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Review article

Have public policy and family farming been an unhappy marriage for the past 20 years?

¿Las políticas públicas y la agricultura familiar han sido un matrimonio infeliz en los últimos 20 años?



¹ Corporación Colombiana de Investigación Agropecuaria, [AGROSAVIA], Bogotá, Colombia.
 ² Purdue University, West Lafayette, Indiana

*Corresponding author: Santiago Andrés Roa-Ortiz. Corporación Colombiana de Investigación Agropecuaria, [AGROSAVIA], Tibaitatá Research Center, Km 14 Mosquera-Bogotá, Colombia. sroa@agrosavia.co

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Abstract: The countries of Latin America and the Caribbean (LAC) have made progress in creating and implementing public policies on family farming (FF) by developing their own concepts, which converge in the fact that the family labor force is the most important link. However, this also appears to be their weakness for the future, since the exodus from the countryside to the city is affecting work in this sector, and restrictive policies in this regard could end up denying the resources needed for FF to achieve greater development. This document aims to review the existing policies, official figures, and regulations that have been created over the years to recognize and strengthen family farming (FF) in Latin America and the Caribbean (LAC). To achieve our goals, we carried out a systematic search for technical documents (books, reports, and papers with official figures), policies, and legislation related to FF in LAC. Several countries have developed concepts to make policies focused on family farmers. Nonetheless, all converge in that the family workforce is the most critical link in this conceptualization. However, it also seems to be its Achilles' heel for the future since the field-city exodus is affecting this sector, and restrictive policies could reduce the necessary resources for FF to achieve more significant development. Furthermore, the most significant challenges are found in conducting research on crops and animal species that mainly affect FF, such as corn, beans, rice, cassava, vegetables, cattle, sheep, goats, pigs, and milk. Finally, efforts need to focus on studying changes in family composition, the quality of land, the role of family farmers as guardians of ancestral and native crops, excluding FF export crops. Unpaid women must not be forgotten as a vital part of FF because domestic and production units are

Keywords: agricultural and rural legislation, agricultural policies, family farms, food security, FAO, rural development.

Resumen: Los países de América latina y el Caribe (LAC) han avanzado en crear e implementar políticas públicas en torno a la agricultura familiar (AF) mediante el desarrollo de sus propios conceptos, los cuales convergen en que la fuerza laboral familiar es el eslabón más importante. Sin embargo, esto también parece ser su talón de Aquiles hacia el futuro, ya que el éxodo del campo hacia la ciudad está afectando el trabajo en este sector, y las políticas restrictivas a este respecto podrían terminar negando los recursos necesarios para que la AF logre un mayor desarrollo. El objetivo de este documento es realizar una revisión de las políticas, cifras y normativas existentes que se han creado a lo largo de los años para reconocer y fortalecer la AF en LAC y detectar los problemas que la aquejan y que se pueden visibilizar para los tomadores de decisiones. Se realizó una selección sistemática de documentos, políticas y legislación relativa a AF en LAC por medio de plataformas como SCOPUS y SciELO; además, se realizaron búsquedas en las plataformas donde reposan las leyes, decretos y resoluciones de cada país incluido en esta revisión. Un hallazgo importante es que los mayores desafíos se encuentran en el desarrollo de investigaciones sobre cultivos y especies animales que afectan principalmente a la AF, así como en enfocar los esfuerzos por estudiar los cambios en la composición familiar, en la calidad de la tierra, en su papel como guardianes de los cultivos ancestrales y nativos, pero sin enfatizar en los cultivos de exportación de AF y sin olvidar a las mujeres no remuneradas, las cuales son una parte vital de la familia, ya que en la AF las tareas domésticas y productivas por lo general guardan un vínculo estrecho.

Palabras clave: desarrollo rural, explotación agrícola familiar, FAO, legislación agraria, política agrícola, seguridad alimentaria.



Introducción

Territories and family farming (FF) are in constant change. The economic, political, social, cultural, and environmental dimensions merge, evidencing their importance for food security and employment in the rural realm. FF shows the world its importance in reducing poverty and conserving biodiversity and cultural traditions.

