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AARON MULVANY
Ambler, USA

FROM RESILIENCE TO RELIANCE. STATE DISRUPTION OF TRADITIONAL FLOOD MITIGATION STRATEGIES

This paper interrogates how Paṭṭaṇavar fisher communities in the Union Territory of Pondicherry, India, imagine their relationship to their environment and examines what the author calls their "flood imaginary", or traditional mechanisms for understanding, mitigating and coping with seasonal flood. The Paṭṭaṇavar flood imaginary will be put into conversation with GoPY (Government of Pondicherry) efforts to rehabilitate tsunami-affected communities and the development ideologies upon which such projects are based. The author critiques the stark shift from traditional coping mechanisms to government-mandated "improvement" strategies and argues instead for a policy that integrates external expertise with local/traditional knowledge.

Key words: India, flood, tsunami, disaster rehabilitation

Introduction

It should come as no surprise that traditional fisher communities in India have long sought to balance the risks associated with living near the sea with the benefits. Among the obvious benefits are vocation and sustenance. The risks are rather more uncertain, but they include the heavy, seasonal monsoon rains and the more unpredictable dangers of a capricious mother nature. Coastal Paṭṭaṇavar fisher communities have a rich body of folklore about water and the sea that references the risks and rewards of living so close to the ocean. I have termed this body of local knowledge a "flood imaginary".

Delineating the flood imaginary – drawing as it does from Cornelius Castoriadis' explication of *l'imaginaire social* (Castoriadis 1998 [1975]) – is key to understanding the "fisher mentality", an emic category used by administrators, aid workers, and the Paṭṭaṇavars themselves within the discourses of post-disaster rehabilitation and development planning discussed in detail below. For Castoriadis, the social imaginary is "the basis for articulating what does matter

and what does not" (Castoriadis 1998:145). In the preface of his seminal *The Imaginary Institution of Society* he clarifies the imaginary as "not an image *of* [but] the unceasing and essentially *undetermined* (social-historical and psychical) creation of figures/forms/images, on the basis of which alone there can ever be a question of something" (Castoriadis 1998:3). It is the very foundation of a society's reality and through its expression "a society is endowed with an identity and distinguished both from other societies and from an undifferentiated chaos" (Thompson 1984:24). Similarly, the Paṭṭaṇavar flood imaginary delineates the ways in which fishers in this community understand, conceptualize, and interact with the sea. Through it coastal fishers rationalize their world, the expression of which manifests as the "fisher mentality" identified and described by actors in the region.

In recent years the primacy of this imaginary has been challenged by an influx of external expertise in the form of development initiatives and technological inputs. The result has been a waning of local practical knowledge, what James Scott has called *mētis* (Scott 1998:311), in preference for the perceived reliability of modern knowledge-making systems. In the Union Territory of Pondicherry (UTP) – a small administrative unit of the Government of India made up of four former French colonies in India – the confluence of tight state control and a small population presents an interesting case study in the collision of state expertise with community mētis.

Understanding the Sea

There is an uneasy balance recognized by fishers in UTP between the life-giving and life-threatening aspects of the sea. This balance is hinted at in a classical verse of the *Tirukkural* (1.1.2.17), known and often recited by older Paṭṭaṇavars:

> *neṭuṅkaṭalum taṉ nīrmai kuṉṟum taṭint*
> *eḻilitāṉ nalkātu āki viṭiṉ*
>
> Even the wide sea will be lost
> if the clouds do not return what they have taken.

These lines link the health of the ocean to the regularity of monsoon but also hint at a second meaning. The sea is not an infinite resource that can be drawn from without care; the words are a reminder to the community that the sea must be treated with respect.

Respect for the sea manifests in part by knowing when *not* to fish. One indication is calendrical: fishing becomes hazardous during monsoon. Regionally this time is called *musappa*, a derivation in the Paṭṭaṇavar dialect of the Tamil words *mūṉṟu mācam*, or three months, referring to the three months of the northeast monsoon lasting roughly from October to December. Vadivelu, a panchayat member in the

village of Karaikalmedu, described *musappa* as: "A strong cloud [that] will form and the weather and wind will change immediately. By these symptoms we know not to go fishing" (personal communication).

An awareness of *musappu*, of being able to recognize the approach of rough weather, was once part of an active fisher folklore. This knowledge provided a measure of safety to fishers by giving tools to identify the worst danger and preventing the riskiest behavior, namely being at sea in heavy weather.

