THE EFFECT OF PRIVATIZATION ON THE SUSTAINABILITY OF THE ROMANIAN ACVACULTURE

Erzsebet OLARIU

Bucharest University of Economic Studies, 6 Piata Romana, District 1, 010374, Bucharest, Romania

Corresponding author email: erji.olariu@gmail.com

Abstract

Privatization emerged as a consequence of nationalization and remains an ongoing contemporary process. After the fall of the communist regime in Romania, the Romanian economy has moved to a competitive market economy from the centralized economy based on the plan-based leadership system. A new economic system based on the requirements of the free competitive market was desired, respecting the principles of economy, sustainability. The paper tries to answer the question of how the sustainability of the aquaculture sector was influenced during this period. The study concludes that the transition that included privatization brought about changes for which the aquaculture sector was not fully prepared. Following the impact, a large part of the companies was liquidated, the sector could not cover the needs of fish consumption in Romania. The way to change the type of property including its management requires the wisdom to learn from the experiences of others, from their own experience, more that the privatization process in Romania still has a lot of potential.

Key words: economy, fish farming, property right, public goods.

INTRODUCTION

Humanity for thousands of years has made efforts to improve the communal life, but without touching the property considered sacred. The legal system, from the code of Hammurabi to the XIX century, tried to bring harmony to the community with the effort of preserving the exclusive and absolute character of the property (Nagarajan, 2011).

However, from antiquity to the Middle Ages and during the period of colonial expansion, there are cases in which the state took possession of properties or activities for the purpose of using them for the public benefit, followed by the nationalizations made by the communist totalitarian systems.

Five realities were shown regarding privatization and nationalization in resourcerich economies. The first fact is that "nationalizations and privatizations are repeated, cyclical phenomena, which often come in waves common to several countries". The second fact is that "privatization - nationalization cycles tend to occur more often in the natural resources and utilities sectors". The third fact is that "nationalization of natural resource industries tends to occur when the price of the corresponding commodity is high". The fourth fact is that "contracts for the exploitation of natural resources between governments and private companies are such that commodity price windfalls are mostly appropriated by private firms". The fifth fact is that "nationalization is more likely when inequality is endemic or worsens in the country, and especially when the rents from natural resource or utility companies are perceived as benefiting only a minority" (Chang et al., 2018).

In Romania "the past 30 years were dominated by the economy/society imbalance. It is obsessively considered that economy is the key to the future, the state of the society is just a simple outcome of the economic growth. However, a radical change is needed in the political concept. The social is the main resource of society's development, including of the economy" (Zamfir, 2021).

In Romania, through Law No. 187 of March 23, 1945, for the implementation of the agrarian reform, and later by Decree No. 83 of March 2, 1949, to complement certain provisions of Law No. 187 of 1948, the agricultural holdings of the landlords, including all their inventory, passed into state ownership. On the basis of Law No. 119 of June 11, 1948, for the nationalization of

industrial, banking, insurance, mining, and transportation enterprises, the entire property in the industry passed from private ownership to state ownership. Thus, Romania transitioned from a capitalist-type economy to a centralizedtype economy. On July 1, 1985, the fish enterprises were established, subordinated to the Central of fish production and industrialization, under the guidance and control of the Ministry of Agriculture and Food Industry - Department of food industry, having as object of activity fish farming, fishing, industrialization, capitalization of fish and other aquatic products. The enterprises were set up by taking over farms, pools, sections and fish processing workshops. The basic units of fish farming, fishing and fish industrialization were: fish production farm, section and factory of fish industrialization, which were organized on three types: big, medium and small. After the change of the political regime in 1989, since 1990 the first steps were taken towards a new economy that included privatization (Chiriac, 2016).

Romanian aquaculture underwent privatization since 1990. This study examines the period from 1990 to 2021 and explores how sustainability and resilience are ensured in the Romanian aquaculture sector.

MATERIALS AND METHODS

The research method used is qualitative research. The research was based on the analysis of documents issued by the Parliament of Romania, the Government of Romania, European Commission, European Parliament, documents from the National Agency for Fisheries and Aquaculture (NAFA), documents issued by the Romanian Court of Accounts, the European Court of Auditors, and literature in the field.

