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Women's Associations in Cotopaxi, Ecuador from Rights to Agroecological Markets

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Women's Associations in Cotopaxi, Ecuador from Rights to Agroecological Markets

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Abstract

Smallholder, indigenous farmers play a key role in the food system in Ecuador, applying traditional farming practices that ensure the sustainability of their food production and meeting the dietary demands of many urban consumers, especially for organic vegetables and dairy products. This study examines the position of six women's associations in the central Ecuadorian Andes, discussing their evolution from rights-based to market-oriented organizations producing and selling agroecological products. We discuss how the history of these associations has led them to play a role in local politics and national policies around agriculture and highlight how these organizations have succeeded both economically and socially, while also noting the challenges they face, as observed by themselves and outsiders. While the history of women's agroecological production organizations in Ecuador may be unique, as it is entrenched in indigenous rights movements, our results also point to opportunities and obstacles that are more common across small scale farmers and deserve attention from both policymakers and agricultural organizations.

Keywords: collective action, farmers' associations, gender, smallholders, rural development

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Introduction

Modern agricultural institutions (i.e., rules, behaviors, norms) often exclude poor rural populations, ignoring or undervaluing their products. Smallholders encounter barriers and inequities in marketing and face additional challenges including a lack of pricing information (Ogutu et al. 2014), small production volumes (Markelova et al. 2009), limited access to credit (Marr et al. 2016), low levels of organization, weak managerial and negotiation skills (Blanc and Kledal 2012), and a dominant modernizing paradigm that privileges individual large farms (Rebai 2018). In addition, major consumer markets are increasingly controlled by a few large agribusinesses, intermediaries, distributors, and processors, that offer generally low and volatile prices (Chaveneu et al. 2010). This move to modern commercial agricultural systems has particularly excluded women, despite evidence that they are important actors in conserving traditional farming practices and maintaining agrobiodiversity (Oakley and Momsen 2005; Blare and Useche 2015).

For the most part, Ecuador has followed this trend, with its government prioritizing large farms and overlooking indigenous populations employing ancestral farming practices. Nonetheless, indigenous smallholders are a critical part of Ecuador's food system, as they contribute between 50 and 70% of the country's fresh milk, rice, corn, potatoes, vegetables, meat, and beans (Chiriboga 2001; Secretaría General de la Comunidad Andina 2011). These Ecuadorean smallholders achieve this feat while only managing 10 to 15% of the country's agricultural land, which provides some evidence of their high level of efficiency and productivity, despite the common rhetoric to the contrary (Chiriboga 2001, 2012; Proaño & Lacroix 2013; Torres et al. 2017). In this article, we examine how organizations of women smallholders in Ecuador have been vital in moving their communities towards an agroecological (AE)¹ transformation despite a general lack of government support at the national and local level. Once these women's associations established themselves as successful AE producers and income-earners, they then drew attention from political actors and were able to influence the institutions and rules of the game in their communities and at a national level.

This study focuses on six women's organizations in the Andean region that have been particularly active and successful in leading these activities.² We document the path that the women's associations have taken to enable their members to participate in markets as sellers of AE products over the last decade, as shaped by the associations' origins in local indigenous women's rights movements. We also highlight the process through which their activities have spurred an AE transformation in their communities at large and given members a voice in

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¹ As defined by the European Association of Agroecology, "Agroecology...as a practice is based on sustainable use of local renewable resources, local farmers' knowledge and priorities, wise use of biodiversity to provide ecosystem services and resilience, and solutions that provide multiple benefits (environmental, economic, social) from local to global. As a movement, it defends smallholders and family farming, farmers and rural communities, food sovereignty, local and short food supply chains, diversity of indigenous seeds and breeds, healthy and quality food" (FAO 2016).

² These are certainly not the only women's agricultural producer's groups in Ecuador that have had success in agroecological marketing. Other groups that have received attention include the Biovida Network in Cayambe in the northern highlands; the "from the farm to the table" Biofarms Fair in Tungurahua in the central highlands; and the Austro AE Network in Cuenca in the southern highlands (Carvajal y Yacelga 2020; Quillupnagui 2020; Proaño & Lacroix 2013; Chauveau y Tapie 2012; Chauveau et al. 2010).

regional planning. This analysis contributes to making rural women visible in terms of their multiple contributions: productive, reproductive, and care roles and provides insight into how their success can be scaled and replicated in similar contexts. The experiences of these women's associations provide a potential path for overcoming barriers related to small scale production and gender norms; and the promising large-scale benefits of supporting AE transformation.

In the next section, we present the conceptual framework. We tie together research on the role of small-scale farmers in creating AE food systems and on women and AE to demonstrate how collective action by smallholder women's groups can encourage an AE transformation. Next, we describe the context and participatory and observation research methods we employed to evaluate the influence of six women's groups in the Ecuadorian highlands. The fifth section presents our results from this qualitative research, detailing the role of these women's associations in improving access to direct-to-consumer markets for its members, providing opportunities for leadership, and giving them a venue for agency. We conclude with a discussion on steps that may promote women's collective action as a catalyst in the AE transformation both in Ecuador and in similar contexts in developing and middle-income countries.

Conceptual Framework

Role of smallholders in transforming food systems

Agriculture in the Ecuadorian highlands is characterized as largely bimodal, with smallholders and industrial production on each end (Schejtman 2006). One of the central differences between these two categories lies in the production objective, stylizing small-scale agriculture as strongly linked to self-consumption and to a lesser extent to the market, while industrial agriculture is associated with mass-production and profit-maximization. The former is based on family or self-labor and restricted by limited access to markets, which are at best poorly developed, while the latter is reliant on salaried labor and functioning markets (Schejtman 2006). However, small-scale agriculture in Ecuador is far from homogenous, with a significant variation in production size, willingness to take risks, working capital, associativity, and capacity for collective action (Chiriboga 1997). Smallholders that employ traditional farming practices play an important role in addressing the food and ecological crisis the planet is facing, as traditional agroecological methods, such as those practiced in Andean communities, are pathway towards more sustainable agriculture and food systems (Chappell and Bernhart 2018; Anderson et al. 2021).

