

Hua, Chai. "Foshan becomes first 100m-ton inland Guangdong river port." China Daily, February 4, 2024.

# **Floods of Change: Analyzing the Efficacy of Public Participation Towards the River Chief System in Foshan, Guangdong**

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The phrase yi shui wei cai in Chinese (simp. 水为财 ; trad. 水爲財 ) means, in a word-for-word translation, to regard water as (the source of) wealth. Used to suggest the ready flow of wealth as akin to the perpetual flow of water in business and economic transactions, this phrase can also be taken literally. To regard water as wealth means to recognize the importance that water has in our own lives, whether in relation to economic success or to our personal well-being. In the case of Guangdong Province, China, both are true: water is essential to the blossoming technological development that forms a core of China's national economy, and central to the livelihoods of China's most populous province. In regulating water, the construction and subsequent gradual implementation of the River Chief System, hereinafter the RCS, has been crucial towards mitigating pollution and improving the waterways of the broader Pearl River Delta for agricultural uses, commercial uses, and personal consumption (Yang, Kun et al. 2024; Wu, Chenhui et al. 2020; Liu, Hui et al. 2019). The RCS is a water pollution prevention policy implemented in 2007 by the city of Wuxi in Jiangsu province to counter cyanobacterial eutrophication in Tai Lake, which contaminates drinking water with high concentrations of nitrogen and phosphorus (Liu, Hui et al. 2019). Under this policy, the national government names party and government officials as "river chiefs", who themselves are responsible for the organization, protection, and maintenance of their given waterway. By 2018, all thirty-one of China's provinces and municipalities had established the RCS to address administrative fragmentation and mitigate pollution, utilizing systems like

“One River, One Policy” to tailor management plans to each waterway (Liu, Hui et al. 2019, Yang and Song 2024, Li, Yinghong et al. 2020). Here, “fragmentation” refers to the division of water-related authority across multiple ministries and levels of government without a unified coordination mechanism.

However, government assistance remained broad: fragmentation had very limited fixes, and issues of sustained correspondence between state and local actors gave way to the need for alternative means to maximize the efficiency of the RCS (Chu, Zhaopeng et al. 2022; Li, Guangqin et al. 2018; J. Liu et al. 2010; Liu, Yazhou et al. 2024). This essay analyzes how methods of public participation and grassroots activism can contribute to the improvement of the River Chief System in Guangdong Province from its national implementation in 2018 to 2025, using Foshan City as a key case study to examine broader issues surrounding implementation at the local level.



"Pearl River Delta: China's Biggest Economic Hub." *We Build Value*, Nov 22, 2017.

