



# BUREAUCRACY, SUSTAINABLE DEVELOPMENT AND DECENTRALIZATION:

Reflections on Jalasamrudhi, a  
Community-based Water Conservation  
Programme in Kerala





Bureaucracy, Sustainable Development and  
Decentralization :  
*Reflections on Jalasamrudhi, a Community-based  
Water Conservation Programme in Kerala*

Gautam Ganapathy  
Salil C S



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**Bureaucracy, Sustainable Development and Decentralization:  
Reflections on Jalasamrudhi, a Community-based  
Water Conservation Programme in Kerala**

Ecology/Development/History

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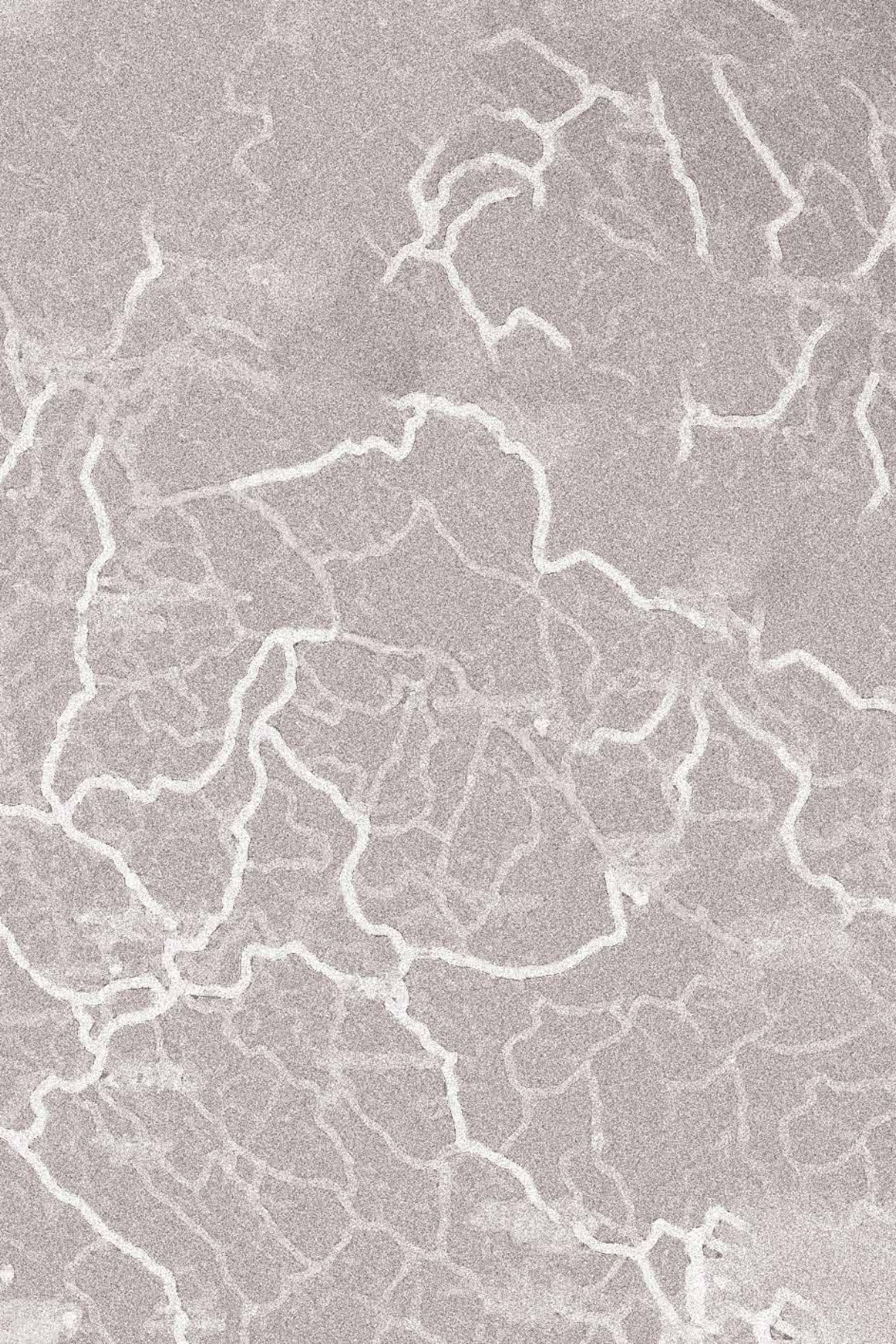
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A PHOTO ESSAY





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## ACKNOWLEDGEMENTS

The floods of 2018 have remained fresh in Kerala's public memory. While not as debilitating as 2018, the flooding experienced in 2019 and 2020 deepened the festering scars. Floods and droughts are increasingly recognized as interlinked events. Seasonal droughts (especially during the hot summer months) have not made a pronounced dent in the state's collective memory as they are experienced typically as a localised phenomenon. With the majority of households in Kerala relying on groundwater for their domestic and livelihood needs, the issue of increasing instances of chronic water scarcity during summer months needs serious introspection as it is indicative of a deeper problem: ineffective local planning and governance in the context of land-use changes over the last few decades.

Jalasamrudhi, a community-based water conservation programme in Kattakada legislative assembly constituency, provides us an opportunity to examine the issue in detail. This work consists of a central essay that reflects on the factors shaping local planning and governance in the state. Against the backdrop of Kerala's celebrated decentralisation reforms, the essay interrogates the prevailing role of government agencies - their relationship with the political class - in shaping the decentralised governance regime in the state. The essay also includes details on the material collected during the course of field work as well as the methodology adopted for studying the issue at hand. This work, like other RULSG monographs in the series, consists of an introduction which provides details (geographical, social and political) on the locale of the study. It also includes a photo essay that documents the works taken up as part of the project.



This work would not have materialised without the help of the following people. First and foremost, we thank Prof. J Devika for her encouragement and patience with this project. Mr I B Satheesh (MLA of Kattakada legislative assembly constituency) and Mr Nizamuddin (Land Use Commissioner, Kerala State Land Use Board) were generous with their time. Along with sharing the projects' successful interventions, they candidly discussed the challenges to improving the existing institutional arrangements on the ground. Local elected representatives (across the political spectrum) were generous in sharing their views on the project, despite their misgivings given the central role of the ruling party in Jalasamrudhi. The field work was carried out between the first and second waves of the COVID pandemic. Given this context, a substantial number of our interviews with local elected members happened on the premises of the grama panchayat offices. We are also grateful for the support extended by field and administrative personnel from several government agencies during the course of field work for this project. We express our gratitude to other respondents (farmers, journalists, auto rickshaw drivers and school teachers) for taking the time to share their views on the project. We thank the former collector of Thiruvananthapuram district Mr Venkatesapathy, IAS for sharing his views on the project. We thank Mr Praveen from the Kerala State Land Use Board for accompanying us to the sites and explaining the projects' interventions. We would also like to thank the anonymous reviewer and Prof Sunil Mani, Director of CDS, who arranged for the review.



**Gautam Ganapathy**

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Salil C S

**Introduction:**

# DECENTRALISATION, DEVELOPMENT AND BUREAUCRACY

In the last few years, Kerala has experienced unprecedented weather patterns. Prior to this, even when there was sufficient rainfall during the monsoon season, it was often followed by water shortages. This caused a great deal of hardship for those who relied on wells for drinking water and other purposes, particularly in rural areas. For the past two decades, Kattakkada has been facing a shortage of drinking water during the summer months. The two main rivers of the Thiruvananthapuram district, the Neyyar, and the Karamanayar flow through the panchayats here. The area is also home to many ponds and streams, as well as important agricultural areas of the Thiruvananthapuram district. As a result, water scarcity has had a detrimental effect on the social and economic life of these areas, as well as on the personal health of the people living there.

Many people have been looking for ways to solve the drinking water shortage issue in Kerala. In this pursuit, Kattakkada Assembly Constituency has put forward a new model – Jalasamrudhi (Water Abundance programme). This essay takes stock of the program by consolidating the perceptions of key stakeholders involved in the project.

## **1. Kattakkada – A Brief Profile**

Kattakkada taluk is located in the eastern part of Thiruvananthapuram district. If you travel 18 km from Thampanoor in Thiruvananthapuram city to the east, you will reach the headquarters of Kattakkada. If you



travel 18 km to the north of Kattakkada, you will reach Nedumangad and if you travel 14 km to the south from Kattakkada, you will reach Neyyattinkara.

The taluk starts from the Western Ghats in the east and ends near the national highway in the west. It includes Malanadu (High Lands) and Edanadu (Mid-Lands).<sup>1</sup> It is located on the upper reaches of Edanadu, which is adjacent to the hilly area. Agasthyakoodam, the second highest mountain (6,132 feet) in Kerala, forms the eastern boundary of Kattakkada taluk, while Mookunnimala, the second highest mountain (3,526 feet) in Thiruvananthapuram district is located on the western boundary of the Kattakkada constituency in Pallichal and Vilavoorkal panchayats. This taluk has no coastal area. Kattakkada Assembly Constituency is in the hilly area of the capital district and has a dominant position in the midlands. The assembly constituency came into existence in 2011 as a part of the delimitation process.<sup>2</sup> Kattakkada taluk was formed in 2014, three years after the formation of Kattakkada assembly constituency. The panchayats of Vilappil, Vilavoorkal, Malayinkeezh, Maranallur and Kattakkada in Kattakkada taluk and Pallichal panchayat in Neyyattinkara taluk form the Kattakkada constituency. There are a total of 122 wards in this constituency.<sup>3</sup>

The general topography of this area is a blend of mountains, hills, rivers, streams, ponds, fields, high plains, slopes, and valleys. There are different types of soil in this area. It has been recorded in the development documents prepared by the panchayats (as part of the People's Plan project) that a variety of soils can be found in these areas such as loamy soil, gravelly sandy soil, alluvial soil, black soil, a blend of crushed rock, sand, and laterite stone.

## 2. Jalasamrudhi's Genesis

The 2016 assembly elections were held during a time when panchayats in Kattakkada Legislative Assembly Constituency (LAC) were experiencing an acute water crisis. I B Satheesh, who went on to become the MLA of the constituency, recalled that the general demand before the election was to solve the problem of drinking water shortage when previously he met a wide cross-section of the people in the constituency. Satheesh won the constituency, held by the Congress Party, with a narrow majority. After that, as an MLA, he resolved to address the drinking water shortage on priority.

After the election results of 2016, under the leadership of the MLA, a meeting was held to discuss the drinking water shortage in the constituency with the participation of local elected representatives and various organizations like Kudumbasree. At that time drinking water was only available in a few places through water authority pipes.

Everyone who attended the meeting voiced their concerns about failed public drinking water projects, dried-up ponds and stagnant streams. No one there had believed that the reservoirs at Neyyar, Peppara and Aruvikkara would provide water supply to the people of Kattakkada ever. The meeting is cited as the genesis of the project. The MLA also says that there was no precedent when the Jalasamrudhi project was started.

The project 'Water Abundance for Perennial Spring' was launched on March 22, 2017, coinciding with World Water Day. The success achieved so far in coordinating the work of various departments – planning and implementation - has become one of the most important aspects of the project. It is not something that came together all at once, but something that has evolved through the project's activities, said A Nizamuddin, Land Use Commissioner, who oversaw the coordination of various departments, based on his experience. It did not limit itself to the single issue of water and advanced with a comprehensive perspective. Hence it has been beneficial in various fields. The MLA claimed that in the fields of environmental protection and agriculture, the project has produced results that anyone can see with their naked eyes.

### **3. Drinking water crisis and climate of Kattakkada**

Southwest monsoon and northeast monsoon are the main seasons of rainfall here. The average temperature ranges from 20°C to 34°C during the transition from winter to summer. January to May is the hottest time in the region. June to November is relatively mild with rain and mist. The months of December to April generally get more sunlight in Kattakkada. It receives seven to nine hours of sunlight during these five months. According to Ajith, journalist and author of the book 'Kurumuni's Nadu', a national history of Kattakkada, who was born and brought up in Kattakkada, the period from May to September bring comparatively stronger winds than other months.

Shortage of drinking water was the biggest problem faced by the people of Kattakkada more than the agricultural sector. The main goal of Jalasamrudhi was to find a solution to that. The history of Kattakkada taluk, which includes Kattakkada constituency, reminds us that before the natural calamities such as floods, unseasonal rains and hot summers, the area received rain for one-third of the year. As of 2015 (from 2005), the average rainy days in the area over this period was 122 days per year (that is, the area receives one-third of the days of rain in a year) and the average annual rainfall is 2288.61 mm. These figures are stated in the study report prepared in connection with various government agencies for the preparation of the development report

of the Amachal watershed project implemented during 2002-2005 as part of the Western Ghats Development Programme. According to the Climate Research Center, the average rainfall for the twelve years before the initiation of the Jalasamrudhi Project in the constituency, i.e. from 2004 to 2016, was as follows (Table 1).

*Table 1 Average Annual Rainfall in Kattakada LAC*

Year	Average annual rainfall (mm)
2004	2427
2005	2532
2006	2831
2007	2743
2008	2831
2009	1482.9
2010	2140.8
2011	1509.2
2012	1154.4
2013	1845.1
2014	1911.7
2015	2243.3
2016	1197.8

Source: Climate Research Center, Thiruvananthapuram

According to these figures, in many years since 2010, this constituency has received less rainfall than in the years before 2010. It may have been a factor in aggravating the water shortage here. The local people and those working in connection with the Jalasamrudhi project point out that the lack of measures to hold the rainwater in the soil aggravated the situation.

### **3.1 Major water sources in Kattakkada**

In Kattakkada assembly constituency and Kattakkada taluk, many areas are facing problems of drinking water shortage. Even along the riverbanks, and the areas in the highlands, water scarcity is common. Based on their traditional experience, the local people suggest that the soil structure is one of the reasons for this. Senior citizens also recall that in the past, local water conservation activities were carried out in rural areas. Two important rivers of Thiruvananthapuram district flow through Kattakkada constituency. The Karamanayar, which can be described as the water vein of Thiruvananthapuram city, flows into



the city through Kattakkada constituency. The Karamanayar, which originates from Chemmunchi Mota in Agasthyakoodam, flows in a southwesterly direction for about 62 km and reaches Thiruvallam and joins the sea. Vinod Jith, a journalist from Kattakkada and a native of Kuttitchal, says that although the river flows in an area called Karamana in Thiruvananthapuram, it is not necessarily the reason for the name the Karamanayar.

