

# Gaps in public policy and rural livelihood strategies in the Yucatan<sup>1</sup>

Desajuste de la política pública y las estrategias de medios de vida rurales de Yucatán

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## Abstract

The purpose of this article is to analyze the livelihood strategies of Mayan households who have been beneficiaries of public policy programs in terms of access, combination, and transformation of their capital assets. A qualitative methodology was used with the ethnographic method; the techniques employed are in-depth interviews and direct observation. The findings indicate that traditional agriculture, women's wage labor, the migration-permanence dichotomy of the head of household in the community, education, and rural youth migration are strategies employed by Mayan households to achieve subsistence. Agricultural public policy focuses on incentivizing physical and financial capital assets in rural households, although these also depend on human capital assets, which is insufficiently addressed in social policy. In sum, the assets of cultural and social capital have been inadequately taken care of in the public policy.

**Keywords:** traditional agriculture, rural livelihoods, capitals, public policy, rural households.

## Resumen

El propósito de este estudio es analizar las estrategias de medios de vida de los hogares mayas beneficiarios de los programas de política pública en términos de acceso, combinación y transformación de sus activos de capital, información necesaria para el adecuado desarrollo de los programas. Este estudio es cualitativo y el método empleado la etnografía, mediante entrevistas a profundidad y observación directa. Se encontró que la agricultura tradicional, el trabajo remunerado de las mujeres, la dicotomía migración-permanencia del jefe del hogar en la comunidad, la educación y migración de la juventud rural son estrategias empleadas por los hogares mayas. La política pública productiva se enfoca en incentivar los capitales físico y financiero en los hogares, aunque también dependen de los activos de capital humano, el cual es abordado en la política social de manera insuficiente. Finalmente, el capital cultural y el capital social no han sido tenidos en cuenta de manera amplia en la política pública.

**Palabras clave:** agricultura tradicional, medios de vida rurales, capitales, política pública, hogares rurales.

## Introduction

In Mexico, traditional agriculture had its origin before the colonial age and has gone through different stages and changes from its beginnings to the present time. It is mainly composed by activities in the home garden or “*solar*” and the “*milpa*.” Both systems include part of the livelihood strategies of the Mexican peasants. The *solar* corresponds to the area in which the house is located and the land that surrounds it; it includes the area of the plants, crops, trees, and backyard animals. It constitutes a complex system and has a strong link with the social, economic, and cultural aspects of the rural families (García de Miguel, 2000; Mariaca Méndez, 2012; Terán and Rasmussen, 2009).

The *milpa* is established in the forest far from home and is in the hands of men (Bello Baltazar, Estrada Lugo, Macario Mendoza, Segundo Cabello, and Sánchez Pérez, 2002). It is a polyculture system in which the main crops are corn, beans, and squash, in combination with others (García-Frapolli, Toledo, and Martínez-Alier, 2008). Its production method is based on a combination of short periods of working the land on the forest and long periods in which the land is left to rest for restoration, this last period being known as fallow (Bello Baltazar et al., 2002).

Since the 1980s and 1990s, structural changes and economic crises have led Mexican peasants to diversify their livelihood strategies, including non-agricultural activities (Bengoa, 2003; Kay, 2009; Yúnez Naude, 2010). In the 1990s, a phase of targeted public policy programs and conditional cash transfers was launched to focus on the poorest people in rural areas (Boltvinik, 2005; Escobar Latapí, 2018). These programs—PROAGRO, originally named PROCAMPO and PROSPERA, initially named PROGRESA—benefited rural households in Mexico for more than two decades.

In Latin America, many public policy programs have failed or had limited effect because of a misperception of the target population and how they attained their livelihoods (Bebbington, 1999). For instance, in Mexico, despite the implementation of those programs, there are more than a thousand municipalities with high and very high degrees of marginalization. This is especially true in Yucatan, where the rural population is composed of Mayan households, and more than half of its municipalities (59.43%) depicts a high degree of marginalization in 2015 (CONAPO, 2015).

