

# Farmer-Producer Organizations During the COVID-19 Pandemic: Examining the Role of Organization-Producer Relationships on Coping, Resiliency, and Effectiveness

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## Abstract

During the COVID-19 pandemic, farmer-producer organizations continued to serve their members. This qualitative study aimed to understand how agricultural farmer-producer organizations assisted their members in bearing the consequences of the COVID-19 pandemic in western Honduras. Through semi-structured interviews with 20 farmer-producer association affiliates and thematic coding of their responses, eight coping mechanism themes were identified: (a) continuous training, (b) seeking and securing external funding for investment, (c) new and safe agricultural markets, (d) value-added food, (e) stable and competitive prices, (f) advocacy for temporary mobility permits, (g) agricultural, financial, and food aid packages, and (h) emotional support. Members felt that these efforts were effective. However, the stability of the farmer-producer organizations was contingent upon the engagement and commitment of the members themselves. Practitioners and farmer-producer organizations can use this study to strengthen formalized social networks in Honduras and similar economic and productive environments. However, further research is still needed to identify the factors which motivate agricultural individuals to engage in farmer-producer organizations.

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## Introduction and Problem Statement

The 2019 coronavirus (COVID-19) generated a health crisis that affected countries' economies and populations worldwide (Zavaleta-Cortijo et al., 2020). Although the focus has been mainly on public health, economic sectors such as tourism and fossil fuels have also received public and private attention due to quantifiable financial losses (Rempel & Gupta, 2021; Škare et al., 2021).

On the other hand, agriculture has had less relevance, although government distancing and biosecurity measures to prevent the spread of the virus impacted the activity of small-, medium-, and large-scale agricultural systems (Lopez-Ridaura et al., 2021). Several researchers agree that these measures have caused widespread consequences of reduced productivity in the farming sector but have been incredibly profound for small rural producers in low- and middle-income countries (McBurney et al., 2021).

During lockdowns and stay-at-home orders, rural households in the developing world depended on emergency assistance from local and national governments and international organizations (Workie et al., 2020). The lack of preventive measures from governments with no means to respond effectively to emergencies forced farmers to seek coping mechanisms to continue agricultural production (Workie et al., 2020). Collective action through farmer-producer organizations (FPOs) has proven to be a fundamental survival strategy in the face of contemporary problems in agriculture-dependent households (Bijman, 2016). Farmer-producer organizations can offer monetary benefits (e.g., competitive prices), tangible and specific business practices (e.g., access to services), and intangible benefits (e.g., bargaining power) and reduce rural poverty (Bebbington, 2019). Despite the existing literature on FPOs and the benefits for their members, the COVID-19 pandemic emphasized a literature gap on the FPOs' role in providing coping mechanisms during public-health crises.