The Neyyar is another river in Kattakkada constituency. The Neyyar is the southernmost river in the state. The river, which originates from Agasthyakoodam, flows through eight panchayats of Kattakkada taluk and reaches Pozziyur in Neyyattinkara taluk to join the sea. The 56-km Neyyar is the main source of irrigation in Kattakkada constituency. It is estimated that the water of this river is used for irrigation of 191 square miles of farmland. The rivers, which are the sources of water in Kattakkada, not only play a role in the irrigation of Kattakkada, but also quench the thirst of Thiruvananthapuram city, Nedumangad, and some parts of Tamil Nadu. These irrigation systems were started even before the formation of Kerala.<sup>4</sup>

Ajit pointed out that the depletion of water resources in Kattakkada will affect not only that area alone. The people of Kattakkada generally depend on wells for drinking water. Although there were ponds, rivers, and streams, they were domestic wells and public wells. The irony here is that the people in the area have been suffering without enough drinking water while water is being supplied to the capital city and irrigating various areas. Despite being endowed with abundant resources, the Kattakkada LAC residents ended up paying for drinking water during the summer months.

#### **4. Effect of People's plan and subsequent Development Activities**

People's Planning activities took place in the areas that later became part of the Kattakkada constituency, just like in other areas of the state. Many people, from different parts of the constituency, feel that development activities have led to the loss of natural and organic features. The focus of these activities has been on building roads and developing land, often at the cost of blocking or filling streams, springs, and ponds. Since the 1990s, land prices in Kerala have increased, leading to a rise in land speculation and trading as a source of employment. As a result, land has become a commodity rather than being used for productive activities such as agriculture. The lands of Kattakkada have not been spared from these activities. This argument is supported by data showing changes in land use for rice cultivation in the constituency.

## 4.1 Agriculture, Land Use and Water Crisis in Kattakkada

Agriculture was the main source of employment in the region. A quarter of a century ago, the area had 1,291.31 hectares of paddy fields. Filling of paddy fields for construction purposes and switching over to other crops happened here for several reasons leading to a steep reduction in paddy cultivation. Still, Kattakkada continues to be an important agricultural area in Thiruvananthapuram district.

Even after the impact of various types of activities, more than 110 hectares of the total area of the constituency was irrigated through ponds, rivers, streams, and canals. It is such a region that has faced the daily problem of severe water scarcity. State Land Use Board figures show that paddy cultivation has been reduced to less than 1% of the total area in this area. According to the board, paddy cultivation has been reduced to 104.67 hectares or 0.92% of the total area of Kattakkada constituency. As many as 0.18% of the 20.60 hectares of field, where paddy was previously cultivated, has turned barren land. The area filled for construction purposes is 3,210 hectares, i.e. 0.28%.<sup>5</sup>

At the time of initiation of Jalasamrudhi, Kattakkada constituency had more than 110 hectares of water storage systems such as ponds, rivers, streams, and canals. However, the area was facing dire water scarcity. According to the figures in the four-year activity report of the Jalasamrudhi project, around 13.93% of the total area of Kattakkada constituency (approximately 1,585.86 hectares) is undergoing various construction activities. This area is dotted with commercial, housing, and industrial structures.

Agricultural production and employment have declined due to acute water shortages, falling prices of agricultural commodities, increased production costs, landfilling and quarries for construction as part of development activities. However, quoting the figures of the government agencies, the spokesmen of the project claimed that the availability of water in Kattakkada has improved with Jalasamrudhi, and because of this there has been a revival in the agriculture sector, especially in paddy cultivation.

According to the state-wide data collected under the Establishment of an Agency for Reporting Agriculture Statistics (EARAS) scheme by the Department of Economic Statistics, paddy cultivation in Kattakkada has increased. According to the survey, the total land area of Kattakkada Assembly constituency is 27,530 hectares. Out of these 1,406 hectares of land are paddy fields and 26,124 hectares is the land area in six panchayats. During 2019-20, paddy was cultivated on 6.74% of land in Kattakkada constituency, a 2.5% increase from 2016-17, states the survey report.

During the period of 2016-17 to 2018-19, when there was an increase in paddy cultivation, other crop areas did not show the same pattern. Coconut is one of the major crops grown in Kattakkada, followed by areca nut, cashew, pepper, jackfruit, mangoes, and rubber. KG Harikrishnan and Harilal, activists of the Kerala Sastra Sahitya Parishad, who are active participants in Jalasamrudhi, quoting the survey report, said that there is a seasonal fluctuation in their cultivated area that needs to be kept in mind while considering these figures. More than 10 people who were members of various panchayats in the constituency during 2015-2020 said that the return of those who moved away from paddy to other crops due to lack of water could be a reason for the increase in rice cultivation. However, different opinions regarding the Jalasamrudhi project and agriculture could be heard in the agricultural sector. Jayakumar, a farmer who leases land in Kattakkada, stated that the use of more ponds and streams and the increased water flow through canals have been beneficial for agriculture. Although many social and economic factors discourage people from agriculture, water scarcity remains the main reason. But he said that after the Jalasamrudhi project, there is no longer a shortage of water in many places, which is a relief for farmers.

However, Balachandran Nair, chairman of Sanghamaitri and a farmer, had a different opinion in this regard.<sup>6</sup> Balachandran Nair was a block panchayat member and standing committee chairman as a CPI candidate. The main criticism put forward by him is that the project is being implemented without consulting the farmers. He based his allegations on his farm and nearby areas. In many places, the canals are full of weeds. So, the water does not reach the farms, he said, showing a stream lying unused and filled with garbage near his farm. He also raised criticism that the implementation of the project here is only through campaigns. The reason for his opinion is that the criticism is not being made by comparing the situation with the activities done when he was a member of the Block Panchayat, and the reality should not go unnoticed. He reiterated that based on his own experience, he believes that the Jalasamrudhi scheme does not benefit the farmers. However, Sunitha, who was a panchayat member of Kollode ward, disagreed with this opinion. In Kollode ward of Kattakkada Panchayat, she said paddy cultivation has revived due to increased water availability after Jalasamrudhi.

## **5. Jalasamrudhi: Experiences of Common People**

V Radhalakshmi teacher, who was the principal of Kulathummal school in Kattakkada during the implementation of the project, said, "When I was transferred to this school, I had hesitated like many other teachers. The reputation of this higher secondary school was that it was a school



without even a drop of drinking water. Now, there is an endless supply of water here. I am standing here with a heart full like a brimmed well. "When the teacher said this in a programme related to water supply, it was not just a success of the project but was the fulfilment of the expectations of many generations. The school, where more than a thousand children study from fifth class to plus two, has been suffering from a drinking water shortage for many years. Radhalakshmi Teacher, who now lives with her daughter in Ernakulam, said that it was there that the Jalasamrudhi project rang the bell of change. "From 2017 to 2019, I was working as the principal of Kulathummal Higher Secondary School. I shifted to that school during the vacation of 2017. Both girls and boys study in the school. There was a severe shortage of drinking water when I joined the school. MLA I B Satheesh came there to participate in a programme related to the opening of the school in 2017. The matter was intimated to him. It was then he mooted the idea of well recharging and said that it can be inaugurated in the school. So, the plan was implemented. That year it rained and the well was full of water, so in the summer, the well filled our hearts with water. In fact, there was no shortage of water from 2017 to 2019 when I retired from the school. There was always water in the well. I am someone who has experienced and learned the benefits of Jalasamrudhi first hand". Radhalakshmi Teacher remembers that when the well was recharged in the school, the neighbours also got water in their wells.

However, a teacher at the school said that although there is water in the school well, it cannot be said that it is because of the project. Refusing to disclose his name, he clarified his assumption that rainfall was high in 2018, 2019 and 2020 and this may be the reason for the availability of water. He said that it will take some more time to realize how beneficial the Jalasamrudhi project is. However, two teachers at the same school disagreed with this observation citing the experiences of water scarcity in many places in Kerala even before the arrival of summer where it has rained heavily. The rain has indeed been beneficial. But they said that the reason for getting water even in summer is that the necessary infrastructure has been installed here to get that benefit. The same opinion was put forward by the representatives of local bodies belonging to various parties in Kattakkada. They say that the success of Jalasamrudhi is not only that rain has been received, but also that work has been done to help the rainwater go underground. Water was available because of the activities such as digging rain pits, recharging wells, constructing, and cleaning ponds, and cleaning streams and canals to facilitate the flow of water to get the benefits of rain. R V Sathish, an officer of the Haritha Kerala Mission, points out that it is possible to confirm that the reason why Kattakkada got drinking water after the rainy season was because of the efforts made to retain the rainwater on the ground as part of the Jalasamrudhi project.

According to Sathish, the water level in two open wells and three observation tube wells in the Nemam block panchayat was higher in January 2019 than in previous years, based on data from the Central Ground Water Board and the State Ground Water Department. Generally, there was a shortage of drinking water in many areas of Kattakkada constituency during the summer months. The panchayat members stated that they were facing a severe shortage of drinking water, especially during the months of January-February to April-May. Water was brought in by tanker lorries at least three days a week in many areas.<sup>7</sup>

## **6. Project experience of residents of Kattakkada Constituency**

“Our place, which only heard stories about buying bottled water for drinking, has gone through days of anguish and worry that we would have to buy and drink bottled water. Especially during hot summers, even when it rains there is no water in the wells.” according to Anil Kumar, a native of Kattakkada. He said that the situation has changed because of recharging the wells. The main benefit of the project is that it created an awareness that water conservation is very important. From children to adults, people are taking it seriously now, he claimed.

One of the senior journalists and the editor of Janashakti magazine, G. Shaktidharan, a native of Malayinkeezh, analyzed the change caused by Jalasamrudhi based on his own experience. He said, “The situation was that all sections of the people were struggling without enough drinking water during summer. People used to wait near public taps around 4:30 in the morning to collect water that was delivered by tanker lorries. Women and children who know me often asked me to fetch water first. In those days, even the small pots in the house had to be filled with water. I often have the experience of riding a scooter to collect water. However, after the implementation of the project, the water level increased in the well. I suspect that waking up early in the morning and standing in a queue to collect drinking water and carrying so much water home may be one of the main reasons for my severe health problems”.

However, Sasikumar, who bought a house and started living in Pallichal panchayat after 2020, had a different experience. When Sasikumar, who drives an auto-rickshaw in the city, started living in Pallichal panchayat, there was water in the well. But during summer, the well dried up, leaving it literally without a drop of water. Later, they had to access water from the panchayat tap. When it rained, the well started getting water. But Sasikumar said he opted for a piped water connection as he did not want the risk of depending only on the well.

Sabu, a construction worker living in Malayinkeezh panchayat, had not experienced a water shortage. He has been living near Valiyarathala area for 16 years. It is an area with hills and fields. The house is in a relatively low-lying area. There is a pipe connection, and if you want a pipe connection to the house, you have to cut the road and lay the pipe. It will cost a lot of money. Piped water connection has not been taken yet as the well is having plenty of water. It is a well with a depth of 15 troughs (15 Ring-Ura). The water in the well has not yet dried up. Water is also available in summer. Sabu said that he does not have a clear understanding of anything related to the project.

## **7. Leadership and Jalasamrudhi**

An elected representative and a government official played key leadership roles in the project. Kattakkada MLA I B Satheesh and Land Use Board Commissioner A Nizamuddin took the helm to coordinate these activities. Nizamuddin, an 'anytime anywhere' officer, was the go-to person for local body representatives and the public for problem-solving, doubt resolution, and idea generation without bureaucratic red tape. Roy Mathew, the District Officer of Soil Survey and Soil Conservation before Nizamuddin took charge, facilitated the participation of panchayat members and farmers in the project.

I B Satheesh's work as an MLA for the Jalasamrudhi project received support beyond politics. BJP's local leader and president of Vilavoorkal Grama Panchayat in 2015-2020 Anilkumar said, "I B Satheesh is an MLA of another party, but when it comes to local development activities, his stature is beyond politics. It was because of this approach that the Jalasamrudhi project was able to move forward successfully. He did not give priority to political disagreements, but to harmony in development perspectives. Therefore, my party and I, who have the same vision, were able to work together on these issues and find solutions to the problems of the region". I B Satheesh's interventions as a people's representative played a vital role in making this project possible, according to multiple respondents including elected representatives, school teachers and journalists.

## **8. Jalasamrudhi, an experiment in coordination**

Even before the People's Plan Campaign, a list of experimental/practical experiences can be traced in Kerala based on the vision of regional development on the lines of decentralization. Such activities have taken place with and without the support of government institutions. Examples of these styles are the formation of district councils in 1991 and the Kanjikuzhi model in Alappuzha respectively. It was officially two decades since the decentralization of power, that an MLA took initiative to solve the people's problem in a new style. That is the



process that took place in Kattakkada assembly constituency of Thiruvananthapuram district. This approach is in line with the vision that Kerala has been putting forward for some time now to move forward in the concept of decentralization.

It is a method of allocating the work, money, and resources of different departments to different phases of activity with a single objective. It requires coordination and cooperation. The Jalasamrudhi Project implemented in Kattakkada Assembly Constituency from 2017 onwards provides a learning experience for Kerala. Working hand in hand with government institutions is generally unheard of in Kerala. It is rare for each to join hands for a cause beyond protecting the four corners of their jurisdiction. Departments in Kerala operate in silos, with limited communication and collaboration with each other. Inter-departmental bickering reinforces non-cooperation. This culture prevails not only between departments but also between officers and representatives of the people.

In this way, this kind of tug-of-war at many levels ties red tape over people's lives. The approach that has emerged in the Kattakkada Assembly constituency in the last four years shows a way to overcome these challenges to a certain extent. However, there are experiences where it has not progressed qualitatively in the same way everywhere. Pallichal panchayat, where Congress-led UDF was in power from 2015-2020, fell behind others in the implementation of the project. The members of the panchayat stated that there were no effective activities regarding Jalasamrudhi.

