

voice of goa

COMMERCIAL CAPITAL STILL PRONE TO FLOODS: CITIZENS

Voice concern over Margao civic body's monsoon preparedness; call for better planning and transparency; claim that several drains clogged with mud and desilting work have been left unattended

MMC NOT SERIOUS: MADGAVKARS

Team Herald

MARGAO: The gap between Margao Municipal Council's (MMC) claim to have completed nearly 90 percent of rain-related works across the town and ground reality leaving several areas still vulnerable to flooding has reignited calls for better planning, transparency, and execution of flood-prevention measures to safeguard town residents during monsoon.

Voicing concern over the council's preparedness, the residents and local representatives have complained that several areas in the town are still prone to flooding with key areas left incomplete.

They claimed that areas such as Old Station Road, Khareband, Old Market, Bor-

MARGAO: With the mon-

soon expected to arrive

in the State soon, the res-

idents of Navelim have

raised concerns over the

unsafe road conditions re-

sulting from the ongoing

underground cabling work.

of Navelim villagers met

with Assistant Engineer

Sharmad Naik to present

a memorandum detailing

As part of the Rs 89 crore

underground cabling pro-

ject the villagers claimed

that numerous roads have

been excavated and pose

these critical issues.

On Monday, a delegation

Team Herald

 The town residents criticise Margao civic body for lacking seriousness
 Claim lakhs of rupees are spent on monsoon works every year, yet the same areas continue to flood
 Allege that the works are poorly planned and executed just for the sake

da, Colmorod, and even the Margao municipal building witnessed severe water-logging during heavy rains. Despite repeated promises

Dug up roads as a result of underground

cabling work pose danger: Navelkars

They complained of lack

of essential safety measures

at these work sites, includ-

ing adequate warning signs,

During the meeting,

the assistant engineer as-

sured the delegation that

a joint inspection with the

panchayat would be car-

ried out on Wednesday to

evaluate the situation on

the ground and implement

spokesperson for AAP Na-

velim, raised serious con-

cerns about the consequenc-

es of the incomplete work.

He noted that residents are

Siddesh Bhagat, chief

necessary actions.

barricades and reflectors.

significant safety risks.

one of timely action, they claimed that many drains are still clogged with mud, with desilting work left incomplete. ad, Criticising the civic body or- for its lack of seriousness,

and Bodgeshwar Temple of showing something on in Borda – both known paper and there's hardly for frequent flooding any evidence of proper are still pending cleandesilting up. We are hoping these Hope crucial areas near areas will be cleared **Apollo Pharmacy and** before the rains intensify. **Bodgeshwar Temple in** If not, the lives of residents will be at risk Borda - both known for - Camilo Barreto, frequent flooding -will be cleared before monsoon

former MMC chief and activist Savio Coutinho, said
"Lakhs of rupees are spent on monsoon works every year, yet the same areas continue to flood. The works are poorly planned and executed
just for the sake of showing something on paper. There's hardly any evidence of props, er desilting."

already experiencing fre-

quent power cuts and low

voltage after 6 pm, result-

ing in damage to household

appliances. Furthermore,

many streetlights have been

making night-time travel

AAP has demanded that

the State government in-

stall warning signs at all

excavation sites, temporary

repair of roads along with

safety barriers or reflectors,

resolve the issue of pow-

er fluctuations, repair all

non-functional streetlights

across the constituency and

deploy emergency response

teams during monsoon.

rendered

hazardous.

non-functional,

Margao Councillor Councillor Camilo Barreto acknowledged that while 80 percent of work in his ward has been completed, crucial areas such as near Apollo Pharmacy and Bodgeshwar Temple in Borda — both known for frequent flooding — are still pending cleanup.

STREE1

WHERE GOANS ARE HEARD

Workers and

passersby had a

miraculous escape

when the girder of the

elevated corridor fell

to the ground when

it was being hoisted

up, at Guirim. Herald

Media asked people

for their reactions to

a major mishap like

the elevated corridor

girder falling at Guirim

in terms of the safety

precautions taken by

the contractor?

OICES

Crucial areas near Apollo Pharmacy "We are hoping these areas will be cleared before the rains intensify. If not, the lives of residents will be at risk," he warned.

MMC chairperson Damodar Shirodkar maintained that monsoon works have been completed in 23 of the 25 municipal wards. Works in the remaining two — Wards 21 and 22 expected to be completed in the coming days. He informed that approximately 135 tonnes of silt

have been removed from drains and nullahs as part of the pre-monsoon efforts. "We are taking all necessary measures to prevent

flooding. However, in some cases, flooding becomes unavoidable due to exceptionally heavy rainfall," Shirodkar admitted.