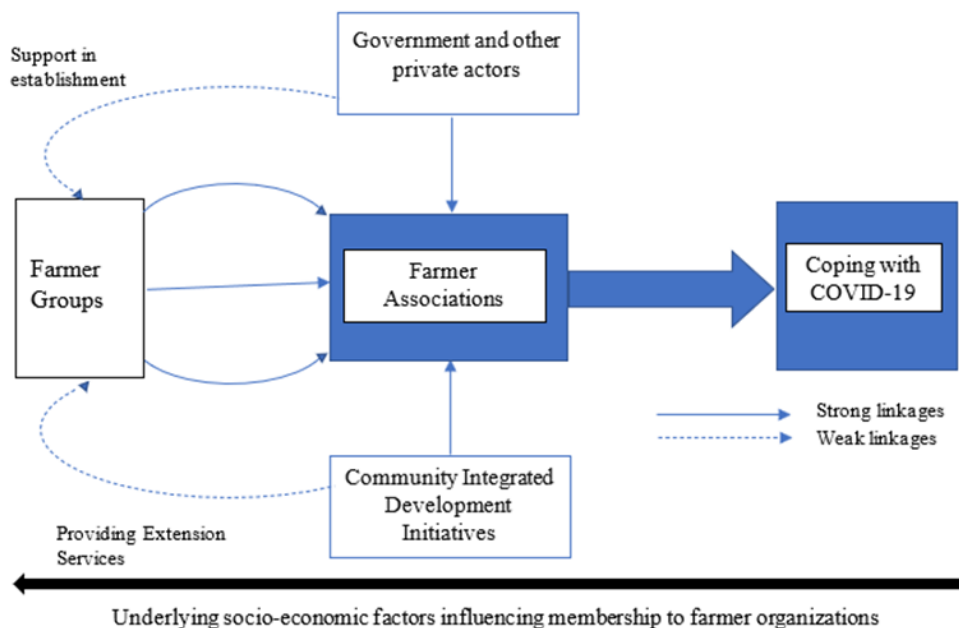
## Theoretical and Conceptual Framework

This study's theoretical framework was a contextualized version of the *Farmer Participation Framework for Collective Action (FICA)* (Ekepu et al., 2017). *FICA* is theoretically rooted in the theory of collective action (Olson, 2009) and entails the underlying conditions that can enhance farmers' participation in collectively organized associations. *FICA* positions Farmer Producer Organizations (FPOs) at the center of multilateral relations across farming development stakeholders such as government, community initiatives, and FPOs. This last group brings the outcomes of those relationships to farmers, who can obtain multilateral benefits through membership and collective action, including capacity building, technical and emotional support, and financial assistance. FPOs can assist farmers through collective action in change processes and emergencies through two types of association structures: (a) informal organizations that function autonomously to regulate internal group relations with assistance orientation and linkage function; and (b) formal organizations which are more recent, professionally managed, and organized on economic principles (Meinzen-Dick et al., 2004). Though, formal

organizations' activities do not neglect local traditions and other needs of its members. The main objective of the latter is to perform a bridging function to organize relations between the group and the outside world (Onumah et al., 2007; Trebbin, 2014). *FICA* has been used to study farmers' collective activity in innovation adoption, adaptation, and crisis management scenarios. For example, Ekepu et al. (2017) used *FICA* to explore the participation of Ugandan farmers in collective action to improve the sorghum value chain, and Vu et al. (2020) integrated it when exploring the impact of FPOS on household income. For this study, *FICA* aids in explaining how FPOs assisted their members during the COVID-19 pandemic by regulating group activities and engaging members with services and resources from other stakeholders (Figure 1).

**Figure 1**

*Farmer Participation Framework for Collective Action (FICA)*



Note. Adapted from Ekepu et al. (2017).

In Honduras, farming communities experienced a decrease in their economic income due to mobility restrictions that prevented commercialization (Pino et al., 2020), but overall, they lost access to off-farm work. In addition, the World Food Programme (2022) estimates that half of the Honduran population experiences poverty and exacerbated climate change, making them vulnerable to external shocks. Therefore, it was predictable that the pandemic would severely impact the Honduran economic performance and labor markets (Food and Agriculture Organization, 2021).

FPOs link individual producers with stakeholders throughout the food production chain (Meinzen-Dick et al., 2004). Routinely, FPOs' intermediation has improved commercial relations

and commitments between interested parties. In addition, FPOs have also increased farmers' participation in more competitive and globalized environments through their proactive response to structural adjustment policies, economic liberalization, and globalization (Moustier et al., 2010). However, during the COVID-19 pandemic, challenges such as limited interaction, the closure of domestic and international marketing channels, and increased production costs brought new challenges to the operation of FPOs.

## Purpose

The COVID-19 pandemic highlighted many of the shortcomings in agricultural production systems. Therefore, as societies have returned to normal, research on how certain groups coped with the health crisis continues to emerge, which intends to inform the readiness of farming systems for future issues. This study aimed to understand how agricultural FPOs aided their members to withstand the consequences of the COVID-19 pandemic in western Honduras. The following research questions guided this research project.

1. What coping mechanisms were implemented by farmer-producer organizations to support their members to counter the impacts of the COVID-19 pandemic?
2. How effective were the coping mechanisms implemented by the farmer-producer organization as perceived by their members?
3. How have members contributed to the stability of the farmer-producer organizations during the COVID-19 pandemic?