When talking to the then panchayat office-bearers about the complaint that the panchayat administration did not give much cooperation to this activity, they tried to avoid the talk and only claimed that they had cooperated as much as possible. Sreekumar, a resident of Pallichal panchayat, said that factionalism within the Congress, the main party of the UDF, rather than the LDF and UDF dissension, was the cause of the crisis. Sreekumar expressed this opinion, while he was at the panchayat to collect some certificates. Not just the Jalasamrudhi project, this groupism is hampering panchayat administration in general, he opined.

## **9. Jalasamrudhi: Dissenting Voices**

Different opinions have been expressed about the Jalasamrudhi project. Vinod, a native of Kattakkada, opines that the Jalasamrudhi project does not solve the core problems of the constituency. Vinod, who works in a private firm and claims to have no particular political affiliation, argues that no development is seen in the area because of the Jalasamrudhi project. According to him, if new industries or

institutions were started, they could employ more people. However, this is not happening with the project. Vinod believes that while drinking water is a real issue that needs to be addressed, it cannot be considered development. He thinks that real development is happening in Tamil Nadu and Karnataka, where industries are being set up to provide jobs.

On the other hand, A. Suhruth Kumar, who was a law college teacher, sees the Jalasamrudhi Project as an example of a decentralized, popular, and sustainable development vision. Among various views about development, the Jalasamrudhi Project is unique because it is a dynamic process towards progress. That is why it has gained so much popularity. The project aims to change the lives of everyone from the bottom to the top and promote sustainable development. This is why people from different political parties, leaders, bureaucrats, officials, and ranks have joined hands with the project. Suhruth Kumar believes that the project has created a positive change in people's lives.

There seems to be no end to the controversy and difference of opinion as to whether the Jalasamrudhi project has achieved its goals or not. But what makes this project even more relevant is that it has opened new avenues in some respects. This project proved that disparate departments that do not go together can work together. For example, it is possible to coordinate financial allocations and bureaucratic services in different departments for the same purpose. The activities related to this show that there are no obstacles for officials, people's representatives and people to work hand in hand. It is not that all this was done with 100% accuracy or that everything was perfect, but as an attempt to create a different style in Kerala's development work, the Jalasamrudhi project work has a place in the list of novel experiments that sought to improve governance in Kerala. ■

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(Information about climate and topography is included in this report from the development documents prepared by the panchayats as part of the People's Plan Campaign)

(A. Suhruth Kumar worked as a teacher, author, decentralized planning expert, KSSP worker and executive director of Karakulam Grameena Padana Kendram. A few weeks after this conversation, he died of a brief illness.)

## Endnotes

1. Amburi, Kallikad and Kutthitchal panchayats are considered as Malanad and other panchayats are considered as Edanadu.
2. The panchayats of Kattakkada Assembly Constituency start from the point where Thiruvananthapuram Corporation limit ends. Kattakkada Constituency was formed by excluding Balamapuram and Nemam panchayats, which were part of Neyyattinkara taluk and including Kattakkada, Malayinkeezh, Maranallur, Pallichal, Vilappil and Vilavoorkal panchayaths. Kattakkada Taluk did not exist when Kattakkada constituency was formed.
3. Kattakkada assembly constituency falls under the Attingal Lok Sabha constituency. Parassala, Aruvikkara, Nemam, Kovalam, Vattiyoorkavu assembly constituencies are the assembly constituencies that share the borderline of Kattakkada constituency. Kattakkada constituency includes parts of Nemam and Vellanadu block panchayats, which also include Malayinkeezh district panchayat divisions. Some areas of district panchayat divisions of Venganur, Pallichal, and Poovachal are also part of this constituency.
4. The Neyyar Irrigation Project was started in 1951 with the aim of agricultural development in Neyyattinkara and Vilavankot (now Vilavankot is part of Kanyakumari district) and Nedumangad taluks of Travancore in Thiruvananthapuram-Kochi state. The plan was to block the Neyyar at Chempilammul by building a dam connecting the Kannankalakum and Koliakkode hills and irrigate through the canals. When the project was launched in December 1951, the objective was to irrigate 36,000 acres of agricultural land in these three taluks. The dam was completed in about eight years and became operational in February 1959. The dam is 965 feet long and 166 feet high. The storage capacity of the dam is 3,750 metric feet. The catchment area of Neyyar Dam is 54 sq. miles. The 127-foot-long spillway is controlled by four shutters that are 17 feet high and 28 feet wide. If they are opened, 28,580 cubic feet of water per second will flow into the river. Neyyar Dam has two canals. Right Bank Canal and Left Bank Canal. The right bank canal is 22 miles long and the left bank canal is 21 miles long.  
  
According to the report about Neyyar Dam Irrigation Project, the total cost of the Neyyar Dam Irrigation Project was Rs 4 crore including Rs 101 lakh for the construction of dam and Rs 240 lakhs for the construction of canals. This project has a history of solving the shortage of fresh water when the city faced severe drought. There have been cases of water pumped from Neyyar Dam at Kapukad in Kutthitchal Panchayat and brought via Vembathukonam, Kalashakonam, Mundithod through Karamanayar and treated at Aruvikkara to supply in the capital.
5. Here are the statistics of other crops cultivated after filling paddy fields. Coconut is cultivated after filling 194.92 hectares of fallow land, 353.13 hectares for tapioca and banana and 587.79 hectares for mixed crops. As many as 123.37 hectares of land was cleared for rubber cultivation. Currently the main crop in Kattakkada



constituency is mixed crops. It covers 34.06% of the land area i.e. 3,875.95 hectares. Coconut is cultivated in 5,588 hectares and rubber in 25.53% i.e. 2,904.41 hectares.

That is, the 1291.31- hectare paddy field was reduced by less than one percent. Construction activity in this area increased rapidly. When we see the growth of construction activities in the area we get to know how the paddy fields have vanished. The quarry area in Kattakkada constituency is 84.83 hectares. Apart from this, the rock quarry is 38.69 hectares.

6. Sanghamaitri is a farmer marketing organisation in Pallichal panchayat.

7. According to Sunitha, who was the chairperson of Kattakkada Health Education Standing Committee, 500 liters of water was delivered at a cost of Rs.1000.

Gautam Ganapathy

# DEEPENING DECENTRALISATION IN KERALA: Community-based Mobilisation, Expert Knowledge, and the Top-Down State in Jalasamrudhi

## 1. Introduction

**K**erala is a land of rivers. Located on the eastern slope of the western ghats, 44 rivers flow through the state with 41 of them draining into the Arabian sea. Considered a land of plenty, the state has historically relied on traditional water sources like open wells, rivers, streams and ponds for its water security. This is reflected in the relatively low penetration of piped drinking water provision in the state. While major urban centres have piped drinking water access, other regions (including regions peripheral to major urban centres) continue to rely on open wells for drinking water. About 80% of rural households and 50% of urban households in the state depend on ground-water based systems (primarily open wells) for their drinking water needs. It is also pertinent to note that groundwater sources meet 50% of the need of the state's irrigated areas.<sup>1</sup> Such dependence on groundwater is an artefact of Kerala's climate and geography. The relatively short length of west-flowing rivers and the considerable difference in elevation between highlands and the coast leads to a substantial proportion of rainwater draining into the sea. Therefore, open wells, ponds and other traditional water sources emerged as the mainstay of water security for the state. Considering these factors, it is not a surprise that Kerala is estimated to have the highest open-well density in India.<sup>2</sup>

However, water availability in the state witnesses a decline during the summer months with the retreat of groundwater levels. According to engineers at the Kerala Water Authority, this is not a recent

development. The five panchayats in Kattakada legislative assembly constituency (LAC) – the setting of this essay - have been facing lean summer months for the last few decades. However, the complete drying up of open-wells along with the disappearance of many streams and ponds reflected a more serious reality that transcended geophysical factors. While soil characteristics, terrain and rainfall affect ground water levels at any given time and place, changing land use patterns driven by human activity have been exacerbating the issue in Kerala recently.

Kerala's decentralisation reforms are celebrated for deepening democracy by devolving administrative and financial authority to local governments leading to improved development outcomes. The reforms created conditions for more direct citizen participation in local governance. Significantly, the reforms (by evolving a more participative local governance framework) were heralded as a critical step to transforming Kerala into a model of sustainable development. The acute water shortage in Kattakada LAC during the summer months of 2016 pointed to a crisis in the state's prevailing drinking water governance. Water governance is a microcosm of the macrocosm that is local planning and governance. The water crisis in Kattakada LAC – after more than two decades of decentralised governance – compels us to re-examine the factors shaping Kerala's local planning and governance.

Jalasamrudhi, the water conservation project in Kattakada LAC, offers an opportune moment to deepen our existing understanding of the factors limiting the potential of decentralised governance in the state. This essay documents the planning and execution of Jalasamrudhi to examine the synergy between civil society actors, government institutions and people's representatives to understand the underlying incentive structure that encouraged the actors to cooperate. While the theoretical apparatuses of sustainable development are pretty well developed, the Jalasamrudhi story allows us to access the field where the substantive hurdles to this goal become discernible. This essay does not attempt to evaluate the impact (by way of measuring the outcomes) of Jalasamrudhi as a water conservation program. Instead, it reflects on the experiment in the light of Kerala's historical experience with the people's planning campaign to explore whether such an approach offers clues to improving local planning outcomes. The essay, toward this end, describes the series of events that constituted Jalasamrudhi, in the process reflecting on their import keeping in view the broader pushes and pulls shaping local governance in contemporary Kerala. It especially considers the relationship between government bureaucracy and the political process to understand the institutions shaping local development planning and implementation.

This essay is based on fieldwork carried out at Kattakada between January and May 2021. Jalasamrudhi is understood through the experience of multiple sets of stakeholders – elected representatives, government departments and agencies, farmers, journalists, and academics. We sought out elected members across the political spectrum to understand their perspectives on the project. The field work was carried out between the first and second waves of the COVID pandemic. While the pandemic had eased in January 2021 when we began collecting data, public transport facilities in the district operated on a curtailed basis affecting our ability to move about. Secondly, potential respondents were reluctant to meet in person to discuss the project due to the threat of catching the infection. Our interactions, therefore, included in-person and telephonic interactions with respondents. Interviews with staff members of various government departments took us to their head offices in Thiruvananthapuram. We also spoke to field-level staff to get a clearer picture of the challenges faced on the ground. Journalists who hail from the Kattakada were able to describe the changes witnessed in the area over the last 4 to 5 decades. Interviews with senior government personnel were conducted in Malayalam and English. All the interactions with elected representatives (from all 6 panchayats) were in Malayalam. We were able to visit more than 10 field locations where individual interventions were carried out. We conducted a total of 33 detailed interviews.<sup>3</sup> We used data shared with us by the Kerala State Land Use Board (KSLUB) on the details of assets created during the project. We also attended a workshop organised by the KSLUB and Kerala Institute of Local Administration (KILA) in Thiruvananthapuram for newly elected members of the six panchayats (to familiarize them with the project). We also utilised secondary material collected from KSLUB, Kerala Ground Water Department along with newspaper clippings and web articles on Jalasamrudhi.

This essay is structured as follows: The following section provides a brief assessment of Kerala's decentralisation experience, forming the background of this essay. The subsequent section recounts the period preceding the initiation of the project, detailing the conditions that led to its conception. The planning and implementation of the project are covered in the next section. This section captures how various stakeholders (government departments, elected members, self-help groups and citizens) were brought together and subsequently charts the evolution of the project from being a water conservation project to a broader livelihood and sustainability focussed local planning exercise. The next two sections explore the roles of government departments and elected representatives in the local planning and execution of projects. Especially focussing on environmental



governance, this section uncovers the increasing chasm between bureaucratic agencies and the people on the ground. This section foregrounds the prevailing governance dysfunctionality partly in the prevailing nexus between political parties and the bureaucratic machinery in the state. Jalasamrudhi's attempt to initiate a dialogue between elected members and government bureaucracy is highlighted in this section. The section also highlights the challenges in local environmental planning in Kerala by recounting the failure of the project in one panchayat. The final section provides reflections on Kerala's people's plan campaign retrospectively, in the light of lessons from Jalasamrudhi.

## **2. Background: Kerala's Decentralisation Reforms and its Discontents**

Kerala's decentralisation reforms are celebrated for deepening democracy. Initiated in 1996, political decentralisation was accompanied by fiscal and administrative reforms that enabled local governments to conceive and implement development programs by themselves. Most importantly, Kerala ushered in devolution through a comprehensive social campaign that mobilised local people and resources introducing a culture of micro-planning and development. The local planning exercise – envisaged to familiarize local people with their physical, social and political environment – became a critical instrument of social mobilisation that gave legs to the decentralisation project. This experiment called the People's Plan Campaign (PPC), intended to demystify and debureaucratize planning to nurture an element of direct democracy in local development (Isaac & Franke, 2000). Kerala Sastra Sahitya Parishad (KSSP), a civil society organisation, spearheaded the campaign that had the organisational backing of the Communist Party of India – Marxist (CPI(M)). Along with members of KSSP, the campaign saw hundreds of citizens volunteering in the process that familiarised the local people with their constituency (biophysical, social and administrative). The campaign eventually resulted in the production of local plans that reflected the 'needs' of the people. The widespread participation of people, supported by KSSP and the local units of political parties, effectively brought the state apparatus to the doorsteps of the people.

The decentralisation reforms succeeded in deepening people's participation in local development planning, thereby introducing an element of direct democracy. Consequently, the local governments and their associated networks have been lauded for strengthening the state's welfare regime. Provisioning of basic amenities including drinking water, sanitation, housing, education, and road connectivity has witnessed qualitative improvement (Chathukulam & John MS,

2002; Heller et al., 2007; Isaac, 2001; Isaac & Franke, 2000; Isaac & Harilal, 1997). The architects of the people's plan programme sought to address a wide set of issues through devolution. These included driving up economic growth, greater representation in governance for marginalised communities, improved governmental accountability and a more efficient environmental governance regime through participatory planning and development. The PPC has been viewed as the moment of emergence of a 'new' Kerala model which sought to integrate sustainable development goals in policy making (Véron, 2001). Moving beyond mere state regulation, the reforms were expected to combine productive and environmental objectives through a participatory planning process which would be supported by social movements and civil society organisations (Isaac & Franke, 2000).