For successful public policy interventions in the rural households of Yucatan, it is necessary to understand their means of livelihood. This would allow the correct selection of the asset or set of capital assets that the policy must invest

in to meet its objective (Bebbington, 1999). Therefore, the purpose of this work is to analyze the livelihood strategies of Mayan households who are the beneficiaries of PROAGRO and PROSPERA, in terms of access, combination, and transformation of their capital assets.

The findings of this study will show that rural households who are beneficiaries of PROAGRO and PROSPERA diversify their livelihood strategies in a complex way and sometimes choose one strategy giving up another. In this sense, social and productive public policies must consider the value of the population's livelihood strategies for an effective design of programs.

## Literature review & theory

There are rural livelihood strategies that are kept off the public policy agenda despite their social and economic implications for the rural population. For instance, the case of traditional wildlife hunting in Central Africa is addressed in public policy from a conservationist perspective. However, empirical evidence points to the importance of the financial and self-consumption benefits of bushmeat production in Cameroon, aspects that have not been considered in public policy (Lescuyer, G., & Nasi, R., 2016).

On the other hand, many rural development efforts have failed to promote sustainable livelihoods in impoverished rural areas (Hajdu, Granlund, Neves, Hochfeld, Amuakwa-Mensah & Sandström, 2019). One of the reasons for the lack of success of the public policy is the disconnection between agricultural and social policies (Franco Parrillat & Canela Gamboa, 2016); and the insufficient response of public policies to the realities of the rural population (Hajdu, Jacobson, Salomonsson, & Friman, 2012). Both situations were observed in PROAGRO and PROSPERA, where despite having different objectives, a significant part of the programs' beneficiaries were in the rural area (ARAPAU, 2011). PROAGRO began in 1993 as an agricultural program that pursued to increase productivity in the rural area (ARAPAU, 2011). Its current name is Production for Welfare. PROSPERA began in 1997 as a social policy program aiming at alleviating poverty (López Sierra, 2019; Arroyo Ortiz, Ordaz Díaz, Li Nig, & Zaragoza López, 2008). This program disappeared at the end of 2018.

The dissociation of PROAGRO and PROSPERA was evident in a quantitative study conducted to assess the impact that these programs had on beneficiary households. The findings indicated that there was no effective coordination

between the two programs, and neither individually nor together, they succeeded in reducing household poverty and vulnerability (Yúnez Naude, Dyer Leal, Rivera Ramírez, & Stabridis Arana, 2017). In addition, the lack of congruence of the programs with the realities of rural livelihoods, PROAGRO and PROSPERA encouraged strategies that were sometimes incompatible with the strategies of the beneficiaries, as presented below.

PROAGRO was created to attend to small farmers who were in a disadvantaged position in the national and international markets due to Mexico's entry into the North American Free Trade Agreement (NAFTA). However, an evaluation of the program in 2011 revealed that there existed beneficiaries who were no longer interested in keeping up their agricultural activity but continued in the program because it provided them with a cash incentive that they used for personal expenses (ARAPAU, 2011).

PROSPERA linked education, health, and nutrition for families in extreme poverty in rural areas with co-responsibilities (Arroyo Ortiz et al., 2008). It was criticized for reproducing hegemonic gender roles and causing a double or triple burden on women who, being mothers of households (Loría Saviñón, 2007; Tepichin Valle, 2010), were assigned to fulfill the co-responsibilities, thereby excluding men under the assumption that they remain absent and irresponsible. The program did not consider the current efforts in Latin America to redefine hegemonic gender roles (Tepichin Valle, 2010).

To adjust public policy intervention strategies in rural household livelihood strategies, Bebbington (1999) proposes a framework of analysis in terms of farmers' and communities' access to different types of capital assets, how they combine and transform these assets into livelihoods that, to the best extent possible, meet their material and experiential needs and the multiple ways in which they can increase their asset endowments by engaging with other actors through relationships governed by the logics of the state, market, and civil society.

