

HISTORICAL ASPECTS OF ASSOCIATIVISM AND COOPERATIVISM IN FISH FARMING IN WESTERN PARANÁ



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**Jéssica Schwanke¹, Pedro Rondon Werneck², Cinara Kottwitz Manzano Brenzan³,
Bruna Alessandra Von Dentz⁴, Dirceu Basso⁵ and Aldi Feiden⁶.**

ABSTRACT

The work sought to organize the timeline of fish farming in the western region of Paraná, focusing on the creation of associations and cooperatives that gave the impetus to the activity as an emerging production chain. According to Pinho (2004), cooperativism and associativism emerged as an opposition to the consequences of economic liberalism, especially in England and France. This new form of organization of the work process was due to the experience of its precursors in the face of the manifestations of the social issue and inequality in the period of the Industrial Revolution I and II. The research carried out is characterized as exploratory qualitative, and covered the western region of Paraná, focusing on fish production since the beginning of the 1990s, when the first fish farmers' associations were created in the region. Associations and cooperatives were fundamental to boost the organization of the fish farming production chain and make the region the largest national production center, based on fish production in ponds excavated in family

¹ Master in Sustainable Rural Development
State University of Western Paraná (UNIOESTE)

E-mail: jschwanke@hotmail.com

ORCID: <https://orcid.org/0000-0002-2809-5043>

Lattes: <http://lattes.cnpq.br/5465041761134106>

² Master in Fisheries Resources and Fisheries Engineering

State University of Western Paraná (UNIOESTE)

E-mail: prondonwerneck@gmail.com

Orcid: <https://orcid.org/0000-0001-8729-5259>

Lattes: <http://lattes.cnpq.br/5293699847807939>

³ Dr. in Sustainable Rural Development

State University of Western Paraná (UNIOESTE)

Email: cinaramanzano@yahoo.com.br

ORCID: <https://orcid.org/0000-0002-1684-2320>

Lattes: <http://lattes.cnpq.br/0181164018755940>

⁴ Master in Fisheries Resources and Fisheries Engineering

State University of Western Paraná (UNIOESTE)

E-mail: brunaale2008@hotmail.com

ORCID: <https://orcid.org/0000-0003-0358-6222>

Lattes: <http://lattes.cnpq.br/3569153664353926>

⁵ Dr. in Rural Development

Federal University of Latin American Integration

E-mail: dirceu.basso@unila.edu.br

ORCID: <https://orcid.org/0000-0003-1487-6049>

Lattes: <http://lattes.cnpq.br/4380964157101311>

⁶ Doctor of Science

State University of Western Paraná (UNIOESTE)

Email: aldifeiden@gmail.com

ORCID: <https://orcid.org/0000-0002-6823-9291>

Lattes: <http://lattes.cnpq.br/8384358462664823>

production units, fostering the diversification of the agricultural production matrix and generating jobs and income, and strengthening the industrialization of fish production.

Keywords: Family Farming, Aquaculture, Production Chain, Rural Organization.

INTRODUCTION

Brazilian agriculture has in its associative and cooperative organization over the last seven decades the great impulse and generation of income for the country, because in this period there have been great advances in the organization of farmers. The organization of farmers, aiming at the incorporation of new technologies of production and management of activities, driven by public policies such as technical assistance and rural credit services in Brazil for the modernization of agriculture based on the American model of rural production, and led to the emergence of several state systems of support for rural producers. The cooperativism law of 1971 (Brasil, 1971) implemented the National Cooperative Policy, which gave a great boost to the creation of cooperatives in the country.

In addition, the agricultural crisis of the 1980s boosted the diversification of agricultural production and its verticalization of production, aiming at adding value and searching for new markets. Johnston et al (2020) show that, according to data from the 2017 Agricultural Census, there are 579.5 thousand enterprises associated with cooperatives throughout Brazil, which is equivalent to 11.7% of all establishments, an increase of 67.3% compared to the agricultural census in 2006.