## **2.1 Assessments of Decentralisation in Kerala**

The experience with local planning and development in Kerala has indicated that decentralisation cannot be the silver bullet for a wide variety of developmental challenges. While assessments critical of Kerala's decentralisation need to be viewed in light of the ambitious expectations that the state had set itself, recognizing the shortcomings is critical to initiate a course correction and more importantly reassess what democratic devolution can realistically deliver for Kerala. On the economic front, decentralisation has not succeeded in providing a fillip to the local economy (Devika, 2007). The reforms were expected to bring in productive investment, especially in the goods-producing sector. Economic success stories from local plans have been limited to the service sector with a few exceptional cases in the agricultural sector (Harilal, 2013). The reforms have not been accompanied by mass mobilisation – led by social movements and civil society organisations – as envisaged by the architects of PPC. The failure of the expected emergence of a conducive civic culture – that transcends narrow party, identity or organisational affiliations – is manifested in the poor social outcomes faced by socially marginalised communities in the state (Tharakan, 2005). Literature assessing the reforms has highlighted that participation is on the wane, in terms of quantity as well as quality (Harilal, 2013). Local bodies' inability to reign in cronyism, corruption and lack of transparency in their institutional decision-making has also been flagged (Oommen, 2004). Decentralisation not realizing its potential and especially the failure to integrate sustainable development objectives in local planning has been mainly ascribed to broader structural factors that are well beyond the control of local governance institutions. Kerala's place as a province - with limited

control over its economic policy - within a developing country in a globalised world has been flagged (Harilal, 2013). The expanding power of the market over the last three decades has also profoundly shaped the character of the political subject that has emerged in Kerala. It has been argued that this political subject is more attuned to 'responsibilised' welfare which is more individual beneficiary oriented and consumption centred rather than the pre-liberalisation political subject who demanded welfare in more collective terms as a right (Devika, 2016). This shift requires critical reflection on the meaning and import of participatory routines in decentralised governance. Domestically, Kerala's development ills are traced, partially, to an 'over-politicized' civil society. Historically generated party politicisation of associational life has been identified as a major roadblock in the fruition of deliberative planning in Kerala (Isaac & Franke, 2000).

## 2.2 Role of Line Departments in Sustainability Transitions

Kerala's formidable political society has historically mediated between bureaucratic machinery and the people in building up the state's famed welfare regime (Devika, 2007). Against the demand for welfare as a collective right, the state has been responsive and has extended the provision of health care, drinking water, education etc. While the agenda of PPC was to enable citizens to shape planning at the local level, the immediate needs of citizens drove the exercise. While planning for environmental sustainability was one of the objectives of PPC, the left's preoccupation - faced with challenges at the beginning of the era of liberalisation - was to re-establish its hegemony through devolution and this led to the campaign's focus on social mobilisation for democratising society and simultaneously evolving an institutional framework for local planning and development with people's participation (Devika, 2016). The latter was designed to ensure the state apparatus' responsiveness to demands from below.

Government agencies have a critical role in developing local plans for sustainable development. Called line departments in Kerala, these agencies are a repository of knowledge and practice in managing water resources, sanitation, agriculture, soil, fisheries, horticulture, labour, public works, forestry and other routine administrative functions. Recently published research shows increased bureaucratisation as well as an acute lack of freedom for local bodies in development planning, undermining bottom-up planning. There has been much debate on the role of experts in local planning in Kerala. It is generally accepted that public administration – an increasingly complex exercise - requires specialised knowledge for optimal social and environmental outcomes. Harilal (2013) has argued for the separation of participation from administration – in the face

of evidence of greater bureaucratisation of planning - for ensuring accountability in public administration and to simultaneously avoid alienation of experts in local planning. While this solution subtly balances the role of experts and the agency of people in local planning, the role of government agencies in the process of producing knowledge for sustainable development has not come under scrutiny. People's immediate needs cannot be the sole basis for local planning for sustainable development. It requires a long-term view and has to consider the needs of future generations.<sup>4</sup> Environmental issues become equally critical as they directly have an impact on the availability of natural capital. Most importantly, the sense of local cannot be divorced from the global and national dimensions in the pursuit of sustainable development. Along with social mobilisation to keep the pressure on the state to extend protection for the vulnerable, the process of generating knowledge for local planning has become immensely political when needs of the future generations and environmental protection become critical dimensions in development.



### 3. Jalasamrudhi: The Beginnings

On 22 March 2017 (World Water Day), the sitting Member of Legislative Assembly (MLA) of Kattakada constituency was pictured planting a sapling and digging a rainwater harvesting pit in a school. He was inaugurating a water conservation programme for the constituency. The objective was simple: to conserve rainwater to improve water availability in wells, ponds and streams.

Led by the MLA of the constituency, Mr. I. B Satheesh, Jalasamrudhi has successfully reversed groundwater depletion and revived other traditional water sources (ponds and streams) in the six panchayats that constitute the Kattakada assembly constituency. The MLA and his team had two major priorities. The first was to address the dire water situation. Water tankers had become routine in these panchayats in the previous decade. Agriculture, which is the mainstay of a considerable section of the population, was affected due to inadequate water for irrigation. The second priority was to involve people in a grassroots movement that would institutionalise it and firmly establish it in the community. The original vision of Jalasamrudhi aimed to begin with rejuvenating ponds, streams and open wells, which would secure the water availability of the residents. However, it gradually metamorphosed into a democratic planning and intervention exercise involving elected members and bodies, students, civil society organisations, government agencies and the people of Kattakada LAC.

We have forgotten that soil and agriculture sustain us. We get reminded of it only when we are affected. It is not just the bureaucracy. We are equally guilty. We did a few things for money, but also due to ignorance. It is also the people.<sup>5</sup>

According to a former member of Vilappil panchayat, the acute water shortage experienced in 2016 made people realize the importance of water conservation.<sup>6</sup> In the context of a severe drought in the panchayats bordering Trivandrum to the south and southeast, a seminar in 2016 (in Peyad) was held in the summer of 2016 to spread awareness about water conservation. The seminar was titled “Jala Suraksha, Jeeva Suraksha” (Water Security is Life Security). Convened by an informal group of state government employees, the seminar was presided over by I.B.Satheesh, MLA of the constituency. The idea of conserving rainwater to mitigate the prevailing drought-like condition emerged in the meeting. While the MLA and the members of the informal group were conscious that the effort will not see immediate results, they believed that it provided an opportune moment to mobilize the entire community.<sup>7</sup>



### **3.1 Importance of Public Campaigns: Early Interventions**

The first major intervention in Jalasamrudhi was 'Veetil Oru Mazhakuzhi' (rainwater harvesting pit in every house). The district administration, Mahatma Gandhi Rural Employment Guarantee Scheme (MGNREGS) and Kudumbasree volunteers came together for these two programs. It was critical to take the program to the grassroots. This campaign-based intervention was intended to raise awareness as well as show tangible results to get people involved in the project.

A series of meetings at the ward, block and district levels preceded the campaigns. The prevailing drinking water shortage resulted in enthusiastic participation from the local people, especially women. The MLA and members of the coordination committee felt that many elected members felt obliged to be part of these meetings considering the public focus on water conservation. The campaigns witnessed pits being dug in households as well as public areas. Volunteers recruited by the MLA's team, local party members as well as elected representatives took part in the campaign. Carried out in the weeks preceding the first summer rains, many were not convinced about the effectiveness of pits in their households. However, the water level in household wells improved considerably after the first few episodes of summer rains.<sup>8</sup>

The second major campaign-driven intervention was "oruLakshamvrisksham" (One lakh trees). Kudumbasree was roped in to provide saplings to households and help the households plant them in households. The saplings – which consisted of native species - were provided by the forest department. The thrust of this campaign was the conservation of native trees which reduce soil erosion and help conserve rainwater. The visible increase in water availability in streams, ponds and open wells with these two interventions provided considerable momentum to the project.

### **3.2 Towards Convergence: Planning and Implementation in Jalasamrudhi**

The initial planning for Jalasamrudhi revolved around an unofficial coordination committee consisting of the MLA I.B. Satheesh and a handful of like-minded state government employees. While some of the members were associated with the KSSP, others came to be associated with the project either through social connections or plain serendipity. For instance, a government employee with the soil conservation department became the convener of the committee after participating in the District Planning Committee meeting convened by the collector. At the request of the MLA, the

district planning committee meetings discussed implementing a constituency-level water conservation programme.<sup>9</sup>

As far as the funds for implementing the project, the MLA and his team identified unutilized plan funds in various departments and agencies. These funds lapse when they go unutilized and usually get allocated for the succeeding financial year. The coordination committee had members from irrigation, soil conservation, MGNREGS and KSLUB. Along with identifying unutilized funds in these departments, the team gathered unutilized funds in other departments and agencies. To bring elected representatives of Kattakada constituency on the same page, a workshop was organised as a preliminary step. All the ward members, from across the political spectrum participated. It was held at Nemom, the block which had then become categorised as semi-critical for groundwater availability. The Nemom block consists of all but the Kattakada panchayat (which falls under Vellanad block) in the Kattakada LAC. Along with the elected representatives, personnel from various departments (irrigation, agriculture, soil conservation, groundwater etc) participated in the seminar. There were brief presentations by government personnel about the schemes being implemented by their respective departments. The objective of these presentations was twofold: to make elected members aware of existing schemes and projects in their constituencies and also apprise them of funds available (unutilized funds) for new schemes and projects; begin a process of consultation between elected members and government departments. Elected members were divided into groups and asked to list the needs of their constituencies and potential areas of intervention. Every group was visited by all the different departments to clarify and help elected members with their tasks. Based on the needs of specific constituencies, the government personnel suggested interventions. The information gathered at the workshop was collated by the KSLUB, becoming the foundation for the design of interventions in Jalasamrudhi. With the project having become a major issue of discussion in grama and ward sabha meetings, elected representatives from all 108 wards in the Kattakada LAC recognized the importance of extending their cooperation to the project. The pressure from below led to greater participation and involvement of elected representatives and line department officials in the project.

With the cooperation of a keen district administration, initial steps for Jalasamrudhi got underway. The district planning committee meetings (DPC), which facilitate coordination between elected members and line department officials for smoother implementation of projects – were also instrumental in the identification of new projects and schemes for water conservation based on unutilized

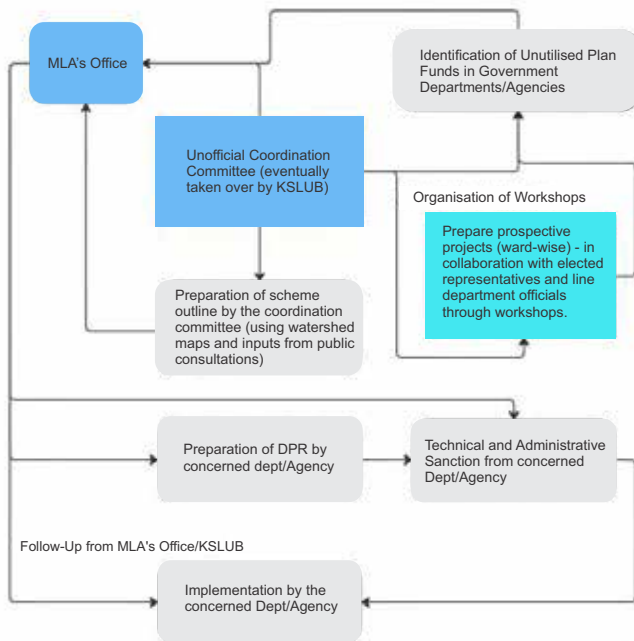


funds of government departments. The KSLUB collated the details from these workshops and integrated the data with the existing watershed maps. A survey was subsequently undertaken by the KSLUB (with the help of volunteers) to identify ponds, wells, streams and springs for intervention, based on the watershed boundaries.

The inauguration of the project in a school with the MLA planting a sapling reflected the fact that the project was more than the sum of individual schemes. Infrastructure and asset creation were to go hand in hand with an attitudinal shift to the management of environmental resources. The task of coordination between various government departments and the MLA office was handled by a coordination committee in the early days. After identifying unutilized plan funds, the committee finalised the broad outline of the intervention including the geographical area the project ought to cover. Using existing watershed maps of Kerala and the details collated from elected representatives, multiple interventions were proposed. With a proactive district collector, the initial schemes were prepared by individual departments and implemented. Follow-up from the collector (convenor of district planning committee meetings) and the MLA with the concerned departments helped in speeding up the process. The coordination eventually was taken over by the KSLUB (with the continued participation of other coordination committee members). Mr. Nizamuddin, Land Use Commissioner (KSLUB) became a critical cog in the machine. The organisation handled proposing new schemes, following up with various agencies, coordinating between MLA's office, elected representatives and civil society organisations over campaign meetings and helping with the implementation of new schemes. They eventually also were given the responsibility to document and handle the public relations of the project (Details in Figure 1).

### **3.3 From Water Conservation to Sustainability**

While Jalasamrudhi's primary focus was the conservation of rainwater, the public campaigns became a conduit for raising awareness about the environment and safeguarding assets from decrepitude and pollution. Public campaigns organised as part of Jalasamrudhi raised awareness about the dumping of waste (plastic, medical and construction waste). For instance, transect walk along major streams witnessed enthusiastic participation from local people, school children and elected representatives. The district collector and MLA led the walk along the length of the stream. Volunteers and participants also cleared waste obstructing flow in the stream. Smaller streams in all six panchayats were also cleared of encroachments through public campaigns. Similarly, water assembly and parliament saw



*Figure 1  
Jalasamrudhi:  
Project  
Planning and  
Implementation*

schoolchildren debating the importance of water conservation for safeguarding future generations of the state. All these programs were organised by leveraging existing funding avenues in government agencies like Suchitwa Mission and Haritha Kerala Mission. Jalasamrudhi evolved into a larger community-based initiative to bring about greater environmental awareness and sensitivity among the local people.

The first two campaign-driven interventions (articulated above) were followed by schemes that have created assets for the local community. The details of these projects are documented in Table 1. The initial phase of Jalasamrudhi witnessed schemes for conserving rainwater by reducing run-off during monsoon. They included the creation of check dams in streams, rain-water harvesting structures in government institutions and schools, and cleaning up of ponds and streams.

Over time, Jalasamrudhi also took up schemes like the creation of farm ponds and the implementation of lift irrigation schemes. These were taken up after demand from below when the project became well-known in the community. The rejuvenated ponds and streams were protected with coir and geo textiles. The schemes implemented by agriculture, fisheries and irrigation departments created assets supporting livelihood activities. Similarly, schemes implemented by the groundwater department came to provide an important service to the local community.