Today fishermen remain acutely aware of the wind, not only because it is often the first symptom of impending trouble but because cyclically changing winds mark the calendar. The strong western winds of *Āṭi macam* (mid-July to mid-August), colloquially called *kāṟṟu mācam*, or "windy month", is followed by an erratic stillness that typically lasts from late August until October. The arrival of a steady northerly wind marks the beginning of *musappu*, which is the most predictably dangerous time of year. Catamaran and fiberglass-reinforced plastic (FRP) boat fishers who still survive on a subsistence economy avoid launching when symptoms announce a storm, especially during Karthikai, mid-November to mid-December, when the *kuṉṉodai kāṟṟu*, or heavy winds, blow.

More dangerous than the *musappu* are the so-called *Cittirai puyal* that occur from late April into May. *Cittirai puyal kuṉṉodai puyal* – "Cittirai storms are heavy storms" – is a common Paṭṭaṇavar expression meaning that these out-of-season storms are as bad as those at the height of monsoon. Vadivelu remarked:

> It will come in [the Tamil month] Cittirai, but there is no scientific explanation. It comes from the north-easterly direction and starts like a mild wind but becomes drastically stronger within half an hour. (Personal communication)

His description underscores the uncanny nature of storms in Cittirai. Where storms during monsoon are expected and understood as a natural artifact of the annual progress of the seasons there is no comparable understanding of the scientific meteorological phenomena that create storms in general, or even the recognition that the storms are caused by similar phenomena. Because of this many fishers who avoid going to sea during the height of monsoon have nevertheless been caught at sea during a Cittirai puyal.

Despite the dangers faced by subsistence fishers who must necessarily risk launching during calmer monsoon days, preparations to minimize perceived risks are often confined to the older generation, among whom each trip will begin with a prayer to *Kaṭal Mata* [the sea mother]. "The sea is god to us, so we pray before going fishing. Kaṭal Mata will definitely save us from evil"(personal communication). Another fisher explained:

> We used to always pray to god when we went fishing. Now the situation is changed. For catching the *kōlā* [flying fish] we still always pray. We do not wear sandals or even cut our hair on a fishing day. [But] by seeing foreigners and Americans

> (*velaikkararum amerikarrarum)* we are now coming out of our traditional practices. (Personal communication)

The change is especially acute among younger men, who have their own opinions about both god and government: "They are nothing. They are not helping us properly. I have only my brother and the rest [of the village] to rely on" (personal communication). Another young fisher from the southern village of Kilinjilmedu voiced a similarly self-reliant sentiment, and when I asked if he at least followed the elders' practice of praying in order to mitigate some of the dangers of maritime fishing he responded curtly: "No, the gods mean very little" (personal communication).

Much of the accumulated Paṭṭaṇavar mētis treats what are termed the "symptoms" (*kuṇam*) of bad weather, indicators by which fisher folk identify an approaching storm. Wind, obviously, is a key symptom. But changes in wind are often too sudden, as in the case of *cittirai puyal*, or the character of the wind is too specifically seasonal to give appropriate warning. Subsistence fishers cannot afford to stay ashore during the three months of musappu, a situation exacerbated in recent years with the institution of an additional forty-five day fishing ban during Cittirai. As a consequence, maritime fishers have fashioned a schemata for identifying the symptoms of approaching storms.

These signs are nearly universal among maritime Coromandel fishers between Pondicherry and Karaikal. The first indication is often a ring around the moon. However, a peri-lunar ring by itself is never enough to prompt the mobilization of mitigating strategies. The appearance of rings encourages fishers to look for other symptoms or, if such have already appeared, the combination of signs would force a decision about launching on a given morning. One common verifying symptom is to note the behavior of the fish themselves. Tandavasamy, an elder from Karaikalmedu, explained:

> Few types of fish settle near the shore. When a storm approaches the water current flows in two directions. The upper level and lower level flow in opposite directions. By this actionsome unexpected types of fish will be caught. (Personal communication)

In Tandavasamy's telling, the symptom of storm is the presence of *unusual* fish close to the shore, typically mackerel and cuttlefish. This method was also known in the fishing grounds near Pondicherry town, one hundred kilometers north of Karaikal, but has declined in use in recent years. An informant from Vambakirapalaiyam offered a variation: when the currents are altered by an approaching storm "whales swim in the upper layers towards the shore" (personal communication). Fishers across the region noted that sea snakes also appear in the upper current while curling into balls.

It is not just uncommon fish that signal impending storms but a change in quantity of commonly found fish. Everyone with whom I spoke in Karaikal

District agreed that unusually high amounts of ribbon fish and prawn precede bad weather. Very often this was the first symptom named, but Karaikal fishers in particular complained that formerly before storms "fish were available near to shore, but now they are not available because large trawler boats washed away the small fish" (personal communication). Kankayan, a leading figure in local Pondicherry politics, summarized the belief that fishermen "are habituated to the coastal environment. Any change happens is easily apparent to us."