Rural livelihoods' capital assets are classified into several categories: i) physical capital, which refers to resources that serve to satisfy human needs by providing products for consumption, housing materials, clothing, and inputs; ii) financial capital, which is the cash assets to which an individual or household has access; iii) human capital, which is the set of skills, knowledge, ability to work, good health and physical capacity to contribute to livelihood activities; iv) natural capital, which refers to the natural resources and processes that a household can use; v) cultural capital, which points to the cultural practices of individuals and

communities and which have value because of their meaning; vi) and finally, social capital, which is composed of trust and reciprocity, forms of social participation, and formal and informal institutional norms (Chambers & Conway, 1992; Scoones, 1998; Bebbington, 1999; Ostrom, Ahn & Olivares, 2003; FAO, 2019).

## Research methods

This research uses a qualitative method and an ethnographic approach since the purpose is to study a group of people with common cultural features (Creswell, 2009). This article is based on the thesis "Impact of Public Policy on the Agrobiodiversity of Rural Households in Yucatan."

### Research location and sample

Data collection was conducted in the community of Yaxunah, Yucatan since it is located in a municipality with a very high degree of marginalization (CONAPO, 2011). Interviews were conducted with members of 12 households that were beneficiaries of PROAGRO and/or PROSPERA, selected through a homogeneous case sampling that is used to describe some subgroup in depth. Also, two PROAGRO and two PROSPERA authorities were interviewed to provide a broader context for program intervention strategies in Mayan households. These were selected through convenience sampling since they were the authorities in charge of the programs (Patton, 1987).

Building up a rapport with the members of the community was very important in this research, given that positive and fluid interpersonal interactions with the informants would augment the quantity of information obtained (Abbe & Brandon, 2014). For this reason, time taken for fieldworks involved lengthy hours. Qualitative data was collected at the offices of the ministries in charge of the programs and at the community of Yaxunah. The lengthy stays in the community enriched direct observation, which in turn allowed the researchers to learn about the routine, problems, needs, and reactions of the community's inhabitants, and to build relationships and trust with some households in Yaxunah.

### Research instruments and data analysis

The techniques employed were in-depth interviews and direct observation (Sandoval, 1996). In-depth interviews enabled to understand the research problem

from the perspective of the informants, as well as the meanings according to their experiences. On the other hand, direct observation allowed the researchers to relate more deeply to the environment he or she is observing. This was achieved by residing at Yaxunah for lengthy periods of time (Alvarez-Gayou Jurgenson, 2003; Sandoval, 1996).

Protecting the integrity of the informants was fundamental, so in each interview the informant was provided with an informed consent and given a copy. Data collection began with interviews with authorities in the city of Merida and then with the community of Yaxunah. Visits to the homes of the community members involved getting oneself introduced to the inmates, knowing them, and scheduling an interview with them thereafter. Generally, after each interview, the household members invited the researchers to observe the home garden, which allowed for systematic notes on the status of the home garden and additional information for the interview. In the results section, direct quotes from the informants are referred to by using a pseudonym.

Field diary entries and interview transcripts were made on the same day of the visit or interview. Coding was done through a pre-coded list and developed based on the rural livelihoods' analytical framework; however, codes also emerged in an inductive process (Miles & Huberman, 1994). After coding, all the information, structured with the K-J method (Scupin, 1997), allowed identifying patterns and triangulating information through networks. For a better treatment, organization, and reduction of the amount of information, the *ATLAS.ti* © software was very useful, since the program allowed the visualization of quotations, codes, networks, and memos for the analysis of information.