Andean smallholders, whose ancestors domesticated many of our crops, have a long history of using these AE practices to confront climatic risks and natural disasters (i.e., volcanic eruptions, pests and diseases, droughts) and have been important in the AE transformation of their region and, though knowledge-sharing, other food systems. Their primary strategy relies on a highly diversified production, with a portion of their output destined for markets and the rest for self-consumption. Despite their small scale, farmers in the Ecuadorean Andes also break down their production into very small plots spread across the community landscape to help mitigate weather- and pest-related risks.

With a history of collective action – actions taken jointly to realize common values or interests or achieve common social or economic objectives, – smallholders in the Andean highlands have developed a culture of knowledge-sharing on the principles and practices of agroecology (Altieri 1999; Altieri & Nicholls 2000; Nicholls et al. 2015; Belloni 2015; Intriago et al. 2017).

Additionally, they practice social and economic elements of agroecology beyond production, as much of their economy consists of bartering, and a communal saving scheme provides informal insurance services (De la Torre and Sandoval 2004; Mallard 2012). Collective action efforts in the Ecuadorian landscape have included creating various organizational structures, such as inclusive businesses, cooperative enterprises, and local exchange schemes that create and capture value within a network of producers, suppliers, processors, distributors, wholesalers, retailers, and consumers (German et al. 2018).

Women's roles in promoting AE production

An important change in Andean small-scale production in the last twenty years has been women's role in farm management and production activities. Studies in the region have shown that they participate in production activities throughout the agricultural cycle, from planting to harvesting and then in post-harvest activities (Chiriboga et al. 1995). Additionally, the migration of mainly young men, which increased substantially in the decade of the 2000s, required women to assume, in addition to reproductive tasks, the management of farms, leading to the feminization of agriculture in the region (Lastarria-Cornhiel 2006; World Bank 2016). However, even though women's contribution to agriculture – as well as their legal entitlement to land and other agricultural assets – increased significantly, their level of empowerment in decision-making and access to and control of productive and economic resources continues to be curtailed (Twyman et al. 2015; Mosquera 2018; World Bank 2016).

Several studies have shown that women farmers often place a higher value on the use of AE practices than do their male counterparts, and thus play a key role in pushing food systems towards the adoptions of AE principles. According to research in El Salvador (Kelly 2009) and Ecuador (Blare and Useche 2015; Blare and Useche 2018), women place a higher value on agroforests than men do, particularly because these agroforests provide fruit important for meeting households' nutritional needs. Women, through collective action, have pushed back on male-dominated spheres to create spaces that promote AE production and markets in food systems, particularly in South America. These efforts have included creating marketing opportunities, enhancing knowledge, and challenging the discourse and agricultural policy spheres that have long been oriented towards export industries (Cárdenas Solís 2012; Oliver 2016; Freire 2018; Hillenkamp 2020; Mestmacher and Braun 2021), much of it led by women of ethnic minorities such as afro-descendent and indigenous women (Montero 2020).

Moreover, as women became more active in their farms, their association with other women farmers increased, as they learned from each other, collaborated on market access, and built on existing rights-based women's associations at the local level to take market-oriented collective action. By participating collectively, small-scale women farmers have improved their bargaining power within markets, lowering the transaction cost they face; improving their access to inputs and services and market information; sharing and adopting technologies; taking advantage of high-value markets; and achieving economies of scale (Meinzen-Dick and Di Gregorio 2004; Markelova *et al.* 2009; Devaux 2009). This evidence indicates that women's organizations are actors that could make a change in the paradigm towards an AE transformation at a larger scale.

Ecofeminism theories provide a basis to understand why women have played a prominent role in the AE transition. Ecofeminism portrays women as being closely connected to nature because

their role in reproduction is similar to nature's provision of life and because women are seen as subordinate to men in many patriarchal societies just as nature is dominated by humanity. These theories suggest that because of the similarities between women and nature women relate more to nature and strive to protect it (Warren et al. 1997; Öztürk, Y. M. 2020). In Ecuador, ecofeminism theory was applied to explain how Amazonian women's efforts combined with ecofeminists to resist extractive industries (Sempértegui 2021). When tying these ecofeminism concepts to theories to induce the AE transformation, several scholars argue that ecofeminism explains how women are often the driving force in bringing about the AE transformation in the adoption and promotion of AE practices as well as demanding AE products and a more equitable food system, which is key element of AE (García et al. 2014: FAO 2018; da Silveira et al. 2021; Giacomini 2021). Based on the evidence of women's involvement in promoting agroecology in various contexts and building upon the arguments of ecofeminism, we argue that women's organizations are a key driver in creating food systems that align with the concepts of agroecology — one that is fairer for producers, with a healthier diet for consumers, and contributes to the protection of ecological systems for all (Glissman 2016).

Study Context: Women's Associations in Andean Ecuador

This study was conducted in the parishes of Cusumbamba and Mulalillo, Cotopaxi province, where the population is predominantly of Kichwa indigenous origin (Fig. 1); members of the six associations studied here are composed of a mix of Kichwa and *mestizos*. Cotopaxi lies in a high-altitude zone, 2900—3200 meters above sea level, with an average annual temperature of 12°C (PDOT Cusubamba and Mulalillo 2020). Most families in this region have diversified production systems of maize (*Zea mays*), chocho (*Lupinus mutabilis*), barley (*Hordeum vulgare*), and peas (*Pisum sativum*) for household consumption and potatoes (*Solanum andigena*) and alfalfa (*Medicago sativa*) for income-generation. Temporary out-migration has become common in the Andean region over the last twenty years, as migrants – mainly men – spend parts of the year in Quito, Ambato, and the Amazon region seeking employment opportunities. As women have gained control of – and responsibility for – the household agricultural plot, women's associations have filled a gap, creating an avenue by which they are able to effectively participate as sellers in the agricultural market.