S. no	Intervention/Scheme	Nature of Activity	Departments/ Agencies Involved
1	Veetil Oru Mazhakuzhi (A rainwater harvesting pit in every house)	Infrastructure and Awareness Generation	MGNREGS, KSSP
2	Oru Laksham Vriksham (One Lakh Trees)	Infrastructure and Awareness Generation	Forest, MGNREGS, Kudumbasree, KSSP
3	Rejuvenation of Ponds	Asset creation	Irrigation, MGNREGS
4	Rejuvenation of Streams	Asset creation	Irrigation, MGNREGS
5	Building Check Dams	Asset creation	Irrigation, MGNREGS
6	Constructing Farm Ponds	Asset creation	Agriculture, Irrigation, MGNREGS
7	Mapping of water bodies/ resources	Planning for Intervention	KSLUB
8	Installing rainwater harvesting structures in Government Institutions	Asset creation	MGNREGS, Ground Water Department
9	Installing Weather Stations in Schools	Asset creation	Suchitwa Mission
10	Introduction of fishlings	Asset creation	Fisheries Department
11	Coir and Geotextiles	Asset creation	Soil Conservation
12	Kala Jaatha (Street Plays)	Mobilization	Education Department, Haritha Kerala Mission, Panchayats
14	Drinking-Water Scheme from Quarry	Asset creation	Ground Water Department
15	Installation of scales in ponds	Asset creation	Suchitwa Mission
16	Water Assembly/Parliament	Mobilization	Suchitwa Mission
17	Jala Mithram	Mobilisation	Haritha Kerala Mission
18	Haritha Vidyalaya	Mobilization	Haritha Kerala Mission, KSLUB
19	Workshop for elected representatives and elected members	Planning and Mobilization	KSLUB
20	AyalKoottams	Mobilization	KSSP
21	District Planning Committee Meetings	Planning and Mobilization	District Administration, Multiple Government Departments, Panchayat Members
22	Transect Walks	Planning and Mobilization	Panchayats, Haritha Kerala Mission

23	Preparation of Water management and conservation plan	Planning	KSLUB, MGNREGS, Kudumbasree
24	Lift Irrigation Scheme	Asset	Irrigation Department
25	Rehabilitation of Open Wells	Asset	Groundwater
26	NSS Water Camps	Mobilization	NSS
27	Energy Audit of all government institutions	Planning	Energy Management Centre
28	Rainwater Harvesting Structure adjacent to state highway	Asset	PWD, KSLUB

*Table 1 Details of Interventions in Jalasamrudhi*

Based on the Jalasamrudhi experience, the following sections consist of reflections on the challenges to sustainable development in the region. In the light of Kerala's decentralisation experience and history of local-planning initiatives, the role and character of bureaucracy in Kerala and its relationship with the political process are explored. Finally, it contextualises these observations in light of broader changes in Kerala society and economy.

#### **4. Role of Line Departments in Local Planning and Governance**

Research in the last three decades on sustainable natural resource management has led to calls for a re-evaluation of the relationship between the state and citizens in local planning and governance (Miller & Wyborn, 2020). In the conventional statist welfare paradigm, the state produces and provides various kinds of essential services including drinking water, sanitation, agricultural extension etc. In this top-down technocratic approach, the state is the leading steward in the management of common-pool resources like water, fisheries etc. It has the knowledge to harness nature to provide a variety of services. Introducing private sector management principles in the provision and management of essential services was expected to enhance efficiencies as well as improve environmental outcomes. However, both these paradigms fall short in the integration of sustainable development principles in local planning and development.

Models of co-production have stressed an effective partnership between the state and the society to construct new institutions of cooperation, enabling efficient production and management of public goods like drinking water, forest and water resources, and public health systems (Ostrom, 1996). In Kerala, the PPC sought to integrate local communities in the planning process with the intent

of democratizing society and making the state more accountable. However, the role of various government agencies engaged in the production and management of public goods has not been scrutinized. The knowledge, institutional practices, and organizational mandates of government agencies have not changed over the years. Most of the agencies remain firmly rooted in the 1960s high modern milieu where the state is the preeminent force - and using knowledge rooted in the positivist tradition - in the production and management of public goods and services.

For instance, the dominant narrative of government institutions in Kerala is that the state is faced with a peculiar situation where abundance and scarcity of water resources coexist, simultaneously.<sup>10</sup> In the corridors of Kerala Water Authority, the state's main water supply agency, engineers argue that the state is on the cusp of a major water crisis, a consequence of scarcity brought about by extraneous factors. Scorching summers, ever-increasing demands from industry and agriculture, urbanisation, and more recently, the climate crisis, all contributing to Kerala's precarious water situation, according to them.<sup>11</sup>

We would be mistaken if we believe that this 'scarcity rhetoric' is a recent phenomenon. Project proposals and administrative reports prepared by the Public Health Engineering Department (and subsequently Kerala Water Authority) from the 1980s speak of a spectre of looming water crises in the state. A large cohort of engineers in the utility bemoans the indifference of the political class as well as the citizens to this issue. 'Politics', they argue, has resulted in misplaced priorities of the state, as far as water supply is concerned. While the state's water bureaucracy acknowledges Kerala's dependency on open wells and streams for its water needs, it strongly believes that the contemporary tide is irreversible. For them, urbanisation, reduction in cultivable land, and ecological degradation in the highlands are here to stay and so is scarcity (Ganapathy, 2021).

This disposition to management of water resources - anchored in scarcity - is a corollary of a dominant imagination of safeguarding water security through building large infrastructure. Building large dams, for irrigation and drinking water, should be viewed in this context. Predominantly a historical artefact of the modernist era, large hydraulic structures (especially dams) were deployed to tame rivers to harness water for irrigation, industries, as well as domestic consumption. While canals were the arteries of the modern irrigation system, pipes played the equivalent role in the industrial and domestic spheres. Kerala's tryst with modern water management began with Trivandrum's Wellington water supply scheme inaugurated in 1933.

The state water bureaucracy's proclivity to dams and pipes for meeting the state's irrigation and drinking water needs is linked to its modernist beginnings during colonial times (Ganapathy, 2021).

While it should be acknowledged that forces of capital have been shaping natural resource management (especially water, soil and forests) in a pronounced way over the last three decades in Kerala, the state agencies' role has been exacerbating the situation. Multiple government departments and agencies operate in this broad but intricately interconnected area. Table 2 lists the government departments and agencies involved in the management of soil and water resources. The other departments and agencies are mandated with supporting and/or providing livelihoods that are fundamentally dependent on soil and water. All of these agencies are directly or indirectly mandated with conserving rainwater and decreasing soil erosion.

*Table 2 List of Select Government Agencies and their Mandates*

S. no	Department/ Agency	Year of Formation	Key Mandate(s)
1	Kerala Water Authority (formerly Public Health Engineering Department)	1956	Provision of drinking water and sanitation provision and allied activities
2	Ground Water Department	1978 (Formed from agriculture department)	The initial focus of the department was to provide solutions to the irrigation needs and later extended to domestic and industrial needs as well.
3	Agriculture Department	1908 (eventually 1987 for the overall development of agriculture for the state)	Planning, implementation and monitoring of the State and Central schemes for the development of agriculture taking Grama Panchayat as the basic unit.
3	Soil Survey and Soil Conservation Department	1963	The Soil Survey wing plays a vital role in inventoring the soil and land resources and in the prioritization and delineation of various watershed-based programmes in the State. The Soil Conservation wing executes these programmes across the State to check soil erosion, regulate surface flow of water, promote institute water conservation, control saline intrusion, all aimed to improve agricultural production and productivity.

4	Public Works Department	1949 (existed in different forms from 1901)	Manage the construction and maintenance of civil structures owned by the government including government buildings, government-owned hospitals, roads, bridges etc
5	Irrigation Department	1990 (From Public Works Department (PWD))	Manage the construction and maintenance of irrigation infrastructure in the state including dams, ponds, streams and other structures
7	Fisheries Department	1956	Fish resource conservation and management, development of aquaculture, exploration of new fishing grounds, augmentation of fish production, and value addition in fish products, and strengthening social security and welfare measures for fisherfolk
9	Local Self-Government Department	2007 (Engineering Wing)	Manage and oversee the affairs of the panchayat, rural development, urban affairs, local self-government engineering and urban-rural Planning
10	Directorate of Environment and Climate Change	2006	The 'Environment Department' came into existence in the year 2006 by delinking the subject Environment from the Science, Technology & Environment Department. The primary concerns of the Department are the implementation of policies and programmes relating to the conservation of the State's natural resources, its biodiversity and the prevention and abatement of pollution.
11	The Kerala State Council for Science, Technology and Environment	2002	Propagate the application of Science and Technology, facilitate the dissemination of scientific knowledge, and plan and formulate science technology and innovation policy pertaining to the development of the Kerala State Create excellence in basic as well as applied research
12	Forest Department	1956 (existed in different forms from 1888)	Conservation of forests and fulfilling existing needs of forest dependent communities

Line departments are fiercely protective of their administrative and disciplinary terrain. While disciplinary boundaries between departments are extremely fuzzy in reality, the fact that they have solidified into concrete interests makes any collaboration between

them unlikely. The tunnel vision informing dominant institutional culture within powerful departments like Public Works, Drinking Water, Irrigation, Agriculture and Forestry are historically inherited from the high modernist ethos adopted by newly independent post-colonial nations of the twentieth century. According to an engineer in the irrigation department, there is also an implicit hierarchy among organisations in Kerala. For instance, a senior administrative officer from Public Works Department would deign to collaborate with a colleague (of the same administrative seniority) from less powerful agencies like the Ground Water Department as his equal. Going further, it was learnt even mechanical and electrical wings within the irrigation department do not work together.<sup>12</sup>

New projects are initiated in these departments and agencies primarily in two ways. Based on existing master plans, schemes or projects are proposed and executed. Projects begun earlier would be usually prioritised at the beginning of a financial year. Agencies also take up projects when MLAs, secretaries and ministers request for execution of schemes or extension of services. While the latter mostly consists of genuine demands from the ground, interventions taken up from master plans are not very useful. According to a retired engineer (KWA), master plans become obsolete if they are not assessed every 3 or 5 years. In several departments, master plans do not take into account pressing issues facing people on the ground. Interventions taken up by other agencies, natural calamities and significant land-use changes triggered by market forces usually go completely unconsidered. In most cases, departments and agencies do not have any long-term plans that would enable them to assess and address resource and capacity deficits and constraints.<sup>13</sup>

Government departments and agencies in the last three decades have not added to their workforce commensurate to the expansion of the projects and schemes. Except for Public Works Department (PWD) and Kerala State Electricity Board (KSEB), other agencies have witnessed a thinning of their lower workforce. Smaller departments like groundwater, coir directorate, fisheries and soil conservation have only a handful of field staff. The already thin public interface has become thinner. Simultaneously, there has been an increasing prioritization of public relations in government departments which reflects the ongoing process of the transformation of the relationship between the state and the citizen. The recasting of the citizen as a consumer is well under-way. The consequence of this shift is also being felt in the corridors of government agencies. While it might be assumed that this shift would lead to an increased awareness of the demands from below, the department personnel are more alienated from the ground. The exercise of allocation of plan funds was called a 'glorified



rigmarole' by a senior engineer from the irrigation department. Every department, he said, wanted an allocation higher than the previous year. The allocations usually see a marginal increase unless a new scheme or program gets announced by the state or union government.<sup>14</sup> The political economy of patronage in Kerala is a critical dimension that requires attention to understand the skewed incentive structure available to the state actors in the realm of environmental governance.

#### **4.1 Ineffective Local Governance: Farmers in Kattakada LAC**

The perception of farmers in Pallichal panchayat on Jalasamrudhi brings out the set of issues discussed above. Pallichal panchayat sits on the main road from Nagercoil to Trivandrum. People remember paddy fields dotting the road towards Trivandrum. Karamana and Jagathy, which were agricultural fields decades back, are said to have changed unrecognizably. Trivandrum has expanded gradually and the fields have transformed into residential neighbourhoods. Along the main roads, commercial buildings have sprung up. Other panchayats in the Kattakada assembly constituency – by their geographical proximity to Trivandrum - have also been profoundly shaped by the economic and social dynamics between a peri-urban area and the core city. In addition to the conversion of farmlands into real estate, the flow of resources (capital, waste and labour) to and from Trivandrum has impacted the environmental governance in the area.

The major crops grown by farmers in the Kattakada assembly constituency are banana and tapioca. Regions – especially Kattakada, Pallichal and Malayinkeezh panchayats – that grew paddy have shifted to banana and tapioca.<sup>15</sup> The farmers in this region are buffeted by structural issues plaguing agriculture across the country after the adoption of economic reforms in the 1990s. In Kerala, input costs have soared and a well-organized and politically powerful labour has meant relatively high labour costs. Fragmentation of land is also a reality limiting productivity. The prices of agricultural goods remain suppressed. Produce coming from Kanyakumari district (including banana, poultry, vegetables, rice and tapioca) ensure an adequate supply of essential food items in and around Trivandrum. Caught between high input costs (especially labour) and supply from across the state, the farmers in the region argue that they don't get adequate government support.<sup>16</sup>

With only a handful of crops proving viable, farmers in the Kattakada area believe that inadequate irrigation infrastructure is the major culprit in the decrease in paddy farming. According to them, other

forms of institutional support to farmers like agricultural extension activities like marketing, access to affordable loans and other fiscal subsidies are also largely inadequate.<sup>17</sup>

According to a senior engineer with Kerala's irrigation department, more than 80% of ponds in the six panchayats in Kattakada assembly constituency have a brick masonry wall around them, indicating the importance accorded to them by earlier administrative regimes. Ponds continue to be a critical source of fresh water in the region.<sup>18</sup> According to the farmers in the region, ponds used to get filled when there was flow in the Neyyar, through the canals. Ponds had sluice gates installed and were used to store water during the rains. The ponds in turn recharged groundwater which ensured the availability of water in open wells during the summer months. Adequate groundwater level consequently ensured flows in streams during summer months that dot the undulating landscape of this region.