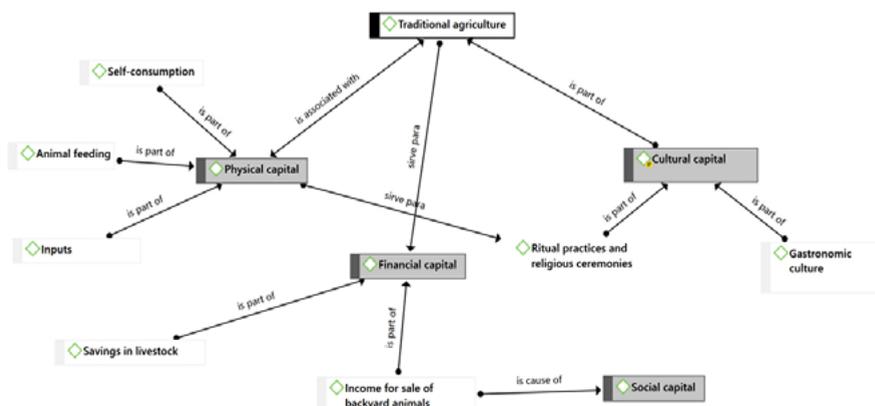
## Findings

### Rural Livelihood Strategies

In Yaxunah, the diversification of strategies is complex and sometimes the choice of one involves the abandonment of another. Among the strategies documented in this study are traditional agriculture, women's wage labor, the migration-permanence dichotomy of the head of household in the community, formal academic education, and migration of rural youth in Yaxunah. Within each of these strategies, the endowments of physical, financial, human, natural, cultural, and social capital assets are built, combined, and transformed.

## Traditional Agriculture

**Figure 1.** Rural livelihood strategy: Traditional agriculture



**Source:** Own elaboration.

Traditional agriculture in Yaxunah allowed families to have access to the construction and transformation of physical, financial, and cultural capital (Figure 1). Physical capital showed a major increase in endowment through agriculture, which included the crops of the *milpa* and the family garden, the backyard animals, and the apiculture. The products derived from this activity were mainly used for self-consumption, animal feeding, and as inputs for other activities. This strategy also allowed the construction of financial capital, since agricultural products such as pumpkin seed, backyard animals, and apiculture conducted by the families of Yaxunah were used for sale and to generate income.

Agricultural products, mainly backyard animals, were also a means of savings or insurance in case of contingencies (FAO, 2019), as households often sold backyard animals in cases of emergency. In this sense, the agricultural good contributed to the construction of financial capital that brought about the well-being of the household. This is how it was mentioned by a local inhabitant:

“We who live in little towns like these try to have animals, whether it's a little lamb, a few pigs, cattle, or a few chickens. What happens when we need that

money? If we have a lot of expenses, we kill the animal or sell it to have money for the expense” (Mr Norberto, farmer, 41 years old).

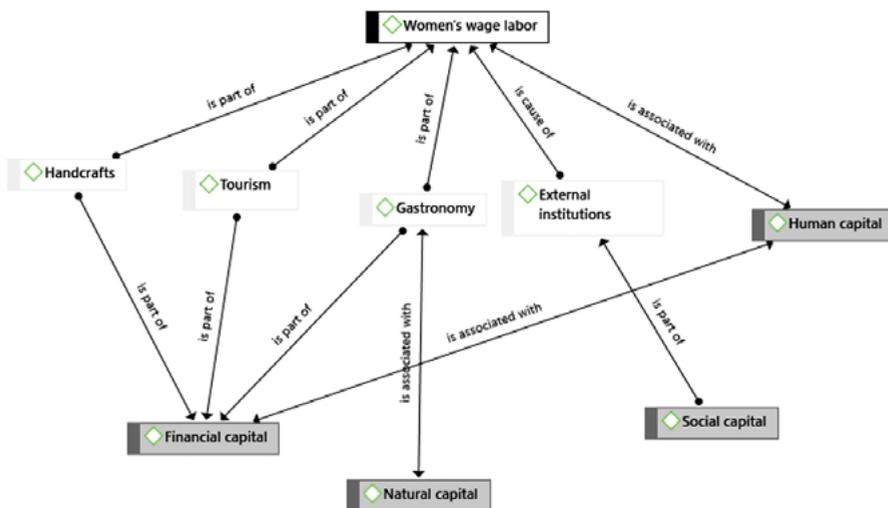
In Mexico, the consumption of native corn from the *milpa* has a very strong cultural significance since its presence dates back more than six thousand years and its use continues to be of central importance in the diet of Mexican families, especially in rural areas (Kato Yamakake, Mapes Sánchez, Mera Ovando, Serratos Hernández, & Bye Boettler, 2009). Such is the importance of corn in the gastronomic culture of the inhabitants of Yaxunah that it would be difficult to sell it to convert it into financial capital, since people prefer to keep it for self-consumption. In that way, the existence of native varieties of crops favors the continuity of people's cultural practices. “Although we got a lot of corn and we got a lot of harvests, we can't sell not even kilo of corn... It's only for the family” (Don Fidencio, farmer, 66 years old).