RESULTS AND DISCUSSIONS

In the international market the demand for fishery products is growing, which leads to the development of aquaculture, because it ensures faster growth than fishing. Even if for now the percentage of aquaculture products is small compared to total fishery products is "still gaining in importance" (Jolly & Clonts, 2020). The National Strategy for Sustainable Development was adopted by the Romanian Government meeting of 9 November 2018, by Government Decision no. 877/2018. Through this strategy. Romania has created national Framework for Supporting the United Nations 2030 Agenda for Sustainable Development implementation of a set of 17 sustainable development goals proposed by it (National Agency for Fisheries and Aquaculture, 2022). To ensure that fisheries and aquaculture are environmentally, economically and socially sustainable and provide healthy food for citizens of the European Union (EU), given that fishing resources in European continental waters are in continuous decline, as a result of habitat degradation and over-exploitation through fishing, at the level of the European Union was adopted the Common Fisheries Policy in 1970 and over time has undergone successive updates. In 2013, the Council and the European Parliament reached an agreement on the new CFP in regulation (EU) No 1380/2013 applicable to all EU member states was adopted (Romanian Court of Accounts, 2021).

In the Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy the Commission develops strategic guidelines for the Union regarding common priorities and targets for the sustainable development of aquaculture activities, with the aim of promoting sustainability and contributing to food security and supply, economic growth, and employment. These strategic guidelines aim to improve the competitiveness of the aquaculture sector, reduce administrative burdens, encourage economic activity, enhance the quality of life in coastal and inland areas, as well as integrate aquaculture activities into the planning of maritime, coastal, and inland spaces (European Parliament, 2013).

In the Communication from the Commission of to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions- Strategic guidelines for a more sustainable and competitive EU aquaculture for the period 2021 to 2030, it is expressed the need to ensure for EU aquaculture sector a "longer-term sustainability and resilience". The new strategic guidelines establish the objectives such as building competitiveness and resilience, participation in the green transition, ensuring consumer information and social acceptance, increasing innovation and knowledge (European Commission, 2021).

In the Special Program for the Development of Aquaculture, Fisheries, and Fish Processing in the years 1989-1990 and the Five-Year Plan 1991-1995 of the Ministry of Food Industry-Fisheries and Fish Processing Centre issued in May 1989, in the last year of the communist period, is presented the report on the achievements in aquaculture, fisheries, and fish processing for the years 1985-1988, along with the plan for the years 1989, 1990, and the fiveyear plan for 1991-1995 (Ministry of Food Industry Fisheries and Fish Processing Centre, 1989).

The focus was on increasing fish production in inland waters, particularly to enhance production per unit area in developed drilled basins, from 1300 kg/ha to 1700 kg/ha by the year 1995. In 1985 the physical production of fish caught in inland waters realized was 73.1 Townsend tons, rising in 1988 to 91.3 Townsend tons (Table 1).

Table 1. The agricultural production- fish caught in inland waters, realized in 1985-1988 period

Indicator	UM	1985	1986	1987	1988
Value of	Millions	491.9	661	452.6	536.4
fish	of Lei				
commodity	Milionis	112.56	153.36	111.20	134.43
production	of USD				
Physical	Townsend	73.1	81.3	80.5	91.3
production	tons				

Source: own calculation on the basis of data from NAFA. The value for USD was used the official exchange rate for the Romanian leu/USD dollar set by Order No.4/2003 (Governor of the National Bank of Romania, the President of the National Institute of Statistics, 2003).

The plan of centralized economy in the communist system for 1989 on physical production of fish caught was 180 Townsend tons (Table 2).

Table 2. The agricultural production-fish caught in inland waters, plan for 1989

Indicator	UM	1989
Value of fish	Millions of Lei	905
commodity	Millions of	217.02
production	USD	
Physical production	Townsend tons	180

Source: own calculation on the basis of data from NAFA. The value for USD was used the official exchange rate for the Romanian leu/USD dollar set by Order No.4/2003 (Governor of the National Bank of Romania, the President of the National Institute of Statistics, 2003).

