

THE RIVER MHADEI: THE SCIENCE AND POLITICS OF DIVERSION

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OF DIVERSION

EDITORS

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The River Mhadei
The Science and Politics of Diversion

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*To
the people
of the Mhadei*

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6. The Unquiet Flow of the Mahadayi: A Logbook of Issues as Seen from the Eastern Face

Rishikesh Bahadur Desai

***Abstract:** This chapter examines the political dimension of the Mahadayi basin issue and its implications for arid northern Karnataka. It considers not only what the political class in Goa, Karnataka and the Centre thinks but also what the environmentalists believe, what the farmer-activists want, and what the common man thinks. It examines the purpose and approach of the projects before turning to the disputes and their consequences. In particular, it looks at the politics around the Kalasa-Banduri nala projects, the Karnataka government's expectations, the manoeuvrings of politicians based on party affiliations and electoral considerations, and the reactions of various stakeholders, particularly in Karnataka.*

Introduction

THE dispute surrounding the river Mahadayi, or Mhadei as it is called on the other bank, is among the most discussed, but least understood issues in Karnataka.¹ The Mahadayi basin projects, called the Kalasa-Banduri nala diversion and lift irrigation schemes, plan to lift water from the tributaries of the west-flowing Mhadei river and divert it to the east-flowing Malaprabha river. The water will be stored in two separate reservoirs and channelled to bigger reservoirs like the Naviluteertha dam, where it will be impounded for strategic release. The Karnataka government maintains this is to provide drinking water to cities like Hubli-Dharwad and to the drier villages in northwest Karnataka.

The Karnataka farmers, however, believe it to be an irrigation project. Members of the Kalasa-Banduri irrigation agitation committee argue that the state government took up the project at their insistence on a permanent

¹ I am grateful to the Mahadayi/Mhadei epistemic community that grew around the issue of understanding the river and the implication of the proposed projects. It has given everyone a chance to better understand the issue themselves.

solution to the problem of inadequate rainfall in the arid lands of Belagavi-Gadag and Bagalkot districts. Even today, all the projects are prepared by officers in the irrigation department and not by the other departments like rural or urban development that are usually in charge of drinking water supply. Engineers in the irrigation department drew up the plans in the late 1990s. However, the pace on the project picked up and the public debate got hotter in 2010 when the Mahadayi Water Disputes Tribunal was set up. Over the years, it has become one of the most politically significant issues in Karnataka, especially in northwestern Karnataka or what is called Mumbai-Karnataka. This chapter examines the political dimension of the Mahadayi basin issue. It considers not only what the political class thinks but also what the environmentalists think, what the farmer-activists want, and what the common man thinks. It tries to understand the projects in some detail before turning to the disputes and their consequences. In particular, it looks at the politics around the Kalasa-Banduri nala projects, Karnataka's expectations from its revised project report, and other relevant issues.

Mahadayini: The Bestower of Great Things

The term Mahadayi comes from two Sanskrit words—*Maha* (“great”) and *Dayi*, an alternative form of *Dayini* or “bestower.” We can choose between the great bestower, or the bestower of great things! The locals believe it is *Mahad Ayi*, Konkani for “the great mother.” It is spelt Mahadayi in Karnataka and Mhadei in Goa. It is also a river with a couple of other names—Mandovi and Rio de Goa (“river of Goa” in Portuguese.) The term Mandovi comes from *Manda* and *Ayva* which means “slow moving” or “meandering.” Sage Mandavya was a character in the Mahabharata. His argument that children below 12 should not be punished for their wrongdoings, as they lack sufficient wisdom to have informed consent, is used in some books on Hindu law. Sage Mandavya was falsely accused of being a receiver of valuables stolen from a king and punished with impalement with a spear. He survived the ordeal, however, and was released after the spear was cut out, but the weapon remained in his body for the rest of his life. He was known for his devotion, self-discipline, and the ability to endure torture in the pursuit of spiritual goals. We, as residents of the Mahadayi basin, seem to be hell-bent in exploring the limits of endurance of the river named after the tormented sage as we too inflict a sort of environmental torture on the Mandovi. The Rio de Goa or the river of Goa, is what gives the state its distinct identity. If you strip Goa of the Mahadayi, little else is left.

A Bit of History

The demand for such a diversion project is five decades old. In 1976, S.M. Horakeri, a legislator from undivided Bijapur district (now Vijayapura) made an appeal in the Karnataka assembly seeking diversion of water from the Mahadayi's streams to the Malaprabha. He said it would provide irrigation to fields in sixteen talukas in three (now four) districts. He expected it to turn the barren lands of northern Karnataka, which has the second-largest contiguous arid tract of land in the country after the Thar desert, into a land of evergreen fields. There was little movement on the issue until the 1980s, when the political parties began to use it as an election plank. There was an agreement for diversion between the Goa government and Karnataka Chief Minister (CM) S.R. Bommai in 1988 but it was not implemented due to major administrative changes when Goa shed its Union Territory status and acquired statehood and a new elected government came to power.

Legal challenges to the diversion scheme started in the 1990s. Some petitions were filed in various High Courts and there were at least two sets of petitions: the government and some environmentalist and farmers' groups. The administrative movement began in the 2000s when the Union Government began considering the demands for and against the river valley projects.

Farmers in Navalgund and Naragund began protests against collection of the betterment levy that the Karnataka government had imposed without providing proper irrigation facilities. The Malaprabha river had dried up and they wanted more water. Two farmers and two policemen died in a violent incident and shooting in Naragund on 21 June 1980 (The Hindu 2018). Then CM R. Gundurao appointed a committee headed by then leader of the opposition S.R. Bommai to study the situation and explore solutions. The Bommai committee suggested diverting the Mahadayi river waters to the Malaprabha.

In 1989, as CM, S.R. Bommai visited Goa. He and Goa CM Pratap Singh Rane signed a pact to enable construction of a dam near Kalasa. As per the Memorandum of Understanding (MOU), Karnataka would get 45 tmcft of water and also set up a power plant. Goa would get some of the power produced at that plant. However, the Bommai government fell and the MOU was not implemented. The National Environment Engineering Research Institute (NEERI), a premier environmental institute that evaluates projects and submits impact assessment reports to the Government of India, studied the project and said it could be implemented but the Goa government opposed it nevertheless (Mahadayi Water Disputes Tribunal 2018, vol. III).