Dense overgrowth dotting the canals and streams in the area is a common sight now. The farmers argue that water doesn't flow unless the dam upstream gets filled up during the monsoon months. Along with the non-maintenance of canals, water stored in dams is also serving other purposes like power generation and as an emergency source for Trivandrum's (and other towns) drinking water needs. The existing institutional arrangements for the operation of the dam, according to the farmers, have not been effective.

We have 108 departments. Soil conservation, water conservation etc (sic). They dig a pit, put a tarpaulin, fill it with water and show the world that we have found water at 10 feet. What a joke. MLAs here want to only install IMAX light. Fix roads for smoother rides. Show me one person who has built a check dam. MLAs here spend 50 lakhs on building boat club and swimming pool here. The farmer does not have any support.

All our water gets stuck in dams. Rains carry all the topsoil during monsoons. The cursed farmer in Kattakada does not have any respite. Here there are multiple government programs. All that is required of government departments is to file expenditure details so that the department funding is continued. There is no attention to reality on the ground.<sup>19</sup>

This harangue of a farmer in Pallichal panchayat alludes to the increasing chasm between the activities of government departments (that are mandated to create and maintain assets and extend services) and reality on the ground. The farmers accuse line departments of creating assets that don't improve water availability for irrigation. Projects carried out for improving canals, in many instances, ended

up with departments installing a concrete lining on the canals leading to reduced groundwater recharge. Projects usually get implemented along wards, blocks or other administrative lines. According to the farmers, the elected politicians and bureaucracy fill their and their political bosses' coffers through routine projects.<sup>20</sup>

More than anything, this reflects the relative powerlessness of farmers as a political interest group in the state. With a substantial chunk of Kerala's output coming from the services and hospitality sector, there has been a substantial expansion of related infrastructure. The demand for better roads, connectivity and infrastructure for education and health remain dominant priorities on the ground. The people's plan campaign that sought to bring about a shift in local planning by empowering local governance institutions is said to have resulted in a substantial expansion of road networks across the state. However, the watershed boundaries and overall geography were not considered during the construction of roads, parks and other social infrastructure. Cases of roads dividing agricultural lands (cutting off access to water and obstructing natural streams and waterways (eventually making them disappear) are not uncommon.

Jalasamrudhi initially focussed on small interventions that would enable groundwater recharging. While farmers have also gained from improved groundwater levels in the six panchayats, they were not part of the early deliberations on individual schemes as farmers. Subsequently, a lift irrigation was proposed in AmachalYelah (Kattakada Panchayat) for lifting water from the Neyyar river and delivering it to farmers. The creation of more than 300 farm ponds in the constituency ranks as a major success of the project. Taken up by the irrigation department, the demand for farm ponds gradually increased after 2018. Along with providing water for irrigation, groundwater levels also improved in the vicinity of these farm ponds.

## 5. Politics and Local Planning

Infrastructure and non-infrastructure projects executed with state funds have emerged as a major source of political funding in the state. Running a political party is an expensive proposition. With the traditional political economy of Kerala undergoing a structural transformation in the last three decades, state expenditure becomes a critical conduit for reinforcing the financial and consequently organisational base of political parties. In addition, being a major source of patronage to reward lower-level party workers, government schemes and projects have become a conduit for the personal enrichment of elected representatives and government bureaucrats. This phenomenon is witnessed across India with socio-economic

particulars shaping the exact nature of the phenomenon in individual states. For instance, Tamilnadu has witnessed the transformation of popular to predatory forms of politics where profits from the illegal economy of sand-mining are injected (directly and indirectly) into the political process for funding vote-buying and in the process enrichment and intensifying of the criminal-syndicalisation of politics in the state (Jeyaranjan, 2019). While vote-buying is not a common phenomenon in Kerala, the evolution and fact of the state bureaucracy and elected members as an economic syndicate was recognised by a variety of respondents including engineers, government administrators, journalists, academics and political party workers.<sup>21</sup> The conception and planning of many new projects and schemes serve no concrete purpose on the ground other than the oiling of the state's bureaucratic-political machinery.

The lower-level officials of line departments in the state are more often than not forced to toe the council's line when it comes to the selection of projects. According to a senior engineer from the soil conservation department, it is common for the Elected councils to unanimously pass a resolution demanding the transfer of a line department official if they fail to toe the council's line on specific projects in their constituency.<sup>22</sup> This setup suits both the elected class as well as the bureaucrats. There is hardly any demand from the political class for reform of bureaucratic agencies whose mandates and mode of functioning are at odds with emerging environmental and social demands on the ground. For instance, projects and schemes of government agencies require multiple perspectives and skills to be effective. For instance, irrigation schemes would require expertise spanning agriculture, soil sciences, water, finance and labour. This is true for most of the government interventions in the management and provision of environmental goods. However, government departments continue to operate with their narrow disciplinary mandate.

### **5.1 Transcending the dissonance between politico-administrative and natural boundaries in local planning interventions**

The other side of the coin in the conception and execution of schemes is the highly over socialised terrain of local planning and development. In Jalasamrudhi, watershed boundaries were considered for planning and implementing interventions. For instance, the Anappadu Thodu (Kattakada Panchayat) runs across more than 3 wards. In addition to planning for the entire stream, several departments executed projects in the chosen stream. The clean-up of the *thodu*<sup>23</sup> was also carried out through MGNREGA across the entire length of the stream rather than limiting it to specific wards.

A member of the coordination committee in Jalasamrudhi said that ward-level bifurcation/fragmentation of developmental activity is the major issue in poor project outcomes.<sup>24</sup> In other words, the administrative boundary is usually the unit of intervention conventionally. This would mean that a downstream ward might have executed a conservation project. But it would not give the desired results. The pressure on elected members to show substantial development works to their constituencies is one of the reasons for these unsustainable planning strategies. The over socialisation of natural resource management is not only due to the highly competitive political arena in Kerala. It is also due to ineffective line departments that have become interest groups in their own right.

During interactions with field staff of various government agencies, it was understood that planning interventions along watershed boundaries were not a straightforward task in Jalasamrudhi. Murmurs of discontent frequently arose from people who felt that their ward or locality was not considered for a particular intervention. Ward and Block level meetings were used to clarify why certain areas/structures were chosen for intervention. For instance, a ward member in Kattakada constituency questioned why a rainwater harvesting system was not installed in a school in his ward. It was explained to him that the soil conditions in his ward were not conducive.<sup>25</sup>

A member of the MLA's coordinating committee told us:

When the ward member raises a question, the answer would be that the irrigation department is doing the project. This kind of direct interaction between the local community and line departments served to dampen the political edge.<sup>26</sup>

While some were convinced, discontent nonetheless persisted underneath the surface. With the MLA helming the project and the fact that the project received considerable support after the initial successful interventions, such murmurs did not become protests.

## **5.2 Jalasamrudhi: Working with the Bureaucratic Status Quo**

The projects executed by individual government agencies for Jalasamrudhi followed the 'clever' handling of these agencies by the MLA and the coordination committee. All the enquiries to the departments about unutilized plan funds were "*passive and sympathetic*."<sup>27</sup> The MLA said that things would have come to a standstill if the departments felt that the project was undermining their authority. It became apparent in conversations with the committee members and government bureaucrats that Jalasamrudhi

never threatened the interests of Government agencies. The agencies' reputation was redeemed with these projects as they led to a conspicuous increase in groundwater levels. The coordination committee armed with a watershed plan for the constituency decided the location and scale of intervention. The rest was carried out by individual agencies.

It must be highlighted that government departments and agencies did not work together in the planning and execution of individual schemes. All the individual agencies/departments worked in isolation in the design and execution of schemes. Jalasamrudhi did not seek separate fund allocation from any agency for implementing individual schemes.

Bureaucrats involved with the program felt that the agencies had to extend cooperation as the ruling party MLA had taken a keen interest in it. They were also conscious of the fact that the members of the unofficial coordination committee had some affiliation with KSSP (an organisation that has historically had a close relationship with the CPM). A few district-level officials of government agencies, we realised, also cooperated as they linked the project with the sitting finance minister who was a former member of the organisation.<sup>28</sup> Without the ownership of the MLA and the strong support extended by district collectors and the overall context of CPM in power, the bureaucracy and the lower-level elected representatives might not have responded positively.

### **5.3 Jalasamrudhi Through the Eyes of Elected Representatives**

It has been argued that decentralisation reforms in Kerala did not achieve their potential due to a combination of cronyism, lack of transparency in the decision-making process at the local body level and inadequate participation of marginalized sections of the population. The ultra-competitive political terrain in Kerala continues to result in the party-politicisation of associational life. The architects of Jalasamrudhi were deeply conscious of this schism in public life in the state. For all the good intentions of the MLA and his coordination committee, they recognized that the project would be perceived as a CPM initiative and consequently alienate many in the process.

The architects of Jalasamrudhi recognized that elected members could not be compelled to participate in the project. It was not a panchayat initiative. Its funds were not used for the execution of schemes. The overall context of drought in 2017 and the relatively successful early interventions which showed conspicuous results made the project popular. There was a possibility of a backlash if the



elected representatives fail to turn up in the ward and local meetings were organised to discuss the water situation and the imminent water conservation project.

## 5.4 Forging Fresh Avenues of cooperation between Elected Members and Bureaucrats

Kerala's decentralisation reforms have led to a substantial deepening of democracy. The rather less noticed yet ubiquitous phenomenon is the increasing instrumentalization of politics. Much of elected representatives' time is consumed in helping people navigate the state: facilitating building approvals, helping in accessing welfare, obtaining no-objection certificates for loans and helping with school admissions etc. The financial incentives offered by these routine activities are crucial to the elected members. The state pays a meagre stipend for elected representatives at the panchayat level. This is reflected in the increasing sterility of formal institutional mechanisms for public deliberations and expression of demands.

An elected representative from Vilappil says that a good proportion of elected representatives lack "*kazhchappaadu*" (vision or broad perspective in English).

Meetings are all a formality. There is a kind of small-mindedness amongst us. We also lack a long-term perspective. It is a major issue. Only if we experience the problem, we will think about solving it. There is a big gap between elected politicians and reality.<sup>29</sup>

However, Jalasamrudhi provides a ray of hope for the future. Workshops convened by the KSLUB were attended by almost all elected representatives in the constituency. For elected members, the existence of so many government departments was a revelation. They got familiar with the mandates and the capacities of various government agencies. A former elected member from Kattakada constituency said:

It was only during our experience that we knew that they could do so many things for us. Many of them spent more than 10 hours in the field with us. Many panchayat members got to know about these various govt departments only through the project. We, elected members, felt that we should cooperate and do as much as the govt staff in making this project a success. It was only in Jalasamrudhi that we elected members saw that the bureaucrats could come down to the ground, and work with people to solve their issues. This was not the perception among elected members before.<sup>30</sup>



The divide between government bureaucrats and elected members narrowed significantly during the project. Jalasamrudhi opened new pathways of deliberation and cooperation. By participating widely in local-level meetings, government department personnel became accessible to people directly. With formal institutional mechanisms becoming strongholds of organised interests (party workers, contractors etc), local meetings, campaigns, workshops, street plays and other events became vibrant spaces of democratic deliberation. They also served to awaken the interest and awareness of the local geography of the six panchayats. The many streams, ponds and other local cultural landmarks emerged into the consciousness of the younger generation through cleaning campaigns, river walks and other programs. Civil society members (Kudumbasree, journalists and others) felt that the project sowed the seeds of local people taking ownership of their neighbourhoods.<sup>31</sup>

### **5.5 Jalasamrudhi in Pallichal Panchayat: Reminder of Challenges on the Ground**

While Jalasamrudhi has been fairly successful in designing and executing interventions across the Kattakada LAC, it confronted major difficulties in Pallichal panchayat. The program was unable to overcome the perception of it being a “CPM project”. At a superficial

level, the program could not secure the cooperation of the Pallichal panchayat council. While other panchayats (despite not all of them being under the control of CPM) passed resolutions smoothening the planning and implementation of projects in their jurisdictions, Pallichal panchayat did not show similar enthusiasm. Additionally, the panchayat's president actively frustrated the program's attempts to mobilise the community through campaigns. For instance, the role of the panchayat president was critical in mobilizing MGNREGS resources for the project. In the planning for works under MGNREGS, the role of the panchayat president and members is crucial. LSGD officials along with elected representatives decide on the details of interventions. In Jalasamrudhi, the role of MGNREGS was critical in the rejuvenation of water bodies. Works carried out in campaign mode were supported by MGNREGS funds. In Pallichal, the panchayat was held by the United Democratic Front (UDF). There was reluctance to coordinate with a project initiated by the opposition party. Additionally, internal wrangling within the UDF alliance led to inordinate delays in passing panchayat resolutions that were necessary for using MGNREGS resources in the project. Streams and ponds in Pallichal panchayat have largely remained untouched by the project. While the water situation has improved in the other 5 panchayats, open wells in Pallichal have been found to have dried up next year.<sup>32</sup>

At a deeper level, Jalasamrudhi's failure to effectively design and implement interventions in Pallichal panchayat was a consequence of the ongoing conflict over quarrying operations in Mookunnimala. Quarrying operations in Pallichal panchayat is a case of private capital circumventing regulations, through favours from the state political class, bureaucracy and judiciary (Mohanakumar S, 2022). The spoils of these operations are believed to be contributing to the running of political parties in the state, with local elected members (especially panchayat presidents and council members) acting as critical conduits between quarry operators and political parties (Devika J, 2022). In Pallichal panchayat, the quarry issue wedged a vertical divide between lower caste people who were formerly agricultural labouring families and other residents of the Edacode ward (where Mookunnimala is situated). Cutting across the party lines, the quarry supporters were perceived to be overtly supported by elected members of the panchayat in the movement against the operations of quarry in the Pallichal. The still simmering conflict over quarrying operations in the panchayat and the rather complex intertwined social and economic interests have resulted in a major trust deficit between the fragmented local community and the state. With the local unit of CPM perceived as aligned with the quarrying interests, Jalasamrudhi did not elicit the kind of enthusiastic response that it had in other panchayats.