In 1989, employees in fish farms were about 6000 (NAFA). The main law that regulated the privatization process in Romania is: Law no.15/1990 (Parliament of Romania, 1999).

It stipulated that the state units, regardless of the subordinated body, are organized and operate in the form of autonomous administrations or commercial companies. An important aspect is the transmission of property rights on land included in the patrimony of each company (Chiriac, 2016).

The exception was the land in the public domain of the state. The right of ownership derives from the provisions of the Government Decision no. 834/1991 (Government of Romania, 1991). The companies after the procedure of the decision to obtain proof that the asset, exactly delimited, is part of their patrimony, finally obtaining a certificate of ownership attestation. Other regulatory documents in this area were as follows: Law no. 31/1990, which provided that natural persons and legal persons may associate and constitute companies for the performance of trade acts (Parliament of Romania, 1990); Law no.58/1991, which established the legal framework corresponding to the transfer of state property into private ownership of natural persons and legal persons (Parliament of Romania, 1991); Law no.77/1994, which provided that for the acquisition of shares of companies that are privatized according to Law 58/1991, employees and members of the management of these companies may be formed into associations (Parliament of Romania, 1994); Law no 55/1995, which provided that the process of acceleration of privatization to be carried out by the actual transfer, free of charge, to the entitled Romanian citizens, of the shares related to the 30% quota% from the share capital of companies with state capital, as well as through the sale of shares issued by these companies (Parliament of Romania, 1995).

By Government Emergency Ordinance no. 88/1997, approved by Law no. 44/1998, and amended and completed by Law no. 99/1999, was established the legal framework for the sale of shares issued by companies and owned by the state or by an authority of the local public administration, as well as for the sale of assets belonging to companies to which the state or an authority of the local public administration is a shareholder (Government of Romania, 1997; Parliament of Romania, 1998; 1999).

By the report of audit of Romanian Court of Accounts, the privatization has been considered a beneficial public policy tool because its application can lead to satisfaction of the 'general good'. It is considered that applying a privatization policy can be a solution 'in situations' in which the State is not able to solve the problem through its institutional mechanisms or whose resolution effort can produce major unsustainable economic and social imbalances over time. The principles that argue for the implementation of public policies on privatization are competition, minimizing state responsibility, reducing bureaucracy, increasing budget revenues, increasing productivity, adaptability, flexibility, innovation and performance (Romanian Court of Accounts, 2023).

According to the report, from 1991 to 2019 a total of 11.589 companies were identified that were privatized, of which valid contracts were 9,795 companies, terminated or disbanded were 9,792 companies and for 3 were not found information. The value of the 9792 contracts in the currency in which they were concluded are equivalent 18,801,708,000 to lei or 8,096,126,000 EUR or 9,141,179,000 USD. 9521 contracts (97.20% of the total contracts) were concluded in lei (94.15% in ROL, 3.05% in RON), and the contribution of the value of these contracts, in the total volume of revenues from sales contracts was 1.60% - in relation to the total value volume of sales contracts - share purchase, expressed in lei equivalent; 33.54% in relation to the total value volume of contracts. expressed in EUR equivalent; 31.35% - in relation to the total value volume of the contracts, expressed in USD equivalent (Table 3, Table 4, Table 5).

The significant difference between these shares is explained by the accelerated devaluation of the national currency in the period 1992-2000, while the accelerated growth of inflation. 90% of the total contracts concluded in lei, the statement said, about 6,500 privatized commercial companies were concluded between 1992-2000.

201 contracts (2.05% of the total contracts) were concluded in USD (of which, 85% concluded between 1992 and 2000) and the contribution of

the value of these contracts, the total volume of contract revenue was: 3.34% - reported at the total value of the contracts expressed in lei equivalent; 19.44% - in relation to the total value volume of contracts, expressed in EUR equivalent and 17.95% - reported at the total value of the contracts, expressed in USD equivalent (Table 3, Table 4, Table 5).