H.K. Patil, irrigation minister in S.M. Krishna's government, renamed the

Mahadayi project as the Kalasa-Banduri projects in 1999. Among other things, they planned to divert 9 tmcft of water from the Mahadayi to the Malaprabha for drinking water supply in Hubli-Dharwad and villages en-route. The Central Water Commission cleared the project in 2000. The NDA government at the centre accorded in-principle sanction. However, the sanction was kept in abeyance after opposition from Goa. Karnataka was asked to obtain all permissions: environment, forest, and wildlife.

In 2007, irrigation minister K.S. Eshwarappa said the work in non-forest areas would be started as there was no objection to drinking water projects. Then Deputy CM B.S. Yediyurappa said the government would release Rs. 100 crore for the projects. Mr Eshwarappa performed *bhoomi pooja* for the project in Kankumbi in Belagavi (also known as Belgaum) district in September 2006. In 2008, the Supreme Court asked Karnataka to go ahead with the project after obtaining due clearances.

The Justice Panchal tribunal was constituted in 2010. Some farmers in Karnataka went to court in 2013, saying the Union Government was not supportive of the tribunal and did not even provide it an office or staff. Following agitations by some farmers in Dharwad, Navalgund and Belagavi and the petition in the Supreme Court, the Union Government provided amenities to the tribunal.

In 2018, the tribunal decision came out and was promptly challenged by riparian states. It was reviewed and decided on 20 February 2020. It was gazetted a week later by the central government's Ministry of Water Resources on 27 February 2020. The allotment was conditional on the clearances from the central government but Karnataka could not get all the permissions. The most difficult, officers say, is getting clearances from wildlife protection agencies (Mahadayi Water Disputes Tribunal 2020).

In 2023, CM Basavaraj Bommai invited tenders for the Kalasa-Banduri projects, just hours before the announcement of assembly polls. Official sources say that the tenders have been finalized and granted to private contracting agencies from Ahmedabad and Hyderabad. The tenders have a clause that the contracting agency should coordinate with the state and central governments in getting permits. Officials say such a pre-condition in the tender document is unprecedented in the history of the Karnataka irrigation department.

On 20 March 2025, Basavaraj Bommai, now MP from Haveri-Gadag, raised the issue in the Lok Sabha. He suggested setting up a single national tribunal under the leadership of a sitting Supreme Court judge to resolve inter-state water disputes. On the Mahadayi project, he said the tribunal has given its

verdict, but environmental clearance has not been granted, causing difficulties for Karnataka. He also sought linking of all major rivers in the state—the Godavari, Mahadayi, Krishna and Kaveri—and sought the support of the National Water Development Agency towards such an initiative.

The original demand by Karnataka was 47 tmcft as the total yield was expected to be over 200 tmcft, as per the assessment by the Central Water Commission. The present allotment, as per the Mahadayi Water Disputes Tribunal Report of 14 August 2018 is around 13.5 tmcft, with around 4 tmcft allotted for drinking water and 8 tmcft for hydro-power. Karnataka has argued that it wants 7.5 tmcft for drinking water alone. All the three riparian states have challenged the allotment in the courts.

The Design

The Mahadayi river basin projects aim to divert water from the west-flowing Mahadayi to the east-flowing Malaprabha, with the stated objective of providing drinking water to northwestern Karnataka. While some politicians have spoken of taking the Malaprabha to Gadag, others have spoken of lifting water from Naragund in Gadag district southwards up to Navalgund in Dharwad district. However, the projects submitted now indicate that the water will be supplied another 53 km further south till Kundgol and all the towns and villages enroute. These include the twin cities of Hubli and Dharwad. The population of the twin cities in 2011 was 9.5 lakh and is now estimated to have grown to around 12.5 lakh. (Population Census 2011).

It is worth noting that the water demand of the twin cities, Kundgol, and enroute villages is estimated to be around 7.56 tmcft till 2044 and 8.69 tmcft till 2051 (Karnataka Neeravari Nigam Ltd 2022). This is part of the detailed project report submitted for the Kalasa-Bandui nala projects by the Karnataka government to the Union Ministry of Forest and Environment. Some officers warn us off the record that there is less chance of diverting drinking water for irrigation and that there is a higher chance of diverting irrigation water for drinking as was done in Bengaluru before the last assembly and Lok Sabha polls. Farmer organizations have been alleging that during severe water scarcity and before elections, the state government diverts water intended for irrigation to Bengaluru city. Kuruburu Shantakumar, Karnataka State Farmers Association leader and president of Karnataka Sugarcane Growers Association, has alleged that before the 2023 assembly elections and 2024 Parliament elections, officials had diverted water from old Mysore region to Bengaluru city: “We have been fighting for the fair distribution of Cauvery water with priority to irrigation. But every time, the politicians divert water from rural areas to urban areas for votes. This is not

the first time it is happening. We have seen it during the rule of all major parties: Congress, BJP and JDS.” He said that they had argued that “Cauvery water should be reserved for agriculture and that excessive diversion to urban areas harms farmers. But in vain.” Shantakumar continued, “But the state government has repeatedly denied this. Officials told farmers in Mandya protesting against water release to Bangalore in 2023, that no additional water was supplied to the metro. They said water allocation was as per the Supreme Court judgement and orders of the Cauvery water disputes tribunal.”

The Mahadayi Basin Projects

As of now, the four projects, which have been clubbed into two main projects, plan to harvest a total of around 3.9 tmcft. I understand that it is essentially a drinking water project that uses lift irrigation project techniques. According to Karnataka forest officials, the difference between the Kalasa cluster projects and Banduri project is that the Kalasa has a wildlife stretch but Banduri does not.

The Mahadayi basin projects vow to lift water “only during rainy seasons” and that the “ecological flow of the river has to be maintained” at all times. All the issues—including the needs of downstream residents and aquatic life and saltwater ingression—are to be taken into account and addressed by the time of lifting the water. The plans are to build storage reservoirs near the streams, carry water through underground pipes for 10 km, and release it into the Malaprabha. The Malaprabha river bank has suffered encroachment all along its 200-km length. It was announced that a state level committee would be formed to remove them led by the regional commissioner of Belagavi but that did not take off. Some have sought parallel dams for the Renuka Sagar dam and some enroute check dams and barrages.

Banduri Nala

The latest project submitted by the Karnataka government to the Union Ministry of Environment, Forests and Climate Change is the Banduri (also called Bandora, Bhandura, Bhanduri) nala project. It was submitted in the second week of August 2024. It will require submergence or removal of around 38.02 hectares of land, including around 28.44 hectares of forest land and around 9.5 hectares of private farm land. As opposed to this, the original proposal had sought 501 hectares of land, including 243 hectares of forest land. The reduction in the demand for forest land is around 8.6 times. The difference is that the earlier project had gravity-based water supply but now it plans to lift water with power supply. Also, the dam height will be decreased. The Banduri project plans to divert around 2.18 tmcft of water.

