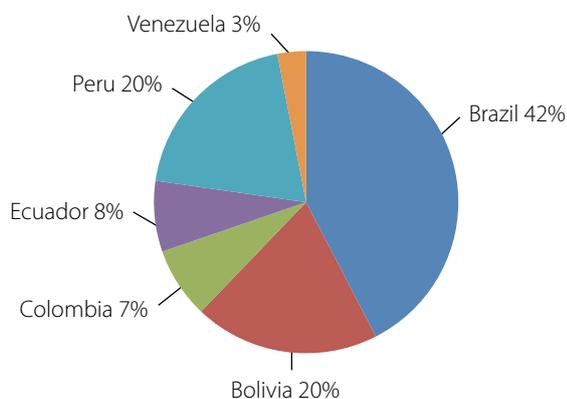


Figure 1. Geographical coverage of gender, forests in sample of Amazonian publications 1985–2013.

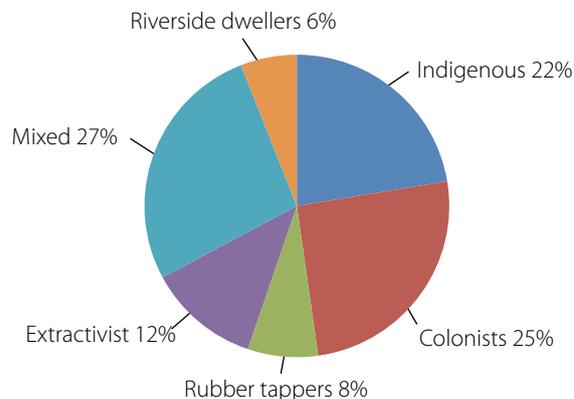


Figure 2. Social group coverage of gender, forests in sample of Amazonian publications 1985–2013.

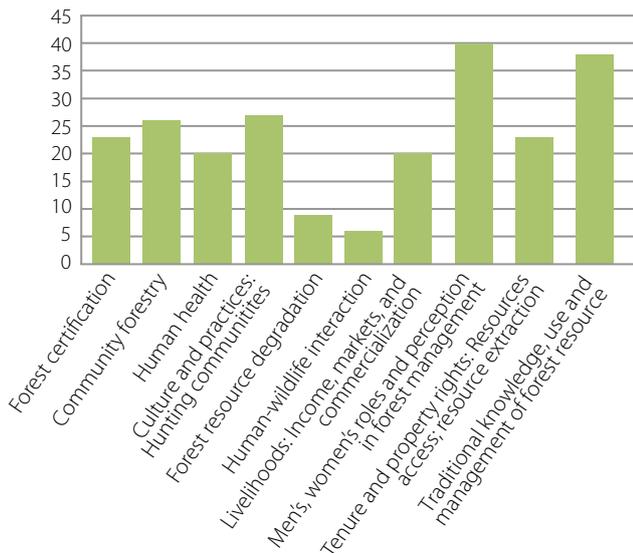


Figure 3. Thematic areas of publication on gender and Amazonian forests, 1991–2013 (N=67).

Source: Authors' calculations, 2013

In the absence of systematic, comparative research on gender and forests in Amazonia, the discussion drew on several useful in-depth case studies to provide more concrete details. Given the materials at hand, this review focuses on distinct social groups, drawing insights from groups for whom reports were included in this survey, and highlighting gaps and priorities for future research. As can be seen in Figure 2, beyond differences in national context the coverage in the sampled literature focuses very unevenly on certain social groups, especially indigenous groups and “traditional” Brazilian Amazonian communities.

In order to compare the thematic coverage of the Amazonian literature that we reviewed with the global review carried out by Mai et al. (2011), we assessed the distribution of literature across the same ten key themes (see Figures 3 and 4). Despite differences in search parameters,¹ the comparison suggests some consistency in key themes. In Mai et al.'s global review, the most important themes were community forestry, livelihoods and income generation, traditional knowledge, and gender roles. In our review of the literature on Amazonia, the most important themes were related to gender roles,

¹ Our review included English, Spanish and Portuguese language publications in many different sources beyond the Web of Knowledge (websites, search engines, gray literature, physical books and online sources focused specifically on the Amazon region) from 1985–2013. The Mai et al. review was global, including only English language literature on gender and forests in Africa, Asia and Latin America listed in the Web of Knowledge, 2000–2011.

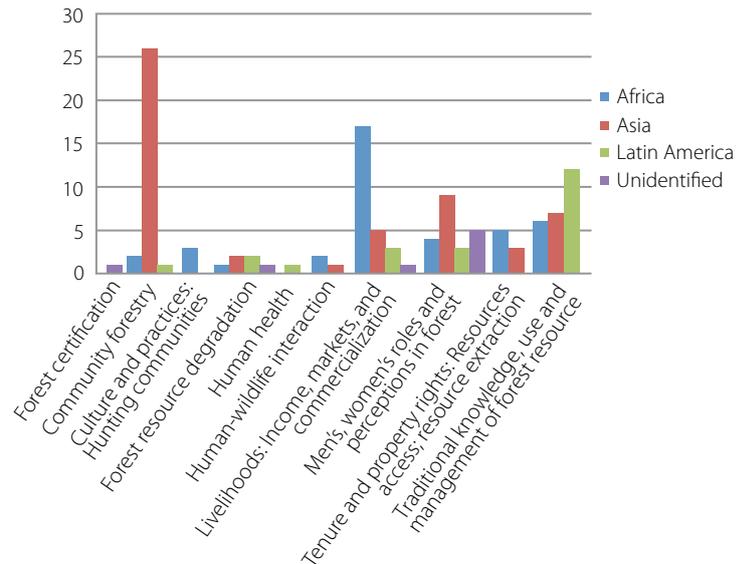


Figure 4. Thematic areas of publication on gender and global forests, 2000–mid-2011 (N=121).

Source: Mai et al. 2011: Figure 2, p. 250.

traditional knowledge, and community forestry, but the publications were more evenly distributed across other themes, such as men's and women's roles and perceptions, forest certification, forest resource degradation and land tenure.

In this paper, we highlight key issues of particular relevance to the Amazon:

- Amazonian property rights, forest territories and communities
- diverse and changing gender relations
- gender and forest management programs
- women's participation in social movements.

Our review is based on the recognition of the importance of both men's and women's active participation in adapting to the future changes Amazonia faces with climate change and other external threats, and in addressing the ongoing challenge of securing their rights to land and resources in order to provide sustainable livelihoods for their families and improving their ability to make strategic life choices. The power to make these choices depends on three key aspects of empowerment (Kabeer 1999, 438): access to and control over necessary resources; recognizing and exercising the human agency or “power within” to participate in transformative social change; and the ability to use those resources and to achieve the capabilities required for well-being. We conclude with priority recommendations for future research on greater empowerment of marginalized men and women to sustainably manage the forests and communities of Amazonia.

3 Amazonian property rights, forest territories and communities

The men and women in indigenous, riverine, colonist, rubber tapper and other forest communities of the Amazon may be largely invisible to outsiders (Vadjunec and Schmink 2012) but they occupy large expanses of territories that they have claimed and occupied in many different ways and therefore defy generalization (Almeida 2011). National policies have strongly influenced land and forest use, including tax and subsidy policies favoring cattle and logging and formal land titling requirements that encourage forest clearing to demonstrate “improvements.” In Brazil, distortions in agrarian, forest and environmental policies, laws and regulations and their implementation have contributed to insecure property rights over both land and timber, leading to persistent violent conflicts over resources – all of which affect women and men in particular ways (Schmink and Wood 1992; Puppim de Oliveira 2008, 303; Araújo et al. 2009, 262; Almeida 2011; Sauer and Almeida 2011).

Many of the individual farm settlements in the region were occupied spontaneously on unclaimed public lands, essentially open-access resources subject to deforestation pressures to establish ownership claims that subsequently might be recognized (Schmink and Wood 1992). In other cases, colonists were settled in official colonization projects created by governments in the region to accommodate migrant farmers attracted by roadbuilding and other development initiatives. Still other territories were reclaimed in the past few decades as communal holdings by social movements representing indigenous and *quilombola* (descendants of slaves) communities, including *Tierras Comunitarias de Origen* (TCOs) in Bolivia and indigenous communities in Ecuador and Peru. The lands claimed by other groups (such as forest extractivists and *castanheiros*, *seringueiros*, and *quebradeiras de côco babaçu* associated with specific forest products) have also been recognized as collective landholdings under the provisions

of Brazil’s 1988 Constitution (Almeida 2011), in response to social movements. The resulting mosaic of community land uses and formal and informal claims varies widely throughout the region as a result of the particular local socioeconomic, ecological and political configuration (Schmink and Wood 1992; Pacheco 2009).

Since 1985, forest policy reforms in several Amazonian countries have expanded tenure rights for communities, in response to both top-down pressures (such as global biodiversity concerns and democratic policy decentralization) as well as the growing recognition of rights of local peoples and responses to their tenure rights claims (Larson et al. 2010, 3, 14; Alcorn 2014). In Latin America, secure community tenure rights are far higher than in other regions, hence the far greater importance of community tenure rights and management regimes, in which both women and men participate in distinct ways (Larson et al. 2010, 6; RRI 2012: 8; Vazquez 2013, 13). Nearly all Amazonian countries have revised their policies and institutions on natural resources significantly over the past two decades, and local and state governments have developed guidelines for forest management, often with public participation (De Jong 2010, 292; Alcorn 2014). Despite trends toward decentralization in the region, however, many aspects of decision making related to forests are still taken by national authorities, while outcomes at the local level are primarily influenced by power relationships and property rights, such as relations of power between the genders, which may have changed relatively little (Pacheco 2005, 166). Moreover, attempts to simplify management protocols have tended to focus on timber, neglecting local and non-timber production that may be more important for women (De Jong 2010, 292). Women risk marginalization if they are not in a position to represent the concerns affecting their livelihoods and well-being (Alcorn 2014, 8).

The large territories allocated to community control in Latin America reflect in part the result of tenure changes in response to grassroots struggles by both indigenous and non-indigenous peoples to defend their historical rights, and to protect forests and improve their livelihoods (Cronkleton et al. 2008; Larson et al. 2010, 8, 14; Almeida 2011; Pacheco et al. 2012). Indigenous areas along with sustainable use reserves, smallholder colonization settlements, and *quilombolas* control rights to over 37% of lands in Brazilian Amazonia (Santos et al. 2011, 22, 26). These claims to “territories” imply far more than mere rights to land, often encompassing historical memory and identity, and implying the right to self-determination and self-governance of the common property using local practices that may follow a different logic from formal property institutions. In Brazil, “traditionally occupied lands” combine the use of commons (forests, water, fields and pastures) with titled properties and recognition of *de facto* rights related to specific extractive, agricultural, fishing, hunting, crafts and animal husbandry activities (Almeida 2011, 37). Securing access to territory often is a precondition for survival as an ethnic group, embedded in highly charged social mobilizations that unite all community members in a common struggle.

The collective nature of forest territories controlled by Amazonian communities, either based on traditional, community-based, long-term collective-use rights or legal title, constitutes a land tenure context for women that does “not necessarily guarantee all members of a community secure access to or control of land” (Deere and Leon 2001, 229). As Deere et al. (2012) assert, women’s bargaining power within the household is related to their ownership of assets that provide a “fall-back position” in the event of desperation, divorce or death. The overwhelming focus on securing community rights discourages the focus on internal gender inequities that may seem secondary or threatening to community unity. Indigenous women, in particular, may view the defense of their community’s collective land claims as their primary interest, especially given

indigenous women’s traditional association with the maintenance of traditional knowledge and culture (AIDSESEP 2006, 19, 76). In practice, the allocation of resource rights within communal lands often follows traditional “customs and practices” (*usos y costumbres*) that may or may not support gender equality (Deere and Leon 2001, 229; Deere et al. 2011, 23).