49 contracts (0.50% of the total contracts) were concluded in EUR (all concluded after 2000). The contribution of the value of these contracts, in the total volume of revenues from contracts, was: 74.99% - in relation to the total value volume of contracts, expressed in lei equivalent; 46.82% - in relation to the total value volume of contracts, expressed in EUR equivalent; 50.51% - in relation to the total value volume of contracts, expressed in USD equivalent. From the value point of view, the 49 contracts in EUR have a significant share in the volume of revenues obtained (Table 3, Table 4, Table 5).

Table 3. The situation of share sale contracts from 1991 to 2019 in terms of the currency denomination at the time of agreement, equating to thousands of RON

Valid contracts		Equivalent- thousands of Lei	
Number	% total	Number	% total
9,222	94.15	1,905,340	10.13
299	3.05	276,228	1.47
9,521	97.20	2,181,568	11.60
201	2.05	2,508,475	13.34
49	0.50	14.099,535	74.99
18	0.19	11900	0.07
2	0.02	80	0
1	0.01	150	0
9,792	99.97	18,801,708	100
3	0.03		
9795	100		
	Number 9,222 299 9,521 201 49 18 2 1 9,792 3	Number % total 9,222 94.15 299 3.05 9,521 97.20 201 2.05 49 0.50 18 0.19 2 0.02 1 0.01 9,792 99.97 3 0.03	Valid contracts of L Number % total Number 9,222 94.15 1,905,340 299 3.05 276,228 9,521 97.20 2,181,568 201 2.05 2,508,475 49 0.50 14.099,535 18 0.19 11900 2 0.02 80 1 0.01 150 9,792 99.97 18,801,708 3 0.03

Source: Romanian Court of Accounts (Romanian Court of Accounts, 2023)

Table 4. The situation of share sale contracts from 1991 to 2019 in terms of the currency denomination at the time of agreement, equating to thousands of EURs

Currency of	Valid contracts		Equivalent- thousands EUR	
contracts	Number	% total	Number	% total
ROL	9,222	94.15	2.638,846	32.59
RON	299	3.05	76,411	0.95
Subtotal Lei	9,521	97.20	2,715,257	33.54
USD	201	2.05	1,574,200	19.44
EUR	49	0.50	3,790,459	46.82
DEM	18	0.19	15,920	0.20
ITL	2	0.02	210	0
CHF	1	0.01	80	0
Total	9,792	99.97	8,096,126	100
Lack of information	3	0.03		
Total contracts	9795	100		6.4

Source: Romanian Court of Accounts (Romanian Court of Accounts, 2023).

Currency of	Valid contracts		Equivalent- thousands USD	
contracts	Number	% total	Number	% total
ROL	9,222	94.15	2,759,230	30.18
RON	299	3.05	106,845	1.17
Subtotal Lei	9,521	97.20	2,866,075	31.35
USD	201	2.05	1,640,965	17.95
EUR	49	0.50	4,617,269	50.51
DEM	18	0.19	16,570	0.19
ITL	2	0.02	215	0
CHF	1	0.01	85	0
Total	9,792	99.97	9,141,179	100
Lack of	3	0.03		
information				
Total	9,795	100		
contracts				

Table 5. The situation of share sale contracts from 1991 to 2019 in terms of the currency denomination at the time of agreement, equating to thousands of USDs

Source: Romanian Court of Accounts (Romanian Court of Accounts, 2023).

In 1990, based on Government Decision No. 1353, joint-stock companies were established in the food industry. Thus, the joint-stock companies were set up in fishery and fish industrialization. In these companies, the state was the sole shareholder, and the duties of the general meeting of the shareholders were exercised by the council of state proxies. On the date of establishment of joint stock companies, the state economic units were abolished. The assets and liabilities of the disbanded state units were taken over by the established companies (Government of Romania,1990).