In fish farming in Paraná, the organization of associations and cooperatives occurred from the end of the 1980s and in the 1990s, and in the 2000s there was the beginning of the verticalization of production by agro-industrial cooperatives as a way of diversifying agricultural production. The objective of this work was to describe the timeline of creation and the actions of the main associations and cooperatives responsible for the growth of fish farming in the western region of Paraná.

THEORETICAL FRAMEWORK

Between the eighteenth and nineteenth centuries, classical liberalism prevailed in Europe, which was characterized by *laissez-faire*, a French expression that means "let it be done", "let it act". However, in the face of the precariousness of the working conditions of that time and the intensification of the social issue, a new form of organization of the work process emerged, Cooperativism and Associativism (Polany, 2000).

According to Pinho (2004), cooperativism and associativism emerged as an opposition to the consequences of economic liberalism, especially in England and France. This new form of organization of the work process was due to the experience of its

precursors in the face of the manifestations of the social issue and inequality in the period of the Industrial Revolution I and II.

Marx (1988) points out that artisanal manufacturing work occurred due to the fragmentation of productive activities and the intensification of the division of labor, reduction of production costs and wage labor. Furthermore, with the introduction of the steam engine, the author evidences the growing number of unemployed and an accentuated exploitation of labor labor.

In this way, cooperativism and associativism emerged together with the Industrial Revolution, as a way to mitigate the economic and social conflicts experienced by the working class at the time (Rech, 1991). According to the author, cooperativism and associativism were conceived with the aim of making society more just and egalitarian, and the work process was conducted by principles divergent from the capitalist one, which was based on individuality, accumulation and centralization of capital.

Rech (2000) considers 7 basic principles for cooperativism, namely: a) free membership (free entry or exit of cooperative members); b) democratic management (each cooperative member has the right to one vote, not depending on the amount of capital invested); c) limited interest rate to capital (cooperatives cannot charge high interest on the capital invested for new members); d) distribution of equivalent surpluses (the surpluses belong to the cooperative members and can be distributed equally to the members, who must invest at least 10% in the cooperative); e) social and political neutrality (the members of the cooperative cannot discriminate against the cooperative members in any way and prevent the adhesion of new members); f) active cooperation between cooperatives (integration between local, national and international cooperatives); g) education, training and information.

The main contributions of the precursors of cooperativism and associativism in Europe are listed in Table 1 (Pinho, 1966; Pinho, 1977; Hugon, 1980; Oliveira, 1984; Schneider, 1991).

Table 1 Main contributions of the precursors of cooperativism and associativism in Europe

PETER CORNELIUS PLOCKBOY	He developed social and economic thinking focused on associativism and cooperativism, idealizing associations formed by small groups and family associations.
JOHN CALLERS	He devised a kind of colony - unlike <i>Plockboy</i> , which was to be composed of 300 to 3 thousand members.
ROBERT OWEN	He idealized a social environment where the exchange relations between individuals found in urban consumption, proposing, for its viability, the creation of colonies.

WILLIAM KING	He defended, through the moral principles of Christianity, the existence of cooperatives aimed at the work of education with their members.
FRANÇOIS MARIE CHARLES FOURIER	In 1829, Fourier published his theory in <i>Le Monde Industriel et Sociétaire</i> , which consisted of associative practice, its objective was to solve social ills, attributed to the terrible living conditions in which workers found themselves.
SAINT-SIMON	He was one of the thinkers who analyzed the reality of the time, realizing the problems caused by social inequality and the exploitation of workers in capitalism. He believed that the owners of the companies should have social responsibilities and offer better living conditions to the workers.
PHILIPPE BUCHEZ	It held that a cooperative which brought together workers of the same profession would be governed by an employment contract.
LOUIS BLANC	He condemned free competition and was in favor of state intervention in cooperatives, which was necessary for their viability and would consist of the creation and provision of aid, incentives and public services, in order to support these collective enterprises.
PIERRE JOSEPH PROUDHON	Proudhon's main contribution consists in his disbelief in the changes in the capitalist system brought about by the production or distribution of products.
HERMANN SCHULZE	He was the pioneer with regard to urban credit cooperatives. Known as "Schulze-Delitzsch type cooperatives", currently known in Germany as people's banks. These cooperatives differed from Raiffeisen-type cooperatives in that they provided for the return of net surpluses in proportion to capital, to the area of non-restricted activity and to the fact that their directors were remunerated.
FRIEDRICH W. RAIFFEISEN	It created another type of credit cooperativism. Raiffeisen introduced this cooperative model to meet the needs of farmers, being influenced by Christianity.
CHARLES GIDE	Gide extolled the importance of Fourier - unlike Poisson - regarding the Principles of Cooperativism and led the discussion group on cooperativist thoughts, which later generated the School of Nîmes, in 1886, in the south of France.
28 ROCHDALE TOWN WEAVERS	These guys organized themselves and collected financial subsidies and on December 21, 1844, inaugurated the cooperative warehouse named "Society of Probos Pioneers of Rochdale".