Kalasa and Other Nalas

As per the Detailed Project Report submitted by the Karnataka government to the Union Ministry of Environment and Forests, the Kalasa project seeks diversion of 1.72 tmcft of water (Karnataka Neeravari Nigam Ltd 2022). It will cover the areas in and around Kankumbi like Parvada, Bethne, and Chorla. It includes using water from three streams—Kalasa, Haltara and Surla. The project will submerge around 67 hectares including 26.92 hectares of forest and around 40 hectares of non-forest land (Karnataka Neeravari Nigam Ltd 2022). This is the difference from the old proposal that sought submergence of around 341 hectares with 77 hectares of forest land.

Some leaders like K.S. Eshwarappa, former Karnataka irrigation minister, claim that the water diverted from the Mahadayi to the Malaprabha will ensure that the Renuka Sagar dam at Naviluteertha in Saundatti in Belagavi district will remain full all year around. Built in 1972, the dam is said to have filled to the full reservation level only six times since inception. The latest was in 2024. Earlier, it provided water only to Belagavi and Dharwad districts. Now, the dependants on this water have increased to include inhabitants of the twin cities of Hubli-Dharwad and enroute villages to Kundgol drink from Naviluteertha.

Four years ago, officers submitted a report to the Karnataka government that due to the delay in starting the project, its cost had increased by about 1,675 percent since it was first conceived. It was estimated to cost about Rs. 95 crores in the year 2000, but in 2020, it came to around Rs 1677.3 crores. The re-estimated cost of the projects in 2024, where the demand for forest land has been reduced by 90 percent, is not in the public domain, as yet.

According to the initial detail project reports prepared in August 2000, the cost of Kalasa nala project was around Rs 45 crore and the Banduri nala project cost was around Rs 50 crore. But the revised estimate said the Kalasa nala projects would need Rs 885 crore and those in the Banduri nala would require Rs 790 crores as per the revised DPRs of 2024. Earlier, in 2022, they were estimated at Rs 995.3 crores and 764.7 crores estimated at 2021-22 price levels (Nandakumar 2025).

The Union Government waived the Environment Impact Assessment requirement as Karnataka claimed it was a drinking water project. However, all the work is being done by the officers of the irrigation department and not rural development or urban development. When I asked D.K. Shivakumar, Karnataka irrigation minister, to clarify this issue, he said irrigation department officers were working on the project only to provide drinking

water to northern Karnataka. “Unlike officers in other departments, these engineers were skilled in building dams and canals,” he said.

Union Home Minister Amit Shah said in a poll campaign rally in Belagavi district in 2023 that the Mahadayi issue was resolved and that the farmers would get water soon. Several leaders including former Chief Ministers B.S. Yediyurappa and Basavaraj Bommai have promised to bring Mahadayi water to the fields of northern Karnataka. At least two former irrigation ministers—K.S. Eshwarappa and Ramesh Jarkiholi—have publicly said that it was an irrigation project. These statements were made during their reign.

The canal work on the Kalasa is nearly complete, but the dam work is yet to start, officers say. However, the reservoir and the canal under the Banduri projects are yet to be taken up as most of the project area lies in deep forests. Work cannot be started till the federal agencies like the Central Water Commission, Wildlife Board and Ministry of Environment, Forests and Climate Change clear the proposals.

Recent Developments

On 27 November 2024, Karnataka Deputy CM and irrigation minister D.K. Shivakumar met the Union Minister for Environment and Forests, Bhupendra Yadav. He submitted a letter requesting permission for the Mahadayi basin projects (ANI 2024). Parts of the letter are produced here.

On 09-10-2024, the Standing Committee of the National Wildlife Board in its 80th meeting had directed the state government to adjourn the hearing of Karnataka's application and clarify the legal issues in this regard. The State has submitted the necessary clarifications through letters dated 10-10-2024 and 16-10-2024.

The Kalasa Nala project requires 10.6852 hectares of forest land in the Kali and Sahyadri Tiger Reserves. It covers the area of villages around Kanakumbi in Khanapur taluk of Belgaum district. In this, a jack well, pump house, and electrical substation will be constructed.

Points discussed in the 80th meeting of the Standing Committee: The Chief of the Wildlife Board of Goa had raised objections to the project work by citing Section 29 of the Wildlife Protection Act, 1972. In response, the State of Karnataka has submitted appropriate documents before the Supreme Court.

The National Tiger Conservation Authority (NTCA) had constituted a committee of experts. This team visited the project work

site and submitted its report. In this report, the authority had stated that the legal battle between Goa, Maharashtra and Karnataka regarding the Mahadayi Water Dispute Tribunal verdict is in the Supreme Court.

On all these issues, the Additional Chief Secretary of the Forest and Environment Department of the Government of Karnataka clarified that the Supreme Court has not expressed any objection to the State of Karnataka regarding the implementation of this project. In addition, he said that the work on this project has been decided only after obtaining all the necessary permissions from the Central Government as per the law.

Although this project is not part of the sanctuary, it falls within the tiger corridor area. The water sources to be constructed in this project will provide the necessary water for the wildlife. Therefore, the Karnataka Wildlife Conservation Board informed the Standing Committee that permission should be given to this project.

After discussing all these issues, the Standing Committee had sought clarification on the legal issues. It had also directed the Authority to submit its opinion. The State of Karnataka has followed all the guidelines of the Standing Committee. However, there is a delay in granting permission to this project.

Therefore, according to Karnataka, the Union Forest Minister should intervene in this matter and examine the authority's opinion on Karnataka's written request and give permission to the project as soon as possible. The Regional Empowerment Committee, Integrated Regional Office, Environment and Forest Department should take necessary action to grant the necessary permission for the Kalasa project.

The state of Karnataka has reduced the amount of forest land required for the Kalasa Nala project from 258 hectares to just 26.92 hectares. The forest land required for the Banduri Nala project has been reduced from 243 hectares to just 28.44 hectares. In this way, the state has demonstrated its commitment to environmental protection. The central government should give permission to this project without delay to protect the interests of the state (Government of India, MoEFCC 2024).

In September 2024 Karnataka urged the Centre to provide necessary clear-

ance from the National Board for Wildlife (NBWL) to expedite the execution of the long-pending Kalasa-Banduri Nala Diversion Project. The board rejected Karnataka's proposal to use forest land for the Kalasa project in the Western Ghats, citing legal disputes between Goa, Karnataka, and Maharashtra related to Mahadayi Water Dispute Tribunal's award, which was pending before the Supreme Court.