The Emergency Ordinance no. 198/1999 establishes the legal framework for the privatization of agricultural companies, which own agricultural land or land permanently under the gloss of water, constituted in accordance with the provisions of Law no. 15/1990. It is foreseen that the privatization of companies, on behalf of the state, to be done by the Ministry of Agriculture and Food (MAF), in collaboration with the State Property Fund (Government of Romania,1999).

In 2000, by Government Emergency Ordinance no. 296/2000 the Authority for Privatization and Administration of State Participation's (APASP) is established, subordinated to the Government, by reorganization of the State Property Fund, which is abolished. MAF received from APASP 38 companies with a fishery profile (Government of Romania, 2000). In 2001 the Agency of State Domains (ASD) is founded on the basis of Law 268/2001 receiving the attributes of privatization. GEO 198/1999 is repealed and ASD takes over all companies from MAF. The land for which the companies obtained the certificate of ownership of the premises land, issued by the Ministry of Agriculture, Food and Forestry, with the application of the legal provisions regarding the revaluation of tangible assets and the modification of the share capital, they are part of the share capital of companies. Land for which no certificate of ownership attestation has been obtained, which are in the exploitation of companies, state property, and which are not part of the share capital of these companies, will be leased (Parliament of Romania, 2001).

ASD managed the companies until 2004, when it handed them over to the National Company for the Administration of the Fishery Fund (NCAPF). The legal situation of the 38 companies in 2004 was as follows: 4 companies were dissolved and radiated, and 34 companies were handed over to NCAPF. NCAPF was established on the basis of Law 192/200, and took over the companies on the basis of Emergency Ordinance no. 69/2004 (Parliament of Romania, 2001; Government of Romania, 2004).

Of these 34 companies, 17 were privatized, 11 were non-privatized solvent companies, and 6 non-privatized companies were insolvent (NAFA). In 2008 based on the Emergency Ordinance no 23/2008 of NACFP was abolished and, the managed companies were transferred back to ASD. The responsibility for defining and implementing the policy regarding the conservation and management of living aquatic resources existing in maritime and continental waters, in aquaculture, in processing and organizing the market of fishery products, in fishing and aquaculture structures was transferred to the National Agency for Fisheries and Aquaculture (NAFA). NAFA is the central public authority (Government of Romania, 2008).

The managed companies by ASD were to be transferred to NAFA. At inventory has been found that of the 34 companies managed by ASD, 16 was already privatized companies, the state not being a shareholder, and they were not the subject of the transfer. 1 the company was partially privatized, and was included in the transfer. 17 companies were non-privatized companies, all included in the transfer, 5 were in operation, 4 were in insolvency proceedings, 8 were radiated. In total 18 companies were transferred. (NAFA). The concession contracts of the state-owned land were concluded by both ASD and NCAFP, in 2008 being transferred to ASD. Based on Law 317/2009 The National Agency for Fisheries and Aquaculture is subrogated to the Agency for State Domains as regards the rights and obligations arising from contracts concluded by it with contracting agents in operation and in management of fisheries facilities, as well as with those who have concluded joint venture agreements or other types of contracts and will conclude additional acts in this respect. The National Agency for Fisheries and Aquaculture takes over free of charge the shares that the Agency for State Domains owns in companies with fish profile, the lands on which the fish facilities are located, as well as other land related to the fisheries owned by it, based on a handover protocol approved by order of the minister of agriculture, forests and rural development. In 2009 NAFA has taken over from ASD 18 companies and 60 concession contracts for land with a total area of 61,265.13 ha. After solving a privatization contract by ASD, NAFA received another company, a total of 19 companies taken over from ASD. In 2020 of the total 19 companies 2 were in operation, 1 were insolvent, 4 were bankrupt and 12 were radiated. Regarding the concession contracts in 2021. there remained leased land with a total area of 29,905 ha representing the land related to 241 fish farms (Table 6).