The year 2019 was exceedingly important for FF because the United Nations (UN) declared the period between 2019 and 2028 as the Decade of Family Farming in the world, shedding new light on the meaning of being a family farmer in a rapidly changing world. Citizens involved in FF are agents of change that the society needs to achieve Zero Hunger, a more balanced and resilient planet, and Sustainable Development Goals (FAO, 2014) due to their knowledge and care for the planet

According to Leporati et al. (2014), FF produces between 27 % and 67 % of total output in LAC countries. Therefore, there has been a particular interest in characterizing FF in Latin American countries in the last decades; however, the most relevant feature is the absence of a single concept worldwide when discussing this critical issue. A unique concept of FF could help policymakers identify or define those farmers linked to FF practices. This identification, in turn, could help Latin American countries optimize policies and resources oriented toward FF.

Even though FF has been recognized in countries of the Latin American and the Caribbean (LAC) region since 2004, and the Specialized Meeting on Family Farming (REAF, for its acronym in Spanish) has been created, there is still a gap in the unification of the FF concept. This gap has caused, in many cases, problems or confusion when defining the concept, often limiting it to small-scale agriculture, small producers, and subsistence agriculture or farmer economy. In many instances, this results from a lack of reliable sources and information systems that provide precise indicators (Tobar, 2010). Failure to unify the concept produces resource targeting problems, where other groups of more entrepreneurial or vulnerable farmers receive the attention of governments. This problem may lead to policymakers erring in targeting the population for FF policies and misusing the resources for this type of producer, condemning them to continue under current conditions.

This paper aims to review the existing policies, official figures (from technical reports), and legal regulations (e.g., laws and decrees) that have been created over the years to recognize and strengthen FF in LAC. Thus, we search whether current policies and regulations in FF are tailored to family farmers' needs and are truly coordinated to achieve well-being.

This paper starts from the concept of FF given by FAO and continues analyzing what Latin American countries add or take away from the concept to further root it in each country. As a second step, it presents statistics on FF in the region and draws up a state of the art of FF policies and regulations as of 2019. This paper ends with a discussion and the conclusions that answer the researchers' question about FF.

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Methods

To conduct this review, technical documents (e.g., technical reports released by governmental or private institutions such as FAO, RIMISP, IICA, among others) and national laws focused on FF in Latin America were systematically searched and analyzed. These documents were searched via Scopus and SCielo using "family farming," "Latin America," "Policies in family farming," and "Family Agriculture" as keywords in English and Spanish languages. Only those documents released during the last 20 years (2000-2019) were included for the analysis.

After this search, we carried out a first review; during this step, a data matrix was created, including variables such as year, authors, and FF approach. In addition, we identified national laws related to FF in Latin America (mentioned in these documents). in Spanish and Portuguese. Finally, we completed a general analysis and discussion about existing policies, official figures, and regulations that have been created over the years to recognize and strengthen FF in LAC.

Results

Twenty-five technical reports about public policy focused on FF in Latin America were identified. Moreover, we incorporated 25 reports on FF public policy about to support the review.

Stylized facts

The importance of FF in LAC is undeniable. According to FAO-BID (2007), it concentrates around 81 % of producers and farms, provides 27–67 % of the total food production in the region, occupies 12–67 % of the total agricultural area, and creates 57 %–77 % of the agricultural employment in Latin America. Regarding the number of farms of family farmers in LAC, 56 % are in South America, 35 % in Central America and Mexico, and the remainder in the Caribbean. Meanwhile, the age of the family farmers is 50 years on average with a standard deviation of three years, finding that in the upper limit is Chile with 58 years of age and in the lower limit, Honduras and Nicaragua with 46 years on average.

Almost 23 % of the agricultural land is in the hands of family farmers. They hold 13 % in Andean countries and 34 % in the countries of the Southern Cone. Over 80 % of the farms are family farms in Brazil, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Nicaragua, Panama, and Saint Lucia, and over 90 % in Antigua and Barbuda, Chile, Guyana, Haiti, Honduras, Paraguay, and Suriname (FAO, 2018).

Likewise, producers of production units defined as FF have a low level of education that averages 3.1 years of school attendance, disaggregated as follows: four in Bolivia, 4.9 in Colombia, 2.7 in Costa Rica, two in Chile, 2.6 in El Salvador, 1.9 in Guatemala, 2.7 in Honduras, 3.8 in Mexico, 2.5 in Nicaragua, and 4.1 in Panama. This result indicates that the illiteracy rate in these countries is close to 32 % for FF producers (CEPAL et al., 2012; FAO, 2018).