However, Karnataka had contested the decision of the NBWL, stating that the Supreme Court does not restrain Karnataka from proceeding with the project. Karnataka has said that the 10.68 hectares of forest land needed for the project was not part of the wildlife sanctuary but was part of the tiger corridor. Karnataka had also listed out the benefits of the project, stating that it would provide a water body for the wildlife in the area as per the request made by the Karnataka government at the MoEFCC meeting of 7 February 2024.

The Political Angle

What is the political angle in this? It is what the politicians and officers think, what the environmentalists and farmer activists think, and what the common people think. (One of my earliest lessons in journalism is to be careful while using the term "people." But we continue to use it, anyway!)

I will start my tale with a very famous politician from Belagavi district who became a minister of irrigation. I am speaking here of Ramesh Jarkiholi, BJP leader and MLA from Gokak. He spent a life time in the Congress only to quit and join the BJP in 2019. In an apparent act of revenge, he bargained for the post of irrigation minister. Among the 100-odd ministries, irrigation is seen as the most desirable or sought after.

Jarkiholi took reporters along for a visit to Kankumbi. But when some officers alerted him of an embargo by the courts, he decided to have lunch at the Kankumbi guest house. During the press meet he kept referring to the project as the Mahadayi irrigation project. I reported it in my newspaper, *The Hindu*. I was later told someone presented the *The Hindu* in the courts later on. Another anecdote about the question and answer session was that Mr Jarkiholi maintained that he would get all the clearances from all state and central government agencies but would not disclose how.

Governments in the three riparian states of Karnataka, Goa, and Maharashtra have taken various stances when different parties have been in power and during crucial times like elections. In 2023, Union Home Minister Amit Shah, who is in charge of internal affairs like law and order and relationships between states, claimed that the BJP-led NDA government at the centre had resolved the Mahadayi river dispute. At a poll campaign rally in a village

called Mugatkhan Hubballi in Belagavi district, he said that the river water tribunal had issued orders fixing shares of water and that the riparian states could utilize them after obtaining requisite permits from federal agencies. Karnataka assembly elections were underway and this statement was seen as Mr Shah's attempt to win over voters in northern Karnataka. At that time, BJP was ruling both Karnataka and Goa. BJP leaders tried to create an image that the central government was the fraternal force that would intervene between two states fighting over their shares of river water.

Shah also alleged that Congress leader Sonia Gandhi had spoken against the interests of Karnataka in the Goan elections of 2007. "The Congress has included in its Goan manifesto that it would ensure that Karnataka does not get Mahadayi water. But due to the efforts of BJP CMs in Karnataka and Goa, the long-pending issue has been resolved. Now, the farmers of northern Karnataka can get Mahadayi water," the BJP leader said.

However, in the past, when different parties ruled the two states and at the centre, the claims have been different. Union ministers Pralhad Joshi and Shobha Karandlaje have blamed the Congress for the delay in implementing the project. In turn, Congress leaders like Siddharamaiah and D.K. Shivakumar have blamed the BJP for stalling the project by not according due permits in time. None of them have used any real data to back their claims.

Whenever the BJP has ruled the two states and at the centre, its leaders have claimed victories whenever the tribunal or other agencies have approved plans of sharing the river water. At other times, they have blamed "routine government delays", or pleaded "inability to influence autonomous agencies" or assured the people "very soon, all the clearances will be granted by all agencies and work will start immediately then." Political responses have been eerily similar when the Congress has ruled the two states and at the centre, in the past.

Maharashtra politicians have been the least active in the dispute. The two instances where they were seen in action were during the construction of the Viridi dam and the declaration by the Maharashtra CM that the state government stood with Goa on the Mahadayi issue. Maharashtra began construction on the Viridi dam in 2008 to provide water to villages and industries in Dodamarg and surrounding areas in Sindhudurg district. Work on the dam was stopped following a tribunal order in 2015. This order followed an objection by the Goa government based on a complaint by Mhadei Bachao Abhiyan activists such as Rajendra Kerkar. The second time was when Maharashtra CM Eknath Shinde announced in Goa in 2023 that Maharashtra would support Goa's fight in the Mahadayi issue. Speaking after the meet-

ing of the Inter-State Control Board of Tiları irrigation project, Mr. Shinde said that his government and Goa (which were both BJP-aligned) would fight the Mahadayı issue together against Karnataka (which was Congress-ruled). Maharashtra Deputy CM Devendra Fadnavis and Goa CM Pramod Sawant were present in the meeting.

Dr. Sawant who had come to campaign for his party nominees in Karnataka, told reporters in Belagavi in April 2024 that Goa was keen to establish its right over the river and that the government would take the fight to the Supreme Court. His statement “Mahadayı may be a poll issue for Karnataka, but it is the lifeline for Goa” was widely covered in local media (Rodrigues 2024). He said that “The river has been the lifeline of Goa and only source for survival of everything in our state, and our fight is in progress in the Supreme Court to protect this vital source of water for Goa... We are also trying to protect Goa’s interests with the Union government and Progressive River Authority for Welfare and Harmony (PRAWAH), an authority formed by the Centre for implementation of the Mahadayı Water Dispute Tribunal. We will not fall short of anything to establish our right over Mahadayı as we are serious about environment conservation” (The Hindu 2024).

A few years ago, N.H. Konaraddi, Karnataka MLA, held a protest in the Malaprabha dam site along with some farmers. He made a speech saying the Mahadayı projects will completely change the Malaprabha river into a “water body that overflows year round” and could “turn the entire barren lands of northern Karnataka green.” He has led several protests. He claims that a people’s movement has been built in the fourteen talukas of northern Karnataka (The Hindu 2016).

In 2018, Mr Konaraddi led a team of around 300 farmers who spent the night at Kankumbi, where the river Mahadayı originates (Pinto 2018). He has made similar speeches in his home constituency of Navalgund. Some political analysts credit his victory in the assembly polls to his focus on the Mahadayı projects. Union minister Pralhad Joshi, MP from Dharwad, has always supported the project. He has moreover blamed non-BJP governments for the delay in the projects taking off. He has claimed that all the approvals for the projects were given when the BJP was in power at the centre ever since the Atal Behari Vajpayee government. Mr. Hanumant Nirani, Member of the Karnataka Legislative Council and brother of Murugesh Nirani, former minister who runs over 20 factories, has written letters to the president and PM, and has been writing articles to newspapers with technical details, about why all the water sources of northern Karnataka should be linked. He says it will lead to larger sugarcane cultivation and overall prosperity.

