

Dictatorship and dam building in Brazil: modifying nature and institutionalizing the environment

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Brazil is one of the largest dam builders in the world and the second country to generate more hydroelectric power in the world, behind China. Dam building in Brazil radically altered landscapes, changed productive structures, displaced thousands of people and launched processes of environmental degradation that continues to haunt Brazilian society. The construction of hydroelectric dams grew from the late 1950s onwards and especially after the military regime (1964-1985). Especially after the first oil shock of 1974, the regime's idea to expand the electric grid through the building of big became clearer as the countries' comparative advantage and was heavily focused on the development of the industrial and mineral extraction sectors. During the dictatorship, 61 large hydroelectric dams were built which increased the installed capacity from 4,894 MW to 37,437 MW between 1964 and 1985. Contrary to the previous model of dam construction in the country, almost all of these were carried out under the responsibility of the state through Eletrobrás or other state utilities companies, and the construction of large dams spread throughout the country.

Before the 1970s, dams had been built without much concern for the extreme transformation it entailed on the nature, landscape, and lives of humans and non-humans affected. The impacts of these infrastructure projects were seen as largely positive (economic growth, urban electrification, industrial hubs) and the negative impacts were masked, seen as minor issues or even as necessary sacrifices. Nonetheless, the environmental consciousness that emerged in the 1970s caught up with the Brazilian regime and also with its electricity sector, demanding corrective actions by the government.

Focusing specially on the examples of the construction of the dams Água Vermelha (Grande river), Tucuruí (Tocantins river), Itaipu (Paraná river) and the Sobradinho (São Francisco river), I would like to explore the State sponsored development of knowledge and techniques of environmental management following the development of the energy sector. Dam construction in this period allowed for a specialization in engineering in Brazil and the elaboration of a large array of annex's *savoir-faires* for the making of studies associated with these constructions, notably about the environment that needed to be scrutinized and understood.

The building of dams during this period had huge environmental and social impacts but it also contributed to the emergence of a new socio-environmental, legal and institutional framework for the construction of those infrastructures. Starting from this tension between destruction and protection, I would like to explore how this process came to be, what drivers were in place, and what practices, knowledges and institutions it created. These examples help us to understand how right-wing dictatorships grasped and dealt with the rise of environmentalism in the 1970s. Furthermore, I would like to discuss the limits and biases of this process and its lasting effects in dam planification and construction through democratization until today.