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Figure 1 shows the importance of FF in LAC. In Bolivia, 100 % of sugarcane and 70 % of rice and corn production are covered by family farmers; in Brazil, 70 % of beans and 87 % of cassava; in Chile, 94 % of goats; in Colombia, 30 % of annual crops (e.g., cassava, plantain, pumpkin, yam, among others); in Costa Rica 75 % of beans and 97 % of corn; in Ecuador 85 % of vegetables and 70 % of corn; in Guatemala, 73 % of rice; in Honduras 78 % of rice; in Nicaragua, 66 % of vegetables, in Panama, 81 % of corn; in Paraguay, 93 % of bananas, 94 % of beans, 97 % of tomatoes, 94 % of cassava, and 80 % of pork meat; in Uruguay, 80 % of vegetables, and in El Salvador, 84 % of rice and 64 % of vegetables (CEPAL et al., 2012).

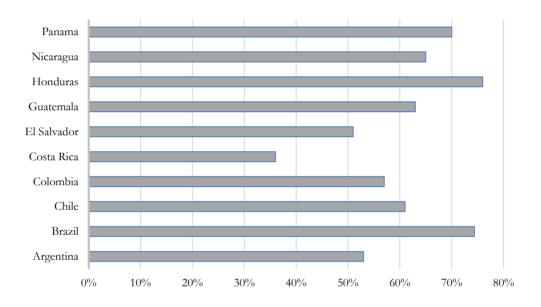


Figure 1. Contribution of FF to agricultural GDP in LAC, by country, 2014. Source: Leporati et al. (2014)

Another critical variable is employment, where FF contributes more than 50 % to region's agricultural sector, ranging from 36 % in Costa Rica to 76 % in Honduras (Figure 2).

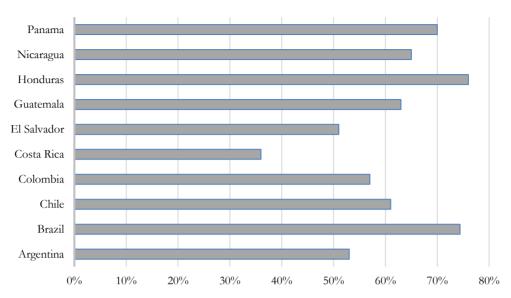


Figure 2. Contribution of FF to the agricultural sector employment in LAC, by country, 2014. Source: Leporati et al. (2014)

Though policies must consider a differential and gender approach, the information shows that the percentage of women classified as farmers ranges between 8 % and 30 %. According to FAO (2018), the average farm size where women manage agricultural exploitations is always significantly lower than those managed by men, ranging between 35 % and 80 %. Medina (2013) states that rural women have been affected in their tenure and land ownership relationships by forced displacement, associated with discriminatory gender arrangements in rural societies. Moreover, land ownership is lower for women than for men, and most of the times the former own low productivity lands (Deere et al., 2011).

Continuing with the differentiation and difficulties that women face to carry out FF activities, we describe how access to irrigation also affects this inequity at the country level as follows. For example, in Chile, 37 % of the women have irrigation, with an average irrigated area of 1.7 ha, while for men, the proportion is 42 %, with an average irrigated area of 2.7 ha (Namdar-Irani, 2014). In Haiti, while women head 20.4 % of the farms at the national level, only 14 % of the irrigated farms are run by them (MARNDR, 2012). In Nicaragua, irrigation is an uncommon practice, and only 3.5 % of the farms have an irrigation system; nonetheless, in the properties managed by women, only 2.1 % have access to irrigation compared to 3.8 % of the properties managed by men.

Similarly, if we analyze the case of family farmers' assets, we find that in Chile, agricultural holdings managed by women constitute 30 % of the national total, but they only hold 23 % of the value of the assets as opposed to 71 % of men's ownership (Namdar-Irani, 2014). In the case of bovine farms, the proportion is similar since men handle 47 % and women 39 %; following this production line in Nicaragua, 40 % of the livestock operations managed by women have an average of 20 cattle heads, while livestock operations managed by men increases to 50 %, raising the average number of cattle heads to 29. In Ecuador, a gender gap is evident in most assets,

e.g., agricultural equipment owned by women is 18 %, while for men, it is 47 %, and 35 % remains as joint ownership. However, in the ownership of animals defined as minor species (e.g., goats, nanny goats, poultry, rabbits, among others), women outnumber men by nine percentage points, i.e., 43 % for women compared to 34 % for men (Deere & Contreras, 2011).