(Top) Parishioners carry the statue of Our Lady of Miracles during a procession on the occasion of the feast, locally known as Milagres Saibinnichem Fest or Purumentachem Fest celebrated with devotion at Sanguem. (Left) The Miracles Community Sanguem UK also celebrated the feast of Our Lady of Miracles in the UK. The feast Mass was celebrated by Fr Savio Fernandes, a native of Sanguem, alongside Fr Renato Andrade. The event brought together Goans living in the UK to honour Milagres Saibinn and cherish their roots, faith, and community spirit

WHAT IS YOUR REACTION TO A MAJOR MISHAP LIKE THE ELEVATED CORRIDOR GIRDER FALLING AT GUIRIM?

The question is not about the incident occurring, was there any planning? Had they taken any safety measures? Did they take precaution to avoid the damages that could happen in case of an eventuality or an accident? Did they plan anything in case of an emergency? Did they have a proper engineered plan? For example, at the place where the girder fell, how close was the traffic? Did they have any backup plan?

- Anthony D'Silva, social activist

We must understand that the company which is undertaking this work is also under tremendous pressure to do it with great speed. But they cannot be absolved of the responsibility of taking care. Fortunately, by the grace of God there were no casualties in this mishap. I hope the company takes precaution and does not allow such incidents to repeat, that could lead to casualties

- Trajano D'Mello, political commentator

This girder falling at Guirim is a total lapse of safety. It appears there is no safety plan for the public and the workers. Was there a periodic test of the equipment that was used for the lifting of the girder. Was there certification of this equipment? There is a need for an inquiry on this aspect. This responsibility lies square at all the safety teams of the company

- Mariano Ferrao, social activist

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MAKING SENSE OF THE 'CONTENTIOUS' MHADEI REPORT

Report concludes with the hope that quantification of the water budget and the potential solutions



GAURESH SATTARKAR

O HERALDO

that it gives will help parties arrive at an amicable solution to dispute

ALEXANDRE MONIZ BARBOSA

The purported report of the National Institute of Oceanography (NIO) on the Mhadei issue requires to be studied a little more deeply before it is dismissed completely. For starters, one calls it purported because the report is not by the NIO, but one of the three authors, D Shankar, is attached to the organisation. The other two authors, K Anilkumar is with the Government Naveen College in Chhattisgarh, while K Suprit was with Meteorological Centre at Port Blair.

Seeking to answer the question: 'What is the discharge at any given location along the Mahadayi river or its tributaries on any given day?' The report says that for 'the Kalasa nala, there is significant impact of the permitted diversion in the northern part of the Mhadei Wildlife Sanctuary, but the impact on the Mahadayi discharge or the Mandovi estuary is less than the natural variability. The Bhandura diversion has a minor impact on the discharge at the Goa-Karnataka border.'

The report actually concludes with the hope that the quantification of the water budget and the potential solutions that it gives will help the parties arrive at an amicable solution to dispute, and it is perhaps in this perspective that the report should be read.

Summary Highlights

Summarising the 63-page report titled 'The water budget of the Mahadayi river and its implications for the inter-State dispute', the authors agree with the tribunal's decision that the re-exists sufficient data to determine the yield of the basin and the award in general, but their simulations lead to different conclusions regarding the decisions on some issues.

For instance, it states that while the tribunal upheld Goa's contention that the discharge data at Ganjem and Kulem were unreliable, it did not provide evidence for the reliability of the

much older discharge data used by it. 'In the absence of evidence, the tribunal's estimates, arrived at using the Inglis formula are no more reliable than the estimates presented by the three parties, all of which were discarded by the tribunal, for the same reason: the quality of the discharge data leading to the rainfall-runoff model is questionable,' states the report.

The contentious part is possibly here, for the report states, 'Specifically, the impact of diversion from the Kalasa nala is significant in the Mhadei Wildlife Sanctuary, but the impact of diversion from the Bhandura nala is negligible for the Mahadayi's run-

In summary, it should be possible to arrive at a mutually beneficial solution to this dispute by shifting the storages from Goa, where it is difficult to construct them, to the leeward side of the ridge in Karnataka. The gain for Karnataka would be in the permitted diversion and the gain for Goa would be the augmented in-basin storage, from which water could be released during the lean season

- NIO's purported report on Mhadei issue

off in Goa. Goa's claimed impacts of the diversion on ecology, which were upheld by the tribunal, are overstated because the significant impact of the permitted diversions is limited largely to the northern part of the Mhadei Wildlife Sanctuary, but does extend farther downstream to the rest of the sanctuary in low-rainfall years.'

It admits that the tribunal turned down Karnataka's plea to permit diversion of water from the river feeding the Dudhsagar Falls and that per-

mitting this diversion upstream of the waterfall, would have reduced its flow to a trickle and also affected the Bhagwan Mahavir Wildlife Sanctuary and Mollem National Park, while the diversion to the Supa reservoir would have impacted the Opa Water Works.