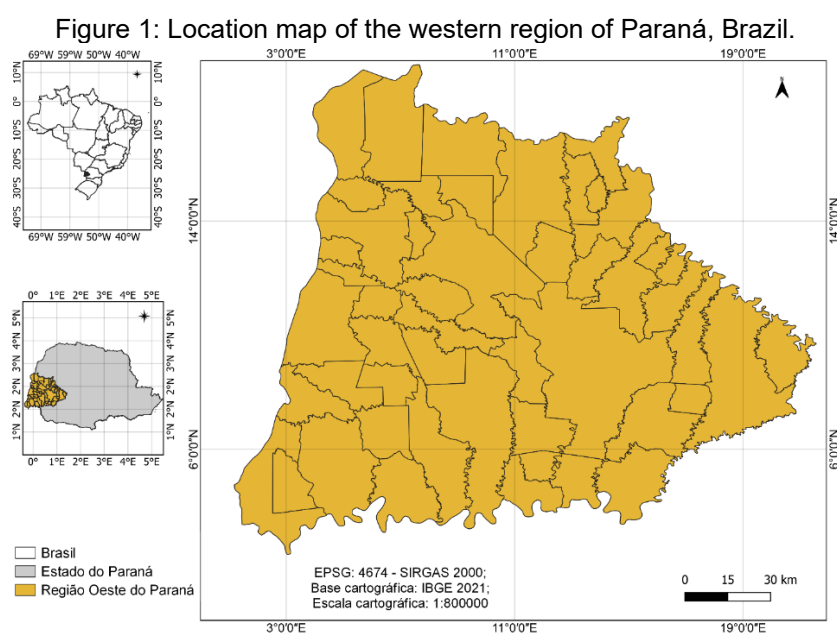
Fonte: Adapted from Goerck et al., 2020.

These forerunners believed that through isolated experiments, such as the creation of cooperative or associative communities, capitalism could be gradually replaced by a new mode of production. However, although his proposals for cooperativism and associativism represented an important advance for the organization of workers and for the search for a more egalitarian society, these ideas were limited in relation to the structural transformation of the capitalist system.

Cooperativism and associativism are ways of attenuating social conflicts, as well as serving as means of contestation and resistance of the subjects to the capitalist mode of production and its production process.

METHODOLOGY

The research carried out is characterized as exploratory qualitative, and covered the western region of Paraná as shown in figure 1, focusing on fish production since the beginning of the 1990s, when the first fish farmers' associations were created in the region. The data sources were primary, with interviews with managers and fish farmers, and secondary, with data collection in official documents and databases. Official websites were consulted at the municipal level, such as city halls and associations and cooperatives, and at the state level, such as the State Secretariat of Agriculture and Supply (SEAB), the Rural Development Institute of Paraná (IDR-PR), the Paraná Institute for Economic and Social Development (IPARDES), the Union and Organization of Cooperatives of Paraná (OCEPAR), as well as dissertations, theses and scientific and extension articles.