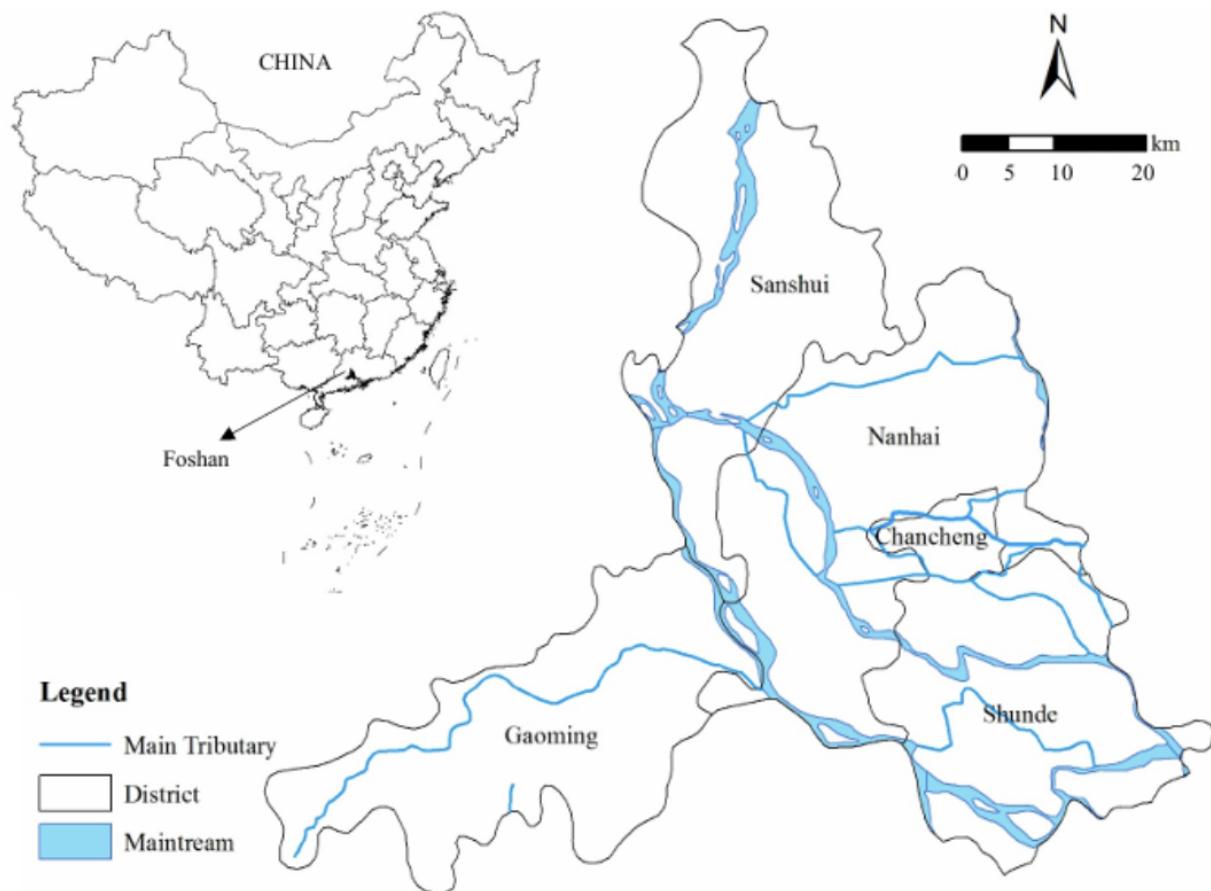
Fragmentation across various jurisdictional areas and government agencies have proved to be faulty at best, as projects involving water pollution control have been empirically sound but often ineffective and unsatisfactory at the local level. For example, the Ministry of Environmental Protection (MEP) and Ministry of Water Resources (MWR) are tasked individually for pollution control and water quality management, but "the two ministries have overlapping decision-making

competencies and responsibilities for water quality management." (Liu, Hui et al. 2019).

While collaboration has been suggested as a counterpoint to the issue of fragmentation, it is not designed as an ongoing structure that is keen on resolving one particular issue, and instead has led to complications behind bureaucratic red tape, inconsistencies from individual decision makers, communication and information asymmetry, and conflicting policy objectives from both various governmental agencies and from actors in the state, regional, and local levels.

### **Foshan: The Implementation Gap**

Foshan, a municipality of roughly 9.6 million people, has been a cornerstone of the Pearl River Delta, and the surrounding trade has produced massive amounts of wealth and prosperity for the city. Sitting on the edge of the connection point of the Xi and Bei Rivers, alongside several other smaller waterways and tributaries, the city's long history of maritime trade has also introduced concerns over the proper usage of the many waterways that flow through the city itself. As one of the most developed areas in the region (Figure 1), it also has a long attested history of environmental degradation into the surrounding waterways. Factories and the city's large population discharge enormous amounts of industrial wastewater and domestic sewage, and thus, wastewater treatment plants are falling behind in efforts to keep pace with the rapid urbanization and industrialization in the region. The deterioration of the surrounding water quality is rooted in this exact issue, and because it is far more difficult to reverse the course of action and stem the tide of economic prosperity in a nation characterized by GDP growth, it would be far more efficient to address the already growing concerns of pollution within these waterways. Li, Guangqin et al. 2018).



**Figure 1.** Map of the location and river system of Foshan municipality. Adapted from Hui Liu et al., “River Chief System”, 1611.