Arable land in these communities is privately held, but plots are small and reliance on hired labor is rare. The average arable land area held by a household is two hectares (Beberdick 2014; Buoniol 2016). Families in this region tend to have a mixture of animals, including cattle, guinea pigs, pigs, and chickens, and use them for food and manure production. Traditionally, men have had intra-household decision-making authority with respect to agricultural production, deciding what, how, and when to plant. Nonetheless, women normally contribute a substantial amount of labor to household agricultural production. With male out-migration, decision-making responsibilities for day-to-day agricultural operations have shifted into giving women greater participation, while the nature of temporary migration preserves male power on larger decisions, such as what, how, and when to plant.

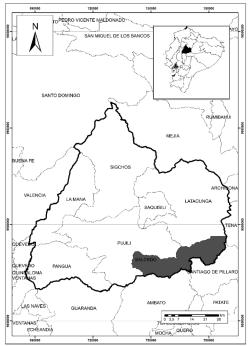


Figure 1. Cotopaxi and its parishes, with sampled women associations located in shaded parishes, Cusubamba and Mulalillo

Being one of the provinces with a large share of indigenous people in Ecuador, Cotopaxi has been at the forefront of indigenous movements for political participation at the provincial and national level. This activity is exemplified by the Indigenous and Peasant Movement of Cotopaxi (MICC), which originated in the 1980s in the fight for indigenous representation in development plans, particularly with respect to land rights and education (Mosquera 2018). In parallel, smaller organizations formed at the local level and were in part effective in securing indigenous rights to land and water in their communities. However, the intersectionality of gender and indigenous identity was overlooked in the broad indigenous movement at the time, and the interests of indigenous women were not explicitly represented (Taş *et al.* 2014).

In response to the male dominance of indigenous organizations in the 1980s and 1990s – despite their relative success in securing some rights for their communities, – indigenous women organized themselves into associations representing female interests in the political and social sphere. National organizations as well as local organizations formed around indigenous women's rights and were transformative in expanding the political and economic participation of indigenous women in Ecuador in the 1980s and 1990s. In Cotopaxi, the initial goals of local indigenous women's associations included recognition for their labor in agriculture, political participation at the local level, access to projects on entrepreneurship and agricultural production, and addressing gender-based violence. While the origins of these movements came from women within indigenous communities, as they took off in the 1980s and 1990s, NGOs and academics became involved through funding and development projects aimed at strengthening indigenous identity – particularly the intersectionality of indigenous and female identity – such as those focused on entrepreneurship and land titling.

The women's associations studied here – and in Cotopaxi more broadly – are unique in the arena of women's agricultural producers' organizations at large in that their origins were in representing women's voices in local and state projects, rather than in collective production or marketing (in contrast to women-led cooperatives). The increased attention and effort in supporting market access for its members has been a relatively recent phenomenon for the associations, as male out-migration increased the feminization of agriculture and members came to see the potential of these associations for bolstering access to not only social and political but also economic opportunities. This relatively new (last 20 years or so) focus on production and market access also arose in response to criticisms – within and outside organizations focused on the rights of indigenous women – that rights do not entail only political access, but also involve access to resources. At the same time, NGOs that sought to support the cause of indigenous women in the Andean highlands presented communities with programs along the lines of female entrepreneurship, production growth, and improved access to nutritious food. These offerings in turn also shaped the opportunities available to and choices made by the local associations as they sought to increase their member's economic opportunities, with the newer understanding that these are a key component to expanding women's rights.

Research Methods

This study focuses on six women's associations working with a local Ecuadorian NGO that promotes AE production and facilitates access to direct-to-consumer markets for groups of small AE producers (both male and female). The women's associations vary in terms of their age, experience in market participation, and collaboration with the NGO (Table 1). In all, around 160 women are members of one of the six association in this study, and 30% of the households in the six communities in which these associations are based have at least one member in one of the associations. Two of these associations have existed since the 1980s, but even the newer ones are market-oriented sub-groups of historically older women's associations (see Table 2).

Table 1. Characteristics of the women's producer associations

Association	Year Established	Membership	Market participation*
Association A	1980	22	2020
Association B	1986	16	2010
Association C	2010	23	2010
Association D	2012	24	2015
Association E	2016	29	2018
Association F	2016	29	2018

^{*} Also marks the approximate time from which the association began working with the Ecuadorian NGO, which has a presence and history in the region. The NGO is committed to facilitating market participation in response to associations' interests.

The impetus of this study is the general experience and observations by NGO workers who have been active in the region for over the last 14 years, noting the growth in the number of women's organizations participating in AE markets along with the growing participation of women in leadership positions within their communities. To explore and supplement the observations gathered over the years by the national NGO and collect more in-depth information on the effect that these associations have had on women's economic empowerment and market participation

as its goals shifted, we conducted interviews with leaders of these associations between April and June 2020 and other stakeholders between October and December 2020.³ Three current and previous leaders from each of the six women's associations participated in individual semi-structured interviews. They were asked about the association's goals, their motivation for organizing, reasons they have gotten involved in AE production and marketing, benefits of collective commercialization, and their perceived achievements as a group. These questions focused on the impacts that these associations have had in achieving local recognition, and the connections they have forged beyond the productive and economic spaces. The inclusion of these leaders was deliberate, as we were interested in the process that was undertaken to gain this recognition and the goals of the associations and their leadership.

In addition to the 18 leaders of the associations, 34 other local leaders and stakeholders were interviewed to understand how the work of these associations is perceived and valued. The latter were distributed as follows: 4 political actors; 5 representatives of other NGOs operating in the region; 4 representatives of national ministries; 1 faculty member of a local university; and 20 community leaders. The latter group included elected leaders and those leading water-related organizations, which in this region hold the most power with respect to community governance.