Mandar-Irani et al. (2014) indicated that in five Latin American countries (Bolivia, Ecuador, Guatemala, Nicaragua, and Panama), a smaller proportion of farms headed by women use fertilizers. In Nicaragua, the use of technologies is less frequent in farms headed by women than those headed by men, but the difference does not exceed five percentage points. In Chile, no gender gap is detected in applying complex technologies (use of certified seeds, integrated pest control), and a small gap (two percentage points) was found in favor of women in the technification of irrigation. Regarding soft technologies (tax regime and marketing channel), the gaps are ten and three percentage points, respectively, which is a class gap rather than a gender gap. In ICT, there is a slight difference in favor of women.

The family farming concept in Latin America

According to Schneider (2014), there are three approaches for defining FF. The first one is based on a conceptual perspective (i.e., using traditional definitions of agriculture and family). The second approach is based on an empirical criterion: land size, socioeconomic status, and family labor in agriculture. Finally, the last one is a political definition, in involving acceptance of a social contract.

Globally, the United Nations Food and Agriculture Organization (FAO) in the International Year of Family Farming (IYFF) in 2014 endeavored to develop a concept of FF that was broad enough and collected the common principles found in the literature. Then, for this event, a practical definition of the concept of FF was established, with a common understanding that facilitated dialogue among different stakeholders (FAO & IFAD, 2019), without forgetting those national definitions adapted to historical, social, economic, political, and cultural contexts. According to FAO:

Family Farming (including all family-based agricultural activities) is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly reliant on family labour, including both women's and men's. The family and the farm are linked, co-evolve and combine economic, environmental, social and cultural functions (2014, p. 9).

On the other hand, the Central American Strategy for Territorial Rural Development (ECADERT, for its acronym in Spanish) differentiated the definition of FF for Central American FF. Consejo Agropecuario Centroamericano (2010) divided FF into two types of production and consumption units based on family labor, including i) small business agriculture and ii) family farmer agriculture, which combines self-consumption and sale of products.

In the same line, MERCOSUR recognized in 2007, that it was necessary to define differentiated public policies for FF, in such a way that the Common Market Group (GMC, for its acronym in Spanish) established standard criteria to typify the rural populations that comprise the set of FF.

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The parameters considered by GMC are hired labor (workers not related to the family); production leadership/management of the establishment (terrain, property); place of residence of the family; area of the establishment; origin of the income/revenue of the establishment, and capitalization of the family (MERCOSUR & GMC, 2007).

Progress on four fronts regarding the FF definition has been made in Colombia. The first progress front started with Law 160/1994, in which the Family Agricultural Unit (UAF, for its acronym in Spanish) was defined as the primary agricultural production enterprise that allows the family to receive remuneration for their work and have a capitalizable surplus that contributes to the formation of their estate. The UAF will typically be exploited only with the owner's and his family's work.

The second progress front took place towards 2011 when the Rural Agricultural Planning Unit (UPRA, for its acronym in Spanish) advanced a concept based on what was said by the Andean Community of Nations (CAN, for its acronym in Spanish). Peasant Agroecological Family Farming (AFAC, for its acronym in Spanish) is defined as agriculture characterized mainly by family labor; it has a marked dependence on the goods and services provided by the natural environment (ecological) and its agroecosystem (UPRA, 2016).

The third progress front is given by the Strategic Plan for Science, Technology, and Innovation in the Agribusiness Sector (PECTIA, for its acronym in Spanish), which has a national FF research agenda focused on four themes summarized as follows: i) research to understand the coexistence of different forms of agriculture; ii) research to reformulate and apply visions to the evaluation and measurement of FF performance; iii) research on and development of new sustainable agriculture practices; and iv) the participation of FF in research for its governance. Moreover, PECTIA also has a socioeconomic definition of FF that allocates labor force in search of collective progress, covering food needs and seeking to generate income (Corpoica et al., 2017).

The fourth and last progress front was made with Resolution 464/2017, which defines FF as a production and organization system that coexist in the country's rural territories. The territory and actors that manage this system are closely linked and co-evolve by combining economic, social, ecological, political, and cultural functions.