## Jalagamrudhi in Other Panchayats

In Maranalloor panchayat, there was hesitation from the panchayat Samiti to take up schemes in the panchayat. It had a BJP president in 2017-18 followed by a congress representative. However, CPM ward members took the initiative to implement individual schemes in their wards, coordinating and liaising with government departments and the MLA's office. In other panchayats, the role of the CPM and Communist Party of India (CPI) ward members was crucial. The project was driven by Left Democratic Front (LDF) members and came about after the party machinery reached out to ward members to cooperate with the project.<sup>33</sup>

Opposition and lack of cooperation were not restricted to opposition parties. Factions and individuals within the party were indifferent to the project. A senior journalist recalled lower-level party workers taunting the MLA behind his back, "*here comes vellam..vellam..*" during a public meeting.<sup>34</sup> There were workers and ward members unhappy with wards held by opposition members getting schemes under Jalagamrudhi. While these instances did not thwart the overall execution of the project, they certainly limited the overall impact of the project. Respondents believe that the cynicism of party cadres towards the project was a rather broader social phenomenon.<sup>35</sup> The social and cultural fissures combined with the hyper-politicisation of civic life in Kerala manifest in such crude ways.

However, Jalagamrudhi did bring together elected representatives across the political divides. An elected member belonging to the Bharatiya Janata Party (BJP) acknowledged the positive contribution of the project in his panchayat. He was appreciative of the MLA and felt that Kerala society

stopped recognizing that water needs to be conserved during rains. Last thirty years, we forgot that leading to the destruction of ponds and wells. Also, dreams of piped water did not help. Simple things like trenches and small pits around wells can help. We only recognised this now.<sup>36</sup>

In Vilavoorakkal, Jalagamrudhi has reduced run-off and enhanced water availability in open wells. The BJP member said that the need for water tankers did not arise in the summers of 2019 and 2020. Vilavoorakkal has been having water availability issues for three decades, he said and Jalagamrudhi has shown the way to address the issue.

## 6. Conclusions

Jalagamrudhi is a micro-level experiment in local planning to improve decentralised governance. The program's focus was on bringing

convergence among different line departments in the planning interventions for water conservation in the Kattakada LAC and mobilizing the community around water conservation by planning and implementing individual schemes in campaign mode. It has also infused much-needed vigour in local planning by creating a platform for greater interaction between elected representatives, local people and officials from various government agencies. Individual schemes have improved groundwater levels across the assembly constituency. 314 ponds and more than 43000 wells were cleaned during the project. More than 300 farm ponds have been created. Recharging structures created in government institutions and schools have also helped in improving groundwater levels locally. Groundwater Availability has increased from 1355.17 mcm to 4908.68 mcm between 2017 and 2019 (more details in Table 3). According to the KSLUB, groundwater recharge from monsoons has been four times higher in Nemom Block compared to other blocks in the district.<sup>37</sup>

Table 3 Water Level in Kattakada LAC, Feb 2021

Well	Water Level in Metres (February 2021)				
	2017	2018	2019	2020	2021
Nemom (Block)	8.75	5.60	5.31	5.48	5.00
Malayinkeezh	11.58	11.69	10.22	10.38	11.05
<b>Tube Well</b>					
Malayinkeezh	9.65	7.85	7.48	7.67	7.56
Vilappil	16.71	15.27	15.38	15.31	14.73
Maranalloor	9.43	7.83	7.31	7.99	7.89

Source: Kerala Ground Water Department

Ancillary activities were taken up to protect the ponds, streams and other assets created during the project. Schemes involving agriculture, irrigation, fisheries, and forest departments have created livelihood activities along with creating economic assets for the local community. Institutional mechanisms have been put in place for monitoring water quality in the six panchayats. Water testing labs set up in schools have helped involve school children in the monitoring of their local water sources. The project critically facilitated a dialogue between elected representatives and government department officials. This happened outside the bureaucratic rigmarole of routine planning and execution.

The Jalasamrudhi experiment, however, showed that the set of factors that are said to have impeded the state's decentralisation reforms continue to persist to this day. It shows that the widely documented challenges to decentralization - politicization of associational life,

participatory fatigue, absence of convergence between various government departments in planning and implementing projects and a lack of autonomy for local governments in planning due to excessive bureaucratisation - continue to shape governance at the local level. However, the experiment also shows that some of these challenges can be overcome during instances when the community mobilizes around a pressing issue affecting it as a whole. In Jalasamrudhi, top-down state action (through various government agencies aided by the district administrative apparatus) followed pressure from below to mitigate the issue of water availability during the summer months.

The MLA's central role in the planning and implementation of the schemes under Jalasamrudhi highlights an essential character of Kerala's decentralisation project - that it was initiated from above by the then ruling party (through its civil society affiliate) as a state project. The people's plan campaign was not a response to demand for devolution from below. The MLA's central role in Jalasamrudhi shows that the state in Kerala continues to exercise critical control over how planning and governance pan out at the local level. The State legislator's active intervention in the planning and execution of individual projects was required to ensure the cooperation of various State-level government agencies in the project. In addition to the 'sensitive' handling of government departments, the initial public campaigns - organized by the MLA's team with the help of his party and its civil society affiliate - were instrumental in getting the elected members of the constituency on board.

The essay argued that the considerable influence wielded by political parties and the unelected bureaucracy in local planning and governance stems largely from structural factors, especially the political economy of competitive elections in Kerala. In this context, the syndicate-like relationship between line department (and local administrative) bureaucracy and political representatives is undermining the quality of local governance in the state. Jalasamrudhi also showed that this phenomenon is providing a fair degree of insulation to line departments (and other government agencies) as well as elected representatives from the prevailing social and environmental realities on the ground. A coherent sense of local brought about by mobilization from below is a prerequisite to evolving an effective local governance regime. In the absence of a pressing issue affecting the entire constituency, decentralised planning and governance is overwhelmingly shaped by factors beyond the confines of the local.<sup>38</sup> The political-economic compulsions of political parties stuck in five-year electoral cycles are manifested in the character of the state – especially in the bent and instrumental relationship between government departments/

agencies and elected members - which is increasingly rendering local planning a perfunctory exercise.

Kerala's famed model of development was built on a fiercely combative political society disciplining bureaucratic power for ensuring the extension of welfare provisions as a collective right. However, there are signs of participatory fatigue, creeping perfunctory character to institutional routines, over-socialized local planning and multiple interests precluding consensus on major local governance issues. Line departments, on the other hand, continue to be afflicted with the age-old institutional character that swears by the high-modernist ideology - privileging a particular kind of knowledge -precluding any substantial collaboration between one another. With the limitations of expert knowledge-led technocratic planning becoming apparent in integrating sustainable development objectives in local development, new institutions of cooperative governance need to be evolved between the state and the citizens.

This essay also highlighted the hurdles to transitioning to sustainable development, especially the integration of environmental sustainability objectives in local planning and governance. It observes that the People's Plan Campaign did not explicitly engage with the issue of reform of line departments for producing context-specific knowledge for development. The focus was on participatory local planning to enable people's demands directly shape the process. There was no scrutiny of organizational character, institutional capacity and functionality of line departments for achieving sustainable development. The limitations of initiating local planning based exclusively on the immediate needs of the people became manifest with the people's plan campaign. For instance, extensive road construction taken up after the campaign in the 1990s was indifferent to the immediate environmental externalities, especially the health of streams, ponds, and open wells. The Jalasamrudhi experiment revealed the existing challenges to improving local planning, especially indicating that the reform of line departments is unlikely to be initiated from above considering the symbiotic relationship that has emerged between political parties and the government bureaucracy. Experiments like Jalasamrudhi open up a space for pushing for change in the process of producing knowledge for sustainable development. ■



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6. -do-
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27. -do-
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29. Interview with Mr. R, former member of Vilappil Panchayat. 10 Jan 22.
30. Interview with Mrs. S, former member of Kattakada Panchayat. 20 Feb, 2021
31. Interview with Mr. H, Administrative Staff with Government of Kerala and associated with KSSP for more than three decades, 09 Feb 2021 and Interview with Mr. SD, Former Editor of Deshabimani Magazine and resident of Malayinkeezh panchayat, 18 Jan 2021
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33. Interview with Mrs. S, former member of Kattakada Panchayat. 20 Feb, 2021
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38. Almost two years after the COVID pandemic took the wind out of Jalasamrudhi's sails, things on the ground appear less rosy. We understand that the infrastructure created under the project are deteriorating from inadequate maintenance. A member of the project's coordination committee observed that they were struggling to maintain the liaison between various government agencies (who implemented the schemes) and the elected members on the ground. This indicates that such experiments essentially become non-starters without pressure from below.





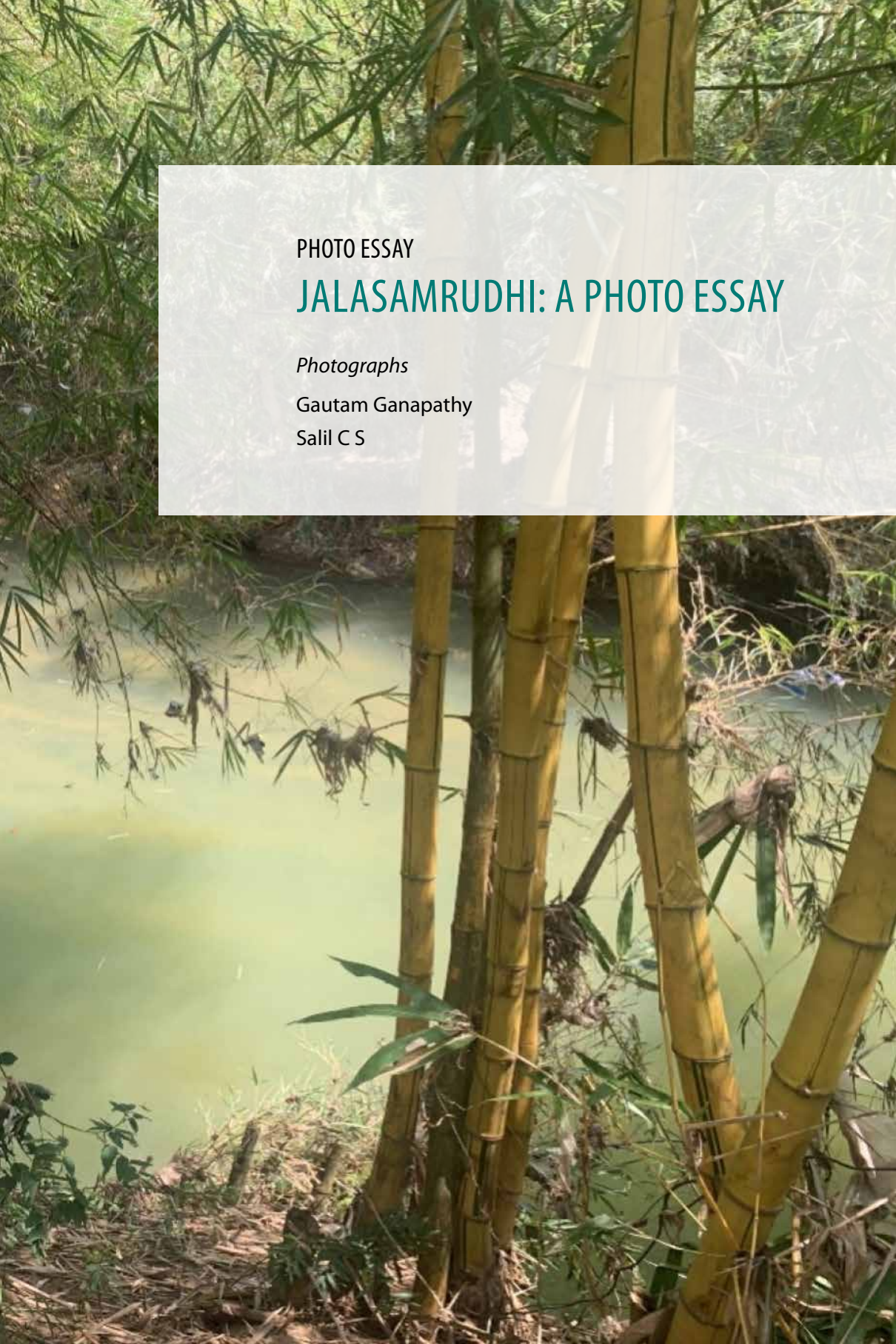


PHOTO ESSAY

# JALASAMRUDHI: A PHOTO ESSAY

*Photographs*

Gautam Ganapathy

Salil C S

## 1. LIFE IRRIGATION SCHEME

Amachal Yelah, Kattakada Panchayat

A lift irrigation project was implemented, as part of Jalasamrudhi, to revive paddy cultivation in the area. The project was implemented in Amachal Nanchalloor Yelah (paddy field) in Kattakada panchayat where paddy cultivation had been discontinued due to water scarcity. Along with the main pumping station (Picture 3), regulators have been installed on the canals from the Payithala pond. Small check dams in the streams will help control the flow of water, besides improving groundwater levels. The project was implemented with the assistance of the Irrigation Department. It is hoped that paddy farming will be revived after bringing water from the Neyyar, which is flowing adjacent to this yelah, to the Payithala pond. The north end of the yelah ends near the Payithala pond and the south end near the Neyyar (Picture 2). Once water is available in the Payithala pond, the plan is to bring water to the fields through the canal (Pictures 1 and 4) as required.



*Picture 1:* Canals from Payithala Pond to AmachalYelah





*Picture 2: Neyyar River flowing near Amachal Yelah*



*Picture 3: Pumping Station*



*Picture 4: Regulator in Lift Irrigation Scheme in Amachal Yelah, Kattakada Panchayat*



## 2. FISHING IN REJUVENATED MATHRAKONAM POND

Kuruthamkode Ward, Kattakada Panchayat

It is estimated that more than 60% of ponds in the Kattakada Legislative Assembly Constituency have brick-masonry walls installed around them, indicating the local community's dependence on them. Over the years, inlets to the ponds have disappeared. New houses and commercial establishments have emerged in the catchment areas. This pond was rejuvenated during Jalasamrudhi, which involved cleaning the pond, clearing shrubs and encroachments in the catchment area upstream and overhauling the regulator. To ensure the conservation of ponds and enhance fish stocks (and create employment opportunities), an inland fisheries project was implemented by the Fisheries Department. Fishes have proliferated and are expected to enhance the income of the local community. Fish farming is also effective in maintaining groundwater levels. Local user groups have been entrusted with the created asset.