Results

Our results are presented in the current section and are drawn from qualitative interviews both with women inside the associations and with stakeholders involved in the community, or that interact with the associations, or both. We find that women's associations in this region of Ecuador have been successful not only in using underlying existing structures for female participation in the community and transforming those to support their own market access, but they have also in turn reshaped the role of women's associations and women in local-level decision-making as well as the position of agroecological farming communities in AE markets.

Market access and agricultural diversification Women's associations have played a key role in representing women's rights and civic interests – particularly that of indigenous women – in Andean Ecuador since the 1980s. The women's associations studied here are a product of that history, as some have transformed to focus more recently on women's economic opportunities and the joint sale of agricultural products as their members became more directly involved in agriculture, while others have spun off sub-groups with the same purpose (Table 2).

While in this setting there are no explicit barriers to women's market participation, members of the associations have nonetheless found empowerment and support for market access through their organizations, being able to travel and manage stalls together, for instance. As an association member explains, "Selling as a group is good because we are not alone. We are united and we can help each other" (Member of Association B). In some associations, women sell their products collectively, dividing up their sales at the end of the day. In others, they travel and set up together, but each sell their own products. In either case, this form of collaboration

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³ Due to the COVID-19 pandemic, most of these interviews were conducted by telephone, though several were arranged before closures. As the interviews were conducted over the phone, the participants gave their consent to participate verbally.

requires trust, that each will sell marketable products and support rather compete with one another.

For some members of the women's associations, their initiation into the association also marks their decision to become AE producers. As they were taking an active part in the process of changing agricultural practices and commercialization in the communities. While many other members were previously involved in farming, most of their sales were to intermediaries. The joint participation in direct-to-consumer market stalls represents a big change in their experience as farmers and sellers. "Intermediaries often did not want my products and offered very low prices for them. It's not worth it. The problem is that it is not very easy or cheap to transport the products to the city when you are alone," explains a member of Association B, highlighting the benefit of membership in lowering transport and transaction costs and facilitating direct access to consumers. In contrast to sales to intermediaries, selling through local physical markets⁴ have allowed women to secure higher prices, gather information on customer demand, and assert themselves as producers.

Table 2. Origins, motivations, and current new objectives of the women's associations

Association	Origin	Initial objectives	Changes in objectives
Association A	Started from two other community women's groups, so leaders have previous organizational experience	To create a space for women to improve their agency and to provide income for the family	The initial objectives remain
Association B	Derived as a sub-group of a broader women's organization	Empower women social and political organizations in the region and offer mutual aid	Improve AE marketing efforts of all associations within the broader organization
Association C	Formed by a group of women in a rural community with support from a local Christian NGO	Identify and implement projects that are of particular interest to the members, increase incomes, improve productive capacity, and engage with local authorities	Greater focus on AE production and commercialization
Association D	Started with the encouragement of member's husbands, who were part of a savings and credit cooperative, and women leaders	Manage community projects of particular interest to women, market agricultural products, support small business enterprises	Greater focus on marketing products produced by the members

⁴ All six associations have scheduled weekly sales days in markets in the cities of Salcedo and Latacunga (about 30-45 minutes travel time for the association members). Some also sell in smaller local markets or regional events.

Association E	Derived from an existing women's group at the community level	Access government programs and extension services available only to organized groups, promote women's rights, and access services for training and grants	Greater focus on the marketing of products
Association F	Initially formed as a collective action initiative to empower women in the community with support of a local Catholic church	Raise awareness of women's rights, promote their political participation, facilitate access to training and income-generating activities, promote health initiatives	Shift focus to production and marketing of AE products

Leaders of the most experienced associations – B, C, and D – all pointed to the ability of the associations to collectively secure "fair prices" that cover production costs as a central reason for their efforts to ensure their respective associations' participation in physical markets and the draw for other members to become part of the association. Even though this study did not focus on income generation, market activities such as selling sites, products sold, prices, and frequency of sales were systematically registered. The benefits generally outweighed the costs with the women, who participate in these markets, indicating that they were more profitable making these direct sales in the local markets than they were selling to intermediaries (Borja et al. 2015; FAO 2016).

The presence of association members in markets, however, also requires effort besides the travel itself, such as investing in the presentation of the product for sale (e.g., shelving, drawers, and the arrangement of products); their own presentation (e.g., the use of caps, badges, uniforms, or aprons); and communicating effectively with consumers, who often use different forms of communication in urban settings and do not speak Quechua. While members note that it is financially worthwhile to invest in these areas, leaders of the associations that have had fewer years of market participation acknowledge that they still have a lot to learn, particularly in terms of building a relationship and reputation with customers.

As they participate in physical markets and observe customer demand, members of the women's associations have also become interested in producing different AE products. In contrast to the traditional subsistence farming in the region, which largely relies on potatoes, corn, and barley, members' farms are generally very diverse and offer a variety of products for sale. The president of Association B explains, "We try to produce as many types of vegetables as possible. We don't have to go to the supermarket because we grow all our food at home, in our own farm."

The increased diversity in agricultural production among members of the women's associations also represents a shift toward marketable production. Vegetables – not the typical staples of potatoes, corn, and barley – are their best-selling AE products, followed by fruit, *melloco* (a tuberous root vegetable, *Ullucus tuberosus*), and maize. Four interviewees estimated that members of their associations collectively sold as much as 70% of the AE output produced in their farms. Several members also highlighted that these diverse production systems limited their exposure to pests.

Co-learning and sharing experiences within the women's associations has also led to an increase in the variety of native species cultivated in their communities. Quinoa (*Chenopodium quinoa*) and amaranth (*Amaranthus spp*) were reincorporated as standard crops, and several varieties of chocho and maize as well as Andean roots and tubers can now be found on farms in local communities. All producers in the women's associations have tried growing jicama (*Pachyrhizus erosus*), white carrot (*Arracacha xanthorrhiza*), and chocho, and participate in a seed saving and sharing program established by the national NGO.