The widespread persistent gender inequality in land ownership in Amazonia is due to male preference in inheritance, male privilege in marriage, male bias in state land distribution programs, and market inequalities, both in individual private lands and in communal lands (Deere and Leon 2001, 2). Among the multiple legal, cultural, structural and institutional mechanisms excluding women from land rights are patriarchal ideologies about the gender division of labor within public and private spheres, and particularly the practice of ceding land rights only to one household representative – the male head. Women’s lack of independent rights to land especially becomes a problem where there is marital breakdown or male outmigration. In Brazil, where joint titling of both women and men became an option in the 1988 Constitution, female land ownership remains very low (12.6% in the mid-1990s) because cultural practices led to titling only male household heads, and the Land Reform Institute (INCRA) resisted joint titling because the forms they used for land registration did not have space for two names until 2001 reforms (Deere 2003, 271). Within Peruvian rural communities, research on the “empowerment effect” of recent policy reforms that *required* joint titling of land showed that in communities where individual family properties were titled in the names of both men and women, women participated significantly more in household decisions in diverse arenas, especially related to agriculture and land use (Wiig 2013). Within Amazonian households and communities, achieving autonomous rights to land and resources constitutes a significant challenge for women, in diverse ways that are not well researched, and may have important implications for future livelihood sustainability.

4 Gender relations in Amazonia

Cultural, historical, and institutional patterns have led gender relations in Amazonia to be highly diverse, and in flux – 420 distinct indigenous Amazonian peoples in a population of more than one million speak 86 languages, and 650 different dialects (UNEP 2009, 72). The uneven coverage of locations and social groups in the existing literature makes it difficult to make generalizations. Moreover, cultural beliefs and practices are evolving rapidly in the Amazon region in ways that have not been adequately documented. Nonetheless, several commonly reported features of gender relations in the Amazon, listed below, provide a point of departure for understanding diversity and change. Each of these conditions varies greatly depending on the social and environmental context, as illustrated by examples from specific Amazonian social groups.

- **Strong community identity** and political commitment among ethnic, occupational and other social groups **discourages attention to gender inequality** that belies community unity.
- **Patriarchal cultural values** among some indigenous groups and among the general population in northeastern Brazil assume that **men represent the family and the community in public arenas**, leaving women without independent autonomous property rights and representation in decision making related to forest management.
- The **division of labor by gender** is often linked to different **physical spaces and arenas of activity**: for example, women may engage in reproductive and productive activities in the homestead/community gardens, swidden gardens, (including livestock, agroforestry and non-timber forest products [NTFPs]), while men dominate in hunting, agricultural clearing and logging activities for the commercial market. In non-indigenous communities, women's arenas are often more limited – and men typically dominate agriculture.

- **Women's productive work is often invisible** to markets and outsiders due to its association with the home, family, and subsistence and because of limited market access.
- **Physical isolation** of many forest communities makes women's collective action more difficult, and limits access to social services and other benefits of citizenship rights.
- **Programs to support community forest management** have influenced community and family gender dynamics, often creating or exacerbating gender inequalities by **focusing resources on a small group of male timber managers**, and neglecting NTFPs and broader forest management tasks.
- Over the past three decades, Amazonian women have found diverse ways to **organize in support of their community struggles for land and other resources**, to demand services from government and NGO projects, and to gradually **build their skills and leadership** within broader community and public arenas.

Because of historical conditions in Amazonian communities, many women may not even have citizenship documents, and are unaware of their basic rights (Grist 1999; Favila 2006, 29; Shanley et al. 2011, 237). Rural Amazonian women's lack of official documents (i.e. birth certificates, identity cards) can impede them serving as official representatives of communities or projects, especially among indigenous women. Another common limitation is the low level of education of older Amazonian women; one study of over 1000 women members of the *Movimento Articulado das Mulheres da Amazonia* (MAMA) in Brazil found that 80% had not studied beyond 4th grade (Guedes et al. 2001).

New initiatives that do not address these preexisting forms of discrimination and disadvantage may reinforce rather than transform

gender inequality, as reportedly happened in some climate change projects in Bolivia and Peru (Masika 2002, 6). Forest management programs implemented in the region have generally failed to identify and address gender concerns systematically. Women in all Amazonian social groups have begun to organize themselves over the past two decades and have achieved some successes in terms of empowerment and improved resource access. These changes have emerged during a period of rapid socioeconomic, cultural, and political transformation that has opened up access to markets and policy arenas by Amazonian communities on an unprecedented scale, but gender-specific impacts from these changes for both men and women and in different situations/ contexts, are not well understood.

4.1 Changing gender relations among indigenous Amazonian peoples

Ethnographic studies of indigenous Amazonian populations have drawn comparisons to small-scale cultures in Melanesia that are also highly “gender-inflected” (Gregor and Tuzin 2001, 8): not only is the duality between male and female of great importance in daily and ritual life, but the male-female axis serves as a “template” for dualities in other domains of Amazonian indigenous cultures. Classic anthropological literature on Amazonian cultures has emphasized the assignment of men to the forest (to hunt and to make war) and to the public domain (the collective house [*maloca*] and public arenas), and women to the domestic, private sphere within a circumscribed radius around the home/*maloca*, where they are responsible for collecting water and fuelwood, gardening and looking after small animals (Murphy and Murphy 1985, 83), although women also manage resources along pathways and within diverse-aged, swidden agricultural fields that are up to several kilometers away from the *maloca*. However, some authors point out that this binary distinction in social life in Amazonian societies does not necessarily “underwrite a power structure” in which men dominate women (McCallum 2001, 3; Aviles 2008, 28). The universally male-dominated gender relations within Amazonian indigenous cultures have been found by different researchers to be flexible, fluid and negotiable, and situated within the specific wider context of power and inequality of each group (McCallum 2001,

164; Aviles 2008, 26). Such cultures have been undergoing rapid changes, including the decline of men’s dominance, the emergence of nuclear family living arrangements, male outmigration for work, increased contact with markets and continuous contact with external actors (Murphy and Murphy 1985). Population growth, violent conflicts, expansion of agricultural frontiers, land invasions, increased pressures on natural resources, and outside cultural influences all contribute to adoption of non-traditional livelihood practices and loss of ancestral knowledge linked to forests and their resources (Lozada 2007, 134).

More systematic research is required before any generalizations can be made on how gender relations are changing in different ways, among the many indigenous communities across the Amazon region. Female leaders of AIDSESP (2006, 9), the largest organization of Peruvian Amazonian peoples, described the traditionally valued, important roles of native Amazonian women as the “fortress” of family self-sufficiency. Within the household, if not outside, women were responsible for the essential tasks of child-rearing and socialization, certain agricultural tasks, food preparation, weaving, care of small animals, use of medicinal plants, and teaching the younger generation the songs, myths and stories that traditionally accompanied all of these activities. Indigenous women and men control distinct domains of cultural knowledge (Athayde 2010). Despite their great diversity, indigenous Amazonian peoples have experienced similar contact with external agents (e.g. colonizers, church, State, NGOs, mining companies, illegal loggers, colonists) that have threatened women, and introduced elements of Western culture, changing gender relations. Men are more likely than women to get their citizenship documents, to go to school and to learn Spanish, giving them a greater advantage and experience in dealing with outsiders. They are also more likely to have problems with alcohol (used for payment by river traders), resulting in increased violence against women. With males migrating for work outside the communities, indigenous women have found themselves taking on many new tasks, responsibilities and decisions for which they are ill-prepared – such as negotiating for resources with outside agents. As indigenous communities assumed new, more formal structures and formed new organizations and federations, interacting with

the State and other agents, women have often been excluded from these new expressions of public life, or restricted to traditional female domains, limiting their access to citizenship rights and services. Indigenous women's efforts to change gender relations have less to do with efforts to change traditional gender identities and relations, and more to do with efforts to address their exclusion from new forms of rights in significant public arenas from which they are being circumscribed.

A report on human rights of Peruvian indigenous women from *Aguaruna*, *Ashaninka* and *Shipibo* groups (Piqué 2005) found cases of sexual and domestic violence to be common and rarely punished even when reported. Social indicators measured in this report showed inequities with regard to indigenous women in terms of education (high rates of school dropouts), as well as with regard to access to and control over natural resources, access to public health services (particularly reproductive health) and access to justice. One of the main findings of this study was that indigenous women in the Peruvian Amazon had achieved a level of formal organization for the defense of their rights through their federations. There were still large gaps between international law standards and national and local practice; moreover, laws were not enforced as they should be, and access to justice was uneven. Pinedo's (2014, 179) study of social and political mobilization among the Arakmbut peoples of Peruvian Amazonia also found that women had been empowered through education and through participation in state-sponsored projects, but still had less access to training, faced opposition from their husbands and were confined to minor positions at the higher levels of indigenous organizations.

4.2 Changing gender relations among non-indigenous "traditional" Amazonian populations: Rubber tappers

Some non-indigenous Amazonian populations now viewed as "traditional" subsistence-oriented Amazonians, such as rubber tappers, began as migrants coming from other regions to become involved in the production of a commodity destined for the global market, often under semi-servile work relations. Single male rubber tappers

recruited to devote their time exclusively to latex production found their wives primarily from among local Amazonian populations, including indigenous women who were stolen in slaving raids (*correrias*) (Wolff 1999, 106, 163; Pantoja 2004, 116; Montysuma and Cruz 2008, 225). Non-Indian women also were taken to the rubber fields and used as concubines (Simonian 1991, 12). Over time, gender relations changed, and the rubber tapper livelihood systems diversified to include agricultural production whose tasks were shared among family members: men typically cared for large animals, while women raised chickens and pigs and took care of domestic tasks – those not valued in the market but which were largely responsible for family survival during periods of low rubber prices (Campbell et al. 1996, 32; Wolff 1999, 79, 98, 141; Pantoja 2004, 101). Marketable products (such as rubber and Brazil nuts) and cash from their sale were controlled by men, leaving women with few options for generating their own income (Montysuma and Cruz 2008, 226). Women's productive work remained largely invisible, despite its importance for subsistence in these remote communities. Over time, the rubber forests occupied by the rubber tappers evolved from enterprises controlled by powerful "patrons" to become the rubber tappers' "territories," and their livelihood systems diversified to include hunting, fishing, agriculture, manioc flour production, handicrafts, and non-timber forest product (NTFP) extraction (Wolff 1999, 117; Pantoja 2004, 206).

The rubber territories traditionally were spatially demarcated according to gender roles: the forest was associated with "masculine" activities such as hunting and rubber tapping, while the homestead and its surrounding home gardens and small animals were defined as women's space (Wolff 1999, 150). Cultural influences of northeastern Brazilian culture (i.e. patriarchal customs, ways of speaking, family values, gender roles) were recreated by migrants in the rubber tapping areas of western Acre in Brazil, where they took on their own characteristics (Wolff 1999, 47, 56). Violence, linked positively to masculinity, traditionally permeated relations in the rubber tapping areas, including relations with rubber bosses and traders, and between women and men (Wolff 1999, 195, 221). Many of these cultural practices persist to some degree in rubber tapping areas today, despite changes. Domestic violence in these areas is linked

with positive concepts of virility and masculinity; women still eat their meals seated on the floor while men sit in chairs, and are often excluded from male conversations (Wolff 1999, 57; Pantoja 2004, 211). Men typically are still seen as the family representative in community organizations and in outside spheres such as the rural unions.

