

SOCIALLY CONSTRUCTED SCARCITY ON LAKE VICTORIA, TANZANIA

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Abstract

This paper will discuss the issue of socially constructed scarcity in the context of the exploitation of the resources (particularly fish) of Lake Victoria in Tanzania. It will rely on the theoretical framework provided by the discussion of socially constructed water scarcity, which is to be found in the body of literature on scarcity belonging to constructivism and post-modernism as approaches to the study of international relations. The main argument of this body of literature is that water scarcity is not physical or natural, but rather socially constructed. This paper will make the argument that the fish population in the lake only became a scarce resource after specific human interventions. The main three steps in this process are: the introduction of the Nile perch by the British colonists; the massive promotion of export activities by the Tanzanian post-colonial governments, as a response to both internal determinants and the economic conditionalities imposed on the country by the WB/IMF; the activities of the aid agencies working in the area. Showing that the scarcity of the fish resources in the lake has been socially constructed is important for the process of solving the problem of scarcity, which requires a re-conceptualization of this

resource as a common good, belonging to the local community, linking it to the acknowledgement of the basic right of all human beings to adequate water and food.

1. Introduction

Many times, when we talk about poverty and starvation, we talk about them as being caused by the physical scarcity of natural resources, which are not sufficient to meet the needs of the people - especially given the constant increase in population at the global level. In the case of the riparian communities on Lake Victoria in Tanzania, extreme poverty and starvation are usually attributed to the lack of sufficient resources in the country, as Tanzania is one of the poorest states in the world. However, these people live next to a lake that has been a satisfactory source of nutrition for centuries, and it is only in the last half of century that the resources it yields have started to be considered scarce.

In this thesis, I will oppose to this way of viewing scarcity one that is closer to Amartya Sen's proposal of shifting the discussion of scarcity from emphasizing a general absence of resources for the growing world population (a Malthusian type of argument), to focusing on the distribution of these resources. To use Sen's words, "starvation is the characteristic of some people not *having* enough food to eat, it is not the

characteristic of there not *being* enough food to eat.”¹

This thesis will show that the scarcity of resources on Lake Victoria is not physical, but rather that it has been socially constructed through specific human interventions. The three main steps in this process are: the introduction of the Nile perch by the British colonists; the massive promotion of export activities by the Tanzanian post-colonial governments, as a response to both internal determinants and the economic conditionalities imposed on the country through the Structural Adjustment Plans of the World Bank and International Monetary Fund; and finally, the activities of the aid agencies in the area, aimed at upgrading artisanal fishing to more technological procedures. Scarcity on the shores of the lake is manifested at two levels: as regards the fish resources currently available for extraction, and as regards the incomes of the riparian population and food security in the region.

The process of social construction of scarcity was possible because of the ideological domination of economist thinking and liberal economics, which informed the colonial decision to introduce the Nile perch in order to increase the yields of the lake, the export-oriented national economic strategies of Tanzania, and the development strategies promoted by the international financial institutions and aid agencies. Economist thinking relies on the assumption that human behavior is and should be driven

by the profit motive. This manner of thinking gradually gave birth to a particular understanding of political economy (currently deemed neo-liberal economics), according to which national economies should be focused on gaining from international trade through opening up to the competition of world markets and promoting export activities. Such economic thinking was further supported by a certain vision of development in the Third World, which argued for the modernization of these countries at all costs. This means that Third World countries deemed underdeveloped should be brought to the level of economic and technological development of the Western world through the implementation of specific external prescriptions.

The domination of this type of economist thinking is associated with the commodification of nature: what were considered to be the common assets of the community have become material resources for capitalist activities. The consequence of this re-conceptualization of nature is that the rush for profit leads to the over-exploitation of natural resources, which, in the absence of external intervention, could have remained self-sustainable.