Another visible effect of the women's associations was the implementation of living barriers, employed by over twenty families in each community (about 30% of residents). Though the type of living barrier varies from farm to farm according to its expected purpose (e.g., protection, production, livestock feed), knowledge exchanges between members of the association on the use of these barriers led to an increased level of biodiversity in the landscape, with a rise in the use of native plants, including the tree species alder (*Alnus acuminata*), pumamaqui (*Oreopanax ecuadorensis*); cepillo (*Callistemon citrinus*) and capulí (*Prunus salisifolia*); shrubs species broom (*Retama sphaerocarpa*), chilca (*Bacharis sp.*) and linden (*Sambucus nigra*); and forage plants purple mallow (*Malva sylvestris*) and maralfalfa (*Pennisetum purpureum*).

While all six women's associations have diversified their production and set up stands in the markets, there are some differences in production between the two associations that have been marketing their products the longest (Associations B and C) and the rest of the associations with less marketing experience. Leaders in the two more experienced associations point to a deliberate reduction in the use of chemical inputs and a shift toward agroecological production among their members. They also noted an increase in their – but also their consumers' – awareness of the relationship between production practices and human health, which has informed production decisions. As the president of Association B explained, "There is greater concern for health, and consumers are demanding locally grown products produced in a way that is not harmful to their health." Members of the two more experienced groups adopted recommended business practices that might otherwise be rare in small-scale agricultural enterprises in less developed contexts, such as calculating all production costs and accounting for those costs when setting their prices at the local markets and when bargaining with larger buyers.

Participation in the process of obtaining identification seals

Drawing on their roots in advocating for women's rights and voices in local decisions, the six women's associations have been very active and successful in pushing for the formal recognition of AE products through seals and certifications. One of certifications that they helped initiate was the Farming Families (AFC)⁵ seal, which was sponsored by the Ecuadorean Ministry of Agriculture and Livestock (MAG).^{6,7} The seal is voluntary and acquired through a series of classes and trainings. It allows farmers to signal to customers that their products are agroecologically and/or locally produced through family farming.⁸ Taking advantage of this

⁵ Sello de Agricultura Familiar Campesina in Spanish

⁶ Ministerio de Agricultura y Ganadería in Spanish

⁷ The FFA seal was formally launched in 2017 at a national level, having been one of the country's official commitments for the International Year of Family Farming in 2014 and to highlight the importance of the smallholders in food production in Ecuador (MAG 2017, 2018)

⁸ Refer to AVSF (2014) for more details on the FFA seal.

achievement, the two women's associations with greater market experience, Associations B and C, created pamphlets and promoted awareness of this seal to local farmers and consumers. Through these efforts, the two associations have had broader impacts in the market and on local production, as they contributed to the increased popularity and recognition of AE products by consumers in local markets.

As a result of these women's associations work with MAG and advocacy with local authorities, they have become key players in promoting AE in their localities. And with the support of local governments, who are looking to provide additional market opportunities for their producers and promote agricultural development, leaders of the women's associations have become sources of guidance and information for local farmers. For instance, they have been asked to help others create traceability systems like their own and speak in sessions explaining the process for applying and maintaining AFC certifications. These efforts certainly add to women's unpaid labor, along with the unpaid roles they already have within the home, including care and domestic work, as described in various contexts (Hochschild 1989; Smee and Martin 2014). At the same time, leaders of the women's associations see these efforts as also strengthening their recognition and reputation in local governance systems as well as benefiting their products, as the value of the seal becomes more widely recognized by consumers. Leaders of Associations B and C report also seeing their efforts lead to greater transparency within their organizations, as members more freely share their production practices with one another with respect to the seal criteria. The standards themselves have also improved their farming practices, as they plan rotations, fallows, and diversification more carefully to ensure that they continue to qualify for the seal.

The AFC seal provided by the MAG is not the first certification that the women's associations have tried to obtain, though it has been the most successful. Associations B and C previously worked together to create a local Participatory Guarantee System (PGS)⁹ for their products. PGSs are locally based guaranties used by producer groups in Ecuador, relying on self-governance for compliance. The design, compliance, and eligibility for the guaranty is based on a more participatory process than the AFC seal created by MAG, as participants agree on standards jointly and inspect each other's farms to ensure that they meet the agreed-upon standards. While initially the two women's associations worked on establishing an PGS for their communities, they shifted their efforts in the last five years toward advocating for and supporting the development of the AFC seal in response to MAG interest. They now invest in promoting knowledge of the AFC seal among producers and buyers, and, in response to requests from the local government, spend time helping farmers outside their association understand the criteria for the seal as well.

Community leadership

Women's associations offer a protected space for women to lead, learn, make decisions, and participate in the community. Because they are run by women, participation is scheduled around women's other responsibilities, such as caregiving and domestic work. Leaders of the associations noted that their organizations have continued for years (and sometimes decades) because their activities do not conflict with other demands on members' time. They report that

⁹ Sistemas Participativos de Garantía (SPG) in Spanish.

other community leadership positions such as participation in the water council are more time demanding, which limits women's ability and willingness to participate.

Many members of the women's association also take part in other community organizations, and the women's associations have served as a springboard for local leadership positions. Several leaders of the women's associations have participated in local government (*cabildo*) and water councils, usually after establishing their reputation through their association. However, those who have participated in these more locally powerful groups indicate that this does not necessarily mean a full incorporation into the leadership structure – even if they are chosen as members of the leadership in these more politically powerful organizations, women rarely reach decision-making positions such as community presidency or council and are usually chosen for positions such as a secretary or treasurer. One interviewee noted that being chosen as treasurer reflected the community's trust in women as caretakers of money; but the position still is more administrative than decision-making, which shows that the gains that women have made in terms of recognition and local leadership is still met with a ceiling. This observation is echoed by research conducted in the northern part of Andean Ecuador in the late 1990s, as "women held minor positions in community councils, but relatively few were elected as community presidents" (Korovin 2001).