It, however, states, 'Though the tribunal upheld Goa's contention that the projects would jeopardise navigation in the Mandovi estuary, available information is sufficient to show that these projects have no impact on navigation in the Mandovi estuary or the Cumbarjua Canal: indeed, navigation in the Mandovi, which is made possible by the tides, is possible even during the lean season, when the natural flow of the Mahadayi is negligible.'

On the other hand, the report argues in favour of Goa's contention that a significant part of the Mahadayi basin is subject to saline intrusion owing to the tides and that this estuary-affected area should be excluded from the estimate of water availability and does state that it is difficult to store water in this coastal plain owing to its flat terrain and high population density.

Providing Solutions

It is pertinent to read the solutions that the paper offers. On the Kalasa project it prescribes a floor on the downstream runoff and allowing Karnataka to divert more water from the neighbourhood of the Bhandura nala. This it says, 'would reduce the effect on the Mhadei Wildlife Sanctuary and ensure downstream runoff even in the driest years...A practical solution is to restrict the diversion to the proposed 30 Mcum from the Kalasa nala and avoid diverting water from the Surla.'

It further says that the 'Haltara diversion has a marginal impact on Goa because it constitutes a small fraction of the flow in the Valvanti. Even with this reduction in the diversion from the Kalasa and the Surla, however, there is still a decrease of 30 percent in the water available at the northern



end of the Mhadei Wildlife Sanctuary. Hence, it would also help to store a part of the high discharge during rainfall bursts in artificial water holes in the sanctuary, as done in the sanctuaries of Goa and also in some other sanctuaries to tide over shortages due to natural seasonal or inter annual variability. This additional storage will help retain water in the sanctuary, but have a marginal impact on the discharge of the Mahadayi'.

It further states, 'Since the contribution of the Bhandura nala to the discharge at the state boundary is small, it is possible to permit diversion of the entire runoff of the Bhandura nala to compensate for the lower diversion from the Kalasa nala. The problem with this solution is that the tribunal's award of 61.8 Mcum for diversion from the Bhandura exceeds 55.4 Mcum, the 75 percent dependable flow in the stream at the dam site; however, the Bhandura's discharge increases to 75 Mcum at its confluence with the Mahadayi. At the confluence, the Mahadayi's simulated 75% dependable discharge is 104 Mcum, implying a total of 179 Mcum at 75% dependability... It should be possible to compensate for the suggested decrease in diversion from the Kalasa nala by permitting a higher diversion from the Bhandu-

ra and the Mahadayi at their confluence. While doing so would increase the storage area, implying additional submergence of forest land, this increase in storage would also imply a lower storage at Kotni dam, apart from lowering the effect of the Kalasa diversion on the Mhadei Wildlife Sanctuary.'

Discussing storages from the view point of Goa that 'opposed storages in general and carry-over storages in particular' it states that 'without constructing storages, Goa also faces scarcity of water towards the end of the lean season. Goa cannot use the water in the flatter coast region, restricting the projects there to minor schemes. The density of population in this region is also higher than elsewhere in the Mahadayi basin. Building storages in the foothills and ridge region is not possible owing to the need to submerge large forested areas in the ecologically sensitive Sahyadris. Hence, while Goa needs storages, a fact acknowledged in a meeting of stakeholders in 2015 it is not in a position to construct them in its territory.'

The report suggests that Goa and Karnataka agree to a water-sharing formula for the storage with the likely trade-off envisaging Goa agreeing to a certain amount of diversion in return for guaranteed supply during the lean

season. It states, 'The annual surplus in the Mahadayi basin, when evaluated along with the scarcity towards the end of the lean season, suggests that a viable solution can be found if both Goa and Karnataka work out a cost-sharing and water-sharing formula with storages constructed on the leeward side of the meteorological ridge in the Mahadayi basin.'

It adds, 'In summary, it should be possible to arrive at a mutually beneficial solution to this dispute by shifting the storages from Goa, where it is difficult to construct them, to the leeward side of the ridge in Karnataka. The gain for Karnataka would be in the permitted diversion and the gain for Goa would be the augmented in-basin storage, from which water could be released during the lean season.'

This comes with a rider, whereby 'given the difficulty of storing water in this small basin with significant topographic gradients and the fragile ecology of the Sahyadris, both Goa and Karnataka will also have to rethink their cropping patterns. Goa may have to reduce the cultivation of rice during the Rabi season and Karnataka the cultivation of sugarcane.'

A discussion on the report, culling out portions that are favourable to Goa, could work to bolster the State's arguments on the Mhadei issue.