The endowment and transformation of social, physical, and financial capital assets were noted in Yaxunah with the experience of the young Eduardo (resident of Yaxunah, 10 years old). He grew up observing his grandfather raising turkeys, so he asked him to give him two turkeys to start raising them as well. In this context, the physical capital assets are represented by the turkeys, and the social capital assets, by the kinship relationship of Eduardo and his grandfather, through which, the grandfather agreed to give away the turkeys. Eduardo increased the physical capital asset endowment, as he managed to reproduce up to 4 more turkeys. He also transformed the physical capital assets, represented by the turkeys, into financial capital assets, since he sold a turkey to a family friend in another town near Yaxunah. This sale was possible due to the relationship of the family with the buyer, as it would not have been possible otherwise. Hence, this relationship represents another social capital asset.

## Women's wage labor in Yaxunah

Figure 2 shows that women in Yaxunah are involved in diverse non-agricultural activities encouraged by external institutions to complement their livelihoods. Such activities included offering gastronomic experiences in the community center and rural households, selling of embroidered handcraft, bull horn handcrafts, hammock wrapping, and others. The external institutions that had connections in Yaxunah included those for higher education and local and international NGOs. These institutions represented the social capital assets that the inhabitants of Yaxunah had at their disposal.

**Figure 2.** Rural livelihood strategy: Women’s wage labor



**Source:** Own elaboration.

Waged jobs allowed women to experience a sense of belonging to different groups, which enabled them to obtain skills and knowledge for their well-being, in addition to integrating to a public space, empowering themselves, and creating links and relationships with other women (de Barbieri, 1991) and relevant stakeholders such as tourists or buyers for the handcrafts and services they offered. In other words, this livelihood strategy allowed households to increase their financial capital by generating a source of income for women; human capital by providing them with learning spaces; and social capital by increasing their internal and external networks and links. This is how a local woman expressed herself about the issue: “I like to participate in the meetings because there you learn, there they teach us” (Doña Vanessa, housewife, 51 years old).

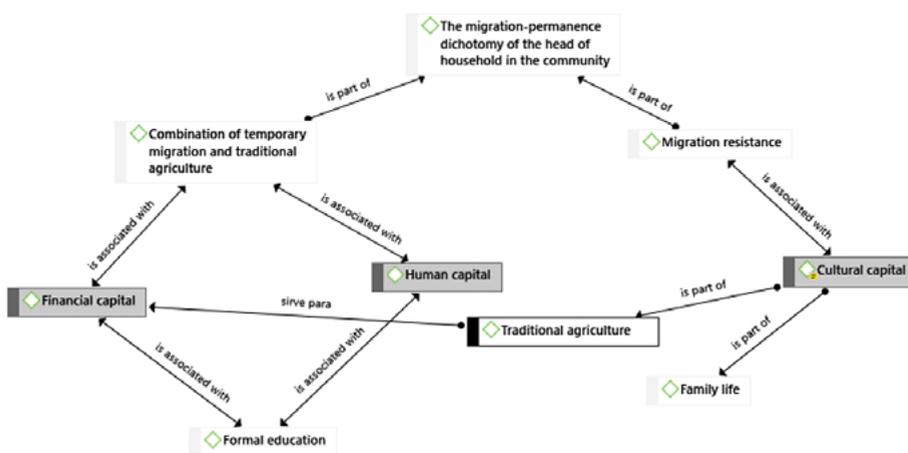
Some women who were interviewed indicated that they also received national and international tourists owing to their relation with a travel agency. These women recognize that tourists visiting Yaxunah find it attractive to consume food in the rural households and, above all, they like to watch the crops and animals that are the ingredients of the dishes inside the *solar*. This motivates the women to increase their physical capital assets by planting crops and raising animals on the *solar*, since these products are attractive for tourism, which gives women

more possibilities to earn a living: “So they want what we harvest here in the *solar* because it has no chemicals; also the food that I prepare with the red stuff, that's *achiote*<sup>2</sup> [points to the *achiote* tree in the *solar*] I grind it in the mill” (Mrs Vanessa, housewife, 51 years).