As Colombia, other countries in the LAC region have made progress in their own definitions, considering the common principles of FF defined by Garner and de la O (2014): 1) at least one member of the family group that inhabits the property is involved in the property's operational activities and decision-making; 2) the productive estate derives from an inheritance or a family succession that promotes the conservation of the farmer culture and rural community; and 3) agricultural production contributes, to some extent, to family income or self-consumption of food.

Under these principles, we can see how Brazil with Law 11326/2006, defines FF and its leading players, who are those carrying out activities in rural areas and meeting the following requirements simultaneously: i) do not have any land title; ii) predominantly use family labor; iii) have a minimum percentage of the family income stemming from economic activities in its

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establishment or entrepreneurship, as defined by the Executive Power (Subparagraph with wording given by Law 12.512/2011); and iv) run its establishment or entrepreneurship with his/her family.

In Chile, peasant FF is based on the criteria applied to intervention subjects for the Agricultural Development Institute (INDAP, for its acronym in Spanish), promulgated at the beginning of 1990. More recently, Berdegué and Rojas (2014) conceptually criticized that INDAP makes frequent and colloquial use of the term. However, the formal documents prepared by this institution suggest a revision of the legal concepts of "small producer" and "farmer or peasant." They are defined as those farmers that exploit an area of fewer than 12 hectares, have assets worth less than 3,500 development units (US\$ 96,000), obtain their income mainly from agricultural development, and work the land, whichever its tenure regime (Law 18910/1990).

Furthermore, Costa Rica formulated a concept that turned out to be the consensus of a consultation process carried out with FF-based organizations, differentiating two FF typologies. The first is for self-consumption or food subsistence, and the second, is for self-consumption and sale of surpluses to markets. In this way, FF, was defined as a production system where the property, management, and work are predominantly family-based and produced both for self-consumption and the market (FAO, 2011).

Paraguay, under the Ministry of Agriculture and Livestock (MAG, for its acronym in Spanish), defines peasant FF as farming in which the family group provides the primary labor resource, being its production basically for self-consumption and partially for commercial purposes, and completes their income from other artisanal or extra-property productions nature (Law 2419/2004).

Uruguay also defines Family Farmer based on the official family production resolution by the Ministry of Livestock, Agriculture, and Fishing (MGAP, for its acronym in Spanish). The farmer is an individual who works with a maximum of two permanent employees or their equivalent in seasonal wages (500 annual wages); exploits up to 500 hectares; his/her CONEAT index (created this Ministry) is 100 under any form of tenure; his/her primary income is obtained from work on the farm and resides on the farm or within 50 km from it (MGAP Resolution 527/2008; Resolution 219/2014; Resolution 387/2014; Resolution 1013/2016).

These considerations have allowed FF to be recognized as a differentiated economic subject in implementing policies where rurality's socioeconomic, cultural, and environmental development is sustainable, equitable, and inclusive. Furthermore, FF has become an emerging category from the political point of view in some Latin American countries in recent years, with social legitimacy, translating into the making of public policies and strategies directed explicitly to the development of this sector (Schneider & Esher, 2012).

Family farming policies in Latin America

Returning to the contribution of FF in Latin America considering policy-making, supranational entities such as FAO and the Latin American Parliament (PARLATINO, for its acronym in Spanish), as well as the national governments of LAC, have influenced and helped develop laws,

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decrees, and resolutions to strengthen FF in the last decade. Adib and Almada (2017) and Sabourin et al. (2014) highlighted these circumstances. One example has been the Bolivian Agricultural Production Community Revolution Act, which promotes more access to supplies for agricultural production, favors the acquisition of production infrastructure for the same purpose, and defines clear elements to increase technical assistance and peasant producer training (Law 144/2011).

Furthermore, Law 338/2013, in its fundamental principles, seeks to strengthen FF with a vision of sustainability for Peasant and Native Indigenous Economic Organizations (OECAS, for its acronym in Spanish) and Community Economic Organizations (OECOM, for its acronym in Spanish), in addition to improving productive capacities, postharvest, transformation, marketing and access to credit for all subjects engaged in FF and other related activities (Law 338/2013).