The actual material practices of men and women often varied widely from the normative discourse of these gender divisions. Despite persistent forms of male dominance, over their lifetimes, rubber tapper women might have children with several different husbands or partners, and engage in diversified forms of work, including many instances in which men and women broke the gender “rules,” especially in cases of disease or outmigration of the husband (Wolff 1999, 37; Montysuma and Cruz 2008, 227). In western Brazil, Kainer and Duryea (1992, 422) found that over 64% of women had cut and collected rubber at some point and 78% had regularly collected latex tapped by men, yet tapping rubber nevertheless continued to be viewed as a male occupation (see also Simonian 1991; Campbell et al. 1996, 32; Wolff 1999, 17; Lazarin 2002, 249; Pantoja 2004, 172). Women participated at times in activities such as hunting and fishing that were seen as “masculine” (Wolff 1999, 131). Both women and men in the rubber tapping areas persisted in discounting women’s involvement in these activities, stressing the dangerous and harsh nature of the work in the forest, which was deemed as suitable only for men (Simonian 1991, 12).

Gender relations in Brazilian rubber tapper communities, patriarchal values, the spatial division of labor, social isolation and the exclusion of women from community and public arenas have strongly influenced women’s roles and livelihood strategies, and often limited their access to resource rights and decision making at household and community levels. However, rapid changes are underway in rural areas, especially among younger generations of extractivist communities, including complex migration and mixed urban-rural residential strategies supported by public social benefit transfers during recent years. Research is lacking to understand the extent, direction and impact of these changes on gender relations and on the management of forests controlled by rubber tapper communities.

4.3 Changing gender relations among non-indigenous “traditional” Amazonian populations: Brazil nut collectors

Other non-indigenous social groups in the Amazon have focused on collection of Brazil nuts or *castaña* (*Bertholletia excelsa*), the region’s other NTFP with a long-established global markets. Women are far more prominent in livelihood activities related to non-timber products (besides rubber) versus timber in Amazonia, especially in the established forest product market for Brazil nuts (Lazarin 2002, 249; Shanley et al. 2008). Brazil nuts constituted almost half of Bolivia’s forest-related exports in 2005, worth almost USD 74 million, accounting for half of global exports (Cronkleton and Pacheco 2010). Brazil nut collection and processing provided an estimated 22,000 jobs, employing some 5500 migrant workers, an impressive number out of a total population of only 52,525 in the northern Pando region in 2001. Brazil nuts are collected seasonally – from December to March of each year – and men in Pando migrate to work elsewhere at other times of the year, giving women greater autonomy than in more settled extractivist populations such as those in Acre, Brazil (personal communication from J. Alcorn, 2014).

In Peru, colonist groups who migrated into the Amazon region from the highlands, mostly the Cusco region, had to learn how to construct livelihoods in the new Amazonian environment (Porro 2004, 10). Families in Madre de Dios, for example, worked hard to learn how to gather NTFPs, such as Brazil nuts and to manage timber. Although many of those colonist families have been in the region for over 30 years, some still did not have legal rights to the land and they suffered difficulties when dealing with forest and mining concession owners who are more economically and politically powerful than the “*castañeros*” (Chavez et al. 2012, 1).

Indigenous and campesino women in Bolivia face similar challenges to their Peruvian counterparts (Porro 2004, 5; Llanque et al. 2012). The indigenous and non-indigenous women who live in northern Bolivia have had conflicts with informal forest estate owners called *barraqueros* for whom they were forced to work because they lacked land rights (Cronkleton and Pacheco

2010; Alcorn 2014). The majority of indigenous people in Pando received property rights in collective land grants called *Territorios Comunales de Origen*. The land rights of non-indigenous people were not secured through tenure reform until 2000 when the “500-hectare decree” granted communal land rights in the Amazon, with a minimal allotment of 500 ha per family, and families joined into new communities to demarcate and gain the new collective titles. The gender rights associated with land entail the same ambiguities and potential constraints as other communal landholdings as they lack definition of internal norms of occupation of the territory.

Women in regional urban centers such as Riberalta (Beni) and Cobija (Pando) often work in the urban-based *castaña* processing industry (Porro 2004, 18). *Castaña* is the economic base of Riberalta, a relatively new city that, in 2001, housed 20 Brazil nut factories that hired over 4000 workers, 75% of them women (Montero and Pavedo 2003, 35, 73). A highly specific gender division of labor places men in charge of Brazil nut collection, while women are employed as piece workers in urban processing as “female factory workers in an agroforestry production export enclave” tied tightly to forest products (Montero and Pavedo 2003; Stoian 2005, 1481). Most of these industries hired more women than men, mainly because they can pay women less; working as subcontractors and piece workers, many women in turn subcontract to other workers, and/or enlist their school-age children to work with them as unpaid family laborers, often during both day and night shifts. Labor relations combine “flexible” and seasonal labor contracts (8 months of work per year) with personalized patron-like relations with employees that resonate with patriarchal family values, and with informal credit through the traditional *habilito* custom (Montero and Pavedo 2003, 55). Following the decline of the traditional Brazil nut economy in the 1980s, Bolivian National Structural Adjustment Policies focused on promoting non-traditional exports, including Brazil nuts; processing plants expanded due to incentives and to a new road built in the 1990s (Cronkleton and Pacheco 2012). By the late 1990s, Bolivian factories had taken over the lead in Brazil nut production from Brazil; 90% of the world’s Brazil nut trees are found in the Bolivian Amazon.

The complex and changing land tenure arrangements, migration patterns, production practices and labor relations involving Brazil nut collection and processing, which combine collective and individual, traditional and wage labor ties, differ markedly across national contexts (Duchelle 2009). More systematic research is necessary to assess the impact of these changes on forest resources, gender relations and family livelihoods.

4.4 Changing gender relations among other non-indigenous Amazonian populations: Riverside dwellers, migrant colonists, and peri-urban dwellers

In addition to indigenous peoples, rubber tapper communities, and Brazil nut collectors and processors, Amazonia is home to many other social groups, each with its own unique history, identity, ways of making a living, and political presence, whose experiences defy generalization (Almeida 2011). Little systematic information is available about gender relations and livelihood strategies among these diverse populations. One study of over 1000 rural Amazonian women found that 57% cited forest extractivism as their principal economic activity; one-third also worked off-farm, but with low incomes (Guedes et al. 2001). Many of these women may be self-employed, and it is likely that more recent data would show a decline in extractive employment, and an increase in reliance on social welfare benefits such as retirement and conditional cash transfers that make up part of Brazil’s anti-poverty program, and which reach from one-quarter to one-third of Amazonian households (Guedes et al. 2001).

Historically, migrants and their descendants have occupied Amazonian riversides and floodplains where both women and men may be involved in subsistence agriculture along with forest product marketing, often without clear land and resource rights. Among Brazilian floodplain communities, work with *açai* palms and other resources is “highly gendered;” resource-based economies are predominantly controlled by men, including production and trade, while direct sales networks have opened opportunities for rural and urban women, despite economic risks

(Brondizio 2011, 221). One study of a community in northeastern Pará, Brazil, revealed the changes in gender relations prompted by the boom in the international *açaí* market (Cunha 2006). Since the eighteenth century, the population of the municipality of Igarapé-Miri has depended on extraction of forest products including oils, fiber, bark, leaves, resin, palm-heart and timber. In the 1980s, the region suffered important changes with the decline of the local sugarcane industry, the impact of the Tucuruí dam on fish populations and the expansion of factories that extracted palm heart, threatening the *açaí* palm whose fruit and juice still constitute a staple food (Cunha 2006, 6). While many rural workers migrated to the nearby town of Igarapé-Miri, a group of leaders convinced a group of residents to return to the rural area to develop an alternative development scheme, with support from an Italian church group, an NGO and the local university. Working with local government and other allies, the group trained members in improved practices for *açaí* management and began to export to the US market in 2003, becoming certified two years later. Local women participated actively in building the new community project and formed their own *Associação das Mulheres de Igarapé-Miri* (AMIM). One of the women's concerns was that benefits such as rural credit were reserved for men, as official family representatives. By 1992, a woman was elected to the local rural workers union directorate, and a woman became president in 2003, converting women's role over time from helpers to protagonists (Cunha 2006, 10).

A quite different population of Amazonian communities is found in official colonization settlement programs. Studies have found a wide variation of gender roles and livelihoods among migrant agricultural colonists, evolving over time through predictable land-use stages in the "pioneer cycle" (deforestation and annual crops, followed by perennial crops and/or pastures) but also shifting in response to availability of labor due to lifecycle changes (Grist 1999, 3). Women's participation in agriculture ranges from full participation, especially in the early stages of frontier settlement, to cases of the *housewifisation* of pioneer settler women who lose access to economic activities after family migration, especially in places with high male-to-female sex ratios, or where cattle ranching dominates (Townsend 1995). There is evidence

that migration often leads to a decrease in women's independence, to greater social isolation, and to invisibility of their work contributions (Grist 1999, 8, 16). Grist (1999) found that women's participation in agriculture was low compared to men's; men cared for large animals and women generally managed small animals and the majority of household tasks. Men were generally the titled owners of family lots and of houses, and usually made all significant decisions in the household; women often had no access to cash. Moreover, while women contributed to church and community projects (often preparing food for participants), they participated little in community decision making due to lack of attendance at meetings, and women displayed little evidence of empowerment (Grist 1999, 20).

Among many agricultural colonist families, rights to land through settlement in an official colonization program help to secure subsistence production centered around the subsistence plot known in Brazil as the *roça*, laden with strong cultural meaning linked to autonomous control over land for production (Porro 2001, 305). In such a system, forests are viewed primarily as the biomass that, once cleared, provides the basis for the *roça*, a kind of "checking account" that can be drawn upon regularly, while the sale of logs may provide a useful by-product of their land clearing activities. Although colonists see themselves as the principal decision makers in managing their forests, the top-down system of approval for forest management projects often completely neglects local social and environmental aspects (Porro 2001, 314).

Growing numbers of rural Amazonians are shifting their residences at least partly to towns, to gain access to schooling and employment (such as Brazil nut processing). NTFPs play an essential role in the livelihood strategies of peri-urban dwellers in the Bolivian Amazon, whose rural-to-urban migration can be seen as a response to shifts in extractive economies (Stoian 2005, 1474). As in Brazil, male household heads may stay in the rural areas, while their wives and children move to town in order to continue schooling. More research is needed to understand the impacts on forest and livelihoods of this growing "multi-sited" livelihood strategy (Padoch et al. 2008).

5 Gender in forest management programs

There is little focus on gender in the extensive literature on community management of forests (CFM) in Latin America. CFM has been a focus of many initiatives in Central and South America since the 1990s, although the extent to which community-based timber management projects have led to greater local control over forests varies widely due to global, regional, and local social and political structures, as well as the internal inequalities within communities (Alcorn 2014; Stone 2003: 3). The 15-year BOLFOR project in Bolivia (funded by USAID) supported the development of forest timber management legislation and infrastructure and promoted community forest management in the lowlands during the 1990s and 2000s (BOLFOR 2009). In Brazil, the Pilot Program for the Conservation of the Brazilian Rain Forest (PPG7) provided significant support for experimentation with community-based timber management in the Amazon region starting in 1992, and the Brazilian Government began to invest in CFM and to promote timber certification in the mid-1990s (Stone 2003, 57; Souza and Mello 2005, 13). The *Fundação Florestal Tropical* based in Belém, Brazil developed training programs for foresters to inventory both timber and NTFPs, taking local community values for these products into account (Shanley et al. 2008, 34). Whereas some Brazilian states such as Acre have heavily invested in support for CFM, in other states such as Pará, CFM initiatives have been more autonomous, often lacking formal management plans (Souza and Mello 2005, 14). Recent studies have emphasized the great potential sustainability of such “discovered” community forestry initiatives, as opposed to “designed” models conceived and introduced by outsiders, which have been less successful (De Jong et al. 2010; Alcorn 2014).