*Figure 5: Mathrakonam Pond*



*Figure 6: Side Walls of Mathrakonam pond*



*Figure 7: View of the entire pond from the North*

### 3. RAIN-WATER HARVESTING INFRASTRUCTURE IN SCHOOLS

Maranalloor and Kattakada Panchayats

Groundwater recharge is the process of filling aquifers with water sourced by rainwater harvesting to avoid water scarcity. Artificial groundwater recharge is the practice of using artificial methods of recharging water in an area where there is no natural recharge is happening due to several reasons.

In Jalasamrudhi, government institutions, including government schools, were chosen for installing artificial recharging structures. In addition to the rejuvenation of ponds and streams, harvesting rainwater would reduce dependence on groundwater. During lean times, schools had to get water from trucks. Girl students had to skip classes owing to the unavailability of water in schools during the summer months in 2016. Jalasamrudhi has recharged wells in the school complexes.

Rainwater, which used to be lost as run-off, is now harvested within the school premises. The two schools pictured here have successfully weaned off water tankers. Groundwater officials visit each institution and assess its topography, slope, soil type and geology and a detailed plan document to be implemented in each institution is prepared based on the area of the roof available.



*Figure 8: Rain-water Harvesting Structure in  
Kulathummal High School, Kattakada Panchayat*



*Figure 9: Rain-water harvesting pipes (Kulathummal School, Kattakada)*



*Figure 10: DVMNNM Higher Secondary School, Maranalloor*



## 4. FARM PONDS

(Veliyamkode Ward, Maranallur Panchayat)



*Figure 11:* Farm Pond constructed at SNDP Yogam Land

Farm ponds are an attractive asset for farmers in the area owing to inadequate water for irrigation during the summer months. The construction of farm ponds also enhanced groundwater levels in the vicinity of the structure. Open wells in and around the farm ponds have got recharged after the construction of farm ponds. It is perhaps the most popular as well as successful scheme in Jalasamrudhi. In the six panchayats (in Kattakada Assembly Constituency), more than 325 farm ponds have come up between 2017 and 2021.

## 5. GROUND WATER RECHARGING STRUCTURE ALONG MAIN ROAD

Maranalloor

Water conservation work carried out at Poovanila in the Karingal Ward of Maranalloor Panchayat has come to be called the 'Karingal model'. During monsoons, rainwater flowing down the sides of roads is blocked and harvested to enrich the groundwater table. Conventionally, rainwater harvesting is done by digging rainwater pits on barren land parcels and around houses to conserve water. But the new method is to dig pits on the side of the roads to harvest water.

At Poovanavila in Karingal Ward, pits were dug (of three-metre length) where rainwater stagnated. The sides were reinforced to store water. The pits are honeycomb structures. It can store 6,000 litres of water that usually runs off. The plan became a reality when the PWD also agreed to it. Water storage pits are covered with slabs to avoid accidents.



*Figure 12: Roadside Honeycomb Rainwater Harvesting Structure*

## 6. INSTALLATION OF SCALES IN REFURBISHED PONDS

Alamkode Pond, Kattakada Panchayat

Scales to mark water levels were established in more than 100 ponds in Kattakada constituency. Through this, it is possible now for the local community to know the amount of water available every day. Water consumption planning can be further improved after getting the amount of available water in the water sources. These scales were installed by the Haritha Kerala Mission after the rehabilitation of the ponds.



Figure 13:Alamkode Pond with scale installed

**ഹരിത കേരളം മിഷൻ**  
 സംസ്ഥാന ജലസേചന മന്ദലം - വറ്റാത്ത ജലസേചനം സംസ്കരണ പദ്ധതി  
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 കാറ്റാക്കര ഗ്രാമപഞ്ചായത്ത്

ആലംകോട് കുറ്റം  
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	ഫുട്	ലിറ്റർ
0.1	202.3	202300
0.2	404.6	404600
0.3	606.9	606900
0.4	809.2	809200
0.5	1011.5	1011500
0.6	1213.8	1213800
0.7	1416.1	1416100
0.8	1618.4	1618400
0.9	1820.7	1820700
1	2023	2023000
1.1	2225.3	2225300
1.2	2427.6	2427600
1.3	2629.9	2629900
1.4	2832.2	2832200
1.5	3034.5	3034500
1.6	3236.8	3236800
1.7	3439.1	3439100
1.8	3641.4	3641400
1.9	3843.7	3843700
2	4046	4046000

Figure 14: View of the scale (close up)

## 7. COIR GEOTEXTILES TO PROTECT REFURBISHED PONDS

Chirakuzhi Pond, Kollode Ward, Kattakada Panchayat

The Chirakuzhi pond protection project in Kattakada panchayat was completed with the help of the Coir Research Center (CRC). The first activity was to clean the pool, which was in a poor condition. For this, an organizing committee was formed including the people living near the pond. Cleaning activities were carried out under the National Rural Employment Guarantee Scheme. Subsequently, the coir geotextile was spread by the staff of the Coir Research Centre in both ponds after adjusting the slope of the sides as per the directives of the CRC officials. Following this, workers of the Employment Guarantee Scheme planted grass on top of it. Fishes are now being farmed in the Chirakuzhi pond where scientific soil and water conservation activities have been carried out.



*Figure 15: View of the Chirakuzhi Pond with geotextiles*



## 8. INTERVENTIONS IN ANAPPADUTHODU

(Kattakada Panchayat)



*Figure 16: View of the rejuvenated Kaduvakuzhi-Anapad-Machel Thodu*

The Kaduvakuzhi-Anapad-Machel thodu (stream) in Kattakada constituency used to be a major source of drinking water for residents living in its vicinity. To restore flow in the stream, it was studied with the help of satellite imagery. During field visits, ideas were exchanged with local farmers and natives. Wells around the stream had gone dry.

A watershed protection drive was organized on October 5 2017 from Kaduvakuzhi bordering the constituency in Kattakada panchayat to Kalluvaram in Malayinkeezhu Panchayath under the slogan 'for a water-rich tomorrow'. The participants walked 6 km along the thodu. Elected members, students, political workers, Kudumbasree workers, NCC and NSS volunteers and local people joined the transect walk. The then district collector along with the MLA led the walk. The participants identified the obstructions and cleaned up the thodu. As a follow-up



*Figure 17: Check Dam to improve groundwater recharge*

to the drive, the first step was to clear the 6 km on both sides of the thodu from Kaduvakuzhi to Kalluvarampu and remove the obstructions and debris to enable water to flow. Subsequent field inspections identified suitable sites leading to the construction of 19 biological check dams, 29 sack check dams and six stone check dams. Three of the nine tributaries joining the thodu were cleaned to improve the flow in the thodu. Subsequently, the irrigation department designed and constructed check dams for improving groundwater recharge. With the addition of temporary dams and five dams by the Irrigation Department, the storage capacity of the Kaduvakuzhi-Anapad-Machel thodu has increased. Soil and water conservation activities taken up upstream have also improved flow in the thodu, along with recharging wells along it.

## 9. ARCHITECTS OF JALASAMRUDHI

Many unsung heroes have worked behind the scenes for Jalasamrudhi. Government department officials, elected representatives, Kudumbasree members, and volunteers played a crucial role in mobilizing the community for the project. However, the project came to revolve around two key figures: Kattakada MLA I. B. Satheesh and Kerala State Land Use Board Commissioner Nizamuddin.

Jalasamrudhi, in his own words, is his dream project. I.B.Satheesh won his second election (in 2016) by a slim majority (849 votes) after the formation of the Kattakada Assembly constituency. He said that the people of the constituency demanded a solution to their water woes in summer. The Jalasamrudhi project was the result of discussions initiated by Satheesh after getting elected as the MLA of the constituency. When Satheesh won from Kattakada constituency for the second time (2021), the margin of victory (23,231 votes) increased tremendously. Many point to the Jalasamrudhi project as one of the main reasons for that. Taking complete ownership of the project, Satheesh and his team pursued government officials and departments in conceiving and implementing the project. Transcending conventional party boundaries, he brought together elected members from the opposition parties who were convinced of his intentions. Many constituencies in Kerala (Thaliparamba and Vamanapuram) want to implement Jalasamrudhi in their constituencies.



Figure 18 I.B. Satheesh



*Figure 19: Nizamuddin, Land Use Commissioner, Kerala State Land Use Board*

The Kerala State Land Use Board became the implementing agency of Jalasamrudhi. Initially roped in to provide environmental and natural resource data for Kattakada during the early stages of Jalasamrudhi, the agency's role expanded gradually over time. Nizamuddin worked closely with the MLA in facilitating the conception and execution of schemes. He was involved closely in the preparation of the water resource management plan for Jalasamrudhi. A comprehensive GIS-based web portal (Ariyam Kattakada) containing information about the project was also created under his leadership.

## 10. JALASAMRUDHI PLANNING WORKSHOP FOR ELECTED MEMBERS

Jalasamrudhi planning workshops brought together elected representatives and staff members of several government departments. After getting to know the details of existing schemes and discussing possible new interventions with line department staff, elected members submitted written submissions of their constituency's requirements to the Jalasamrudhi planning team. Pictures 20 and 21 offer a snapshot of those submissions. Individual schemes were designed and implemented after integrating demands (and possible schemes) from individual wards.

In this activity, Jalamithrams played a key role. In all the 122 wards of Kattakada constituency, the main function of Jalamithrams was to assist the people's representatives in coordinating the technical assistance of various departments and institutions for the implementation of the activities mentioned in the Jalasamrudhi Conservation Document. In addition, they played a leading role in the protection of local water resources by implementing water conservation activities through the people of the constituency, activating water clubs set up in 68 schools in the constituency and making maximum use of facilities such as NSS in educational institutions, organize and implement various activities in the areas of organic farming, waste management, sanitation and energy conservation in collaboration with people's representatives.



Picture 23 Workshop with elected members, civil society members, and government department staff in attendance Bhagyamala Auditorium, Thiruvananthapuram



വറ്റാത്ത ഉറവയ്ക്കായി ജലസമൃദ്ധി - കാട്ടാക്കട മണ്ഡലം

**ജലസമൃദ്ധി ശില്പശാല**

2017 ജൂലൈ 8 ശനി

ഗവ. ഗേൾസ് ഹയർ സെക്കണ്ടറി സ്കൂൾ, മലയിൻകീഴ്

1. ജലസമൃദ്ധി പദ്ധതിയുമായി ബന്ധപ്പെട്ട പദ്ധതികളിൽ പങ്കെടുത്തിട്ടുണ്ടോ? ഉണ്ടെങ്കിൽ ഏത്?

ഉണ്ട്. കാട്ടാക്കട ജലസമൃദ്ധിയുടെ വിഭാഗത്തിൽ പങ്കെടുത്തു.

2. ഈ ശില്പശാല ജലസമൃദ്ധി പദ്ധതിയെക്കുറിച്ച് മനസ്സിലാക്കുന്നതിന് എത്രത്തോളം സഹായിച്ചു.

ഈ ശില്പശാലയിൽ നിന്നും ചെന്നിടത് ജലസമൃദ്ധിയുടെ ആവശ്യം കുറയ്ക്കുവാൻ സഹായിച്ചു.

3. താങ്കളുടെ പ്രദേശത്തെ ശുചിത്വ-ആരോഗ്യ-ജല സംബന്ധമായ പ്രശ്നങ്ങൾ?

പരിവഹ വിവിധ രണ്ടാം ഡ്രൈനേജ്.

4. താങ്കളുടെ പ്രദേശം ജലസമൃദ്ധമാക്കുന്നതിനുള്ള നിർദ്ദേശങ്ങൾ (സ്വന്തം പറമ്പ്/ പ്രദേശം/വാർഡ്)

എന്റെ വാർഡിലും എന്റെ വീട്ടിലും പരിവഹ ഡ്രൈനേജ് ഇല്ലാത്തതിനാൽ നിർദ്ദേശങ്ങൾ പാലിക്കണം.

5. ജലമിതം എന്ന നിലയിൽ പദ്ധതിയെ ഏതൊക്കെ രീതിയിൽ സഹായിക്കാൻ നാകുമെന്ന് പ്രതീക്ഷിക്കുന്നു.

എന്റെ കുടുംബത്തിന് പദ്ധതിയിൽ സഹായിക്കണം.

6. മറ്റ് നിർദ്ദേശങ്ങൾ

ജലസമൃദ്ധിക്ക് കുറച്ച് ചെലവുകൾ ഉപയോഗിക്കണമെന്നും അടയ്ക്കണം.

പേര്: ഉമ്മിള്ളൂർ  
ഗ്രാമപഞ്ചായത്ത് വാർഡ്: 218  
ഫോൺ നമ്പർ: 8943254534  
പനംകോട് (1)

Picture 20: A snapshot of issues and demands of their wards recorded by elected members, assisted by Government Department Staff and Jalamithrams

①

Sl. No.	Particulars	Remarks	Remarks	Remarks
1	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	உதவியாக
2	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	உதவியாக
3	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	உதவியாக
4	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	பேரூபா கிராம பஞ்சாயத்து கட்டிடம் கட்டுவதற்கு உதவியாக உதவியாக	உதவியாக

Picture 21: A ward member's written submissions to Jalasamrudhi Planning Committee



Picture 22: Physical Model explaining the science of water recharging





Picture 24 : Picture of the Workshop Dias

Organised jointly with the Kerala Institute of Local Administration (KILA), the workshop witnessed a good turnout despite the pandemic. Dr Thomas Issac, then finance minister, addressed the meeting via video conferencing, urging them to actively take part in the project. He told the gathering that such experiments are required to revitalise local planning and governance. MLA I. B. Satheesh, Director General of KILA Joy Elamon also spoke in the meeting.

# കുട്ടികൾ



# BUREAUCRACY, SUSTAINABLE DEVELOPMENT AND DECENTRALIZATION:

Reflections on Jalasamrudhi, a  
 Community-based Water Conservation  
 Programme in Kerala

This is the fifth monograph in the series resulting from the research projects supported by the Research Unit on Local Self-Government at the Centre for Development Studies on Kerala's emergent ecological challenges and our preparedness to tackle them.

This study, located in Thiruvananthapuram district, reflects on a community-based water conservation program to understand the challenges to improving local environmental planning outcomes. In this work, a journalist and a researcher collaborate to show how local planning priorities and outcomes are shaped by anachronistic line departments and their extant relationship with elected members and the administrative apparatus at the local level.

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Series



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