Leaders of the women's associations also noted that, through the associations and their achievements, there has been a shift in not only their identity as legitimate AE producers but also their relationships and social networks, as members of their communities and their leaders have come to recognize them as producers. Because of this legitimacy, their membership has improved their access to seeds, inputs, small and large livestock, credit, technical assistance for agriculture and livestock, and participation in local environmental and water programs. Because of the visibility of their success, members have also been consulted and invited to participate in the design of the local Development and Land Management Plan (PDOT), ¹⁰ a formal system implemented in Ecuador by the Decentralized Autonomous Governments (GAD)¹¹ for provinces, cantons, and other territories to set their own economic development plans and priorities through a participatory process. Some of the associations are also part of the provincial women's federation FEMICAM, ¹² which fosters collaboration between women's groups to support local economic development and improve nutrition in the area.

Even though leaders of the women's associations have participated on and off in local governance and water councils, the women's associations have a relatively poor level of formal contact or collaboration (i.e., written agreements) with local leadership and other community organizations such as farming groups, youth groups, or the water council. This reality represents lost opportunities for collaboration, growth, and even recruitment of new members. While the difficulty in making these formal connections may be in part explained by the transitory nature of the leadership in several of these organizations – including the women's associations – some respondents also pointed to the political or religious affiliations of several community groups as another barrier for collaboration.

¹⁰ Planes de Desarollo y Ordenamiento Territorial in Spanish

¹¹ Gobiernos Autónomos Descentralizados in Spanish

¹² Federación de Mujeres Indígenas y Campesinas de Mulalillo

Some of the limits in the interaction between the women's associations and the local government and leaders are deliberate. The leadership of two of the associations in this study noted no significant relationship with the local government. Four of the associations complained that their community leadership may impose its own priorities and agenda on associations or require that associations adjust their plans to that of local councils (Table 3). Some reported that local government demands from the associations – for both their own and others like farmers' and youth organizations – are onerous. The Andean indigenous tradition of *mingas*, or labor exchange within the community, requires that community members regularly participate in unpaid work such as area beautification, erosion-prevention planting, or water management. (Less often, *mingas* may also be carried out to help a particular household through the idea of cooperation and insurance, such as working in each other's harvests). Under this tradition, households must generally send at least one member to attend local government meetings and may be fined if they are absent. As a local association, women's associations report that they are also pressured to participate in community activities as a group, which takes up members' time and limits their ability to focus on their own agenda.

Korovin (2001), in discussing *mingas*, notes that while fines may deter shirking of meetings and community activities, the nature of *mingas* as an indigenous social norm reinforces the sense of obligation to participate, even if burdensome. Nonetheless, requirements imposed by some local councils on women's group's attendance in particular have lowered their members' enthusiasm to participate in the association and limits new membership. Some leaders also noted an additional point of tension, as local government meetings were scheduled without consulting with representatives of lower-level associations (women's associations, but also farmers and youth organizations, for example); but the latter are nonetheless expected to attend and fined if they do not. While this oversight might not be directed at women's associations specifically, some interviewees noted that this felt disrespectful of women's time. Several leaders of the women's associations were also frustrated that even though they completed much of the groundwork for projects that benefited the community, such as advocating for the AFC, the local government was asked to implement them and not the women's organizations.

Table 3. Impact of Women's Associations (Based on Interviewee Responses) Associations	Effects on members	Effects of the associations on the communities	Impacts of community leadership on the associations
Association A	Overall empowerment, greater self-confidence; more purposeful participation; improved management skills	Women's voices heard; more diversified farming system; growth in the number of home gardens	Community leadership imposes its agenda on the association, requiring them to frequently change activities and plans
Association B	Self-confidence; greater respect within their families; stronger social networks; enhanced money management skills and knowledge of the health benefits of AE; more marketing opportunities	Inclusion of women in leadership; established reputation as good money managers; greater demand for transparency from local leadership	No effect from the community leadership or community acknowledged by the members
Association C	Increased women's agency, knowledge, self-esteem, and confidence	Greater participation in water councils and community leadership; greater adoption of AE techniques and new crops	Seen as an interference by community leaders who do not take the associations' activities

Association D	Increased confidence and self- esteem, increased income generation and project management skills, greater community participation	More women in leadership and community organizations; widespread adoption of AE practices and new crops; growth of family gardens	into account and make demands on their time Association's activities are not prioritized by the community leaders; fined for not attending local council meetings
Association E	Improved management skills; better community-level leadership opportunities; greater respect within their families; increased AE knowledge	Women empowered to participate in the community; greater community recognition of women's roles in leadership; adoption of diversified farming systems	Association's agenda subordinate to community leaders' preferences
Association F	Greater self-esteem, recognition in the community, group cohesion, and income generating activities; stronger social and client networks	Greater participation of women in the community; tours and exchanges with nearby communities	No interference from the community leaders

Leaders of local NGOs voiced that to be more effective, the women's organizations should collaborate closer with other local community organizations such as producer groups to promote AE products in the market and demand more support from local authorities in the promotion and dissemination of their products. NGO representatives also believe that a more coordinated effort among community groups that have a stake in AE production would give them a better bargaining position, whereby they could negotiate for dedicated spaces in markets and fairs for AE products and for additional training from NGOs or MAG.

On the other hand, the interviewee from MAG noted that the women's associations cannot be expected to act alone in supporting agricultural production and markets. Rather, local and state governments – including MAG – should budget for and provide training for producers, including members of the women's associations, and promote consumer awareness of AE production and messaging of the health benefits of these products. The MAG interviewee also noted that external stakeholders, such as NGOs, churches, and government representatives, should act as facilitators for creating alliances and forging cooperation between the women's associations and other local groups of producers and stakeholders.