Most community forest management models focused on commercial production involve co-management between communities (which often

practice informal rules for access to forests) with state ownership and control, introducing new rules and formal laws; both formal and informal systems may discriminate against women (Cronkleton et al. 2012; Vazquez 2013, 11). CFM also encourages communities to interface with new market demands and dynamics with which they have little prior experience and which may create tensions with their traditional socioeconomic practices and roles (Souza and Mello 2001; Schmink 2004). Markets for NTFPs may be narrow and unpredictable and meeting their demands for uniform production and quality may be difficult for communities, especially women (Schmink 2004; Shanley et al. 2008, 94). “As forest market value has increased, women have been marginalized from decisions about forest management,” although they have played important roles in agroforestry and forest restoration (Alcorn 2014, 15). Among the MAMA members surveyed in 2000, 66% of women knew about marketing channels and points of sale, but only 19% reported that they participated in these markets, of which 40% did so as a member of a group (Guedes et al. 2001).

The relatively scarce documentation of gender approaches within commercial forest management programs suggests that program managers and implementers typically do not consider how gender differences in use, knowledge and rights to forest resources and responsibilities for family livelihoods, might be important inputs in planning forest management activities. Even when gender is addressed in policies, its implementation rarely goes beyond attempts to form “women’s groups” without an effective gender strategy for involving forest resource users.² In the absence

2 For an example from Nicaragua of the lack of operationalization of gender policies, see Mairena et al. (2012) http://www.cifor.org/publications/pdf_files/WPapers/WP95Larson.pdf.

of explicit attention and resources addressing gender difference in resource use, programs are likely to make assumptions about gender roles and knowledge that lead to missed opportunities to support and empower both male and female forest managers in rural communities.

Lack of attention to gender in CFM is part of the larger problem with CFM efforts in Amazonia, whose framework, based on the experience of large-scale commercial operations and the Central American community forestry experience, is inappropriate for most local communities in the Amazon (Pokorny and Johnson 2008; de Jong et al. 2010). Case studies of CFM in Bolivia, Brazil, Ecuador and Peru showed that current national legal and regulatory frameworks and existing pilot projects, lead to long-term dependence on outside experts and ignore the complementarity of logging with broader livelihood systems, and the values communities, and particularly women, give to protecting (not logging) forest. For most Amazonian communities, forestry comprises an integral part of diversified and evolving production systems that are generally ignored in CFM programs. In order to fit within the diverse livelihood systems of Amazonian small producers, Pokorny and Johnson (2008) compellingly argue that CFM should take existing local practices as their point of departure and emphasize education and extension. Sears et al. (2007, 697) document the development of the smallholder timber industry of the Amazon floodplain in Brazil as an “outstanding example of local patterns of resource management and economic activities transformed from within.” De Jong et al. (2010) recommend several measures to balance conservation and development pressures on Amazonian forests, including: better controls over illegal forest use; stronger governance including mechanisms to facilitate public participation; land reform to regularize both collective and individual rights; and improving links of poor Amazonian populations to knowledge, technology, and markets to support sustainable forest use. Support for “self-generated” initiatives with stronger stakeholder participation is key to incorporating diverse community interests and perspectives, thereby increasing the potential sustainability of forest management (Alcorn 2014, 7).

5.1 Community timber management

Amazonian forest policy reforms have tended to focus on commercial-scale timber extraction, rather than on small-scale management of timber and non-timber products in multi-use systems (Schmink 2004; Sears et al. 2007; Pokorny and Johnson 2008). Yet many Amazonian smallholders operate informally (Alcorn 2014). A case study among settlers along Brazil’s Trans-Amazonian Highway found that participation in forest management was defined and practiced differently by various forest actors in self-generated forest enterprises (Porro 2001, 301). Another case study in Goianésia found that small-scale farmers sold timber through informal agreements mainly brokered through middlemen (Souza and Mello 2005, 21).

Studies from the Brazilian Amazon show that many community members – not just the small number of male community timber “managers” involved in direct forest operations – participate in timber management projects in diverse ways, often finding innovative and unexpected ways to influence projects (Stone 2003, 4, 10). Households and individuals with the best access to resources, as well as prominent roles in the local association, are likely to participate more than others (Stone 2003, 12, 171, 263). Usually male heads of household are the principal participants and beneficiaries of timber management projects, assumed by those implementing the projects to be the direct “managers” even in the absence of prior logging experience (Stone 2003, 132, 263). Logging provides male jobs that are often dangerous and isolating. Direct benefits from timber management in Bolivia, such as wages, have typically flowed to men rather than women, and women have complained that they do not even know how much men are being paid, although they are grateful their men do not have to migrate to find employment (Cronkleton and Bolanos 2005, 208). Women in some communities are more critical than men of timber management projects (Montysuma and Cruz 2008, 234). However women may also participate in diverse support activities such as cooking for men and lending them tools and materials – tasks carried out near the homestead that is viewed as women’s space (Stone 2003, 274). Yet in general, women rarely participate in community timber management associations; timber sales decisions are taken by

men and women participate little in management, leading to restricted access to knowledge and benefits (Stone 2003; Vazquez 2013, 14). Shanley et al.'s (2011, 239) study reported that, "today, in rural communities throughout Amazonia, decision making regarding timber management and land use remain the domain of men."

Despite the many substantial investments in community timber management projects in the Amazon region, little is known about the impact of such diverse programs by gender in terms of labor and employment, access to benefits and participation in decision making. More research is needed on different kinds of public, private and community co-management and their functioning in different social and environmental contexts, and the ways that policy changes and implementation of project interventions have shifted customary patterns of resource access and use by men and women. Small-scale and community timber producers, especially women, could benefit from policies attuned to their variable states of organizational development and different types of interaction with buyers, intermediaries and other market actors (Souza and Mello 2005, 23). Research is needed to determine whether and how projects have approached gender, and to what extent they have introduced new gender biases or successfully promoted more equitable access to information, benefits and participation. Under different market, tenure policy, taxation, and institutional arrangements, how does timber management differentially affect men and women's participation and their livelihoods, in Amazonian forest communities?

5.2 Non-timber forest product (NTFP) management

The gender division of labor commonly associates men with timber and women with multi-use, small-scale, local, informal activities. Men's and women's knowledge also differs according to these areas of expertise: one study of 1515 men and women in Pará state of the Brazilian Amazon found that women listed twice the number of NTFPs compared to men (Shanley et al. 2011, 239), and in another study in the Bolivian Amazon, men mentioned twice as many timber species as women (Vazquez 2013, 16). Men in Brazilian Amazonia were more likely to cite

timber products among important forest products, whereas women included a variety of species used for food, nutrition, medicines and other cultural uses (Shanley 2011, 239). This organization of knowledge into complementary but distinct gender domains provides a valuable, collective adaptive resource for rural communities.

A favorable environment emerged in Brazil in the 1990s for new initiatives supporting women's groups to form collective microenterprises to work with forest resources (Mello 2014). Rural workers unions, NGOs and organizations linked to the Catholic Church invested in training women for production and entrepreneurship, and in 2000, the women's secretariat of the rural workers' federation of Pará state along with NGOs organized a meeting of women involved in 70 microenterprises working with forest resources (handicrafts; beekeeping) in seven Amazonian states (Mello et al. 2013). In that 2000 meeting, women identified deforestation, lack of value given to women's activities, lack of financial resources, low prices of products, and poor technical production capacity as critical factors that hampered their microenterprise improvement; this meeting led to the creation of the Amazon Rural Women's Microenterprise Network (RMERA) which expanded to include 150 women's collective microenterprises in nine states, by the second meeting held in 2003 (Mello 2014). Rural women's organizations, such as this one, were able to influence new national policies focused on rural women's employment and women's rights, and to marshal resources due to the international attention to forest-based development in the Amazon region, for developing women-owned enterprises based on forestry and agroforestry systems (Mello 2014).

Surveys were carried out in 2003 and 2008 with women in RMERA who were involved in these 150 collective microenterprises operating in nine states of the Amazon, most of them focused on processing of NTFPs (Mello et al. 2013). The interviews showed that women's participation in collective microenterprises was primarily motivated by the desire for financial autonomy and additional family income through forest product use; the majority (88%) used NTFPs to produce handicrafts, medicinal products, cosmetics, jellies, sweets and fruit juices (Mello et al. 2013). Only 15% of these collective enterprises had received

technical support from the government or the private sector; 80% were started with the women's own financial resources and 85% of women received training and/or technical support from NGOs. One of their most striking features of the women's collective microenterprises was their social entrepreneurship character, combining economic activities with social, political, and environmental goals and activities. Because of the collective nature of the microenterprises, they constituted support groups to help build women's self-confidence and the capacity to claim greater access to household and community resources and to decision-making arenas. Women activist leaders involved in RMERA collective microenterprises reported experiencing significant economic empowerment due to material changes such as increased income and greater decision-making power, as well as cognitive, perceptual and relational changes related to the multifaceted impact of the economic enterprises and training opportunities of the collective microenterprises (Mello 2014).

Little published information is available, in general on access by women (especially minorities) to financial resources and other supports for such microenterprises, but available evidence suggests that access to credit, technical assistance and other inputs is limited. For example, Brazil's FNO credit program never considered credit for home gardens, food crops or small animals, important economic activities that are primarily women's responsibility in both rural and urban areas of Amazonia (Murrieta and Winklerprins 2003; Favila 2006, 10; Amaral 2008, 62). Lack of credit may be partially explained by the observation that promoting value chains for women can be risky because product markets are often taken over by men when economic demand grows; markets introduce new types of gender norms/values that may be unfamiliar or uncomfortable for women, such as how to access bureaucracies and public services, as well as new market niches (Bose and van Dijk 2013, 6).

Literature on NTFPs demonstrates their importance for women and their families, and women's strong involvement in NTFP management, even without women benefiting from state support provided to men for timber projects, including technical assistance and credit. Because of their combination of economic,

social and political goals, women's initiatives often require broader strategies of support that take into account family livelihood diversification, strengthening of social and political organization and leadership, as well as environmental planning and practices of family enterprises. More research is needed on the many experiments underway to support women's NTFP management, often promoted by grassroots groups or NGOs, to identify the most effective ways to support women's organizations and enterprises, and to understand how these experiments affect forests and livelihoods, as well as women's empowerment.

5.3 Pilot Program to Conserve Tropical Forests (Brazil)

The growing mobilization of women has not been matched by adequate attention to gender within major forest-oriented programs in the Amazon, such as the Pilot Project to Conserve Tropical Forests in Brazil (PPG7). A case study of gender in the PPG7 program found a "great lack of data" (Favila 2006, 25) disaggregated by gender to show patterns of participation and empowerment. Questionnaires and interviews with managers about the treatment of "gender relations" in PPG7 subprograms and projects revealed a large gap in women's technical training, especially in production and resource management. "In general, gender is not a topic for reflection and does not have specific activities" (Favila 2006, 9, 20). Many managers had no idea how to deal with the topic beyond affirmative action strategies such as quotas. Many parts of the pilot program had no gender initiative at all and yet all program leaders could cite at least one case in which gender relations were important for project goals of forest management – such as women's management of medicinal plants, and indigenous women's traditional roles and knowledge. Yet many agroforestry systems were implemented in the PDA without consulting women (Favila 2006, 9). These findings suggest that the PPG7 program missed a number of opportunities to support efforts by both women and men in Amazonian rural communities to implement improved forest resource management programs, and to understand how such gender-disaggregated support efforts might affect the outcomes of forest management programs.

Only one-third of the dozen programs that made up the pilot program reported having some gender-focused activities: those that directly supported demonstration projects with communities for resource management and marketing (Sustainable Business; ProManejo; Proteger; ProVárzea). Generally the program managers developed these activities in response to demands from local women's organizations (Favila 2006, 25). Only Proteger (focused on fire management) and ProVárzea (focused on floodplain management) programs collected data disaggregated by gender to enable analysis of results by gender (Favila 2006, 25). The data showed that ProVárzea activities contributed to a 32% increase in women occupying directors' positions in community associations they supported (Ruffino et al. 2011, 331). Proteger succeeded partly through quotas: the program trained 56 female and 84 male local extension workers and female participation in local training grew from 31% to 49% as they used simple strategies such as adjusting content (e.g. to include water, medicines and home gardens), shifting meeting times to fit women's schedules as well as men's and disaggregating data collected on participation in field activities by age group and sex (Favila 2006, 25). The Proteger program also incorporated discussions of gender in annual, regional and local meetings, including assessments of the effectiveness of gender strategies and in communications through 300 community radios and with the Amazonian Women's Movement (Favila 2006, 29). In addition, Proteger produced a manual on *How to Work with Women*, systematically collected disaggregated data and integrated gender transversally across programs (Favila 2006, 32).