## The migration-permanence dichotomy of the head of household in the community

Figure 3 shows the livelihood strategy of temporary migration and traditional agriculture. Over the years, some households in Yaxunah have combined two livelihood strategies, in which, the head of the household migrates temporarily for non-agricultural activities outside the community but returns to work in the traditional agriculture. The periods of migration can range from days or weeks, to even months, as one housewife in Yaxunah said of her husband who was working out of state: “He has to come and work in the *milpa*, even if he is working outside. He has to come and help his dad” (Doña Ana, housewife, 30 years old).

**Figure 3.** Rural livelihood strategy: Migration-permanence dichotomy of the head of household



**Source:** Own elaboration.

2 Bixa orellana.

This combination of strategies makes it possible to obtain support, but in some households, it is also done so that the children can have an academic education and the possibility of building human capital through it. Despite the existence of wage labor outside the community, some households continue to work in the *milpa*: “When I came here on Sundays I had to make my *milpa*, I never left it, I have corn here and what I earn [with the wealth I have is my family, my house, my home, my wife and my children. So, I didn't want to leave them, I wouldn't want to go out to work all week and come back on a Saturday at noon, be here on the weekend and on Monday morning have to travel to work in Merida or Cancun” (Don Joaquin, farmer, 48 years old). Some households showed a cultural resistance to leave the community of Yaxunah (Korovkin, 1997), since the permanence in it allowed the maintenance of the assets of cultural capital that build the family's life and the work of the traditional agriculture (Altieri, 1991). This was expressed by a head of household who decided not to migrate to remain in Yaxunah with his family, in addition to working in the *milpa*: “The wealth I have is my family, my house, my home, my wife and my children. So, I didn't want to leave them, I wouldn't want to go out to work all week and come back on a Saturday at noon, be here on the weekend and on Monday morning travel to work in Merida or Cancun” (Don Joaquin, farmer, 48 years old).

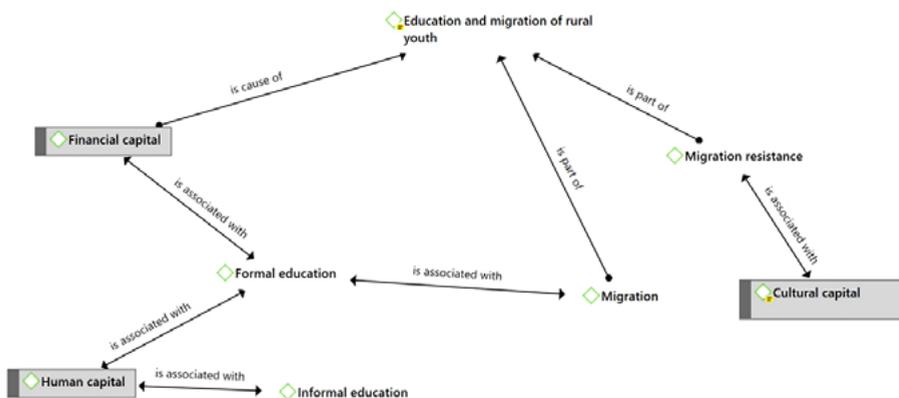
Households in Yaxunah choose between the strategy of combining temporary migration with traditional agriculture or remaining in the community. This indicates that for Yaxunah households, building a cultural capital is as important as, and sometimes more so, building financial capital.