Manohar Parrikar wrote to B.S. Yediyurappa, then opposition leader in Karnataka in 2017, saying Goa could share water for drinking water needs in Karnataka. He defended it saying it was legally perfect and that he trusted Mr. Yediyurappa more than those ruling the state at that time (Kamat 2017). On July 3, 2019, Murugesh Nirani led a delegation to the union water resources minister Gajendra Shekhawat to press for river linking to supply water to northern Karnataka (News18 Kannada 2019).

Some leaders think the diversion is akin to the grand plans of pan-India river linking advocated by former President A.P.J. Abdul Kalam. H.K. Patil, former irrigation minister in Karnataka, has been a votary of this. In an interview to The Hindu Centre for Politics and Public Policy, Mr Patil said in 2016 that he had begun the process when he was the Water Resources minister. “Linking all the rivers in the country is theoretically a good idea. Ambitious projects like linking Ganga-Cauvery may neither be economically viable nor is it easy to evaluate their long term ecological impact and repercussions. However we must make a beginning with smaller projects that are basically intra-State in nature” (Rajendran 2016).

“Rivers like Mahadayi and Malaprabha, Kali and Malaprabha and other inter-basin transfer proposals can be cleared by the Union Government in order to end the scarcity of water. Inter-basin transfers should be allowed. In Karnataka alone, a total of 2,000 tmc ft. of west-flowing rivers and 200 tmc ft. of Mahadayi basin drain into the sea. During 1999–2004 when I had an opportunity of serving the state as Minister for Water Resources, we in Karnataka, had thought of diversion of west-flowing rivers towards east. Things had started taking shape but political situations ended the efforts following declaration of election. But the scientific studies conducted are available and Nethravathi diversion may be a reality if efforts are made,” he said. The Karnataka government is working on the Netravati and Sharavati diversion projects already.

Some leaders like Chief Minister Siddaramaiah, former CM B.S. Yediyurappa, and former irrigation ministers K.S. Eshwarappa and Ramesh Jarkiholi have favoured talks with the Goa government to convince them not to object to Karnataka’s proposals. However, successive Goan leaders have turned them down. Ramesh Jarkiholi even claimed that he had held a round of talks with his Goan counterparts. However, Karnataka officers deny any such official meeting happened. (IANS 2018; The Goan Network 2017).

What the Officers Say

I spoke to some officers, activists, and scholars during the course of my work regarding the Mahadayi. Most spoke on the condition of anonymity. I found that the general feeling was that none were fully backing the project but had accepted the fact that they would have to do it anyway as political forces would ensure that all the approvals would be given someday.

Their arguments go something like this: “Environment damage is a real thing but the anthropogenic perspective is it will happen, but damage will be minimised with the revised project design and other measures.” They point to measures like lifting during the monsoon, maintenance of ecological flow, and taking into consideration factors like downstream residents, aquatic life, and saltwater ingression. An officer friend made an interesting remark. “Our rivers are either dammed and undammed. Mahadayi, that was undammed, is damned now, as it will soon be dammed.”

Officers say that in the Kalasa project, the 5.15 km-long canal has almost been completed after a long delay owing to challenging conditions involving loose soil and work taken up for only four months in a year. Around Rs. 245 crore has been spent on the canals. However, no work on the reservoir has been done, as it falls in protected forest areas. Some point to the claim of it being a drinking water project and highlight the possibility of it being misused as an irrigation project but are confident that there is no way of cheating as the riparian states, the centre, courts, Tribunal, and environmentalists will all be watching. One officer argued that the Mahadayi with a length of 100 km, is smaller than some lakes like the Vembanad. Another officer said that the river is fed by around 30 streams and tributaries, but Karnataka’s projects aim to harvest only four streams.

The Department of Forests and Environment Conservation operates on a few principles, one officer said: “The first is the principle of avoidance, next is suitability, and the minimalization of impact. In case of Devimane Ghat, a new road and widening was not allowed, but shoulder clearance was allowed for the existing road length.” he said. Forest officers indicate that once the wildlife approvals are obtained, it is no longer difficult for the project to start, as leaders on both sides are in favour of the projects.

What the Activists Say

There are a few types of activists—those who say the projects should not be implemented as they will damage the ecology; those who say it can be done with minimal damage; and those who blame activist groups in Goa for being hard on the governments in Karnataka but soft on Goa.

Groups like Paryavarni in Karnataka have consistently opposed the project. Activists like General Srikrishna Sardeshpande, Nitin Dhondh, Nyla Coelho, Dilip Kamat, Amrit Charantimath, Lingaraj Jagajampi, and others have been opposing it for decades. They have faced some resistance from local farmers' groups and politicians. They have done some footwork like charting the route of the river, conducting a census of trees and wildlife species, documenting the lives of families dependant on the river, organizing workshops and seminars on the project, and submitting memoranda to governments. They warn against west-to-east diversion, reduced water in the river, drying up of the Mhadei and Bhimgad Wildlife Sanctuary, reduction in rainfall in northern Karnataka due to thinning of forest in Khanapur, damage to the riverfront due to reduced ingression, and damage to oxygen-producing algae, fisheries, and structural damage to the laterite mountains due to construction of dams, etc. Mr. Dhondh has claimed that Mahadayi diversion will turn all of northern Karnataka into a desert (Express News Service 2025).

Activists like General Sardeshpande, Dileep Kamat, Shivaji Kaganikar and Ram Apte from Karnataka consistently opposed any attempts at diverting the Mahadayi. In the year 2000, a delegation from Paryavarni led by Dileep Kamat held a demonstration before Union Minister Suresh Prabhu and submitted a memorandum against the deforestation of the Mahadayi basin. They argued that this would damage the country's ecology irreparably and negatively affect all riparian states. They said that the Karnataka government was being secretive about the area of forest needed for its projects, the number of trees that could be felled, the number of reservoirs and other structures to be built in jungle areas, and the length of canals being built.

In 2001, a delegation led by General Sardeshpande met the then irrigation minister and urged him to abandon the projects completely. They said that the forests of Khanapur, the birthplace of the Mahadayi and Malaprabha rivers, were part of the Western Ghats biodiversity hotspot and that they could never be regrown as they currently are. "No amount of compensatory reforestation could compensate for the destruction," they said. This group of activists was instrumental in convincing noted conservationist Rajendra Singh, "waterman of India", to withdraw his support for the Mahadayi basin projects. Initially, some farmer leaders had convinced him to visit the district and express support for their agitation.