The analysis in this thesis will bring together two different understandings of “socially constructed scarcity.” On the one hand, I will refer to the social construction of scarcity as the sum of specific interventions by actors that led to the creation of scarcity in the region. This reading falls in line with dependency school/neo-Marxist theories arguing that

¹ Amartya Sen, *Poverty and Famines: an Essay on Entitlement and Deprivation* (Oxford: Clarendon Press, 1991): 1.

actors from the core take advantage of the periphery, and increase their own well-being at the cost of creating or aggravating scarcity in the Third World. On the other hand, the social construction of scarcity means the creation and dissemination of a specific understanding of scarcity, as natural and unavoidable in a world of limited resources and unlimited human wants. This interpretation matches constructivist and post-modernist theories explaining how the paradigms of thought that we use can determine and even impose specific behaviors.

Showing that, in the case of Lake Victoria, scarcity has been socially constructed is essential for the process of solving the problem of scarcity. Such a solution requires the re-conceptualization of the resources of the lake as a common good that should belong to the local community, linked to the acknowledgement of the basic right of all human beings to adequate food and water.

2. Traditional Fishing on Lake Victoria

The Nile perch was introduced in the lake in the 1950s, but it was not until the late 1970s that the changes in the ecosystem of the lake (and consequent alterations in the fishing and commercializing patterns) brought about by this introduction became glaringly obvious. Until the introduction of the new species, fishing was done through artisanal techniques, for purposes of subsistence and commercializing on the local market.² This type of small-scale

fishing was a full time activity for most of the fishermen, with few others using it only as a secondary, seasonal source of income, in addition to agriculture.³ Furthermore, fishing in the lake was done in a fairly equitable manner, as most fishermen owned at most one canoe and just the number of nets they could deploy themselves: “The ownership pattern was thus very decentralized and the income from the lake was distributed fairly evenly among the fishermen.”⁴

3. The Introduction of the Nile Perch

All of this changed gradually after the introduction of the Nile perch. According to most accounts, the Nile perch was brought to Lake Victoria by the British colonial government, in order to increase the productivity of the lake and expand commercial fishing.⁵ The desired effect was achieved:

Nile perch and tilapia populations grew slowly at first, then increased exponentially during the 1970s through the 1980s. Major fisheries developed in concert with the increase of Nile perch

Lake Victoria Fisheries Phase II, *Fisheries Management Series* 1 (July 2004).

³ E.G. Jansen, “Rich Fisheries—Poor Fisherfolk. Some Preliminary Observations about the Effects of Trade and Aid in the Lake Victoria Fisheries,” *Socio-economics of the Nile Perch Fishery on Lake Victoria*, Report No.1 (Nairobi: IUCN-EARO, 1997).

⁴ E.G. Jansen, “The Fishing Population in the Kenyan Part of Lake Victoria. Report to the East African Freshwater Fisheries Research,” *Department of Social Anthropology, University of Bergen* (1973).

⁵ William Beinart, “African History and Environmental History,” *African Affairs* (2000): 269-302.

² “Cross-border Fishing and Fish Trade on Lake Victoria,” IUCN/LVFO *Socio-economics of the* 58

as an improved distribution system linked new processing firms to foreign markets. Total yields climbed to 4 times the maximum of previous fisheries for native species.⁶

3.1 An Alternative Account

Before moving on with the discussion, it is important to mention that there exists an alternative account of the introduction of the Nile perch in the lake. This account has not been documented in the literature, and it does not invalidate the theory of socially constructed scarcity proposed in this paper. In the course of my research about the introduction of the species in the lake, I have been in touch with D. Wilson, a researcher who has conducted extensive work on fisheries in the Tanzanian parts of Lake Victoria. As I have had some difficulties with finding the specific narrative for the bringing of the Nile perch to the lake, I turned to him with this question, to which he replied that he was not surprised that I could not document that precisely, as most authors call the introduction of the species “mysterious,” or assign the responsibility to the British authorities, because of the mere fact that they were technically in charge of the management of the lake at the moment.