While technical teams were found to be relatively gender-balanced, fewer women were found at the coordination level except in "women's" projects, where they were the majority (Favila 2006, 20, 28) "Women's" projects (food production; medicinal plants; handicrafts) tended to be headed by women's groups and to incorporate reflections on gender roles and relationships; some organizations strengthened by ProVárzea previously had benefitted from participation in the strong women's movement in Santarém (Favila 2006, 27). Pro-Várzea trained 810 women and incorporated attention to gender and a micro-credit program (Favila 2006, 10, 26). Training and

income-generating projects were the main ways women participated – often the first step towards empowering them to participate in local political life and to occupy local political positions or represent the community on local councils (Favila 2006, 27). In contrast to the project's attention to individual women, the study found little support for women's organizations by the demonstration projects. However, some demonstration projects resulted in the creation of women's organizations and other projects such as *palmito* and honey producers in Rondônia that increased family income, nutrition and health (Favila 2006, 13, 28). In general, cultural resistance on the part of women's families reportedly kept women's participation low in demonstration programs although lack of attention to gender in the operational design of the program may have contributed to this (Favila 2006, 28, 31). Women-only projects were found to be necessary to strengthen women's organizations.

5.4 BOLFOR (Bolivia)

In parallel to the pilot program in Brazil, BOLFOR, a major government forest management program, was funded in lowland Bolivia by USAID over a 15-year period, beginning in 1994 (BOLFOR 2009). The initial strategy focused on dramatically growing support for men trained under BOLFOR's technical training program, with scant female participation, as can be seen in Figure 6 (BOLFOR 2009, 23).

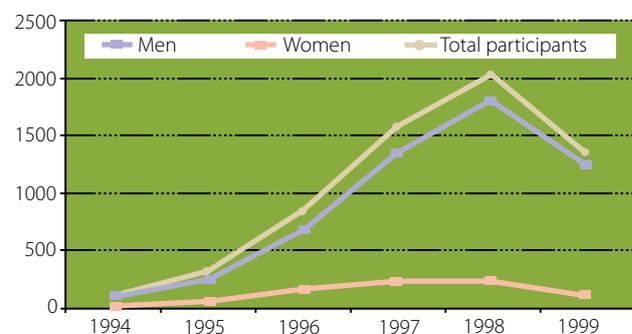


Figure 6. Participants in BOLFOR training by gender.

Source: BOLFOR 2009, 22.

After supporting the establishment of national legislation and infrastructure to promote sustainable commercial forest management, beginning in 2000, BOLFOR II focused on supporting community-level forest management; USAID required the inclusion of a gender strategy that included scoping exercises, training in gender analysis, production of gender analysis manuals and monitoring of impacts by gender. Studies from that period provide valuable insights into the ways that such changes in a major CFM program could broaden participation by community residents, building local capacity for collective self-management – although comparable data on men’s and women’s participation were not available for the later period (Cronkleton 2005, 264).

There was initial resistance by some BOLFOR program managers and staff to addressing gender, which was seen as an inappropriate outside imposition, but the project gender team pointed out that BOLFOR was already changing household labor patterns and access to knowledge and income, without adequate awareness of the implications of these changes across the different social groups in the community (Cronkleton 2005, 264). At first, the project carried out gender training with BOLFOR technical staff, but this was seen as a work overload so the strategy was changed to integrating gender into the technical work. A practical guide was created that suggested ways to promote women’s participation in technical assistance: explicitly inviting women to participate; carrying out community-based training, scheduled at times convenient for women’s schedules; and following up with women who participated (BOLFOR 2009, 41). BOLFOR also identified and promoted discussion of content and language contained in the statutes of community organizations that contributed to women’s exclusion, such as the requirement that all forestry organization members carry out technical forestry activities; sometimes women were unable to become members due to a lack of personal documents (BOLFOR 2009, 56, 78).

Reframing the argument about broader participation rather than “gender” shifted the focus onto questioning assumptions about forest management and community dynamics, specifically the narrow focus on logging, and eventually led to the insight that long-term viability of the CFM projects would require not only technical training

of male loggers, but also technical capacity and organizational skills of the whole community to support the enterprises. “Once the foresters realized that the gender policy would not increase their workload (only required changing some practices) and saw that a gender focus offered useful concepts that could improve their understanding of village dynamics and increase the project’s chances of long-term success, they were convinced” (Cronkleton 2005, 265). Technicians began to reach out to invite women to participate in meetings, to encourage their active participation and to validate their contributions, using smaller group formats and translators when appropriate (Cronkleton 2005, 266). After 2004, the BOLFOR II strategy focused on a smaller number of communities (15), broadened the groups of people involved in training, and expanded training to focus more on organizational and administrative capacity building, which had the potential to attract more women (BOLFOR 2009, 26).

The distribution of benefits from community forest management in Bolivian communities is based on the collective ownership of forest resources; the forest legislation implies equal rights for men and women although the text of the law does not make that explicit (BOLFOR 2009, 33). Since not all community members are members of the community forestry organization, there can be complex levels of decision making (especially for indigenous communities) related to forest resources, the timber management project, the community as a whole and broader inter-indigenous interests. Women in one of the Bolivian indigenous communities working with BOLFOR told a researcher that they were interested in participating in the CFM project, primarily by providing food to workers, but they had difficulty balancing even such traditional activities with the time required for their household tasks and to attend meetings. Some attended despite the disapproval of some husbands, but in other cases even the wives of project leaders did not participate because their husbands discouraged them from doing so (Bolaños and Schmink 2005, 288, 291). The BOLFOR program failed to consider the impacts of new logging activities on the community agricultural cycle, and women complained that men’s abandonment of their agricultural tasks in order to do forestry work was forcing women to do more agricultural work and thus limiting

the time women had available to join the forestry project (Bolaños and Schmink 2005, 293; Cronkleton 2005, 261).

Over time, BOLFOR reported that the project gradually increased women's participation in project activity through greater support for grassroots groups; community-based training; explicit invitations to both men and women; and systematic documentation and follow-up of women's participation (BOLFOR 2009, 26). Women were especially interested in training in organizational skills, policy, administration and marketing; women's participation in administrative activities contributed to success in some forestry organizations, providing evidence of their potential contributions to forest management programs in Amazonia (BOLFOR 2009, 101). In summary, the BOLFOR experience confirms that differences in gender roles and interests, and the links between forest use and other livelihood activities, are important elements that become visible only when a CFM project takes a broader view of CFM that includes addressing evolving cultural beliefs, power differences and constraints and opportunities linked to the gender division of labor, opening opportunities for non-traditional participation while simultaneously valuing traditional support roles (Bolaños and Schmink 2005, 293).

The experiences of major community forest management programs such as BOLFOR and the pilot program, that were initially implemented without consideration to gender, demonstrate the potential for relatively small changes in project strategy to increase both women's and men's participation, contribution, and benefit from forest management, allowing such projects to address a broader range of important livelihood interests and reach more people (Van Holt et al. 2010, 799). Without explicit attention to gender, such projects miss important opportunities to increase the effectiveness and impact on resource rights, labor allocation and empowerment of both women and men – instead of increasing female workloads as in the BOLFOR example above. Future research is needed to learn from forest management programs in the Amazon regarding which strategies are most effective at addressing the interests and constraints of

distinct social groups in forest management under different sociocultural, economic, political and environmental conditions.

5.5 MERGE (Managing Ecosystems and Resources with Gender Emphasis)

The MERGE program (Managing Ecosystems and Resources with Gender Emphasis) was a collaborative network of organizations that, during the 1990s, pursued a strategy of mutual learning focused on gender, community participation, and natural resource management in Peru, Ecuador and Brazil, with a strong focus on the Amazon (Schmink et al. 2002). The smaller MERGE project brought together funds from several donors to support three universities³ and seven NGOs in Bolivia, Peru, Brazil and the US, who worked together to build a partnership among equals, respecting and learning to deal with diversity. While sharing common interests and goals, each organization defined its own objectives and activities, and controlled its own funds. The MERGE program adopted the approach of “cross-training” to emphasize the importance of different kinds of knowledge exchange and of social learning grounded in comparison of particular sites, alongside a broader approach, working through partnerships, to build a process of learning for institutional change.

A first step was training in participatory approaches to working with local communities, avoiding “gender” as an initial entry point in favor of a focus on working with heterogeneous local communities to incorporate gender and other concerns into natural resource management strategies. The MERGE strategy and conceptual framework (Schmink 1999), which was developed and adapted over several years and in diverse sites, used gender analysis as a point of departure to approach diversity in community-based conservation efforts by adopting a collaborative

³ The University of Florida coordinated the MERGE network of partners. MERGE reports including the conceptual framework, four case studies, and an unpublished book on the MERGE experience can be accessed at <http://www.tcd.ufl.edu/research/merge/merge-case-studies>. The MERGE program was supported by five inter-connected grants to different partner institutions from the John D. and Catherine T. MacArthur Foundation and USAID-Brazil, among other sources.

learning approach and developing participatory techniques for conservation projects in different conditions. The conceptual framework provided a useful set of guiding questions for incorporating gender, community participation and natural resource management, analyzing the historical context, different interest groups inside and outside rural communities, project and institutional design and implementation and links to natural resource management.

The MERGE program produced two Amazon-specific case studies of successful approaches to incorporating gender into community-based natural resource management (Oliveira and Anderson 1999; De Paula et al. 2003). The cases provided insights into the creative and complex process of adapting projects to better address gender issues at diverse scales, often using simple strategies (e.g. mixed field teams; separate interviews and questionnaires; gender-differentiated mapping of resource use; separate meetings and trainings for women at convenient times and places) that evolved to improve women's and men's participation. In two extractive reserve communities in the Brazilian state of Rondônia, a diverse team of facilitators strengthened women's participation in developing community development plans by working with both men (encouraging them to support women's participation) and women (often taking advantage of the kitchen as – to the researchers – a surprising “space for participation” by women) (De Paula et al. 2003). In the Brazilian state of Amazonas, a local NGO used simple gender-disaggregated interviews and participatory mapping to incorporate a complex understanding of gender differences in consumption and production activities into their planning for the vast Jaú Park (Oliveira and Anderson 1999).

The MERGE approach also fostered longer-term institutional changes among at least six of the twelve participating organizations, which included indigenous organizations in the Ecuadorian Amazon region, local and national NGOs in Brazil and Peru, and one donor organization, the USAID-Brazil Environment Program (Arroyo and Poats 2002; Arroyo et al. 2002, 54). Key factors cited as important in supporting institutional change included the actions of key individuals, the intellectual stimulation provided by the conceptual framework, continued training and nurturing to multiply the impact of training sessions,

and significant time and resource investment in building and maintaining networks among partners. Subsequent follow-up has not been carried out, but in 2002, eight years after the beginning of the MERGE program, most of the partner organizations had continued or expanded their work with gender and community participation, and some had institutionalized gender concerns in their work plans, institutional missions or work philosophy; many individuals who participated in MERGE had moved to new positions where they had worked to integrate a gender focus into other organizations.