## Education and migration of rural youth in Yaxunah

As shown in Figure 4, the investment of economic resources in the education of children allows the construction of human capital. On the other hand, acquiring a formal education is a factor associated with the migration of young people; however, some young people resist to migration, since staying in the community allows for the continuity of cultural capital.

In several cases, young people from Yaxunah who were able to obtain a higher education were supported by the PROSPERA program scholarships, which helped them to continue their studies: “My daughter studied elementary school and high school with the scholarship, there is support through PROSPERA” (Don Joaquin, farmer, 48 years old).

**Figure 4.** Rural livelihood strategy: Education and migration of rural youth



**Source:** Own elaboration.

While not all of PROSPERA's young scholarship recipients continued with their higher education, those who did were identified as coming from families where parents were committed to supporting their children:

“My husband and I talked about how we could help my son, even though my husband did not have a permanent job, but we decided that if my son wanted to study, he should go ahead. Whatever happens, I am going to support them, I want them to have a career” (Doña Lourdes, housewife, 45 years old).

In addition to assuming responsibility for their children's higher education, these families also provided them with financial education, so that they could make adequate use of the PROSPERA incentive through informal education (Jiménez Castillo, 1985). A father of a family expressed it this way: “My son told me: thanks to you, you have been able to see how to spend the money [...] because if not, there are many of my colleagues who do not care, they are not interested in how one fights for money” (Don Vicente, peasant, 42 years old).

Formal education in Yaxunah, especially higher education, is a factor associated with the migration of the young population because those who achieve an education at this level are more likely to leave the community: “My children learned, they know how to plant, they know how to knock down, they know everything, they know how to handle bees, they know everything. And they also

learned a little bit of study, my son who is in the airport [Cancún] has been away for about 14 years now” (Don Juan, farmer, 55 years old).

However, just as there is a cultural resistance in the parents to leave the community, some of the young people return to Yaxunah and even try to undertake a livelihood activity to stay in:

“He grew up in the school [my son], but now he is with me for a while, until he decides that he is no longer going to be with us because he has a personal project that he is doing on his own land. So I support him in everything he needs to do his project, his work (...) he is the one who knows the most about it, he is already an agricultural engineer, that's what he studied and that's what he's doing, he practices it now” (Don Joaquín, farmer, 48 years old).

## **Impact of public policy in rural livelihood strategies**

PROAGRO authorities indicate that the rural household needs to achieve financial stability; however, some factors affect this negatively like the low agricultural productivity of the farmers, the lack of association, and the low potential for commercialization.

From the authorities' perspective, there is need for a change in the farmer's mind and transmit them an economic rationality (Lugo-Morín, 2011) that allow small farmers to become more productive: “Perhaps the only thing they need is to change the mentality that the government must support them [the farmers] when they are the ones who are going to do business with this (SADER official).”

Related to the above, PROAGRO was perceived as a social assistance program to alleviate poverty and not a productive program. This perception was identified in the beneficiary farmers, as some of them admitted the use of monetary incentive for households and non-agricultural expenses, instead of investing in the productivity of the agricultural system.

The lack of land tenure succession for young people is a problem that needs an urgent solution, according to SADER authorities. This partly is due to the inheritor's absence of interest in fighting for the land and partly due to the resistance of the older owners to hand over the land to the new generations:

“Sometimes many people are not interested, especially the younger generation. (...) So sometimes it is very difficult for old people to leave their land or to give their land to someone, in this case even their son, the producer is unwilling in life to leave his land to his son” (SADER official).

PROSPERA authorities argue that the success of a poverty reduction program lies in maintaining a tight connection between health, food, and education: “no matter how good an education program is, if a person is not well fed and nourished, they will not take advantage of the program” (PROSPERA official).

People in Yaxunah also recognized that alcoholism can bring conflict into families. Informants from one household interviewed mentioned witnessing a case where a man from Yaxunah violently demanded PROSPERA's monetary incentive from his wife to buy alcohol.