But prophesying cyclones and mitigating their effects are different matters. Most Paṭṭaṇavars speak proudly of their habituation to the dangers of life near the sea, of being able to recognize storm symptoms and using that knowledge to minimize exposure to hazard. Older fishers do not eschew technology in favor of folklore, but adaptations to weather are made on the basis of learned expertise, and risk is minimized using traditional strategies and technologies. One significant local technology is the traditional catamaran. Unlike the newer fiberglass boats replacing them, traditional catamarans are built for the conditions under which they are used. "The wooden catamarans are very safe in [storm] conditions", said a fisher working out of Manalmedu in Pondicherry District. "It never tilts, but the fiber boats are very dangerous." He continued:

> [The fiberglass boat] can tilt very easily. With a catamaran, even if it tilts it can be adjusted. But a fiber boat, when it tilts it is difficult to bring it back into position. (Personal communication)

A second local adaptation to flood is to build villages atop *mēṭu*, or sand dunes, and down their protected west-facing sides:

> Most of our villages are placed over the *mēṭu*, [and] by that save themselves from the floods. There is no life loss during cyclone, only material loss like boats [and] nets. But due to overpopulation now fishing hamlets are getting dispersed into plain areas. (Personal communication)

This has certainly always been the case in Karaikal, where *mēṭus* rise abruptly out of the *kallarām*, or sandy beach, to heights of ten or more meters forming a natural sea wall that repels all but the most ferocious storm surges. This is less the case in Pondicherry town, where *mēṭus* are less prevalent, but almost the whole of the settled town from Vambakirapalaiyam to Solainagar, a distance of about four kilometers, is instead fronted by a high stone revetment that grew out of the original French seawall. In fact, in the immediate vicinity of Pondicherry town much of *kallarām* has disappeared beneath enormous stone breakwaters, a government initiative intended to protect fisher villages and mitigate the effects of beach erosion.

Where There Is No Flood

The construction of fisher villages atop sand dunes has specific implications for the occurrence of flood among fishers in the Union Territory of Pondicherry. "There is no danger here", asserted a long-time community leader in Vambakirapallaiyam. "Flood only comes occasionally, so no problem. The sea never came inside the village or eroded the shore" (personal communication). Not only is this assertion internally contradictory, but it stands in the face of a history of flooding traceable well into the colonial period (e.g. Elliot 1879; Martineau 1917; Ramaswamy 1985). According to the administration's own disaster management plan, the district is vulnerable to a variety of flood scenarios:

> Cyclones and floods have wreaked havoc in the district several times in the past few centuries… Part of the problem owes its genesis to the location of the district [which] has a coastline of approximately 24 km. Therefore the district is vulnerable to the cyclonic depressions and the resultant rains.
>
> [The region] benefit[s] from water draining over fields and through major and minor river systems. The district however suffers from the flooding when excess water flows down these local rivers… due to the Northeast monsoon rains.
>
> The drainage is poor and the encroachments over the drought years have lead to a scenario where even rainfalls which are slightly above normal can cause floods disrupting the normal course of work. (*Northeast Monsoon Action Plan* 2009:21-22)

From the perspective of fishers, however, flood is "not a problem". In fact, fishermen in Pondicherry make a key distinction that, once understood, clarifies an otherwise incongruent concept of flood.

The Tamil word translated as 'flood', *veḷḷam*, has two distinct uses in the Paṭṭaṇavar dialect, neither of which is used to denote flood at all, at least as it is understood in the west. The EU, for example, defines flood as "the temporary covering by water of land not normally covered by water" (Directive/2007/60/EC). A more development-focused definition of flood might be simplified as "inundation plus damage equals flood" (Nishat 200§:4), but neither captures the meaning of the Tamil word.

A frequent response to my own inquiries into flooding in fisher habitats was *iṅke veḷḷam vantille*, "flood will not come", and this was indeed true as the fishers understood the word. In one sense *veḷḷam* is used to mean "ocean current". Like *kāṟṟu* (wind), *veḷḷam* varies from season to season and knowledge of it is necessary in order to safely to navigate the sea. The occurrence of simultaneous currents at differing depths, called *irukkā veḷḷam*, is often a surer sign of bad weather than a change in the wind, especially when coupled with the other symptoms discussed above.

The usage closest to the Western understanding flood was explained in the following way:

> *Veḷḷam* and *vatam* are the two words. *Veḷḷam* means increase in sea water, *vatam* means decrease. If the sea does come [into the village] it immediately goes out again. (Personal communication)

The final sentence was spoken with emphatic gestures, one hand drawing slowly over the other towards the body then quickly sweeping out with a sudden clap: *kaṭalnīr poṅki* (the sea having come) *varakum* (it will go [like that]). That this happens is due to the placement of villages on quick-draining, sandy *mēṭus*, a kind of traditional flood proofing.