Essential lessons learned from the MERGE program, and relevant to this review, included the following:

- **Conceptual complexity:** Gender issues are embedded in conservation and development issues in complex ways across multiple scales. The incorporation of gender at the policy level requires skill in analyzing context and different scales. For MERGE, an evolving conceptual framework (Schmink 1999) was developed to stimulate discussion and critical thinking on these issues.
- **Comprehensive action strategy:** The MERGE program pursued a strategy of linked activities at many levels, including training, building partnerships and mutual learning, site-level application and applied research. Each activity was designed with multiple reinforcing objectives in mind and was implemented in ways that would bring together people from different countries and organizations to learn together.
- **Mutual learning:** The MERGE approach to learning focused on mutually reinforcing change at personal, methodological and institutional levels.

While over two decades have passed since funding for the MERGE program ended in 1994, it continues to inspire people and organizations in the Amazon region, such as a health program near Iquitos, Peru (<http://www.amazonpromise.org/index.php/newsletter/finish/5-newsletters/45-amazon-promise-fall-2012-newsletter>, p. 14). Still, the conceptual and methodological advances of the MERGE program have not been adopted by major CFM programs, in part because the results of the project activities were only published belatedly, online (<http://www.tcd.ufl.edu/research/merge/merge-case-studies>), and because of the costs and complexities involved in such participatory approaches.

6 Women's social movement participation

Because of the widespread tradition of men representing their households in the public sphere, often the male head is the only household member who joins and represents the household in Amazonian community associations, and when women do attend community assemblies, they often remain silent (Stone 2003, 276). This effectively removes women from many of the spaces and institutions where key decisions are made about the future of their forests, their family and community. Studies on women's participation in governance have tended to ignore community and territorial levels, in the Amazon as well as elsewhere (Bose and van Dijk 2013, 4). The studies that do exist (such as those focusing on women's participation in the rubber tappers social movement) indicate that men predominate in the main extractive reserves associations and cooperatives, at best alongside small women's organizations (Favila 2006, 23).

This historical pattern appears to be changing, based on scattered evidence of success stories of Amazonian women organizing and gaining greater voice and influence, often with support from NGOs (Alcorn 2014, 12). One of the most surprising outcomes of this literature review was consistent evidence of women's gradual collective mobilization across all social groups, gaining confidence and skills to empower themselves and to fight for their rights to resources and power in different arenas, as a means to secure sustainable livelihoods for their families and communities. Women represent half of the Amazonian population, and because their knowledge, work and commitment are essential for securing sustainable futures, their efforts to strengthen their voice and organization for stewardship of Amazonian forest resources deserve far greater research attention and support.

6.1 Indigenous organizations

In Ecuador, indigenous organizations began forming among the Amazonian *Quichua*, *Shuar*

and *Achuar* groups in the late 1960s, leading to the creation in 1980 of CONFENAIE (*Confederación de Nacionalidades Indígenas de la Amazonia del Ecuador*), an inter-indigenous organization which has emphasized unity in its struggles for indigenous rights, while considering women's issues within this framework; it does not have a specific agenda on gender because gender concerns are seen as a divisive outside imposition (Aviles 2008, 12, 31). The first national women's indigenous organization in Ecuador, the *Consejo Nacional de Mujeres Indígenas del Ecuador* (CONMIE) was created in 1998, at the initiative of a group of women activists who wanted to unify the efforts of the women's secretariats of five mixed-sex indigenous organizations because they were concerned about men's monopoly of power (Aviles 2008, 13). A case study by Aviles (2008, 56) outlines the evolution of Huarani women's involvement in the growth of their indigenous struggle, first within ONHAE (*Organización de la Nacionalidad Huaorani de la Amazonia Ecuatoriana*) created in 1990. Later they created AMWAE (*Asociación de Mujeres Waorani de la Amazonia Ecuatoriana*) in 2005, which was linked to but independent of ONHAE, and with the financial support of outside NGOs and oil companies (which paid lower honoraria to women leaders from AMWAE than to men leaders from ONHAE). Women's increasing mobilization was motivated in part by the perception that the adoption of new forms of organization based on external models was undermining Huarani traditional gender equality and complementarity, and marginalizing women from leadership and decision making on key community issues. Paradoxically, the creation of AMWAE gave women more voice and visibility, but largely confined their participation to women's issues such as handicrafts and tree nurseries, and converted ONHAE into an all-male organization due to the scarcity of female leaders (Aviles 2008, 70). AMWAE has expanded women's networks, and promoted the election of a woman to national leadership in CONFENAIE, as well

as built capacity to negotiate and participate in public arenas, and supported short-term income-generating projects (Aviles 2008, 73).

The Indigenous Women's Program of the *Asociación Interétnica de Desarrollo de la Selva Peruana* (AIDSESP) published a revealing report on the evolution of gender relations within this important organization that represents 1300 indigenous communities grouped in 57 federations and 6 regional organizations (AIDSESP 2006, 8). Since 1998, women have successfully promoted internal changes to the organization's statutes and representation in key decision-making committees, to increase women's participation in AIDSESP and recognition within their community organizations, gradually overcoming some degree of resistance from men and fear that a focus on women's needs might weaken the unity of the movement (AIDSESP 2006, 25). External support organizations, including GTZ and NGOs, supported a series of over 300 regional and community-based workshops to gain support from men, and to train a team of leaders in each region, emphasizing the importance of complementarity of both men's and women's participation (AIDSESP 2006, 29). Many of AIDSESP's female leaders began their activism in groups formed by government welfare programs such as mother's clubs and community kitchens, slowly building in confidence and overcoming their reluctance to speak in public (AIDSESP 2006, 19). In 2002, AIDSESP's leaders unanimously approved the creation of a Women's Program and statutory quotas for women were gradually implemented.

A case study in Brazil focused on the rise of the indigenous women's movement, with support from the Norwegian aid agency, NORAD and NGOs (Sacchi 2003). The Indigenous Women's Department (DMIAB) of COIAB (*Coordenação das Organizações Indígenas da Amazonia*) was created in 2002 with representatives from all nine Brazilian Amazonian states during the First Encounter of Brazilian Amazonian Indigenous Women, held in Manaus with the participation of 70 women leaders from 20 different organizations and 30 different indigenous peoples (Sacchi 2003, 98). The objectives of DMIAB/COIAB were to promote participation by indigenous women in diverse arenas, assure women's rights, and contribute to the advancement of the indigenous movement. Participation levels by women varied depending on the characteristics of the organization, women's personal life trajectory,

resistance by male relatives and leaders, distance to meetings and other factors; more educated, urban women who spoke multiple languages were most active (Sacchi 2003, 99, 101). The Second Encounter of Brazilian Amazonian Indigenous Women, held in Manaus in 2003, focused on more specific gender issues such as combatting domestic violence, rape and prostitution, as well as greater political participation by women through support from male leaders, and through training and financial resources for women's projects (Sacchi 2003, 100).

The above-mentioned studies from Ecuador, Peru and Brazil demonstrate the evolution of women's indigenous organizations since the 1980s – especially as part of the emergence of indigenous movements in Amazonia. Follow-up research is needed to understand the impacts of the greater inclusion of women in indigenous organizations, including the impacts on indigenous management of territories and on women's active engagement in decision making at all levels of indigenous organizations.

6.2 Rural workers unions and federations and organizations of forest extractivists

Non-indigenous Amazonian women have gone through a parallel process of organizing since the 1980s, as part of a broader process of women's growing involvement in rural social movement organizations (Deere 2003). Amaral's 2008 study of women's involvement in rural workers unions (STRs) in Pará, Brazil, reveals how women's participation as members and as elected leaders in these important grassroots organizations had increased over the past 30 years: only 3% of STR members were women in the 1970s, increasing to 7% in the 1980s, 14% in the 1990s and 33% by 2005, after national and regional organizations adopted quotas for 30% female representation at all levels in the unions (Amaral 2008, 70). By 2006, women constituted the majority of union members in the state (Amaral 2008, 95). As elsewhere in Brazil (Deere 2003, 263), Amazonian woman leaders reported continuing resistance by family members and male leaders to their growing union activism ("the union is no place for a woman") as well as difficulties balancing the demands of union work with family obligations (Amaral 2008, 82, 108). For example, in Nova Timboteua, a city in Pará, over 100 women

occupied the STR office for one week in 1990 to acquire the right to join and to be members of the leadership of the organization (Mello et al. 2013). Similar to concerns initially expressed among indigenous organizations (Aviles 2008: 12; 31), gender concerns were often considered to be divisive for the non-indigenous social movements (Deere 2003: 274). Local women's organizations multiplied in the 1990s in Pará, and women became important participants in several Pará municipalities as part of the "new syndicalism" movement emerging in Brazil. The first female STR president in Pará was elected in 1985, and a woman was elected for the first time to a state-level office in 1993, although women's positions have tended to be the less important leadership posts (only 23% of the presidencies) and women leaders were sometimes perceived as "strange" and "threatening" by male leaders (Amaral 2008, 21, 77, 97, 122). Participation in national events grew as well: during the first nationally-organized march articulating women's demands, 150 women from Pará participated; participation grew to 1000 in the second march in 2003 (Amaral 2008, 117).

In more remote western Amazonian states such as Acre, women's participation has also grown in grassroots organizations representing communities of forest extractivists such as rubber tappers. Similar to the Landless Movement (MST) elsewhere in Brazil, Acrean women were active in the early phase of the rubber tapper social movement (1970s and 1980s) in the frontlines of the *empates* (non-violent standoffs to prevent forest clearing), although they were unlikely to exercise other kinds of community leadership (Campbell et al. 1996: 27; Deere 2003: 273; Montysuma and Cruz 2008, 224). More typically, rural women's roles in unions, church and women's groups were to: raise membership numbers; take on traditional roles as domestic caretakers (i.e. cooking for men at meetings and *empates*); and as peacemakers in conflict situations such as the *empates* (Campbell et al. 1996, 33). Unions were seen as male spaces – 90% of the first 455 union members in Xapuri were men (with a few widows and female household heads), and few women participated in union meetings partly because their husbands would not allow it, leaving one woman to refer to them as "prisoners in their own homes" (Campbell 1996, 34, 57; Shanley et al. 2011, 236). In the early years of the movement, most men held the *machista* attitude that women were incapable of contributing to or leading the movement (Campbell 1996, 36). Women gained

their first leadership experience as leaders in the Christian base communities (CEBs) promoted by the Catholic Church during the period of Brazil's dictatorship, and by the 1970s and 1980s "shocking new ideas" emanating from the urban Latin American women's movement began to penetrate the rubber tapping communities (Campbell 1996, 42). "The road from the kitchen to the union hall to the speaker's podium at an assembly meeting is a scary and difficult one for women who have very low self-esteem, husbands or mothers-in-law who may be adamantly opposed to their participation, and a community that does not value their voices and opinions" (Campbell 1996, 53).

New generations of women began to join the union in the early 1990s, but their opportunities remained limited because women could not afford to pay union dues (Campbell 1996, 48). Only three women were among the 222 members of the local cooperative, CAEX (Campbell 1996, 51). A decentralized Brazil nut shelling and drying project offered women and younger men more autonomous access to income, but was short-lived (Campbell 1996, 48; Hecht 2007). By the 1990s, Amazonian non-indigenous women leaders began to travel to national/regional events such as ECO-92, which provided new opportunities to build their leadership capacity; they eventually rose to positions of leadership in national-level institutions, as detailed by Shanley et al. (2011). Brazil's National Council of Extractivist Populations (CNS, formerly the National Council of Rubber Tappers) was established in 1985 to push for the creation of community-managed forest extractive reserves in Amazonia, and over time, the CNS gained significant influence in representing the interests of extractivist families in policy arenas. Women have made great strides in representing their issues and filling leadership positions at national and pan-Amazon levels of the CNS, and the CNS added a Secretariat of Women Extractivists in 1995.