Guanziroli et al. (2013) mentioned that the term family farming in Brazil was an innovation with three sources. The first was the National Confederation of Farmers (CONTAG, for its acronym in Portuguese); the second, the federal government, which in 1993, with the Emergency Solution Program, included small farmers in agricultural policy issues. The third source was the academic studies that contributed to the debate on the subject and the formulation of public policies, influencing the enactment of Decree 1946/1996, which created the National Program for Strengthening Family Farming (PRONAF, by its acronym in Portuguese). This strategy also seeks to promote food security and reduce poverty. It also has a public policy instrument instituted by Article 19 of Law 10969/2003, as regulated by Decree 6447/2008 and amended by Decree 6959/2009, which defines the maximum amount of direct support (R\$ 4.500) for family farmers to purchase agricultural products by and production units destined to national food programs (Decree 6959/2009 [outdated]).

In Costa Rica, the Sectorial Plan for Family Agriculture 2011-2014 sought differentiated financing for technology, support, and technical assistance for FF, in addition to the insertion of differentiated commercial circuits, i.e., support for vulnerable groups and logistic support actions with information system applications. Also, there was progress in a Framework Bill for the Human Right to Food and Nutritional Food Security, including a specific chapter on FF protection and support; this bill was approved by a legislative assembly in 2017.

On the other hand, Ecuador created the Organic Act (Law 1/2009), as amended on December 27, 2010, which establishes the Food Sovereignty Regime for the production, certification, processing, and commercialization of seeds to promote agrobiodiversity. It also promotes the protection, use, and conservation of native seeds by creating germplasm banks and financing projects to protect agrobiodiversity, research, and knowledge exchange around these germplasm banks.

In the same line, Peru also has Legislative Decree 885/2000, which defines the Promotion Mechanisms for the Agrarian Sector that are applied throughout the country by the Ministry of Agriculture and Irrigation (MINAGRI, for its acronym in Spanish) by combining critical investment and development activities of the agrarian sector. This Decree was established to improve the capacities of producers and their access to instruments and supplies, raising their living standards and bettering food security. Also, government programs that promote FF have

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been implemented in high-Andean areas to serve native communities mainly through the Sierra Export Program, the Rural Agricultural Production Development Program (AGRORURAL, for its acronym in Spanish), and the Compensation Program for Competitiveness (AGROIDEAS, for its acronym in Spanish).

Following this trend, Paraguay through the MAG, within the framework of the commitments made by the government in food security policy, especially the "Public Policy Proposal for Social Development 2010/2020" (PPDS, for its acronym in Spanish), prioritized actions to promote food production by FF focused on sustainability. MAG works with FAO to develop policy instruments that support FF in the supply of products for healthy and nutritious school feeding programs, reducing rural poverty and assuring the purchase of agricultural products from FF in public purchase programs that consider food quality, quantity, and safety. To achieve this objective, the government approved Decree 11464/2007, which creates the National Family Farming Register (RENAF, for its acronym in Spanish) as a technical and public policy instrument that identifies and characterizes producers and the FF production unit as a fundamental requirement to be part of the list of public services and food suppliers that contracts with the State. This Decree was amended by Decree 2651/2014, creating and implementing the National Registry of Beneficiaries (RENABE, for its acronym in Spanish).

Correspondingly, in Uruguay (although this model is not exclusive to this country), the National Commission for Rural Development (CNRF, for its acronym in Spanish) is the FF representative organization, showing two contrasting models in 2009, the agribusiness model and the FF model (Cabrera, 2019; CEPAL, 2009). The latter is defined as "a way of living, a culture related to nature, a differentiated community life marked by the link with the earth, climate cycles and coexistence with nature" (CEPAL, 2009). Towards 2014, Uruguay developed a public procurement system for small FF based on Law 18362/2008, which in turn provided the basis to create the "Public Procurement Program for Development" that supports the Public Procurement System for the Development of Family Producers that MGAP coordinates). Law 18362/2008 creates "the Public Contracting Subprogram for the Development of Small Farmers, established by the Ministry of Livestock, Agriculture, and Fisheries," lays the foundations for the Public Procurement System for the Development of Family Farmers MGAP coordinates, as regulated by Law 19292/2014. This Law declares a general interest in FF and artisanal fishing. Family farmers and fishermen are registered and must be included in the National Registry of Enabling Organizations (RENAOH, for its acronym in Spanish) to participate in FF policies. They must have an active record with the MGAP General Directorate of Rural Development, as provided in Article 311 of Law 19355/2005 as regulated (Law 19292/2014). Likewise, Decree 86/2015 regulates Law 19292/2014 to specify the application practices and implementation of this state purchasing system.