Relationship to Other Stakeholders

While the feminization of agriculture and the increased role of women in managing farms is a pattern seen in many parts of the world, external factors also contributed to the shift toward agricultural diversification. Association leaders point to NGOs working in the area as instrumental in the shift toward AE productions, as the NGO representatives piqued their interest in increasing their market participation as sellers and provided guidance on how to do so. Additionally, these markets such as fairs, corner stores, farm stands, direct sales to homes and restaurants that the organizations developed and, in some cases, created were facilitated through support of governmental entities such as MAG and the Ministry of Economic and Social Inclusion (MIES). These institutions have been essential in giving the women's organizations the opportunity to not only market but also learn about consumer demand and market trends. A

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¹³ Ministerio de Inclusión Económica y Social in Spanish

member of Association B demonstrated this understanding of consumer preferences when she stated, "It is better to sell here [fair] than at the wholesaler. People come because they know us. They value our products. They value the fact that they are agroecological."

Participating in these markets has also enabled the women's associations to forge connections with other local players, such as local universities, local and national NGOs, and numerous individual consumers. NGO representatives and most of the other stakeholders viewed the associations as being a generally positive influence on members' lives and on the community, as some associations promote AE production locally and informally offer technical assistance and knowledge exchange not only for members but other producers in their community.

Collaboration, and Empowerment

Participation in the women's associations – and the economic growth and local recognition they have received – has also contributed to members' empowerment and agency. Leaders of the associations noted that they have seen members become more willing and able to speak out in their community, are more respected by their families, and are more confident in their own abilities and management skills (Table 3). For the women, being able to travel outside their communities, improve their communication skills, and strengthening their social and commercial networks were important incentives to justify their participation in the AE markets. They emphasized that selling their products and earning their own income has empowered them and granted them greater independence.

By interacting with one another in meetings and other joint activities, the association members also enhanced their agricultural production and marketing skills. For instance, they have learned about crop planning and rotation, product quality, production cost accounting, marketing, and customer service. These technical skills have also given members more credibility as producers and sellers and better access to institutional support from local leaders and NGOs. Nonetheless, women's associations with fewer years of market experience expressed that they have still have much to learn about participating in local markets, particularly in customer service and understanding consumer demand.

We observed not only the collaboration within each women's association but also the collaboration between the two associations with more market experience, Associations B and C. Although each of these women's associations are in separate villages, they have fostered collaboration and knowledge-sharing through farm tours, farmer exchanges, and the replication of successful garden designs. For leaders of Association B, fostering collaboration between women's groups in the region is an essential step to elevating women's positions in their community and as producers in the market.

Leaders of some associations also lamented that member engagement and attendance appears to be largely tied to income generating activities and receiving gifts. Turnout was higher in events in which members received inputs or training from MAG, NGOs, or the technical university compared to those in which the focus may be on strategic planning or knowledge-sharing between members. So, rather than conduct advocacy and negotiations with other local groups jointly, the leaders of the associations often were left to participate in these important activities by themselves.

Another issue regarding the internal structures of the women's associations came from interviews with NGO representatives and the governmental support institutions (Table 4). They expressed that some of the women's associations failed to have a well-defined long-term vision with clear goals and objectives. They were also concerned that the associations did not have a "cooperative" work model. A representative of MAG in the Rural Development Unit mentioned "Right now, the associations have not had the impact we had expected. The majority do not have a well-developed strategic plan and clear objectives." This lack of foresight has weakened their ability to communicate with other groups such as NGOs and local governments and associations about their plans and may have left them out of activities that require coordination across several groups. Some NGO representatives acknowledged that the focus on shorter-term goals may be understandable given the relatively low socioeconomic status of many of the members, who may have to prioritize subsistence needs over longer-term investments and the advanced age of many of the leaders and members. The leaders of the associations expressed a concern that they have had trouble recruiting younger members, particularly for leadership positions. Older women were still leading the associations with limited planning for when these leaders eventually step down.

Even with these challenges, all the interviews with representatives from NGOs and governmental agencies that work in the region described the primary strengths of the organizations is their solidarity and the positive influence they have had in their communities. For example, a representative from an international research center mentioned, "I see how they [the women in the associations] have influenced a new perspective on agriculture, valuing traditional knowledge and practices. They have promoted equity in the decision-making processes." The director of a regional rural development NGO added that women's associations, "...help in educating their members and encouraging the diffusion of technical assistance in their communities." The director of a national public health NGO explained that "The women have improved their lives and have changed how they grow their food to the benefit of their rural communities and neighboring cities." A representative from an international bilateral aid agency explained that the associations and their members have influenced other smallholders in their communities to employ similar practices, leading to the scaling out of AE.

Table 4. External and internal challenges

Associations	External Challenges	Internal Challenges
Association A	Unfavorable institutional environment; sometimes hostile towards women's issues; sometimes entirely ignored; disillusioned because of promises from governments that have gone unfulfilled	Member participation linked to the projects offered.
Association B	Difficult external environment for women's organizations; would like FEMICAM to take on a bigger role in representing women's associations at the provincial level; instability in sales	Lack of participation from members; instability in sales
Association C	Lack of support from local governments and institutions	Participation strongly linked to the achievement of projects; younger members have not stepped into leadership positions; would like to improve their own marketing strategies and establish a sales venue

Association D	Support of government institutions depends on their priorities –worked with provincial government to sell in fairs but faced a hostile attitude from the parochial government; seeking support to secure their own sales venue	Membership participation linked to support from institutions; projects needed to get young people involved in associations
Association E	Difficult institutional environment for women, authorities ignore them	Lack of capabilities and enthusiasm in management (fatigue); lack of motivation among members; would like establish sales venue and improve product quality
Association F	Complicated institutional environment where local authorities do not support women	Low sales volumes, need to improve participation; perception that some members only attend when they received a gift rather than being motivated to help and learn from one another; searching for market venue

Discussion and Concluding Remarks

The path that women associations in Andean Ecuador took to become AE producers was the result of internal, historical, and external forces, including their interest in co-learning, and their willingness to collaborate, their experience in activism and fighting for representation, and the vacuum in agriculture left by male migration. By working together and co-learning, these women's associations have triggered a transformation of their local food system by creating or taking advantage of direct-to-consumer AE markets (Rossi & Brunori, 2010; Jarosz, 2007; Venn et al., 2006; Harris 2010). Their efforts in these AE markets have allowed members to secure higher price points and learn about and respond to consumer preferences. Market participation has increased their earnings. Even though this income growth was modest, it was significant for these smallholders and improved the financial stability of their households (Beberdick 2014, Borja et al. 2015). Additionally, because of their success, local authorities and other actors in Ecuador recognized that producer associations can, with government support, lead transitions to more sustainable agriculture among their members and their communities at large.