According to Wilson, during the 1950s, there was a debate in the colonial fisheries services in East Africa about whether to introduce the Nile perch or not. Supposedly, the reason why the insertion of the Nile perch was proposed in the first place was for sports fishing, not for

commercial reasons. When the authorities rejected the proposal, a disgruntled individual took it upon himself to introduce the Nile perch. This account is not encountered in the literature and Wilson himself did not include it in his own writings. As he explained to me,

I got the fact that the British authorities, after some debate, had actually decided against the introduction by reading the debates in the annual reports of the East African Fisheries Research Organization from the 1950s. That it was one disgruntled loser of that debate who actually made the introduction was from a conference I attended in the early 90s where a recent letter to the editor was passed around from a man who said that the introduction was not such a big mystery to him, he had been there as a helper to a British fisheries officer while he was carrying out the introduction. Of course there could have been more than one introduction. Or this person may not be a reliable source.⁷

Most of the literature on fisheries in Tanzania describes the introduction of the Nile perch as motivated by commercial reasons, however. I do not have enough resources at my disposal to verify which of the accounts is true. Therefore, I have decided to include both. The most important thing to be considered, however, is that no matter which explanation is valid, it does not contradict the theory of the social construction of scarcity. Whether it was done for commercial reasons or in the interest of leisure activities, the insertion of the Nile perch

⁶ Idem 5.

⁷ Personal communication with Prof. D. Wilson.

was an artificial act that had the consequences described above. It affected the ecosystem of the lake and the nature of fishing and commercial activities around the lake in such a way as to produce scarcity. It was not a natural phenomenon, but it was the result of external, human intervention. These two elements combine to make the argument that the introduction of the Nile perch represents the first step in the social creation of scarcity in Lake Victoria.

4. The Introduction of the Nile Perch—First Wave of Socially Constructing Scarcity

The introduction of the Nile perch in the lake represents the first step in the process of social creation of scarcity. In the case of fisheries in Lake Victoria, scarcity can be discussed at two main levels. One refers to the natural resources of the lake, namely the fish population that represents the basis of nutrition for the riparian communities (fish is a high-protein aliment, and eating it a couple of times a week can ensure the minimum amount of nutrients necessary to avoid starvation). The other level is linked to fish as a source of income for the riparian communities, whose members make their subsistence through fishing and commercializing the fish.

As much as there is agreement on the immediate benefits brought by the Nile perch, there is divergence among the voices that analyze the long-run consequences of this step. One of the main elements to be mentioned in this

discussion is the gradual exclusion of most of the artisanal fishers from the trade.

Even more, the fate of the local fishermen is put under question because of the over-exploitation of the lake, caused by the combined effects of the biological evolution of the ecosystem after the introduction of the Nile perch, and the increased exploitation of the lake over the years as a response to market stimuli.

Perhaps the most problematic consequence of the transformation of commercial activity on the lake refers to food security and, more specifically, the access of the local population to the nutritional resources of the lake. Over the past years, several institutions, at both national and international levels, have expressed concern over food security in the area. Among them, the Food and Agriculture Organization of the United Nations FAO has explained that an excessively large export of fish from the lake can have a detrimental effect on the nutritional well being of the riparian communities.⁸

5. Export Promotion-Second Wave of Socially Constructed Scarcity

While the introduction of the Nile perch represents the beginning of the process of social construction of scarcity, scarcity around Lake Victoria would not have become so severe without further actions

⁸ E.G. Jansen, "Rich Fisheries—Poor Fisherfolk. Some Preliminary Observations about the Effects of Trade and Aid in the Lake Victoria Fisheries," Socio-economics of the Nile Perch Fishery on Lake Victoria, Report No.1 (Nairobi: IUCN-EARO, 1997).

of the Tanzanian government, the processing and exporting companies, and the international organizations. The export promotion strategies of the Tanzanian post-colonial government, especially starting with the 1980s, have been instrumental in manufacturing scarcity in the area.

In terms of availability of fish in the lake, export promotion has contributed to over-fishing, therefore leading to the depletion of the lake's natural resources. In terms of the material well-being of the local communities, the prevalence of processing companies in the trade has led gradually to the exclusion of artisanal fishers and women processors from the trade. These people were thus left without a substantial source of income. Finally, as regards the food safety of the region, the impacts of export support mechanisms are usually evaluated negatively:

fishing effort was noted to have shifted from the capture of domestic market oriented species to export oriented species (...), disturbing the domestic market supply and raising fears about an increasing protein deficit, which already exists in the countryside.⁹

The effects of export promotion are much more nuanced and debatable than modernization theories of economic development make it sound.