## Methods

Based on the constructivist paradigm, this study implemented a basic qualitative design (Creswell & Creswell, 2018). Four organization leaders and 16 active members of FPOs in the Municipality of La Esperanza, Department of Intibucá, Honduras, participated in semi-structured interviews. Interviews were conducted between September and December 2021. A literature-based interview guide developed in Spanish, assessed for content validity by a panel of experts with experience in qualitative research, agricultural production, and community development in Latin America, was used to gather information. Sample interview questions are as follows: *how the COVID-19 pandemic has affected the organization's members (e.g., Transportation, availability of inputs, access to markets)? And how are the members supporting the organization in facing the COVID-19 pandemic?*

For this study, participating FPOs had to have (a) legal registration and (b) maintained commercial activities for all or part of the strictest period of the COVID-19 pandemic in Honduras (March-December 2020). As a result, four associations were purposively selected. The FPOs had similar organizational structures in which the leaders, in addition to being responsible for the management and governance of resources, acted as legal representatives of the organization. On the other hand, members must prove their membership through the official registry and compliance with FPO regulations regarding activities engagement and compliance with purchase and sale commitments of fruits and vegetables. All associations

share a long history of producing and marketing fruits and vegetables in several markets across Honduras. For each association, participants were selected using a convenience sampling framework. A general description of the FPOs can be found in Table 1. Most interviewees were female (55%) between 24 and 65 years old. Each participant was assigned a pseudonym to protect their privacy (L: Leaders; F: Famer member).

Semi-structured interviews were conducted at the location and date of the participants' convenience. All participants received a verbal explanation and signed a written informed consent form detailing the study, their participation rights, and future results use. Participants were allowed to ask questions about the research and receive a copy of the informed consent form. While most of the association members were interviewed at their homes, the leaders and one member preferred the offices of their respective FPO. Interviews were conducted in Spanish by the primary author, a native Spanish speaker. The interviews with the leaders lasted an average of one hour, and those with members lasted 45 minutes. All interviews were conducted in a private setting and audio-recorded with the prior authorization of the participants. The recordings were transcribed using a text data processor for further analysis.

**Table 1**

*Farmer-producer Organizations' Characteristics*

FPO	Members	Membership
1	285	Organized producers (35% women)
2	650	Organized producers (100% women)
3	69	Individual producers (100% women)
4	103	Individual producers (40% women)

Thematic coding guided by the data was implemented to analyze the interview transcripts. Transcripts were coded line-by-line in two consecutive rounds. In the first round, the initial codes were identified. In the second round, the codes were organized into themes (Gibbs, 2007). Coding was conducted simultaneously by two researchers to establish dependability. Once the analysis was completed, a research team member translated the results into English (Elliott, 2018). The veracity of the translation was corroborated by another team member who is fluent in Spanish and a native English speaker (Squires, 2008). Finally, the positionality of the research team was as follows: The PI was born and raised in a similar Latin American country to Honduras. Three researchers have lived in Honduras for extended periods and worked with the FPOs in other research and development projects. Three of the researchers were proficient in Spanish. All the researchers had previous experience in qualitative and social agricultural-related research in the Latin American socio-economic context.

## Findings

### What coping mechanisms were implemented by producer associations to support their members in countering the impacts of the COVID-19 pandemic?

According to the producer associations' representatives, the coping mechanisms for the COVID-19 pandemic were intended to continue agricultural production and marketing. Despite the distancing and mobilization restrictions imposed by the Honduran government, all the associations claimed to have continued operations during the health crisis. However, only one has operated since the pandemic's start. L2 said, "Initially, we did not let our guard down and continued despite the circumstances. We continued with planting programs because we understood that the issue of food was going to be essential in these times." However, the rest of the associations halted operations for up to three months before reactivating (L1, L3, L4). In response to the COVID-19 pandemic, eight coping mechanisms were implemented by the FPOs and are presented below.

#### *Continuous Training*

FPOs continued their training on agricultural production and added topics on biosafety standards and virtual communication tools. L1 commented, "We looked for information on biosafety regulations to implement them in our activities and to continue working safely... We had to adapt to a new working method because everything became virtual. We updated ourselves on recommendations for the pandemic." Much of the information on how to prevent COVID-19 reached farmers through the training above. F5 commented, "Since the pandemic began, the association has always encouraged wearing a mask, using gel alcohol, and keeping distance to avoid contagions." During the COVID-19 pandemic, FPOs had to provide more than their usual technical assistance in planning and managing agricultural production and marketing. For example, L2 affirmed: "What we provided the most was technical advice to maintain the planting plans that we had helped them develop." Furthermore, given the growing demand for technical assistance, one of the associations used a technical representative, known as "promoter," who was trained in agriculture and nutrition, to provide technical assistance to FPOs members during the pandemic. Regarding the promoters, R4 mentioned:

To provide technical assistance, we did it through promoters, who had been getting training for a long time. They helped a lot because they live in the same communities as our members, so they had no problems communicating or traveling.