Finally, people in Yaxunah report that sometimes government programs, NGOs, or higher education institutions have offered them to participate in projects that do not meet their needs, but in most cases, they agree to participate in order to receive the incentive. In this sense, projects must analyze the true needs of their target population and the capital assets that need to be strengthened. For example, the experience of an informant who participated in an institution's project to build a pigsty on the site recalls, “Well, they paid a thousand pesos for each person who was participating (...) although we would also have liked to learn some other medicines to be able to cure them when the pigs have some disease” (Don Joaquín, farmer, 48 years old).

## Discussion

Traditional agriculture provides families predominantly with physical capital through the production of crops and animals for consumption. These are converted into cash through their sale and even as a means of saving in times of emergency, contributing to the construction of financial capital. Certain crops, such as Creole corn produced in the *milpa*, have a very strong cultural importance in the gastronomy of Yaxunah households. Along with corn, other crops from the *milpa* and the *solar* are used in Mayan ceremonies and religious rituals. In this way, this strategy contributes to the construction of cultural capital.

When animal breeding and crop production on the *solar* becomes a potential source of income, younger members and women of the household are motivated

to produce the physical capital to convert it into financial capital. A potential sale of these products is increased when there are relationships and links with the market. Similarly, social capital, represented by the presence of external institutions in Yaxunah, allows women to have access to livelihood activities, as well as access to a public space where they can organize and empower themselves along with other women (de Barbieri, 1991).

Migrating or staying in Yaxunah is a significant issue in families, as the cultural resistance to leaving the community is evident (Korovkin, 1997), mainly in the older generations, between 40 and 55 years old. On the other hand, rural youth have a greater predisposition to migrate, probably because young people are more sensitive and quicker to adapt to changes in the agrarian structure, the growing association of the rural environment with poverty, and the aspiration of the youth to have a better life in urban areas (Ruiz Peyré, 2019). Even so, there are cases where young people are also resistant to leaving the community.

Parents with adult children who have managed to provide them with basic and higher education have the following in common: i) showed commitment towards supporting their children financially so that they can have an education; ii) demonstrated good money management, which they passed on to their children through informal education, even though they had a "poor" family background; iii) are hopeful that their children will value the incentives received and the family savings attained. These families allocated a large part of their assets to building human capital, i.e., providing not only formal education to their children, but also teaching them to have a financial education.

The livelihoods of Yaxunah families depend on a very wide range of capital assets (Bebbington, 1999). PROAGRO's productive policy focused on the most visible capital—physical and financial. But households also require the construction of human capital, which was perhaps addressed in PROSPERA's social policy, but insufficiently so. There are, however, two capitals as important as the previous ones, which have been insufficiently addressed in both productive and social public policy: cultural and social capital.

In Yaxunah, social capital enables connections and relationships to improve people's livelihoods. The data allowed us to observe cases mainly from external organizations, i.e., "from the outside in." However, there were no documented cases where actions were initiated from the inhabitants of the community, "from the inside out" (Woolcock, 1998); this does not mean that they did not exist, but that these types of actions were not easily visible. Given that social capital is

difficult to measure (Bebbington, 1999), the time spent in the community was probably insufficient to detect a case of this nature.

Public policy has several areas of opportunity for rural development. Social policy can be an external agent that helps beneficiaries to be agents of change in solving their problems in their lives, i.e., to empower themselves (Balcazar, 2003). Some of the main social problems identified by social policy officials are alcoholism and the emotional aspects of poverty in rural areas, which can represent a barrier to achieving sustainable livelihoods. It is suggested that future research on poverty should address these aspects in depth in order to have relevant information to assist in the formulation of social development projects.

Production policy aims to increase the financial and physical capital endowment, but rural households also require the strengthening of social capital, by creating links and relationships between producers and other stakeholders in the market, through which they could increase their capacity to transform their assets of any kind into income flows (Norte and Cameron, 1998; Bebbington, 1997 cited in Bebbington, 1999). On the other hand, it is necessary to strengthen the productive capacities, considering the cultural importance of traditional agriculture for the Mayan peasants, and to conduct research and development activities of these productive systems from an agro-ecological standpoint, with bottom-up methodologies that involved the peasants.

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