6. Aid Agencies

⁹ "Integrated Assessment of Trade Liberalization and Trade-Related Policies. A Country Study on Fisheries Sector in Senegal." United Nations (New York and Geneva, 2002): 35.

The previous chapters have established a connection between scarcity in the riparian regions of Lake Victoria and specific profit-oriented actions of the colonial power, plus the measures taken by the post-colonial government in order to promote national economic growth. In addition, the activities of the aid agencies present in the region have not managed to alleviate the negative consequences of these policies on the local population, on occasion even proving to be detrimental in spite of good intentions.

Aid agencies working in the villages on the shores of Lake Victoria mainly promote advanced techniques of fishing, in line with the widely-held belief that the technologically advanced ways are more productive.

Only some of the better-off fishermen are able to take advantage of both the training and the few advanced pieces of gear available in the villages. The poorer fishers end up depending on either the better-off ones or on the processing companies:

a patron-client relationship was created as the traders who invested in boats and gear were in the position to act as patrons and give loans to poor fishermen and customers (...) large-scale fishing is organized and done by external, often urban owners of boats, engines, sails, nets, etc., who capture most of the catch.¹⁰

¹⁰ Marja Liisa Swantz, "Grassroots Strategies and Directed Development in Tanzania: The Case of the Fishing Sector," Wider Working Papers, World Institute for Development Economics, Research of the United Nations University (August 1989).

Furthermore, there are a number of fishers that were completely eliminated from the trade and the type of investments made by the aid agencies (in training of high skills and in advanced gear) does not help to reintegrate them. The same can be said about the effect of aid activities on the lives of the women that used to be involved in the processing and marketing of the smaller fish and that are now left out of the business.

7. Conclusion

Economist thinking, growth strategies based on industrialization and open trade, and development have been in place ever since they were established in spite of their failure to bring about generalized well-being. However, this type of thinking about economic and social organization is not inevitable. Not only is it not inevitable, it may on occasion be detrimental to human well being. Still, the voices arguing against neo-liberalism have a more marginal position in the public sphere than its proponents. This is true about thinking on international economics done both inside Tanzania and by Western intellectuals and decision-makers. The profit-oriented activities of businesses could only be limited by a strong concentration of voices arguing for the limitation of their actions. But there is no such concert of views.

The analysts that criticize the current functioning of the economic system as detrimental to the environment or to social equity have a hard time in trying to come

up with alternatives. For one thing, they admit that the capitalist system is dominant and that a replacement is not in sight. John Gray argues that humanity can come up with ways to make up for some of the damages caused by the current manner of the functioning of the economy (through technology), but he does not propose a more comprehensive solution. Neither are the post-development thinkers who argue for the dismantling of the idea of development as a whole capable or willing to propose an alternative. Some of these questions are too difficult to answer, but perhaps it is possible to mark down a few starting points for an eventual solution.

One of these starting points could be found in the previous discussion of socially constructed scarcity. It has been shown in this thesis how the scarcity of water resources has been gradually socially constructed, from the moment when the ecosystem of the lake began to be seen as a potential source of material gain. In this light, a possible starting point for alleviating scarcity is the re-conceptualization of these elements. Neo-liberalism is dominant nowadays although it is not the only manner of reading economic relations, neither perhaps the most beneficial. The use of nature for profit-oriented capitalist activities is neither the "natural" nor the "inevitable" way of perceiving reality. Rather, this is just one of the treatments we give to the reality around, a treatment that has proven to be highly destructive in specific situations, such as the exploitation of Lake Victoria. If this thinking is not unique and inevitable, and if it is also destructive,

then it must be changed. Rather than continuing to see water and its ecosystem as material resources to be traded like merchandise on the market, they should be re-conceptualized as common goods, pertaining to the basic right of every human being to proper water and food. In fact, this re-conceptualization merely means a return to the original understanding of water and its resources as belonging to the local communities, as the center around which they build their lives.

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