Members acknowledged how important the training they received from the FPOs was, especially during the first couple of months when mobility restrictions prevented them from adequately maintaining their agricultural productivity. They had to adapt to many changes in society and production. For example, F6 said, "Technicians came to the community on motorbikes, and on certain occasions, they gave us advice over the phone, but most of the time, we used videos and texts on WhatsApp."

### ***Seeking and Securing External Funding for Investment***

In response to the reduction in agricultural production and marketing activities, the associations dedicated themselves to developing competitive proposals to apply for financial resources from donor organizations. R3 commented, “Despite the negative impacts, in the closing months, we were at home, but we developed proposals because greater opportunities arose to apply for resources. That is why we managed several proposals to assist our members and are now executing them.” As a result, two of the FPOs secured funding from international aid organizations to implement members’ led projects. For example, R2 said, “We managed to get financial support from an international donor to set up new projects. Thanks to this grant, it was possible to support members with protected structures, animal husbandry projects (e.g., birds and pigs), vouchers for farm management, and family orchards.”

### ***New and Safe Agricultural Markets***

Faced with multiple restrictions on social interaction, marketing stopped, forcing FPOs to cultivate relationships with new markets using new marketing and business strategies (F2, F7, F13). For example, F6 mentioned, “With the pandemic, online sales companies with which we work have emerged and have facilitated selling our products. This is because the association has been so helpful throughout negotiating the service terms.” Similarly, one of the FPOs created its first website to market agricultural products, increasing the number of commercial transactions and improving communication with community stakeholders (F8, F9). Even though new markets emerged due to the FPOs' efforts, additional support was needed to purchase members’ agricultural production. For example, some FPOs always buy their members fruits and vegetables. This relationship offered those members a secure and stable market to generate income (F2, F3, F4). Still, it represented a challenge for the FPOs, who had to continue supplying markets they had worked with for a long time. While one FPO never interrupted the purchase of agricultural products, one stopped for two weeks, and the other two suspended the service for up to three months (F14, F16). F8 said, “The association always bought me [production] during the pandemic; it never stopped buying our crops. Having a fixed market helped me not to feel the pandemic in its hardest moments.”

### ***Value-added food***

FPOs incorporated value-added products into their operations to increase clientele (F8, F11). Extending shelf-life and producing by-products were the two most common value-addition processes implemented by FPOs. Value addition was possible because food processing could continue with a permit issued by the national government despite biosecurity measures. For example, F2 mentioned, “The pandemic forced us to invent. So, we processed some products... We made changes and investments. Still, we worked on producing fruit concentrates, sauces, and jams...association leaders taught us about food processing and safety and got all the sanitary permits.” Members also mentioned producing sweetened fruit syrups, candies, pickles, and salads (F6, F13).



### ***Stable and Competitive Prices***

FPOs offered stable and competitive prices to their members during the COVID-19 pandemic (F3, F8, F10, F16). According to L1:

Prices for members were maintained during the pandemic. There was even an improvement in some prices for products in high demand. For example, the price at the traditional market was between L. 200 to L. 250 per quintal [100kg] of potatoes; we reached at some point an average of L. 350 as a minimum, and under very fortunate market schemes, a farmer can get between L. 450 to L 500 depending on the quality of your product.

### ***Advocacy for Temporary Mobility Permits***

With the interruption of public transport, agricultural producers lost opportunities and market power (F1, F5, F10). To mobilize during mandatory lockdowns, FPOs were responsible for advocating and requesting government permits that allowed producers to participate in agricultural marketing as long as specific biosafety standards were followed. F5 assured, “The association to which I belong was one of the first to obtain a safe-conduct [permit] to mobilize without restriction. That was a great help, especially to get our product out there.” L2 added:

One of the priority things at the beginning of the pandemic was the food that was already on its way out... what we did was coordinate with the checkpoints [police inspection stations] to find out how we could haul those fruits and vegetables; because police officers were there to prevent us from entering with a large truck, fearing that they could be contaminated.