Romania, in 2021, had an area of approx. 135,000 ha of freshwater fisheries corresponding to a number of approx. 1,000 fish farms. Of the area of approx. 135,000 ha of fishing facilities, about 62% are surfaces overlapping Natura 2000 protected natural areas, approx. 83,000 ha. The number of units with an aquaculture license has varied insignificant until 2020, with the trend increasing from 2016 to 2020. Thus, if in 2016 there were registered a number of 634 licensed units, in 2020 we find a number of 735 licensed units. The increase was also due to the 34 units established through the Operational Programme

for Fisheries (OPF) and Operational Programme for Fisheries and Aquaculture (OPFA). The number of active versus inactive units in the total licensed units followed the reverse trend of the latter, that is, the active units decreased and the inactive ones increased. By percentage, the number of active units decreased from 95% in 2016 to about 90% in 2019.

No.	County	No. of fish farm	Surface -ha
1	Alba	3	195.6600
2	Arad	2	331.3600
3	Bacau	1	142.0700
4	Bistrita Nasaud	1	134.0200
5	Brasov	2	435.4528
6	Braila	2	829.5200
7	Buzau	2	942.4500
8	Botosani	14	1,951.5650
9	Caras Severin	1	127.7300
10	Calarasi	29	2,592.4847
11	Constanta	16	8,741.8488
12	Dambovita	6	697.3600
13	Dolj	2	103.3100
14	Galati	6	1,256.2000
15	Gorj	27	1,159.1460
16	Ialomita	13	1,159.1460
17	Iasi	11	2,595.5834
18	Ilfov	49	717.9346
19	Mures	4	490.5800
20	Mehedinti	3	795.9000
21	Neamt	2	139.4500
22	Olt	1	19.0000
23	Prahova	6	803.9800
24	Satu Mare	3	655.3557
25	Sibiu	1	169.1500
26	Suceava	8	653.2120
27	Teleorman	12	653.2120
28	Timis	5	380.9500
29	Tulcea	3	1,418.8100
30	Vaslui	4	565.0840
31	Valcea	1	57.0400
32	Vrancea	1	98.5000
	Total	241	29,905.0425

Table 6. Status of ongoing concession contracts in 2021

Source: own calculation on the basis of data from NAFA.

The situation of the economic results of the fisheries facilities worsened even more after 1990, when their activity began to face the requirements of the functioning of the market economy and the reconsideration of production costs, as well as management inappropriate for new companies formed in the field. There were not allocated funds for the modernization of fish basins, for the restoration of dams degraded hydro technical. The operating costs have

increased greatly in particular due to increase in expenditure on electricity, water, feed, force labour, while the obtained yields remained very small, below 100 kg/ha without the possibility to cover the costs of production. As a result, much of the fish ponds remained unused for fish farming being abandoned or used for other purposes and for especially for agriculture or animal husbandry. In terms of volume of marketed consumer production in recent years, it is noted that after an increase until 2017. supported by the implementation projects carried out through operational programme, followed by even a decrease in production by about 4% in 2018 compared to 2017. In 2019 there is a revival of the marketed production that is based exclusively on reaching the maturity of projects within OPF 2007-2013 (Table.7).

Table 7. Aquaculture production in the 2015-2020 period in Romania

	Year	Production (t)
	2015	11016
	2016	12472
	2017	12798
	2018	12298
	2019	15124
	2020	12150
~	1 1 1 1 1 1	1 0.1 0 01.171

Source: own calculation on the basis of data from NAFA.

As shown in the Special Report 25/2023 of European Court of Auditors, the Scientific, Technical and Economic Committee for Fisheries reported that in 2020 the Romanian EBIT -earnings before interest and taxes, known as "operating profit"- turned negative (European Court of Auditors, 2023).

According to the Multi-annual national strategic plan for aquaculture 2022-2030, on the high cost of ensuring aquaculture stocks a given justification has been that a number of environmental and climate issues affecting the sector generates significant economic losses, being it is necessary to establish lines of assistance, which ensure or cover these losses so that they do not endanger sustainability, especially economic. There are no effective tools insurance to cover aquaculture activity (National Agency for Fisheries and Aquaculture, 2022).

Aquaculture is facing labor shortages in mainly due to the lack of attractiveness of aquaculture activity (Table 8).