Source: prepared by the authors, 2024

RESULTS AND DISCUSSIONS

The results of the surveys that associativism in the area of fish farming occurred in the region as a result of public policies carried out by the state government, mainly through Emater (current IDR-PR), in the search for strengthening management actions and access to rural credit, seeking to promote the diversification of agricultural production.

Rissato (2001) in his thesis on fish farming and its industrialization of fish in the western region, shows that public policies were fundamental to encourage fish farming. The initiatives of credit subsidized by the state government for the purchase of equipment gear

for management and harvesting, feed, fingerlings and for the construction of excavated ponds, the latter with subsidies for hours/machine and organization of producers to invest in the activity were fundamental.

Allied to this, with the support of several municipal governments, there was the creation of several associations, as shown in Table 2, highlighting in 1991, the creation of Atoaqui, Aquimar, Apaqui, an association of Tupãssi. In 1992, these supported the creation of the first regional association, Aquiopar, which received financial resources for the implementation of the first fish warehouse under an associative regime, to process tilapia fillets, located in Palotina. In 1992 and 1993, the Aquami and Aquilago associations were created, respectively. Unfortunately, due to management problems, the industrial unit had several financial problems, due to competition from private companies and mainly due to the presence, at the time, of middlemen who transported live fish to São Paulo fishing grounds, which paid more for the fish, and led to a wave of financial defaults.

In 2002, the Aquiopar association was deactivated and replaced by the private company Aquiopar - Aquicultura Oeste do Paraná Ltda, which was deactivated on 01/23/2017. Of all the 16 associations created in the region, eight are still active, representing fish farmers and organizing fish production. Several associations were deactivated due to specific difficulties or lack of interest from their members.

These associations were important to organize fish farmers and their activities, such as the search for new technologies for production, organization and purchase of inputs, as well as the organization of events and representation of these before municipal and regional councils, aiming at the search for public policies to promote the growth of the activity.

Riedo et al (2021), when analyzing the relationship networks of fish farming in Maripá, state that the social capital of the region allows producers to establish trust strategies, standards, regulations, knowledge structures, for the emergence of production chains increasingly concatenated with the economic development of the country. In this municipality, more than half of the fish farmers are members of Aquimap and most are integrated into agro-industrial production cooperatives for fish production.

Chart 2 Timeline of the creation of the associations representing fish farmers in western Paraná, since 1991.

Associations	Start / Performance Date
1. Toledana Aquaculture Association – Atoaqui	01/18/1991 – Deactivated on 07/02/2021
2. Association of Aquaculture Farmers of Marechal Cândido Rondon – Aquimar	10/03/1991 - Active

3. Pallottine Aquaculture Association – Apaqui	22/05/1991 - Active
4. Tupassian Aquaculture Association	11/21/1991 - Deactivated
5. Association of Aquaculture Farmers West of Paraná – Aquioapar	02/09/1992 – Deactivated in 2002
6. Association of Aquaculture Farmers of Missal – Aquami	12/29/1992 – Deactivated on 06/27/2014
7. Beira Lago Aquaculture Association - Aquilago	01/17/1993 – Deactivated on 02/09/2015
8. Association of Nursery Farmers of Paraná - Aleinopar	2006 - Deactivated in 2019
9. Nova Aurora Aquaculture Association	05/21/1996 - Deactivated
10. Association of Aquaculture Farmers of São Miguel do Iguaçu – Aquismi	05/03/1997 - Active
11. Association of Aquaculture Farmers of Maripá - Aquimap	07/07/1997 - Active
12. Itaipulandiense Association of Aquaculture Farmers - Aiqui	04/15/1999 – Deactivated on 11/23/2018
13. Association of Aquaculture Farmers of Serranópolis do Iguaçu	09/13/2016 – Active
14. Association of fishermen and fish farmers of the Itaipu lake of Foz do Iguaçu – Applifi	01/14/2014 – Active
15. Association of Aquaculture Farmers of Western Paraná – Aquioeste - Cascavel/PR	08/17/2018 – Active
16. Association of artisanal professional fishermen and aquaculture farmers of Santa Terezinha de Itaipu	08/14/2019 – Active
17 – Association of Farmers, Fish Farmers and Agroindustries of Palmital – APAP. Fish production in net tanks.	07/19/2021 - Active

Source: prepared by the authors, 2024.

