

Environmental Dynamics and Fishing Livelihoods

Stories of Resilience from Penumakalanka, Kolleru Lake, Andhra Pradesh

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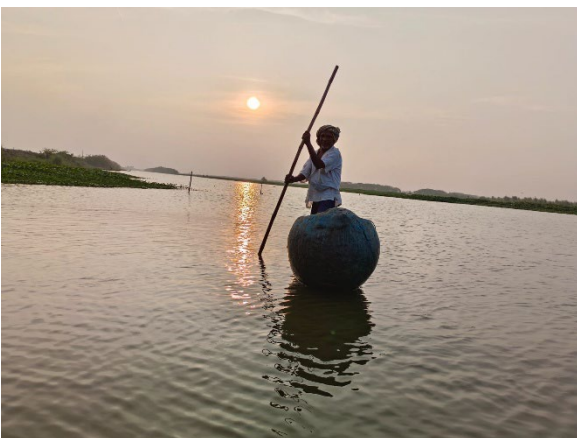
Bala Raju Nikku

This visual story presents an ethno-graphic understanding of Penumakalanka, a fishing village of Kolleru Lake in Andhra Pradesh, India. Based on the Stories of Resilience that we have been collecting and writing in this series, we underscore the urgent need for inclusive policy-making and sustainable lake management that considers the socio-ecological realities of indigenous fishing communities in Andhra Pradesh, India, and globally.

Based on oral storytelling and our field observations, we document the lived experiences of artisanal fisher families and communities engaged in traditional fishing amidst changing environmental, economic, and social conditions reflecting local and global politics and processes.

The stories when shared and engaged becomes powerful. We believe these stories help the reader to engage and gain deeper understanding as they reveal how the fisher communities navigate their day-to-day life events, try to protect their tenure and fishery rights, pay for ecological degradation, and have less access to public health, education, and governance issues.

Lake Kolleru and Artisanal Fishers:

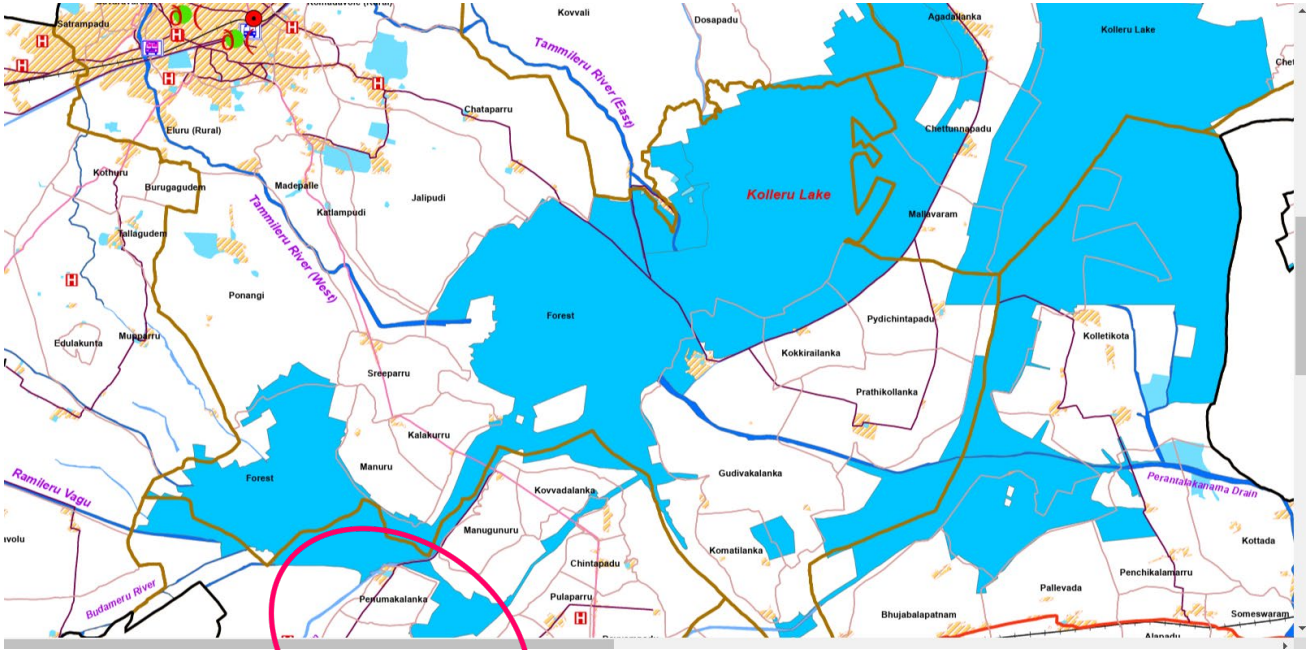


Fishing communities around Kolleru Lake (known as an Asia's biggest and significant wetland in Andhra Pradesh) traditionally rely on inland fishing and ancillary activities for their subsistence and sustenance. However, environmental degradation, legal interventions, and socio-political shifts over the past few decades have drastically altered their way of life.