In Colombia, Resolution 464/2017 provides the strategic guidelines of public policy for the farmer, family, and community agriculture, and the definitions related to FF, while Resolution 1133/2013 establishes the priority benefits in the UAF. Further, Article 12, Chapter III, Law 101/1993, states that under Article 66 of the Constitution and the Law, it seeks to subsidize (from the State) credit for small producers under specific terms and promote credit effectively for rural capitalization.

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These advances in public policy allow stating that in LAC, as referred by Brandalise et al. (2017), FF is not only a way to protect rural families' self-consumption but also an approach to support national food and nutrition security. Moreover, without the materialization of these initiatives in public policies, instruments, and technologies designed for FF, no differential value can be given to this activity.

Simultaneously, because of the need to have a general legal framework that includes and considers the criteria, principles, and parameters recognized internationally and the regional legal framework, FAO and PARLATINO (2017) defined an FF model that, while not binding for member states, proposes lines of action. This model establishes a legal framework that enables any country in the region to implement policies and strategies that permanently guarantee FF promotion and development and recognize its importance as a way of life and production activity that contributes to food security, the sustainable use of natural resources, biodiversity conservation, rural development, territorial decentralization, the dynamization of local economies, and the validity of indigenous communities. It intends to improve the quality of life of families who depend on FF, achieve producers' social and economic well-being, reduce poverty in the rural sector and contribute to the realization of the human right to adequate and sufficient food, the comprehensive development of individuals, families, and communities, and the maintenance of each region's cultural patterns and natural resources.

In essence, FAO, other supranational organizations, and the countries of the LAC region that are part of FAO have taken the necessary steps to define FF. It is delimited by the fact that family labor predominates in it and that family is directly responsible for the production and management of agricultural activities and assets (land, equipment, infrastructure) in the production unit. More importantly, States must provide all necessary means to strengthen this primary subsector.

Discussion

The dynamics of each country and their different approaches to FF show many interpretations and visions mainly focused on the importance of family labor, an essential variable in all LAC countries to access programs or policies aimed at this sector of the population. However, this situation also brings about restrictions for family farmers who must hire labor in the absence of a family member or when they wish to expand their agricultural exploitation. However, there is a worldwide phenomenon related to the exodus of young people from rural to urban areas, which is a consequence of voluntary or involuntary migration processes. In the first case, cities are attractive for the young population since they offer diversity in employment—especially for women—and availability and access to services they do not have in the rural areas. In the second case, the migration is caused by insecurity, state absence, co-optation of natural resources, among other problems that affect people in the countryside and all civil society.

This vertiginous migratory rhythm is evident when statistics show that in 1950, less than 30 % of the total inhabitants of the planet lived in cities, rising to 47 % in 2000; this trend is expected to rise to 60 % by 2030 (Martínez & Alcalá-Sánchez, 2012). Nevertheless, it is expected that FF

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assistance policies based on family labor reverse this phenomenon by improving monetary and non-monetary income for farmer families.

Policy-makers also attract the population to the rural sector with credit policies, in which banks grant more affordable loans to the advantage of producers. For example, Colombia created and implemented a policy called "siembre y venda a la fija," a kind of futures market that ensures the sale of crops. All this creates a capitalist—but also cultural and environmental—appeal that attracts young people and roots them in the rural world, but with a vision of sustainability, understood as a balance between production (economic), environmental, and social-cultural aspects (Garner & de la O, 2014).

The size of the farm is another important factor to access resources given FF policies. In Central America and the Caribbean, the area established for FF is 2 ha on average, while in the rest of Latin America, it reaches up to 5 ha. Nonetheless, what limits the sustainable development of FF in both latitudes and has been neglected by policymakers are land quality or water availability, agroclimatic risks, the sanitary impacts of crops, and the market and financial barriers facing this type of farmer. According to Salcedo et al. (2014a), these aspects lead to wrong conclusions and generalities that make this type of agriculture visible and unfavored by many current policies. Authors such as Maletta (2011) argue against large existing livestock operations because a single hectare of deep soils under irrigation may be more economically important than a hundred or two hundred hectares of semi-arid grassland or with marginal crops.