In 2024, activist Nyla Coelho, who runs the Save the Western Ghats campaign and a movement to save the Mahadayi and Malaprabha, held a week-long awareness workshop about the gradual degradation of the environment and the measures that could be taken to prevent it. It was held in Kankumbi

village in Khanapur taluka, the village where the Mahadayi arises from the depths of the earth. Resource persons like advocate Norma Alvares, sustainability campaigner Sanjiv Kulkarni, and Prakash Bhat were invited to speak. Conservation and wildlife enthusiast Nitin Dhond has been observing the issue for decades. He has travelled across the length of the Malaprabha in northern Karnataka. He says the shift from sustenance agriculture to commercial crops, especially sugarcane, has generated a vested interest among politicians and large farmers. He argues that the farmers have been fooled into believing that the project would turn arid northern Karnataka into a lush green forest. "This is based on a series of lies like 'Goa is wasting precious drinking water by letting it flow into the sea' or 'because the river takes birth in Karnataka, it belongs to Karnataka and not Goa or Maharashtra,'" he said. "But then, these are meaningless arguments and a lot of work has to be done to create awareness about the science behind such issues and expose those myths."

It is Dhond's opinion that "political leaders also deliberately hide the negative effects of the diversion projects. The Mahadayi basin projects could be the surest way to reduce rainfall over northern Karnataka significantly, as it would lead to indiscriminate deforestation. The extent of forest destruction will not just be limited to the project site. It will include the roads leading to the site, the setting up of workers' tents, staff quarters, and irrigation department buildings and other structures [that] take additional lands."

According to Mr. Dhond, the two dams—Naviluteertha dam in Saundatti and the Channamma storage reservoir in Navalgund—have small capacities small as they were built to support sustenance crops, not commercial water-guzzling crops. Their storage quantum has also reduced as they are storing silt due to erosion. Politicians have made the people aspire for more and more water to grow sugarcane. He says the political push comes from the myth of the river water being wastefully drained into the sea, ignoring the fact that rivers have to meet the sea as they drain organic resources and lead to algae growth that support carbon sinks and oxygen production.

The Sugar Factor

Most farmers, especially those in irrigated areas, say they have no alternative to sugarcane, arguing that it is only crop with assured returns, that it is low maintenance and has a factory-managed harvest, and that it ensures one-time payment, has competitive pricing and assured annual increase in prices. The solution to this dependence on sugarcane lies in Agriculture Produce Marketing Communities (APMC) regulation, market intervention, boost to food processing industries, and a legally assured,

universal, extended and remunerative Minimum Sale Price (MSP), experts say. The B.D. Biradar report submitted to the Karnataka government in 2010 recommended inclusion in the public distribution system of local food grains that people consumed as staples, including jowar in northern Karnataka, ragi in the south, and parboiled rice in the coastal districts. Public procurement of these grains would naturally increase their demand and price, and lead to enlarged areas under cultivation. The report pointed out that the area under jowar cultivation has reduced by over 20 percent with the advent of commercial crops like sugarcane, soya and horticulture.

An interesting fact is that a beverage factory run by a MNC factory in northern Karnataka is said to be drawing immense amounts of ground water. Captain Dhond points out that this and other factories have not only reduced the aquifer but also polluted the Malaprabha. "Most importantly, the projects will cause the highest damage to northern Karnataka by reducing rainfall, more than it could do to Goa. If the water does not flow through the Bhimgad sanctuary and surrounding forest areas, forests will get thinner, thereby reducing moisture and cloud formation, reduced rainfall, and lesser inflow into the river, thereby defeating the whole purpose of building the projects. Awareness needs to be created among the general public and farmers that could stop further strengthening the demand, if not to reduce the interest generated about the project among the people," he said.

However, there are some environmentalists who are working with the government. They seem to have accepted that the project will be inevitable and that it is better to minimize damage than oppose the project. Some of them are behind the revised project reports that have reduced the demand for forest lands by 90 percent. There are others who say the Goa government and some Goan groups are being hypocritical. An activist said that some of the groups that oppose the Mahadayi basin projects by citing potential damage to the Bhimgad Wildlife Sanctuary were not pushing the Goan government to upgrade the Mhadei Wildlife Sanctuary into a tiger reserve. However, activists like Rajendra Kerkar have strongly demanded the setting up of a tiger reserve. A reserve increases the level of protection to wildlife as the law has special provisions, and the degree of protection and funding would increase. "If Bhimgad has villages inside, so does the Mhadei sanctuary in Valpoi. Leaders use this excuse and say people do not want it as civil infrastructure would be hard to build. The officers and environmentalists do not oppose them," one of the activists in Karnataka said. Another activist said Goa and Karnataka could make peace by agreeing to a joint project that provided drinking water to northern Karnataka while supporting the wildlife

and trees in the Mhadei sanctuary. He gave the example of the Tillari dam that was built by Goa and Maharashtra and used by both two states now.

What the Agitators Think

I had an extended conversation with Vijay Kulkarni, the Kalasa-Banduri Agitation Committee founder-president. I found out he knew little about the technical details of the projects. I also found that it was impossible for him to shed his prejudice or change his mind based on facts or evidence. Later, I found out that most farmers' leaders who are agitating for the project hold similar beliefs. Kulkarni also thinks that Kalasa-Banduri and Mahadayi are different issues altogether (DHNS 2018).

One quote to take home from the conversation with Mr Kulkarni:

Question: Why are you not objecting to deforestation, doubling of railway lines and six laning of highways in Khanapur that is leading to loss of tree cover and destruction of wildlife habitats? Do you not understand that Kankumbi is where the rivers Mahadayi and Malaprabha originate?

Answer: We are not worried about the Khanapur forest. You give us water in the Malaprabha and we will grow a bigger forest in Gadag!

What the Common People Think

The common people have no idea whatsoever of the project. They only think it will bring an irrigation revolution in northern Karnataka as the Krishna Raja Sagar dam in Mysore and Upper Krishna project in Almatti did. They neither seem to think about the environmental issues nor the similarity of this dispute with the other river water disputes that Karnataka has over the Krishna or the Kaveri.

Based on reading government reports, court judgments and interviews with respondents across society from politicians to environmentalists to local officials, I feel the need to pose the following questions.