Photo: An senior fisherman from Penumakalanka fishing in Kolleru Lake

Penumakalanka:

This village is located at a distance of 18 kilometers from Eluru and 25 kilometers from Gudivada. It has a population of 1,868, according to 2011 census data.



Source: Screenshot taken from Google map on 23rd April 2025



Photo: A section of Penumakalanka, one of the villages in Kolleru Lake

Story of Rangamma:

We present a story of resilience of Rangamma (name changed) now a 60-year-old woman and her family from Penumakalanka village, capturing lived experiences to understand broader patterns of disruption, adaptation, and resilience of small-scale artisanal fisher livelihoods.

Rangamma resettled in Penumakalanka village following her marriage about 45 years ago. She has engaged in the traditional craft of making fishing traps for catching fish by her parents and after marriage her husband.

Rangamma shared that she legally acquired a plot of land and built a house about ten years ago. When Kolleru Lake partially dries in the summer, she supplements her income by selling milk. Rangamma emphasized that due to the lack of rules, regulations by the government over Kolleru Lake, the villagers (including non -fishers) utilized portions of the lake near their settlement for fish rearing. The proceeds from fish sales were distributed among the villagers based on agreed shares.

Rangamma recalls that the local government (perhaps from a fisheries department) had issued a fishing license to her family, authorizing them to catch and sell fish to the Fisheries Department. She also recalls the enforcement of Kolleru *godavalu* (local fights known as 'Operation Kolleru,' 2006 onwards) to regulate and restore the Lake's ecosystem, the fishponds owned by the villagers were destroyed. This operation (initiated by the Legal petitions by nature conservation advocates and a government led), while aiming to protect the Lake's biodiversity, significantly impacted the villagers' livelihoods.

Rangamma stops for a while and said, since then our lives changes. Our men from the village now forced to depart around 3 a.m. to fish and return by 10 a.m. *We are forced to sell our whatever small catch in limited quantities to external buyers and avoiding sales in nearby towns due to prohibitive transportation costs.* She remarked that fellow villagers avoid buying fish from each other because of payment issues. Her husband, now aged 70, typically catches only about one to two kilos of fish per day, which they sell for approximately ₹600, though some days he returns empty-handed.

Photo: Rangamma standing in front of her house along with her grandchildren.



Agricultural opportunities for wage labour are virtually non-existent in the area surrounding the village says Rangamma. With no arable land, agriculture is not a viable occupation perhaps. Her husband is not able to enter the lake in the early hours of the day due to age-related limitations. She lives in a shared household with her husband and her son's family. Her son with three children, who studied until graduation but did not find a job, purchased a four-wheeler to transport fish to towns for better market access.

Regarding education, she noted that boys in the village typically study up to the 10th or 12th standard. Only a few manage to complete graduation, and even then, they often resort to fishing as employment options aligned with their education are unavailable. Girls tend to marry after schooling. The village has a government school that functions up to the 8th standard. For further education, students travel to Chintapadu, a nearby village, for schooling up to the 10th grade. Due to logistical challenges, some parents have enrolled their children in government-run hostels in Eluru.



Photo: Upper Primary School, located in Penumakalanka

Regarding healthcare, the woman explained that villagers depend on the government and private hospitals in Eluru or Kaikaluru for treatment. Private hospitals are preferred for serious ailments despite the financial burden, which often necessitates borrowing. For childbirth, however, government hospitals are generally utilized. She reminisced that earlier generations remained healthier when consuming organically grown rice. Presently, villagers' health has deteriorated, a trend she attributes to consuming rice grown with chemical fertilizers.

The woman also discussed environmental issues. Upon her arrival in the village, she recalled that the community members drank water directly from the lake. Today, lake water is no longer potable due to pollution caused primarily by effluents from fishponds. The community now relies on purified groundwater provided by the state government.