Table 8. Employees in aquaculture between 2015-2020	
in Romania	

Year	Number of employees
2015	2047
2016	2035
2017	2364
2018	2065
2019	2303
2020	2332

Source: own calculation on the basis of data from Multi-annual national strategic plan for aquaculture 2022-2030, (National Agency for Fisheries and Aquaculture, 2022)

The staff employed in aquaculture did not very significantly in the period 2015-2020, however in 2017 there is an increase of 15.48% compared to 2015, in 2018, there was a decrease after which in 2019 there is a recovery that is maintained for 2020. Total number of employees reported by aquaculture units for 2020 it is 2,332, of which 451 women and 1,881 men, the share of women being 19.33%.

Compared to 1989, when the number of employees in fish farms was about 6000 (NAFA), the number of employees in 2020 decreased with 61.13%.

Climate change and competition for natural resources are adding pressure additional to the aquatic environment.

Most fish farms have a relatively long history and have fit well into the natural landscape, playing an essential role by creating wet areas, important in the protection and conservation of biodiversity, in strengthening ecological balances, in taking over excess water and nutrients from intensive agriculture in providing and maintaining large areas that function as biological filters.

CONCLUSIONS

The history of Romania's economy has been marked by significant transitions and the nationalization and privatization of the fishing sector is no exception.

In the post communist period, in the Romanian aquaculture there was a fragmented privatization, in the sense that not in all cases all the goods that form a whole of the fishing farms were transferred. In cases where the entire fish farm has been transferred and however not all remained in activity, in all conditions created by privatization, this was not the sufficient condition for durability either. Privatization was generally perceived as a beneficial tool for economic and social development.

Currently, under the pressure of challenges such as climate change, biodiversity conservation and protection, competition for natural resources, the fishing sector is facing new challenges.

Following the privatization of aquaculture in Romania there is a partial sustainability, but opened new opportunities in this sector.

ACKNOWLEDGEMENTS

I thank all the presidents and all the colleagues from the National Agency for Fisheries and Aquaculture.

REFERENCES

- Chang, R., Hevia, C., & Loayza, N. (2018). Privatization and nationalization cycles. *Macroeconomic Dynamics*, 22(2), 331-361.
- Chiriac, C. (2016). *The great privatisation. Property restructure.* Bucharest, RO: Paideia Publishing House. (*In Romanian*)
- European Commission. (2021). Communication from the Commission of to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Strategic guidelines for a more sustainable and competitive EU aquaculture for the period 2021 to 2030. Retrieved June 3, 2023, from https://eurlex.europa.eu/resource.html?uri=cellar:bab1f9a7b30b-11eb-8aca-

01aa75ed71a1.0022.02/DOC 1&format=PDF.

- European Court of Auditors. (2023) Special report 25/2023 EU Aquaculture Policy - Stagnating production and unclear results despite increased EU funding. Retrieved September 2, 2023, https://www.eca.europa.eu/ECAPublications/SR-2023-25/SR-2023-25_EN.pdf
- European Parliament. (2013). Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC. Retrieved September 2, 2023, https://eurlex.europa.eu/eli/reg/2013/1380/oj.
- Government of Romania. (1990). Decision No 1353 of 27 December 1990 on the establishment of joint-stock companies in the food industry. *Official Gazette* no 31 of 8 February 1991.
- Government of Romania. (1991) Decision No 834 of 14 December 1991 on the establishment and valuation of land owned by state-owned companies. *Official Gazette* no.259 of December 20, 1991.