Women's representation in grassroots Amazonian organizations grew in the 1980s with Brazil's democratic "opening" and the emergence of social movements (including a national women's movement) and NGOs such as the Women's Movement of Amazonia (MAMA) and the *quebradeiras de coco babassu* (Shanley et al. 2011, 236). Women babassu nut collectors – collectors and breakers of a small palm coconut used for its oily kernels – successfully organized their own

association in the 1990s, lobbying for “Free Babassu” laws at local and federal levels, and leading the organization of Amazonian women extractivists (Porro et al. 2012). Babassu nut collection and sale (for edible oils, margarine, soap and cosmetics) has been combined for centuries with family agriculture in a region of Maranhão state where social movements historically have struggled for autonomy from patrons and bosses, and from cattle ranchers seeking to take over their traditional lands (Porro 2003). For centuries, babassu nut collection (primarily by women and children) has been combined with shifting agriculture (a family enterprise) in this region of Maranhão. United in their distinct histories of loss of ethnic identity and migration, these diverse peasant populations share a common struggle for autonomy (“free work,” *trabalho livre*) as opposed to the “captivity” (*cativo*) of subordination to a patron or landowner (Porro et al. 2012, 128). In the late 1970s, the Catholic Church supported the emerging grassroots mobilization in response to land grabbing of traditionally used territories by cattle ranchers supported by government policies. The *quebradeiras de coco babaçu* officially launched their social movement in 1991 at a general assembly attended by 240 women in the state capital of São Luís, and were legally registered as the Association of the Interstate Movement of Babassu Breaker Women (MIQCB); in 1995 they organized the first large-scale demonstration of Amazonian women, attended by hundreds of women from four states (Shanley et al. 2011, 237). For these women, maintaining access to babassu nuts from common-use areas constitutes the core of the *quebradeiras*’ political struggle, and they proposed “Free Babassu” laws at both local and federal levels (Porro et al. 2012, 139).

The success of the *quebradeiras* catapulted Dona Raimunda, their leader, to power as the founding director of the newly-formed (in 1995) Secretariat of Women Extractivists of the CNS, which aimed to strengthen extractivist communities through women’s empowerment, and to change public policies and private opinions in order to address women’s needs such as education and health care (Shanley et al. 2011, 237). It began small, by simply providing women with a place to meet and talk, and by 1998 the CNS had allotted 30% of the positions on its board of directors to women, and supported their recruitment to management positions at all levels of organization.

The secretariat successfully pursued issues such as citizenship (documents) as well as family health and medicinal plants, including participation in 2005 in the construction of a national policy for rural health (Shanley 2011, 237). A CNS program created in 2004 focused on ways to draw on women’s knowledge of forest products to increase income and conserve useful trees; from 1966 to 2011, 430 CNS workshops conducted in extractive communities reached an estimated 31,100 women and men (Shanley et al. 2011, 238). The CNS Women Extractivists’ Secretariat also successfully leveraged government funding, and was recognized by several human rights awards⁴ (Shanley et al. 2011, 241). Working to build leadership capacity among women, the secretariat has succeeded in increasing women’s membership in CNS (now 40%) and participation in CNS meetings; women are still reluctant to speak, and according to reports in 2011, no woman had been elected president of an extractive reserve (Shanley et al. 2011, 240).

These studies document the significant growth and evolution of diverse, non-indigenous grassroots women’s organizations and social movements in the Brazilian Amazon region since the 1970s and 1980s but especially in the 1990s and 2000s. The remarkable trajectory of women’s mobilization within these diverse structures, starting at local levels and building confidence and trust to engage as leaders in broader public arenas, has yet to be systematically analyzed. Moreover, research is needed to explore and compare the experiences of the grassroots women’s movement in Amazonian countries beyond Brazil.

6.3 Organizations for gender justice

Gender justice, as defined by Cunningham and Bluhm (2013), is related to forests through concerns about equitable access and control over forest resources, the capacity to make decisions about forest use and forest policy and institutional accountability in facilitating women’s access to resources and to decision making about forests. Over two dozen organizations that support issues related to gender justice, women’s rights, collective

⁴ These included the International Service Human Rights Award for Women’s Rights, accepted by Fatima Cristina da Silva in London, UK; the Chico Mendes Award for the Defense of Human Rights for their work on Health and the Environment, accepted by Célia Regina das Neves in Acre in 2009, and the ActionAid award for their video on health care.

Table 1. Organizations focused on gender justice, women's rights, collective land rights and natural resource management in the Amazon region.

AIDSEP <i>Asociación Interétnica de Desarrollo de la Selva Peruana</i>
Alianza de mujeres rurales
AMWAE <i>Asociación de Mujeres Waorani de la Amazonía Ecuatoriana</i>
CADEMCA <i>Centro de Apoyo al Desarrollo de la Mujer Campesina</i>
CARE <i>Central Asháninka del Río Ene</i>
CEDLA <i>Centro de Estudios para el Desarrollo Laboral y Agrario</i>
Chirapaq
CIDOB <i>Confederación de Pueblos Indígenas de Bolivia</i>
CIMI <i>Consejo Indígena Misionario</i>
CNAMIB <i>Confederación Nacional de Mujeres Indígenas de Bolivia</i>
COICA <i>Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica</i>
CONAIE <i>Confederación de Nacionalidades Indígenas del Ecuador</i>
CONFENAE <i>Confederación de nacionalidades indígenas de la Amazonia Ecuatoriana</i>
CONMIE <i>Consejo Nacional de Mujeres Indígenas del Ecuador</i>
ECMIA <i>Enlace de mujeres Indígenas de las Américas</i>
Fundación TIERRA
IPAHE <i>Instituto Para el Hombre, Agricultura y Ecología</i>
ONHAE <i>Organización de la Nacionalidad Huaorani de la Amazonia Ecuatoriana</i>
ONAMIAP <i>Organización Nacional de Mujeres Indígenas Andinas y Amazónicas del Perú</i>
MMCC <i>Movimento de Mulheres do Campo e da Cidade (Pará, Brazil)</i>
RMERA <i>Rede de Mulheres Empreendedores Rurais da Amazônia (Brazil)</i>

Source: Adapted from Cunningham and Bluhm 2013, with additions by the authors' informal search.

land tenure and natural resource management in Amazonia were identified by Cunningham and Bluhm (2013), with a few additions from the authors based on the literature sampled (Table 1). This list is not exhaustive or representative; many other local and regional women's organizations exist. For example, Sacchi (2003) listed 34 organizations and special women's sections within local and regional organizations of indigenous women in Brazil that were formed in the 1980s and 1990s.

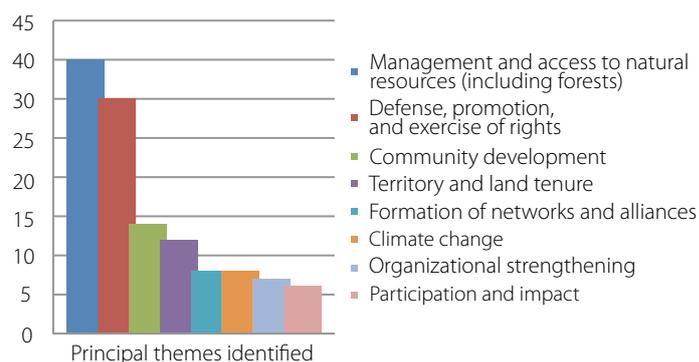


Figure 7. Principal topics identified in work by women's support organizations.

Source: Cunningham and Bluhm 2013, 5.

Evidence suggests that forests, land tenure and livelihood concerns loom large on the agendas of these organizations. A study carried out in 2013 by the International Land Coalition in Nicaragua of 48 gender justice organizations from Latin America, including those beyond Amazonia, found that these organizations' main foci included: "management and access to natural and forest resources" (35/48 organizations) and "defense, promotion and/or exercise of individual and collective rights" (30/48); followed by other lines of work related to community development, land tenure, networks and alliances, climate change, organizational strengthening, and participation (Figure 7). Access to land and territorial governance were found to be the focus of 60% of the publications found on the websites of these 48 organizations, often with an emphasis on collective rights that were seen to take priority over consideration of individual and specifically gender rights; in other key topics (community development, land tenure, and climate change) gender was relatively invisible although perhaps implicit (Cunningham and Bluhm 2013, 11).

Representative grassroots organizations and NGOs have provided crucial support to women's organizing efforts, which are often intrinsically linked to women's concerns about sustainable resource management for family and community livelihoods. Important assets for socioenvironmental transformation at the grassroots, the insights, activities and strategies of these organizations for gender justice deserve greater attention in the future.

7 Future research priorities

The findings of this literature review reveal a lack of recent systematic research on the diverse forms of gender relations among forest populations of the Amazon region, despite the importance of this topic for forest management, community food security, sustainable livelihoods and the capacity of Amazonian people to respond to external pressures and changing climates. Since the 1970s, evidence from existing literature suggests that gender relations have been changing across the Amazon as part of the greater socioeconomic and ecological transformations underway throughout the basin. As women have found greater visibility for their productive activities, interests and capabilities, they have developed ways to contribute more effectively to the livelihoods of their families and communities and the sustainable management of their forests. In the process, they have contributed to their own empowerment by securing greater access to critical resources, and their improved levels of self-confidence have helped them to negotiate their interests in different arenas. Yet there is relatively little systematic research available documenting these important changes and their implications for ways to support and sustain forest management efforts.

This lack of documented research is especially troubling given the lack of attention to gender in many outsider-driven community forest management initiatives, which suffer from a tendency to adopt top-down, technologically-driven programs focused only on timber and directed to male timber managers, while neglecting the many other components of Amazonian livelihood systems, including activities such as agroforestry and NTFP use, that are especially important for women. Facing the new demands of responding to climate change, global market expansion and persistent conflicts over land and forests, both women and men in Amazonian communities would benefit from far greater

research and policy actions oriented to the development of pluralistic forest programs with communities and smallholders that are specifically designed to build on local knowledge and to provide more equitable access to resources. Women's often more holistic focus on well-being and future generations is an essential complement to the market-driven emphasis on individual productivity and profits.

In major forestry programs such as the PPG7 in Brazil, investments are needed in specific training on gender analysis and gender-sensitive planning and action for local and partner organizations, donors and women (Favila 2006, 28), and specific projects are needed to strengthen women's organizations and empower women throughout the programs (Favila 2006, 44) and to ensure sustainability beyond the end of the project cycle. The challenge is to open mainstream projects to women's participation and to tailor resources to respond to their needs and activities as well as men's, addressing the full portfolio of household forest enterprises. Studies of PPG7 show that when women are involved in project design and implementation, the projects incorporate more cultural diversity by including a focus on food, nutrition and medicinal plants, and information is broadened beyond men's access (Favila 2006, 29). Research on the PPG7 shows that simple strategies can improve attention to gender, such as peer-to-peer exchanges with groups that have greater female participation, and videos and gender dynamics in meetings and events (Favila 2006, 29).

REDD programs provide another emerging avenue for increasing attention to gender in Amazonian forest management programs, provided that they build on the lessons learned from the history of community forestry interventions (Alcorn 2014). These lessons include the need to avoid top-down, technological approaches in favor of locally-

designed and locally-driven management systems that incorporate the interests and decisions of diverse groups within the community, “nurturing pluralistic community forest civic science” as a means to incorporate local knowledge and to facilitate greater participation and empowerment of women and other marginalized groups (Alcorn 2014, 32).

Women have demonstrated their ability to overcome major cultural and logistical barriers in order to find ways to increase their participation in family production, and in key decisions about family resource use, and to organize and act on behalf of their own interests and those of their families and communities at many levels of community and social movement organizing throughout the Amazon region. Such organizing and grassroots capacity building have taken place through support from local NGOs and church organizations, and have led to important changes in some of the region’s most important representative social organizations, such as the CNS (in Brazil) and AIDSESEP (in Peru). These cases provide examples of strategies to strengthen women’s groups, organizations and networks through collective action and peer-to-peer support for women’s efforts to become leaders capable of pursuing their rights and interests related to access to land and economic and technological resources, including credit for their enterprises and decision-making power over their forests. Women’s productive work in forest-related activities holds great promise to help secure livelihoods and use Amazonian forest resources sustainably, providing key knowledge and practices to address complex future changes and challenges.