Although there was permission from the government to mobilize, there was no transportation. So, the FPOs offered transportation to their members to collect the harvest and take it to authorized marketing points (F5, F8, F11).

### ***Agricultural, Financial, and Food Aid Packages***

Food, biosafety kits, agricultural inputs, and money were some items members mentioned receiving from FPOs during the lockdowns and stay-at-home orders (F1, F3-4, F8, F13, F15). For example, L3 said:

We gave out groceries to our members to help them a little during those rough days. In addition, concerned with the existing food security issues, we deliver vegetables, corn, and bean seeds so that the members can produce and have food easily available; we look for food they could produce in their backyards.

Also, FPOs requested aid from several entities, including governments, non-profits, and civil society organizations, to assist their members better (L1-4). Also, FPOs used some of their funding to provide money to members who needed to pay for emergency expenses (L2, L4).



### **Emotional Support**

FPOs implemented recreational activities and offered services to improve their members' moods and emotional states. For example, L3 said:

We evaluated the situation in other parts of the country; people had nothing to do, felt depressed, and in extreme cases, committed suicide...We kept members busy with various productive activities, such as raising animals, gardening, and other virtual training opportunities.

In addition, FPOs helped their members find medical attention when needed (L3, F14), and facilitated access to at-home resources for self-care (L1-4).

### **How effective were the coping mechanisms implemented by the producer associations as perceived by their members?**

FPOs' representatives agreed that their members are prepared to cope with difficult situations. They mentioned that members have learned to be resilient and withstand eventual unforeseeable events through training and teamwork. L3 affirmed, "Our members are trained to create alternative solutions by learning and taking precautions... especially taking into account the conditions of our country." Members attributed their preparedness and response capacity to the COVID-19 pandemic to their membership in FPOs. For example, F8 said:

The association made me not feel the pandemic. They supported us at all times; for example, they came to our houses and gave us food, which helped us not to starve. We are so very grateful for what they did.

Members felt constant support from the FPOs, primarily through the FPOs' efforts managing permits from local authorities and business transactions during the most challenging COVID-19 pandemic. F7 assured:

The most complicated thing was accessing a market...and even more so if it is a traditional market where I have to deliver products every week of the year... I cannot meet those requirements, but because I belong to the association, I always had access to the market during the pandemic.

FPOs' members did not perceive support from other institutions and highlighted the lack of support from the national government (F5, F8, F13). For example, F3 said, "So far, there has been no support for our area [community] from another institution; we have only had the association's support." FPOs' members acknowledged using previous training and materials the FPOs provided to face the COVID-19 pandemic (F1, F5, F8, F12). Preventing the spread of COVID-19 was pursued by FPOs members due to the information and encouragement received from the FPOs (F6, F9, F10, F16). Furthermore, most members perceived that they generated enough income to support their families due to the highly effective coping mechanisms implemented by the FPO they affiliated with (F5-6, F8-10, F13, F15).

### How have members contributed to the stability of the associations during the COVID-19 pandemic?

FPOs' representatives considered that despite the impacts of the COVID-19 pandemic on their business operations, FPOs remain stable with no risk of failure. L3 affirmed, "Despite the association not working at 100% capacity, we made all possible efforts not to close our activities. Today, we have returned to normality. We are on a good run now [good situation]." Despite decreased demand from agricultural markets during the first months of the pandemic, most producer associations ( $n = 3$ ) managed to release products held in inventory. For example, L1 said:

The demand for our products decreased, but despite that, we sold the product later on and were able to hold on to them for a couple of days and sold them later even for not the highest price, but it was not a total loss.

Furthermore, the regular commercial activity maintained by the FPOs helped stabilize income and increased chances for improvement. For example, L2 mentioned, "Maybe there was a decrease in revenue, but there was no risk for the association to be closed or go out of business. As time passes, things return to normal; therefore, the association is doing so too." On the other hand, three FPOs representatives affirmed that stability depends mainly on the commitment and engagement of members maintained with the FPOs. L4 commented, "The current situation of the association is because each member maintained pre-established production requirements throughout the pandemic." Members' engagement was amplified by how relevant and beneficial they perceived the benefits and support they received throughout their FPOs' membership (F4, F12, F5, F16). In addition, FPOs' representatives stated that members prefer to market their products with the association regardless of the price. Members corroborated this sentiment since F8 said:

I would not sell to anyone else even if another buyer comes and wants to pay me more because another buyer is not going to give me the benefits that the association offers us, such as fertilizers and some things for the home, so you cannot let them down because we lose.