The evidence shows the things already predicted and confronted, such as the income received by men and women with worrisome figures. In rural areas, 11 % of men have no income due to agricultural activities, but more than 40 % of rural women do not have any income, resulting in dependence and vulnerability. Therefore, it is vital to make policies that seek equity between men and women who favor the growth of FF as a specific development component.

Studies show that in LAC, three predominant crops (corn, beans, and rice) produced in FF play a crucial cultural role in the food and nutrition security of the population of these countries. These crops are the basis of the daily diet for most people with limited resources who suffer from food insecurity, as defined by Salcedo et al. (2014b). As noted in the previous section, most of the production of corn (97 %, 81 %, 70 %, 46 %, and 70 % in Costa Rica, Panama, Bolivia, Brazil, and Ecuador, respectively), beans (75 %, 70 %, 52 %, and 94 % in Costa Rica, Brazil, Panama, and Paraguay, respectively), and rice (84 %, 78 %, 73 %, and 70 % in El Salvador, Honduras, Guatemala, and Bolivia, respectively), along with cassava and vegetables, mainly come from family producers. Furthermore, the production of some bovine, porcine and poultry breeds is fundamental for ensuring animal protein for food security.

Consequently, agricultural research and policies must have a solid inclination to support these systems, the basis of rural families' diet, without forgetting that food security not only implies the availability of food but also consumption habits and biological use of communities according to the culture (Guevara et al., 2014). Therefore, each country in the region must prioritize the crops that shield the food security of its inhabitants. According to FAO (2002), families whose food security depends on their food products are usually those with limited productive resources

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in quantity and quality due to conditions imposed by poverty. However, it has also been identified that other activities related to the sector are also crucial for FF, such as non-wood forest products (NWFPs). The most crucial NWFPs for FF are food, exudates (resins, oleoresins, balms, and gums), wild honey, beeswax, and ornamental plants.

Despite the studies and estimates of FF survivors and descendants in the future, studies must continue to see the migration dynamics of these families. Likewise, with the rise of agroecology, future studies should look at how family farmers are making use of green stamps for products and if there is a trade-off between family consumption and what is left for sale, given that prices can push a family to stop consuming their products and sell them to third parties, adversely affecting their food security in some way.

Conclusions

An essential element highlighted in this manuscript is the heterogeneity of FF-related concepts Several approaches for defining FF have been used in Latin America during the last 20 years (at least three approaches). This heterogeneity, in turn, has implied different ways to propose rural public policies in these countries. Although this fact is positive because several variables such as land size, family labor, and socioeconomic status can be included in FF rural policies, a lack of a unique concept affects the recognition of beneficiaries to which public policies are oriented, avoiding the optimization of human and financial public resources. Latin American governments and rural policy-makers might concentrate their efforts on unifying concepts. By doing this, it would be easy for policymakers to propose and develop programs to increase productivity, reduce poverty, or increase the living standards of rural people.

Another vital element discussed is the importance of defining FF not only to ensure rural families' self-consumption but also to support Latin American food security (FF produces more than 30 % of the continental food). This finding highlights the importance of supporting the FF approach during the following decades.

With this scenario in mind, it is necessary to develop a research policy that recognizes that FF coexists in the territory together with specialized and business production units, often competing for the same production factors, and is organized differently, even collectively.

Furthermore, the entire agricultural sector faces adverse conditions primarily due to climate variability and change, new global policies of environmental protection and biodiversity, the scarce generational change in rural areas, added to labor shortages, land use conflicts, and conventional agricultural production methods. These issues can be addressed through seed access and improvement programs and good crop and soil management (irrigation, chemical fertilizers, mechanization) schemes, accompanied by technology transfer, linkage services, and actual access to FF credit.

It is necessary to pay more attention to FF to achieve sustainable development goals, reduce poverty and hunger, and protect the environment since poverty reaches 46 % of rural territories.

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Also, public policies must focus on changes in the family composition, the concepts of land related to its quality, unpaid women, and FF as guarantor of ancestral and native crops for the peoples' food security. It is worth reminding policy-makers that FF should not be emphasized on export crops since they are almost always temporary and do not provide food or income stability to the family.

Finally, this paper highlighted that the FF approach has been discussed in Latin America in the last 20 years, not only by technical institutions focused on rural development but also by national governments. As such, several regulations have been enacted to define FF and public policies. In other words, although the FF approach requires unification and public support, it is not a new concept that local governments have not addressed.

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Conflict of interest

The authors declare no conflict of interest.

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