1. What is the place of "public opinion" in a democracy? Some say it is neither public, nor opinion. Is it manufactured consent? Is there a single viewpoint or are there multiple viewpoints? If it is the latter, how do we align them to arrive at a unified policy position? Or are policies made by experts who frame the policy after discussing with politicians and thinly accepting the multiple views aired in the public domain?

2. What is the role of the media in this process? Does the media drive policy?
3. What are the communication channels between the public and the state? Does it exist only before elections or has it acquired permanency because we are a settled democracy?
4. What are the longstanding solutions to our problems—approaching the courts, or changing governments, or slow social changes based on increased awareness?

All these can be discussed with reference to the Mahadayi basin projects. The answers, however, do not seem to be either simple or linear.

Latest Developments

The Karnataka government has decided to go ahead with the Bandura nala projects. The special land acquisition officer, Malaprabha Project III, Bagalkot, has issued a notification for land acquisition on 25 February 2025. The public notice is issued as per section 11/1 of Karnataka Land Acquisition Act, 2013. It seems land acquisition in Karambal village in Khanapur taluka is under way for the rising main canal and storage works for the “Bandura Nala diversion lift irrigation scheme.” Objections, including identification of lands, and denotification requests can be submitted in three months.

The affected farmers are not happy. The few I spoke to, said they would not like to part with their land. Rajaram Hanumant Ghadi of Karambal village said that they would be thrown out in the streets as they would lose their only source of livelihood. “My extended family’s fields are all here in this village. Where will we go? This is not like other project. Dams and canals will be built here and we will be displaced. We are farmers and don’t know any other skill. We asked officers to give us land instead of the land taken from us, but they are saying there is no guarantee of that. They said compensation amount will be released in phases. We are worried that it may be delayed and we may never resettle properly,” Mr. Ghadi said.

Farmers’ leader Jyotiba Bendigeri of Bhooranaki village says the government’s move is shortsighted. Why is the government bent on building a project that will not help the communities in any way? “It is not just the few farmers facing acquisition that are opposed to the Mahadayi basin projects. The whole of Khanapur taluka is against the projects. They will take away our lands, destroy forests, and build dams and canals. This will destroy the natural climate of the region. Have you heard the proverb *Nekarana Hendati Bettale* (“the weaver’s wife has no clothes to wear”)? That is our situation

now. The government wants to destroy our forests and rivers, as it wants to supply water to faraway places like Hubballi-Dharwad and Gadag. It is not acceptable," Mr Bendigeri said.

"We are apprehensive of the project too as it will lead to environment degradation," said Rajaram Patil, farmers' leader from Khanapur. "Khanapur is probably the greenest taluka in northern Karnataka. It is also among the taluks with the highest rainfall in the region. The rivers in Khanapur are flowing only because of the thick forests here. If you cut down forests for a dam or canal, then it will be turned into another dry taluka of northern Karnataka. We do not want that to happen."

Environmentalist Joseph Hoover opposed the move to go ahead with the land acquisition before the Mahadayi basin projects had got all the necessary approvals from the Union MoEFCC. "What if the centre rejects the proposals tomorrow? Will the state government return the acquired land to the farmers?," asked Mr Hoover, who has approached the Karnataka High Court to protect the forests of Khanapur in the proposed highway expansion projects.

However, farmers who are likely to benefit from the project are happy. Uday Desai is a farmer in Beedi village, which lies in the drier plains of Khanapur taluka. He said the diversion projects were necessary to keep the Malaprabha river flowing year round. "When we were children, the Malaprabha was full even during summers. But nowadays, it tends to dry up in January-February. We need to lift water from Kalasa-Banduri and other streams into the Malaprabha to keep it flowing. It will not only benefit the drier parts of Belagavi district, Dharwad and Gadag," he said. Choonappa Pujari, Karnataka Rajya Raitha Sangha leader said the majority of farmers in Belagavi district and northern Karnataka were happy with the decision of the state government to go ahead with the project.

Vijay Kulkarni, president of the Kalasa-Banduri Nala Agitation Committee said he also welcomed the move: "The project should have taken off in the 1990s. Opposition from riparian states like Goa and Maharashtra, and some environmental groups has led to the delay. The diversion of water from the Mahadayi to Malaprabha through the Kalasa and Banduri Nala projects will lead to the greening of arid northern Karnataka."

Irrigation department officials maintain that they are going ahead with the land acquisition as they want to be ready to launch the projects if the Union Government clears the proposals. An irrigation engineer said that since land acquisition takes a long time, sometimes years, they were instructed by their seniors to be prepared if the approvals were received in the near future.

With such a multiplicity of views among various stakeholders, it is clear that the issue of river water diversion in northern Karnataka is still a deeply contentious one, and very far from being resolved.

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tructure projects like Bidar's multi-arch dams. His reporting on the kidnapping of actor Rajkumar gained wide attention. As India coordinator for BBC Radio, he worked on projects about the tobacco industry, Kaveri dispute, and the IT revolution. Fluent in English, Kannada, and Hindi, he holds degrees in English Literature, Political Science, and Law. He also edits and translates, organizing initiatives like a Wikipedia editathon in Bidar.

Vaishali Kashyap is a doctoral research scholar at the Department of Humanities and Social Sciences, BITS Pilani K.K. Birla Goa Campus. Her ongoing research explores factors behind livelihood change in a traditional fishing community in Assam. She holds a post-graduate degree in Water Policy and Governance from TISS, Mumbai. In the past, she has been a part of organizations like Tata Trusts and INREM Foundation, engaging with the development space with a particular focus on public health, nutrition, and water quality.

Vasudha Sawaiker trained in law at V.M. Salgaoncar College of Law, Goa University and has a post-graduate degree in social work from the Tata Institute of Social Sciences (TISS), Mumbai. At TISS, she was awarded the prize and shield for being the best student in Dalit and Tribal Social Work. As a lawyer, she represented clients in cases on social justice and inclusion in public employment. Her legal research encompasses diverse areas such as organ donation, forest rights, and construction workers. She was awarded the UGC-JRF Fellowship in Social Work in 2016 and is presently a research scholar at the School of Sanskrit, Philosophy and Indic Studies, Goa University.

A. G. Chachadi, former Professor, Goa University, Goa completed his M.Tech. and PhD from IIT Roorkee. Before joining Goa University as teaching faculty, he served as a scientist at the National Institute of Hydrology, Government of India for seven years. His research interests and works are related to the fields of hydrogeology and water resources management, environmental science and exploration geophysics. He has published several research publications in national and international journals and has worked as a consulting hydrogeologist for several mining companies.