Previous pilots have been conducted, such as the 2003 “establishment of a comprehensive office to consolidate the powers of various department agencies for river water pollution control” and the 2008 establishment of a headquarter to “achieve the goal of cleaning up the river in three years,” but all efforts have seemed futile due to three main reasons: the envisioning of the legislation as a one-off solution, the economic ethos in China of GDP growth as paramount in comparison to all other aspects of society, and public participation as an afterthought in affecting the successful implementation of water governance. (Liu, Hui et al. 2019) Firstly, both the 2003 and 2008 initiatives ran into the concern of normalizing institutional change. In 2003, the city of Foshan was aiming to be named “Model City for Environmental Protection” and the improvement of Foshan’s waterways was a key condition for the bid’s success, and thus an office regarding water policing was established and affiliated under the national Environmental Protection Bureau (Ibid) In 2008, with deteriorating river water quality still a pressing concern in the city, the

mayor and 15 heads of various bureaus closed or relocated highly polluting plants and established means of industrial pollution supervision. By streamlining the efforts across different bureaus, relevant authorities were able to guarantee a collaborative and efficient restoration of the area, but it did not garner sufficient support from the new municipal administration in 2010, and the office was merged into one division of the Environmental Protection Bureau of Foshan City by 2013 (ibid). This is a prime example of what I consider to be the underlying issue behind the initial failures of the project pilots and the need for the RCS as a policy within the municipality: an ethos of economic gain as trumping all other forms of growth (Li, Guangqin et al. 2018).

This leads directly to my third point of concern, that being the minimized role of public participation prior to implementation in light of a predominating economic focus in China. If environmental concerns are secondary to GDP growth, public participation was and remains far lower on the list of means to address them. Rather than streamlining methods for public participation to be as seamless as possible and preventing a pileup of bureaucratic red tape behind how people can actively contribute to the issue of the RCS, legislation revolving around water policy in the past was fueled by a concern behind the improvement of raw pollution data, not the lapse in treatment surrounding the public's concerns over what is really at stake. While it is undeniable that public participation and supervision were promoted during this period, the means to communicate concerns and the problems that the local government was focused on did not speak to the real concerns of localized waterways that affected everyday people. Because fragmented agencies often fail to coordinate on monitoring, enforcement, and information-sharing, public participation offers an alternative mechanism for oversight and responsiveness at the local level. These three points became clear signs of failures that the RCS had to address by its implementation in 2014.

China has recently lost its status as a WTO developing country, demonstrating the effectiveness of the many leaps and bounds it has made in economic and political legislation over the last several decades of Deng Xiaoping's "[socialism with Chinese characteristics](#)".<sup>1</sup> Yet at the same time, state-sponsored sources [have claimed](#) that China remains a developing, second-world country, as "China still lags [behind] developed countries in areas such as technological innovation, industrial structure, and social welfare." The core relations between power and a country's ability to service its citizens is crucial to how leaders create effective policy, and it remains

ever more important that said policy will positively contribute to the body of people that it contributes to. Foshan, a city of 9.6 million, provides a fascinating case study to examine the broader contradictions behind local, regional, and national implementation levels of Chinese environmental policy. While the implementation of the RCS in 2014 proved to curb some of the issues present in 2003, 2008, and other earlier pilot programs, the measure itself is far from perfect. Analyzing Foshan as a conduit to broaden conversations on the River Chief System and other similar water policies provides us with a view of how public participation can affect the efficiency of water policy. In a world with changing and reconstructed dynamics of power, security, and safety, the well-being of the average citizen's consumption, natural environment, and general welfare remains a crucial point of contention for any country, not least the second-largest economy worldwide by nominal GDP. By analyzing not only the efficacy of the River Chief System as an environmental policy designed to implement change on a systematic level to streamline China's efforts to combat its rapid GDP growth, but also the role of public participation within it, we are seeing firsthand how the contribution of the public towards potentially ineffective or substantially improvable legislation can affect change. While the empirical data provide clear evidence of a working system, the RCS remains problematic due to the very diverse natural, socioeconomic, and political circumstances through which various cities, provinces, and locales within the whole of China encounter.

*Note: This paper is a part of a larger work commenting on the efficacy of public participation in the River Chief System in Guangdong as a whole. Future research will center around field work within Guangdong Province to test the viability of these proposed solutions within the structure of government itself, as well as utilizing sentiment analysis as a means to gauge public participation within the online sphere as our world, and China as undoubtedly a leading actor within said world, becomes increasingly technological in practice and technocratic in governance.*

## Notes

1. For more information about Deng Xiaoping's 1982 claim that China was a country practicing "socialism with Chinese characteristics", see Ken Moak and Miles W.N. Lee, "Deng Xiaoping Theory: Socialism with Chinese Characteristics" in China's Economic Rise and its Global Impact (London: Palgrave Macmillan, 2015).

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