At the time of this study, representatives of three FPOs had not registered any member withdrawals due to the COVID-19 pandemic; surprisingly, the relations between FPOs and their members have been strengthened during the pandemic (L1, L2, L3, L4). F8 assured:

We communicated with other members and with the association during the pandemic. Therefore, I feel the relationship between me and others in the organization is great. Moreover, we have become more united due to the COVID-19 pandemic because we had many more group activities and learning experiences together and overcame a lot.

Some members withdrew from one of the FPOs due to disagreements with the FPOs' sanctions received for non-compliance with production and performance standards and lack of trust in their leaders' initiatives (L4). The representative of this last FPO (L4) mentioned:

Some members left the association because they were upset because we were not able to buy their agricultural products during the first couple of weeks of the COVID-19

pandemic... but this is out of our hands since, as an association, we depend on what the market requests. We are only the marketing channel.

Despite losing some members during the COVID-19 pandemic, the FAO continues and presents good prospects for recovery and permanence (L4).

## Conclusions, Discussion, and Recommendations

The impacts of the COVID-19 pandemic on agriculture and rural households were primarily negative, generally causing losses in production, employment, market opportunities, and purchasing power (Iese et al., 2021). In western Honduras, producer associations modified their operations and implemented different practices to assist their members during the health crisis. The results of this study support the literature that describes the potential of producer associations to improve their members' productivity and economic conditions (Bebbington, 2019). Nevertheless, formalizing the response of FPOs to an emergency, such as the COVID-19 pandemic, takes work due to the complexity of setting, monitoring, and achieving collective standards (Hellin et al., 2009). However, the experiences of the FPOs' members indicate how these formally organized groups continued their agricultural production and marketing activities. Members of the FPOs in this study were satisfied with their association's performance. They affirmed that membership was essential to generate and provide income for their families during the pandemic.

Many producer associations fail due to the inability to meet the needs of their members (Hernández-Espallardo et al., 2013), resulting in a decline in member commitment and trust (Trebbin, 2014). FPOs in western Honduras have demonstrated the ability to assist their members during unexpected events by implementing focused and inclusive response mechanisms. They cultivated the trust and commitment of their members, which was demonstrated during the COVID-19 pandemic when members chose to market their products with FPOs, despite higher available prices. Similarly, the continuity and stability of FPOs, as perceived by their representatives, were due to the commitment of their members. The evidence found in this study aligns with *FICA*, which establishes how FPOs function as intermediaries between their members and other social and commercial entities, such as governments, authorities, and markets; some of those connections were instrumental during the months of isolation, even if members were not able to recognize them (Ekepu et al., 2017).

Although producer associations and their benefits for members are not a new topic in the literature, the transformation of agricultural systems worldwide caused by the COVID-19 pandemic brought new challenges to producer associations through which they demonstrated their potential to serve members before and during other unforeseeable events (Workie et al., 2020). Therefore, identifying support and survival mechanisms can generate valuable information to strengthen formalized social networks in Honduras and similar economic environments.

The findings of this study demonstrated that economic and social motivations drive members' commitment to their FPOs and motivations to join an organization. Access to markets for high-value crops necessitates large-scale operations, which can be accomplished through farmer's groups and associations. Associations are also important intermediaries for governmental and non-governmentally funded projects and donations. Furthermore, associations, as seen, form an important social network of familiar and neighbors to deal with externalities.

Although factors motivating participation are location-based and context-bound, gender-responsive collective action could strengthen local agricultural systems (Davis et al., 2017). Finally, although the results of this study are mainly relevant to the Honduran context, they bring to light how FPOs' intermediation could potentially benefit other initiatives, particularly those in which FPOs could serve as allies for public and private entities seeking to promote changes at the community level. Literature has demonstrated that community change would be more successful when targeted individuals trust the entity disseminating new knowledge or innovations (Nanyonjo et al., 2012).

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