Concerning government welfare, her husband mentioned possessing a ration card, part of India's public distribution system. This system entitles him to subsidized rice, though he often does not receive sugar or Toor dal. The quantity of rice supplied is inadequate, necessitating the purchase of an additional 25 kg from the open market at a cost of ₹1,200, which they blend with ration rice to sustain themselves for a month.



Photo: Rangamma and her husband (third from left) is seen with field researchers in front of their house.

On dietary habits, her husband said they consume fish about 20 days a month and vegetables on the remaining days. Reflecting on societal changes, the woman lamented that everything now comes at a price in the Information Age. She noted with dismay that she had to forgo purchasing half a kilo of brinjal due to its high cost.

He further recalled that former Chief Minister Y.S. Rajasekhara Reddy had once provided financial aid for making traditional fishing traps, a scheme discontinued by subsequent governments. He linked the Supreme Court's verdict on illegal fishponds to a petition filed during the TDP government's rule. However, the judgment was delivered under YSR's leadership. They used to earn up to ₹1 lakh annually before demolishing the ponds.

Floods have also severely impacted the village. The man recalled a recent flood during which the village was cut off for three months. Essentials were procured using boats. He remarked that such submergence had occurred previously. Still, their homes were not drowned as they were built on elevated ground.

Addressing employment, the man revealed that all but four families (belonging to the Yadava community) in the village are part of the fishing community, and not a single youth has secured a government job. The YSRCP government had introduced driving training programs to facilitate government employment, including for his graduate son, but these promises remained unfulfilled. Daily wage jobs under MGNREGS are currently the primary alternative employment. He believes their livelihood could significantly improve if the State government provided cattle and bamboo sticks for fishing trap construction.



(Photo: A migratory bird in Kolleru lake).

Photo: (Above) A group of fishing traps used for catching fishes.

When we asked about the Rangamma's family said that the village road was submerged during floods. After the waters receded, villagers raised ₹10 lakhs (one million Rupees) and laid a gravel road as a temporary solution. He claimed that the government denied a tar road because the village was within the +5-contour zone. The road connecting the village to Eluru (18 km away) could also be removed if the Supreme Court's directives are enforced. Should this occur, villagers

must rely on Gudivada, 25 km away, for essential services. This concern has already been taken to Kaikaluru MLA Kamineni Srinivas following a unanimous Grama Sabha decision.

As for media consumption and leisure, the man watches news channels like TV9 and NTV only at night when his family is asleep, as his wife and daughter-in-law dominate the TV for serials during the day. Villagers rarely watch cinemas and theatres in Eluru, preferring to watch films on television. However, youths occasionally watch movies in theatres during significant festivals such as Dasara and Sankranti.

Dispute resolution in the village is handled internally by elders, including the village panchayat president, vice president, and former presidents. He proudly stated that not a single murder has occurred in the village over the last 60 years and that the president's decision in disputes is final and binding. Regarding local governance, the village president is elected every five years, and around ten individuals have served in this role so far. He admitted that votes are often secured through monetary inducements of ₹500 per voter. The president and his aides regularly meet with officials and political representatives to obtain development funds. The president also arranged food supplies during the recent isolation due to flooding.

On housing, the man stated that a quarter of the villagers have managed to construct permanent buildings through savings, while the rest still live in basic homes. Regarding marriage customs, he explained that inter-community marriages are not accepted in the village. Couples who marry outside the community are not allowed to stay unless they have children, after which their families might take them. Concerning healthcare services, the man mentioned that ASHA workers regularly visit to educate residents about disease prevention. A government mobile health van also visits monthly, offering free medical checkups and medicines. For serious illnesses, referrals are made to the Government General Hospital. Wealthier residents opt for private hospitals. Due to a severe mosquito problem, some villagers sleep under mosquito nets for protection.

Religious life in the village revolves around five Hindu temples and five churches. There are no Muslim families or other religious groups. For meat and liquor, villagers travel to Kaikaluru the next town, as the village lacks shops for these items. He noted that alcohol consumption occasionally leads to domestic disputes and conflicts that destroy the social fabric and trust.



Photo: A temple and a church (right) in the village

What do we hope and work towards?

The *story of fishing community of Penumakalanka* illustrates how marginalized populations grappling with the ongoing policy shifts, environmental transformations, and socioeconomic exclusions. Their resilience, embedded in cooperative culture, traditional knowledge, and adaptive strategies, needs recognition in developmental planning. Inclusive governance, environmental justice, and sustainable resource management are crucial for their survival and dignity.

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Authors bio and Acknowledgements:

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