Priority questions for research that emerge from this review are listed below.

Amazonian property rights, forest territories and communities:

- How and why do patriarchal ideologies and actual practice (i.e. women’s invisibility as forest producers, and men as sole representative of the family and community) persist and/or change in different Amazonian countries and communities?
- How is gender addressed under different kinds of property regimes, in policy and in practice, in different Amazonian countries? What are

the implications for men’s and women’s rights to forested territories?

- Under what conditions do women and men have autonomous access to community and household land and resources in different complex community and co-management regimes (collective/household; formal/informal)?
- Under what conditions do women and men have access to productive assets and supports, especially for NTFPs (technical assistance, credit, markets) and for REDD resources?

Diverse and changing gender relations in Amazonia:

- How are livelihoods and the gender division of labor changing among diverse Amazonian indigenous communities, as well as extractivist, colonist, floodplain, riverside and urban settlements?
- How do changing international, national, and local laws and norms interact to shape women’s and men’s rights?
- What are the impacts on forests, livelihoods and gender relations of growing “multi-sited” and peri-urban livelihoods strategies, migration and remittances?
- What are the impacts of government cash transfer programs on forests and forest communities, and on gender relations?
- How are younger generations changing Amazonian communities with regard to gender relations, forest orientation, and rights to resources?

Gender and forest management programs:

- How do resource access and use changes due to policy reform (i.e. new forestry laws, forest tenure) and market changes interact with customary or traditional gender relations and impact men and women?
- In what ways do the organizational patterns and institutions introduced by forestry development initiatives differ from preexisting endogenous patterns of gender relations?
- In what ways have forestry development initiatives supported more equitable access and benefit distribution, or have they introduced new patterns of exclusion and marginalization by gender?
- How can programs effectively integrate support for timber and non-timber product use in mixed strategies, oriented to both social and economic goals?

- Under what conditions are mixed-group and separate gender group strategies appropriate?
- What are the impacts of these strategies on forest management and empowerment outcomes?

Women's participation in social movements:

- How have women's collective organizations and enterprises evolved within the grassroots and other organizations? How has this varied from country to country and over time?
- What factors catalyze greater involvement of women in grassroots mobilization and social movements and more egalitarian processes? Conversely, what factors discourage greater participation and power by women in social movements?
- How does women's participation vary in decision making among different kinds of communities, associations and programs, and what strategies have been most effective in increasing women's voices and votes?

- What kinds of organizations are supporting gender and forest rights among Amazonian social groups, and what kinds of strategies and approaches have been most effective in promoting gender equity?
- What is the impact of women's empowerment on Amazonian forests and community welfare?

Existing research (1970–2010) has established that Amazonian women and men have different domains of knowledge and practice on forest management and forest products, and both are essential to the complex livelihood systems that evolve over time in each historically distinct part of the region, as well as to the food security, protection of resource rights and sustainability of forest-based communities. The challenge for the future is to provide the information base and material support that are needed to strengthen strategies to support both women's and men's capacity to participate actively in household, community and society-wide discussions, and to contribute to Amazonian forest management for a sustainable future.

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Appendices

Appendix 1. Knowledgeable individuals consulted for literature on gender and Amazonian forests

Name	Institution
Alcorn Janis	Rights and Resources Initiative
Ashby Jacqui	International Center for Tropical Agriculture (CIAT)
Bezerra Joana	Rio do Janeiro University
Bolanos Omaira	Rights and Resources Initiative
Colfer Carol	Center for International Forestry Research
Deere Carmen Diana	University of Florida
Duchelle Amy	Center for International Forestry Research
Del Aguila Chaves Rosario	PROCREL (<i>Programa de conservación y uso sostenible de la biodiversidad de Loreto</i>)
Evans Kristen	Center for International Forestry Research
Galloway Glenn	University of Florida
Hecht Susanna	UCLA
Heredia Beatriz	Federal University of Rio de Janeiro
Kainer Karen	University of Florida
Katz Elizabeth	University of San Francisco
Kaimowitz David	Ford Foundation
Larson Anne	Center for International Forestry Research
McCallum Cecilia	Federal University of Bahia
Mejia Villacis Elena	Center for International Forestry Research
Mello Denyse	University of Florida
Meola Kayte	Cornell University
Midkiff Hillery	USAID Colombia
Paulsen Susan	University of Florida
Padoch Chistine	Center for International Forestry Research
Pezza Cintrão Rosângela	Rural Federal University of Rio de Janeiro
Porro Noemi	Federal University of Pará
Purabi Bose	International Center for Tropical Agriculture (CIAT)
Rocheleau Diane	Clark University
Simonian Ligia	Federal University of Pará
Spinard Danielle	USAID Colombia
Thayer Millie	Nicaragua University
Twyman, Jennifer	International Center for Tropical Agriculture (CIAT)
Verónica Vazquez Garcia	<i>Desarrollo Rural Colegio de Postgraduados Mexico</i>

Appendix 2. Chronological list of 67 references on gender and Amazonian forests

N	Country	Location	Social group	Focus	Author(s)	Year
1	Brazil		indigenous	traditional knowledge	Murphy	1985
2	Peru	Iquitos	colono	women's and men's roles; livelihoods	Anderson	1985
3	Brazil	Acre	rubber tappers	women's and men's roles; livelihoods	Simonian	1991
4	Brazil	Acre	extractivist	traditional knowledge	Kainer	1992
5	Brazil	Pará	mixed	tenure and property rights; livelihoods	Schmink	1992
6	Colombia		colono	tenure and property rights; livelihoods	Townsend	1995
7	Brazil	Acre	rubber tappers	women's organizations	Campbell	1996
8	Brazil	Jauú National Park	riverenos	community forestry	Oliveira	1999
9	Brazil	Acre	colono	culture and practices	Wolf	1999
10	Brazil		mixed	livelihoods	Alvares	2001
11	Brazil - Peru	Cashinahua area	indigenous	livelihoods	McCallum	2001
12	Brazil		colono	community forestry	D'INACAO	2001
13	Brazil		mixed	livelihoods	Guedes	2001
14	Brazil		colono	community forestry; tenure and property rights	Porro	2001
15	Brazil		mixed	livelihoods	Simonian	2001
16	Amazonia		rivereno	culture and practices	Tuzin	2001
17	Brazil		extractivist	traditional knowledge	Lazarin	2002
18	Brazil	Maranhão	extractivist	Men's, women's roles	Porro	2002
19	Brazil	Rondônia	rubber tappers	health	De Paula	2003
20	Brazil		colono	Men's, women's roles	Murrieta	2003
21	Brazil, Venezuela, Guiana	triple frontier	colono	livelihoods	Simonian	2003
22	Brazil	Acre	mixed	community forestry	Stone	2003
23	Peru		indigenous	community forestry	Peralta	2004
24	Bolivia, Brazil, Peru	Pando, Acre, Puerto Maldonado	colono	Men's, women's roles; livelihoods	Porro	2004
25	Bolivia	Santa Cruz	indigenous	community forestry	Bolanos and Schmink	2005
26	Brazil - Peru	Acre, Madre de Dios	mixed	livelihoods	Campbell	2005
27	Brazil	Manaus	colono	women's organizations	Costa	2005
28	Bolivia		mixed	community forestry	Cronkleton	2005
29	Bolivia		indigenous	community forestry	Cronkleton	2005
30	Brazil	Acre	mixed	Culture and practices: hunting colono	Minzenberg	2005
31	Bolivia	North Amazon	colono	community forestry	Pacheco	2005
32	Brazil	Maranhão	mixed	community forestry	Figueiredo	2005
33	Peru		indigenous	women's organizations	Paredes	2005
34	Brazil	Acre, Maranhão	mixed	community forestry, livelihoods	Porro	2005
35	Brazil	Acre	extractivist	community forestry	Santos	2005
36	Brazil	Acre, Pará	mixed	livelihoods	Souza	2005
37	Bolivia		mixed	livelihoods	Stoian	2005
38	Peru		indigenous	women's organizations	AIDSESP (Asociación Interétnica de Desarrollo de la Selva Peruana)	2006
39	Brazil	Maranhão	extractivist	women's organizations, tenure and property rights	Da Rocha	2006
40	Brazil		mixed	culture and practices	Favilla	2006
41	Brazil	Bajo Amazonas	colono	culture and practices	Murrieta	2006
42	Brazil	Pará	colono	culture and practices	Silva	2006
43	Brazil	Pará	riverenos	fisherwomen	Simonian	2006
44	Brazil		colono	women's organizations	Siqueira	2006
45	Brazil	Acre	rubber tappers	livelihoods	Hecht	2007
46	Peru	Bagua - Amazonas	indigenous	culture and practices	Lozada	2007
47	Bolivia, Brazil, Colombia, Ecuador, Peru, Venezuela		indigenous	tenure and property rights	Chirif	2007
48	Mixed		indigenous	tenure and property rights; livelihoods	Pazmino	2007
49	Ecuador		indigenous	tenure and property rights; livelihoods	Aviles	2008
50	Peru		mixed	livelihoods	Padoch	2008
51	Brazil		colono	livelihoods	Adams	2009
52	Bolivia		colono	Forest management; livelihoods	Lehm	2009
53	Peru	Iquitos	indigenous	women's and men's roles; livelihoods	Fuller	2009
54	Bolivia	Takana	indigenous	Culture and practices: hunting colono	Lehm	2010
55	Brazil	Amazon estuary	mixed	livelihoods	Brondizio	2011
56	Brazil		colono	tenure and property rights	Almeida	2011
57	Brazil	Espirito Santo	extractivist	Forest management; livelihoods	Fernandes	2011
58	Brazil		riverenos	Forest management; livelihoods	Ruffino	2011
59	Brazil	Petrolina	extractivist	livelihoods; women's organizations	Santos	2011
60	Brazil		mixed	tenure and property rights	Sauer	2011
61	Brazil		rubber tappers	women's organizations	Shanley	2011
62	Bolivia, Brazil, Peru, Colombia, Ecuador, Venezuela		mixed	livelihoods; women's organizations	Simonian	2011
63	Bolivia	RiberaIta	colono	tenure and property rights; livelihoods	Llanque	2012
64	Brazil		extractivist	women's and men's roles; livelihoods	Porro	2012
65	Bolivia		indigenous	livelihoods; traditional knowledge	Villar	2012
66	Peru	Bagua - Amazonas	indigenous	culture and practices	Lozada	2013
67	Bolivia, Brazil, Peru, Colombia, Ecuador		mixed	tenure and property rights; livelihoods	Mairena	2013

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Despite the importance of forests for global processes and the tradition of forest management by local Amazonian peoples, there is not much available literature on gender and forests in the Amazon region. Yet gender roles and relationships are important components of key emerging forest-related issues, such as climate change and the differential risks and opportunities faced by women and men in different contexts. This paper reviews recent literature (in English, Spanish and Portuguese) that addresses gender and forests in Amazonia, focusing on: property rights in Amazonian territories and communities; diverse and changing gender relations; forest management programs; and women's participation in social movements and organizations. The review finds significant historical, sociocultural and material barriers to gender equity and to women's full participation in sustainable management of Amazonian forests, and a relative lack of focus on gender in forest management programs, despite promising examples. The most important finding was that, over the past two decades, women from different Amazonian social groups have become increasingly organized, enhancing their rights, levels of participation and empowerment. More research is needed to understand the variability of gender relations and rights in different Amazonian contexts, and how they are changing. Research is also needed to understand and support efforts to improve gender equity in rights to resources and income and participation in key community and societal decisions on the future of Amazonian forests and their peoples.



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