Considering that the women's associations in this study – and in rural areas in the region in general – are largely comprised of women with low levels of education and in low-income households, it is even more remarkable that they have been drivers in the transformation of food systems in their community. They encouraged production diversification, experimentation, and advocated for and achieved an AE seal for family farm products. The women's experiences and the perspective from external stakeholders demonstrate that these associations not only gained from connecting with AE markets but also have had a larger impact on agriculture in the region.

One of the most salient results from our current analysis is that even though women's associations in Ecuador arose from indigenous women's calls for government representation and improving their households' living conditions, decades later, they are now influential in transforming the local environment into a more sustainable food system. Through their effect on the agricultural decisions of their household and on other producers in the community, the associations have had impacts far beyond political or economic issues and have affected the way communities conceive and carry out production.

As mentioned by women leaders, through strengthening their organizations' capacity, women's associations have increased the visibility of AE among both consumers and producers, have influenced local food policy, and have directed the efforts of local authorities seeking to support small scale producers. Altogether, these results demonstrate that farm size is not the determining factor; smallholders can influence the local food system. Other forms of capital, such as social, physical, human, natural, and financial, are also key components in the ability of smallholders and their organizations to effect change in the food systems towards the AE transformation (Donovan et al. 2013).

Social capital appears to be an instrumental part of how women's associations operate, not only through the connections between members, but also as the associations have enabled them to extend their connections to other groups, obtain local leadership positions, and influence important stakeholders. As Putnam (1993) points out, working together is easier in a community that has social capital. The underlying social capital from women's associations and the shared history of their members in activism gave them a space to discuss common concerns in their communities and families and enabled them to eventually collaborate to achieve other goals, such as participating in markets as producers and transforming their farms. The social capital built over time allowed members to confront and overcome organizational, management, and information challenges. And because of their malleability, the women's associations were established through collective action rather than by legal mandate – in contrast to local governmental and water councils – they can adapt to a variety of issues according to members' interests and schedules. Additionally, by working together members can specialize within their associations so that those who have better social capital or skills can use them to the benefit of the group and they exchange best production practices.

The commitment of members to their associations was essential to the initial transformation of the women's associations into a space for collaboration on AE production and marketing. The future of these associations – particularly those that have more recently shifted into market participation – is less clear. Collective action demands a tremendous effort and requires some members to lead and take on larger responsibilities, oftentimes with tension between personal and community interests (Beberdick 2014). Some women's associations studied here expressed concerns about the burden on leaders, as the leadership in organizations ages and younger members are reluctant to take on time-consuming and demanding leadership roles. The availability of leaders at different levels, accompanied by an adequate flow of information and accountability among members, will be a decisive factor in maintaining the unity and continuity of the associations, especially in the face of frequent changes in local authorities and counterparts in other local groups (Parrado et al. 2014). To the extent that collaboration and joint marketing has enabled women to improve their positions in the community, increase their household incomes, and make other gains at a personal level (such as their reported sense of increased empowerment within their household, as they become less dependent on income from their spouses), there is hope that members who continue to benefit from these associations will step up to ensure their longevity.

The external environment in which the women's associations operate has also played a role in their creation and current operations. First, NGOs with activities in the communities facilitated the shift in attention of the associations towards marketing, by helping them gain access to and in some cases creating marketing venues and encouraging knowledge and seed sharing between producer associations, whether they were women organizations or not, in the region. More recently, collaboration with local branches of MAG have given these associations access to training and inputs and propelled the use of the AFC seal, increasing the recognition of (and potential profits from) their AE products. Support from higher levels of government has been essential to establish the credibility of farmers in the eyes of consumers as well as providing them with venues for their markets.

At the local level, the relationship between members of the women's associations and leadership was more complex and anchored in well-established framework that proved to be difficult to change. A broad observation of rural parishes in Andean Ecuador reveals that many women are members of parish councils, but few serve as presidents or vice presidents of these councils. Commonly, women's participation in local political spaces has been circumscribed to the "management" of social services and "voluntary" contribution to the well-being of the family and community, which has resulted in a "naturalization" of gender roles (Mosquera 2018). The relationship between members of the women's associations and the local government and other politically important groups fit into this description.

As the women's associations succeed and gain more respect within their communities, their leaders have been involved with local councils, but they rarely have held decision-making positions. Based on their experience and knowledge, they have been asked by local governments to provide information and guidance to other producer groups in developing traceability systems for agroecological seals and participatory certifications. However, despite their work in response to these requests, leaders of women's associations were left feeling that local government leaders are ultimately getting the credit for providing the information to other groups.

Influencing the political environment has been a challenge for the women's associations, especially at the local level, as it is conditioned not only on their capacity for collective action, the policies, priorities, and attitudes held in the region but also by the prevailing power relations resulting from patriarchal and colonial structures in the Andean society. Nevertheless, with respect to farming systems and the marketing of AE products, the cases presented in this study demonstrate that it is possible to exert a shift in farming practices in an entire region despite a difficult local political environment. This change can be achieved through the establishment of markets that benefit small producers and consumers, creating strong social networks through this market participation, and working with stakeholders at the national level that supersedes local leadership. To scale up and replicate this AE transformation, which includes greater agricultural diversification, a focus on production without the use of agrochemicals, and knowledge sharing among producers, this study demonstrated that market access is not the single only requirement. The strengthening of women's associations and the replication their successes towards an AE transformation in other regions will also depend on a more equitable distribution of opportunities

and an enabling institutional environment for women to establish greater agency and decision-making power within their communities.

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