Nirmal U. Kulkarni is a herpetologist and nature photographer with over two decades of experience in conservation science and field herpetology in tropical forests of Western Ghats and North East India. He has served as an Expert Member of the Goa State Biodiversity Board and Goa State Wildlife Advisory Board for two terms, besides being part of various state and national committees on wildlife and research. Nirmal is currently Chairman

of the Mhadei Research Centre, Goa, India and is leading research projects on the Leith's soft shell turtle in Karnataka, a snake bite awareness project in Goa, and a monitor lizard project investigating illegal trade in India. As an ecologist, Nirmal is involved in long term monitoring of the Chorla Ghats forests and the adjoining Mhadei bio-region. His research interests include field herpetology in tropical forests, tackling the organized illegal wildlife trade and conservation education.

Vidyadhar Atkore is a freshwater ecologist by training, interested in quantifying the anthropogenic and environmental factors on freshwater biodiversity across different scales. Currently he is a faculty member at the Salim Ali Centre for Ornithology and Natural History (SACON), South India Centre, Wildlife Institute of India, Coimbatore. He teaches wetland ecology and management, ichthyology, landscape ecology, GIS, human ecology and ecohydrology.

Nandini Velho is a wildlife biologist working on the human-dimensions of forest management. She has completed her PhD from James Cook University and was an Earth Institute Fellow at Columbia University. She has worked as a Policy Fellow with the Minister of Environment and Forests, and with multiple forest departments and communities across India. She is interested in the intersection of art, science and action.

Helga do Rosario Gomes is a Research Scientist at Lamont-Doherty Earth Observatory, Columbia Climate School. She graduated with a PhD in Biological Oceanography from University of Bombay and has held research positions in Japan and Maine. Dr. Gomes is interested in large-scale climatic questions such as the impacts of the new and unusual planktonic blooms in the Arabian Sea, the effect of Arctic warming and ice melt on the American lobster, the impact of urbanization on wetland systems, and ocean acidification and deoxygenation of waters from harmful algal blooms. With her colleagues she has been developing ocean monitoring and decision support systems tailored to meet needs for sustainable management of coastal resources in tropical countries experiencing climate change. She mentors postdoctoral, graduate, and undergraduate students, but her passion lies in providing guidance and support to high school students, some of whom have won national and international awards. She is a trustee and Science Advisor for Goa Chitra, an anthropological museum in Benaulim, Goa that preserves and showcases the culture and lifestyle of the people of the west coast of India.

Dhirendra M. Deshpande has nearly four decades of experience in Indian higher education, starting as a Lecturer in a degree college in Goa, working in various capacities in reputed institutions such as Symbiosis, Pune, KLE Society, Bengaluru, as Faculty, Principal, Director and finally retiring as the Vice Chancellor of ISBM University in Chhattisgarh. As a columnist for a leading daily newspaper in Goa, he has rich experience in writing on a range of economic and policy issues such as budgets, monetary policy, reforms and liberalization. As a faculty in Symbiosis, he was associated with guiding and evaluating various finance-related projects that included building economic models for producing hydroelectricity, long-range demand and sales forecasting.

Leon Morenas is the Principal of the Goa College of Architecture. He was Associate Professor of Architecture at the School of Planning and Architecture, Delhi. He was also a Fellow at the Indian Institute of Advanced Study, Shimla where he worked on a project entitled “Mohallas and Smart Cities: Post-Colonial Development in Delhi.” He was a World Social Sciences Fellow in Sustainable Urbanization (2014) and Programme Coordinator of the Masters in Social Design at Ambedkar University, Delhi (2013). He is an architect with a Master’s in Urban Design from the School of Planning and Architecture, Delhi and a PhD in Architectural Sciences—with a specialization in Informatics—from Rensselaer Polytechnic Institute, Troy, New York. Professor Morenas’s research uses the disciplinary lens of Science and Technology Studies (STS) to understand the relationship of technology with contemporary design, architecture and urban planning. His most recent writings have focused on urban governance through technology with a focus on smart cities and their command centres. He is also working on a set of essays that attempt to answer the question: “Is there an Indian way of thinking about technology?” using the foils of history, metaphysics and literature.

Manisha Rodrigues is an architect based in Goa. She holds a Bachelor’s degree from the Goa College of Architecture and a Master’s in Architecture with a specialization in architectural conservation from CEPT University, Ahmedabad. With over a decade of experience in practice and more than three years as an assistant professor at her alma mater, the Goa College of Architecture, her work often explores the intersections of water, heritage, and the built environment. She was part of projects like the Serampore Initiative led by the National Museum of Denmark, which documented Indo-Danish heritage along the Hooghly River. Her academic and professional work reflects a deep connection to water and cultural landscapes—from the Sabarmati and Hooghly to the Sal and Mandovi rivers in Goa. As a fellow of the Goa Wa-

ter Stories fellowship by the Living Waters Museum, she explored “What is a river?” through the lens of the built environment of the Mhadei–Mandovi–Mahadayi River. She currently leads her practice in Margao and continues to engage with architectural education as visiting faculty at the Goa College of Architecture.

Aurobindo Gomes Pereira is an Advocate, with an L.L.M. in Constitutional and Administrative Law, and a resident of the city of Panjim, Goa. He can be contacted at thegoanphilosophicalociety@gmail.com.

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Sujata Noronha is an educator specializing in early literacy and enjoys working with children and books. She is deeply interested in the power of the printed word and the pathways to access and growth emerging from it. In Goa, she works out of her organization called Bookworm, that provides resources and facilitates libraries and reading within the community of Panjim and in schools around the state. She consults with the Tata Trusts within the education portfolio.

Maya de Souza has an inter-disciplinary background with over twenty years’ experience in public policy and the law. She graduated from Oxford University in Philosophy, Politics and Economics before studying and practising law. After an L.L.M. (London), graduating with distinction, she joined the Department for the Environment, Food and Rural Affairs in the UK Government Legal Services and later moved to policymaking. She headed various teams on better institutional structures for flood risk and integrated water management where she led a project on holistic approaches to water management in the climate risk context. She has also headed the Business Environment Council Hong Kong’s Policy and Research Team, leading projects on climate resilience; and served on the BITC–UK Circular Economy team as Co-Director, Environment. Maya has been an elected Green Party councillor in London, playing an active role in town and country planning and scrutiny of the environment among other policy areas. Currently, Maya lives and works in Goa, and is a co-director of Act for Goa, co-founder of Materia Verde (a new biomaterials industry accelerator powered by Quicksand). She was previously with Bangalore-based think tank, CSTEP. She also works with various consultancies on future-proofing and strategic insight.