The cooperatives were created in 2002 (Table 3), with the creation of Coopeixe, in Toledo, which sought to organize fish farmers for community purchases of goods and inputs for the cooperative members, and was later restructured to meet the demands of public policies for the purchase of food from family farming, since most of its members produced food other than fish.

As of 2008, traditional agro-industrial cooperatives introduced the Fish Farming Integration System (SIP), with the implementation of fish warehouses, diversifying their production matrix, as they did in the 1980s with the milk, pig and poultry and poultry chains.

Coldebella *et al.* (2017) analyzed the beginning of fish farming in net tanks in the reservoir of the Salto Caxias hydroelectric plant, on the Iguaçu River, which was a cooperative experience, through Cooperçu, created to promote fish farming in public waters with tilapia, involving fish farmers from the west and southwest region of Paraná.

Brum and Augusto (2015), when analyzing Copacol's strategies in tilapia production, stated that the experience with the integration model adopted for fish production, similar to that of poultry and pork, Copacol achieved the objectives and finds room for expansion of the activity, also concluding the importance of adopting corporate governance strategies to generate value for members and remain firm in the market.

Table 3 Cooperatives of fish farmers, professional fishermen and agro-industrial cooperatives that have worked or continue to produce fish in western Paraná since 2002.

Cooperatives	Start date / operation in fish farming
Fish farmers' cooperatives	
1. Cooperative of Family Farmers of Toledo – Cofatol. Originally coopeixe.	06/28/2002 – Active – In 2008 there was a restructuring to meet the PAA
2. Cooperative for the Production, Industrialization and Commercialization of Fish of the Iguaçu River – Coopercu	02/26/2006 – Active – Covers fish farmers in the west and southwest regions of Paraná
3. Pisces Agroindustrial Fish Farming Cooperative – Copisces	07/09/2007 – Ativa – in 2020, incorporated by Copacol
Agro-industrial cooperatives	
4. Consolata Agroindustrial Cooperative – Copacol	2008 – Beginning of the Fish Farming Integration System (SIP) – Own slaughter
5. Copagril Agroindustrial Cooperative – Copagril	2010 – Beginning of SIP with Copacol
6. Primato Cooperativa Agroindustrial – Primato	2017 - Beginning of SIP with outsourced slaughter
7. C.Vale Agroindustrial Cooperative – C.Vale	2017 - Beginning of SIP – Own slaughter
Professional fishermen's cooperative	
8. Cooperative of Family and Solidarity Agriculture of Western Paraná – Coafaso	11/25/2011 – Ativa – Beginning of support for fish farming in cages
9. Cooperative of artisanal fishermen, aquaculturists and family farmers of Santa Helena - Coopesca	04/16/2012 – Deactivated on 06/09/2021
10. Cooperative of artisanal fishermen and aquaculture farmers of Itaipulândia – Coopeixe	06/29/2016 – Deactivated on 05/10/2017

Source: prepared by the authors, 2024.

It is also noteworthy that of the three cooperatives that represent professional fishermen working in the reservoir of the Itaipu Hydroelectric Power Plant, two were created with the incentive of federal public policies, with the creation of the Territory of Citizenship of Fishing and Aquaculture, which was discontinued, and with this the managers were unable to operationalize and make their cooperatives viable, these being deactivated after a few years.

When analyzing the official fish production in the western region of Paraná (IBGE, 2022), combined with the work of Brenzan & Feiden (2022), the production linked to cooperatives represents more than two-thirds of the total fish production raised in excavated ponds.