- Government of Romania. (1997) Emergency Ordinance no. 88 of 23 December 1997 on the privatization of companies. *Official Gazette* no.381 of December 29,1997.
- Government of Romania. (1999). Emergency Ordinance no. 198 of 10 December 1999 on the privatization of companies that own agricultural land or land permanently under the gloss of water. *Official Gazette* no.607 of December 13, 1999.
- Government of Romania. (2000) Emergency Ordinance no.296 of 30 December 2000 on the establishment of the Authority for Privatization and Administration of State Participation. *Official Gazette* no.707 of December 30, 2000.
- Government of Romania. (2004). Emergency Ordinance no. 69 of September 16, 2004 amending and supplementing Law no. 192/2001 on living aquatic resources, fish fund, fisheries and aquaculture. *Official Gazette* no.883 of September 25, 2004.
- Government of Romania. (2008). Emergency Ordinance no.23 of March 5, 2008 on fisheries and aquaculture. *Official Gazette* no.180 of March, 2008.
- Jolly, C. M., & Clonts, H. A. (2020). *Economics of aquaculture*. New York; US: CRC Press Publishing House.
- Ministry of Food Industry Fisheries and Fish Processing Centre (1989). Special Program for the Development of Aquaculture, Fisheries, and Fish Processing in the years 1989-1990 and the Five-Year Plan 1991-1995.
- Nagarajan, K. V. (2011). The Code of Hammurabi: an economic interpretation. *International journal of business and social science*, 2(8), 108-117.
- National Agency for Fisheries and Aquaculture (NAFA). (2022). Multi-annual national strategic plan for aquaculture 2022-2030. Retrieved September 4, 2023, https://www.anpa.ro/wpcontent/uploads/2022/05/PSNMA-2021-2030versiunea-a-doua.pdf.
- National Bank of Romania & National Institute of Statistics. (2003). Order No. 4 on August 5, 2003 rregarding the official exchange rate for the Romanian leu/US dollar during the period 1945-1989 *Official Gazette*, Part I, 576, August 12, 2003.
- Parliament of Romania. (1990). Law no. 31 of 16 November 1990 on commercial companies. Official Gazette no. 126-127 of November 17, 1990.
- Parliament of Romania. (1991). Law No 58 of 14 August 1991 on the privatization of companies. *Official Gazette* no.169 of August 16, 1991.
- Parliament of Romania. (1994). Law No 77 of 1 August 1994 on the associations of employees and members of the management of companies that are being privatized. *Official Gazette* no 209 of August 11,1994.
- Parliament of Romania. (1995). Law No 55 of June 15, 1995 speeding up the privatization process. Official Gazette no.122 of June 19,1995.
- Parliament of Romania. (1998). Law no. 44 of 20 February 1998 for the approval of Government Emergency Ordinance no. 88/1997 on the privatization of commercial companies. *Official Gazette* no.88 of February 25,1998.

- Parliament of Romania. (1999). Law no. 99 of May 26, 1999 on measures to accelerate economic reform. *Official Gazette* no.236 of May 27,1999.
- Parliament of Romania. (1999). Law no. 15 of August 7, 1990 on the reorganization of state economic units as autonomous kings and trading companies. *Official Gazette* no. 98 of August 8, 1990.
- Parliament of Romania. (2001). Law no. 192 of April 19, 2001 on fisheries, and aquaculture. *Official Gazette* no.200 of April 20,2001.
- Parliament of Romania. (2001). Law no. 268 of May 28, 2001 on the privatization of companies that own public and private land in the administration of the state with agricultural destination and the establishment of the Agency for State Domain. Official Gazette no.299 of June 7, 2001.
- Romanian Court of Accounts. Synthesize the Audit Report. (2021). The performance of the management

and exploitation of living aquatic resources of natural fish habitats and aquaculture, and, in the period 2016-2019. Retrieved September 4, 2023, https://www.curteadeconturi.ro/uploads/f0298466/92 72050b/e2a14f74/4dcddbd7/726d6806/6a5876e0/25c 85294/3f685ef9/SINTEZA_Raport_AP_PESCUIT_si ACVACULTURA 2016-2019.pdf.

- Romanian Court of Accounts. (2023). Audit of the performance of the general management of privatization. Retrieved January 14, 2024, https://www.curteadeconturi.ro/uploads/a034ffc2/e9b 4be1e/5ad6f8d0/0ea2d8ad/9bccad3c/e0e8c7e1/ed7df be3/2309e903/RAP_555_Audit_al_performantei_m anagementului privatizarii.pdf.
- Zamfir, C. (2021). How good or bad was the Romanian strategy of transition. *Sociologie Românească*, 19(1), 11-54.