CONCLUSION

Associations and cooperatives were fundamental in boosting the organization of the fish farming production chain, made possible by municipal, state and federal public policies, which made the region the largest national production center, based on fish production in ponds excavated in family production units and in net tanks, fostering the diversification of the agricultural production matrix and generating jobs and income, and strengthening the industrialization of fish production.

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REFERENCES

1. BRASIL. (1971). Lei nº 5.764, de 16/12/1971. Define a Política Nacional de Cooperativismo, institui o regime jurídico das sociedades cooperativas, e dá outras providências. 24p. Retrieved from https://www.planalto.gov.br/ccivil_03/leis/l5764.htm
2. Brenzan, C. K. M., & Feiden, A. (2022). Fish farming as a driving force for the development of the western mesoregion of Parana State. *Research Society and Development*, 11(14), e22111435877.
3. Brum, S. A., & Augusto, P. O. M. (2015). Ambiente de tarefa: as estratégias da COPACOL (PR) na produção de tilápia em escala industrial pelo sistema vertical integrado. *Revista Eletrônica Científica do CRA-PR-RECC*, 2(1), 19-34.
4. Coldebella, A., Ramos, M. J., Chidichima, A. C., Boscolo, W. R., & Feiden, A. (2017). Cooperativismo do desenvolvimento da cadeia produtiva do pescado no reservatório de Caxias. In *Seminário Internacional de Pós Graduação em Desenvolvimento Rural Sustentável* (pp. 1-5). Universidade Estadual do Oeste do Paraná/PPGDRS.
5. Goerck, C., Gaviraghi, F. J., Oliveira, J. D. L., Kocourek, S., & Freitas, T. G. D. (2020). Aspectos sócio-históricos do cooperativismo e associativismo no Brasil e no Mundo. Bagé: Editora Faith.
6. Hugon, P. (1980). *História das doutrinas econômicas* (14th ed.). São Paulo: Atlas.
7. Instituto Brasileiro de Geografia e Estatística. (2021). Produção da Pecuária Municipal. Available at <https://cidades.ibge.gov.br/brasil/pr/pesquisa/18/0>. Accessed on 27/08/2023.
8. Johnston, F. L., Santana, A. S. D., & Santos, G. R. D. (2020). Produção agropecuária e cooperativismo na região Sul do Brasil: Destaques dos dados do censo agropecuário de 2017. *Boletim Regional, Urbano e Ambiental*, 23ª Ed. Especial Agricultura, 135-147. Brasília: IPEA.
9. Marx, K. (1988). *O capital: Crítica da economia política* (3rd ed.). São Paulo: Nova Cultura.
10. Oliveira, N. B. D. (1984). *Cooperativismo: Guia prático* (2nd ed.). Porto Alegre: Organização das Cooperativas do Rio Grande do Sul.
11. Pinho, D. B. (1966). *A doutrina cooperativa nos regimes capitalistas e socialistas*. São Paulo: Pioneira.
12. Pinho, D. B. (1977). *Economia e cooperativismo*. São Paulo: Saraiva.
13. Pinho, D. B. (2004). *O cooperativismo no Brasil: Da vertente pioneira à vertente solidária*. São Paulo: Saraiva.

14. Polanyi, K. (2000). A grande transformação: As origens da nossa época. Rio de Janeiro: Campus.
15. Rech, D. (1991). Cooperativas: Uma onda legal. Rio de Janeiro: DP&A.
16. Rech, D. (2000). Cooperativas: Uma alternativa de organização popular. Rio de Janeiro: DP&A.
17. Riedo, I. G., et al. (2021). Redes e (inter)relações: A organização social da piscicultura em Maripá/PR. Research, Society and Development, 10(13), e453101321037-e453101321037.
18. Rissato, D. (2001). A indústria de beneficiamento de Tilápias-do-Nilo no Estado do Paraná: Um estudo de sua organização industrial (Master's thesis). Escola Superior de Agricultura "Luiz de Queiroz", Universidade de São Paulo, Piracicaba.
19. Schneider, J. O. (1991). Democracia-participação e autonomia cooperativa. São Leopoldo: UNISINOS.