In short, to apply a western conception of 'flood' to the Paṭṭaṇavar experience of it is not sensible in the fishers' context. Paṭṭaṇavars have a very specific relationship to the sea, its dangers, and their own role in mitigating them, and the narratives they tell reflect these beliefs. In traditionally constructed fisher villages water regularly enters the village, even the home, but flood does not come because their relationship to the ebb and flow of the sea is conceptualized differently than in those communities more insulated from the sea's dangers. Using traditional knowledge about the wind, the current, and the "natural behavior" of fish and sea and sand Paṭṭaṇavar fishers well-versed in sea-lore claim that they can identify the approach of dangerous storms with up to 90% percent certainty, and when storms do come they are weathered using traditional strategies.

A Fisher Mentality

"There has been a change in mentality among the fishermen" noted the son of a former member of the Kilinjilmedu panchayat, using the English word. "Everybody wants nice things – you know like TV, scooter, AC – but they are not willing to put in the hard work for it" (personal communication). He dated this shift from the 1970s, when the government started programs to modernize the fishing fleet by giving fiberglass boats to fishers. This change is also evident in Vambakirapalaiyam, where a fisher who came of age in the 1960s described it in the following terms:

> People are changed very much from the past. Before we earned money for daily subsistence, but now the situation is changed. People are bound to earn more money [so] the thoughts to make money have increased. Thatched houses were enough for us at that time. (Personal communication)

These two accounts are similar, even though they are given by men separated by a generation. The concept of "mentality" used by the younger man is one that also percolates within both the Government of Pondicherry and local development

NGOs, and it is worth examining as it serves as the pivot point of the resilience/reliance binary.

Nearly every older fisherman with whom I spoke was keen to underscore their own knowledge and experience as a touchstone of self-definition. "We know about the climate….we adapted to live with disaster", explained one of the oldest fishers in Karaikal District, a man who grew up in the early 1950s when the French still ruled Pondicherry (personal communication). This sentiment – that Paṭṭaṇavars are particularly suited for the sea-faring life – was echoed and amplified by fishermen up and down the Coromandel Coast between Pondicherry and Karaikal:

> In Vambakirapalaiyam: "We have knowledge about the sea and wind, [but] traditional fishing techniques are changing terribly now."
>
> In Manalmedu: "We don't have fear about the sea. We are accustomed to it. Whether it is heavy rain or wind, we are not afraid."
>
> In Karaikalmedu: "It is very dangerous. The whole fisherman life is danger. There is no security when we go fishing. Cyclone, tsunami and a lot of [other] dangers are there."

This attitude of hard-won wisdom and confidence in the face of certain danger is what Paṭṭaṇavar elders mean when they speak of a fisher mentality. It is based, they insist, on traditional knowledge that is "absorbed from their parents" without "follow[ing] any verbal teaching". "We live here from childhood", summarized a man named Murthi, "and have mentally adapted" (personal communication). Many of the older fishers with whom I spoke had shaped their self-images around attributes of strength, independence, resilience, even devotion. "I have two arms and they have always brought me home", proclaimed Veerappan in the urban hamlet of Kurucchikuppam. "I am a man, and there is a god. This is all I need" (personal communication).

In short, the wide perception among the older generation – those who came of age in the 1970s – is that skilled fishers should have the ability to "sense the nature of the shore soil and predict the weather, [because] most of the time these prediction prove true" (personal communication). But now they fear that much of this expertise is being forgotten. Even before the government began to discuss building media centers in tsunami-affected villages the electronic media of radio and television had already begun to supplant traditional ways of knowing and understanding the sea. "The television will warn us if a cyclone is coming", agreed a group of Kilinjilmedu fishers in their early twenties, which begged the question: what about before television? "The radio would warn us. There is a weather station in Chennai and Andhra [Pradesh]. They would give a cyclone warning." Today when a storm approaches "the government tells us" using radio, television, and local public announcement systems, explained a fisher from Ucchimedu.

Ironically, a sizable number of men who declare unreservedly that the government does too little to help the community also no longer seem able to identify traditional symptoms of storm. There may be general agreement that the government does not do enough to secure the safety of Paṭṭaṇavar communities, but then neither do many younger Paṭṭaṇavars. This is all part and parcel of a "change in mentality" identified by both older fishermen and village headmen and by government and NGO agents planning for their development. This change does not just signify a loss of traditional folkways but a reshaping of the Paṭṭaṇavar flood imaginary and an increased reliance on government knowledge systems. According to a Karaikal District fisher named Anand vocational tools, materials, and knowledge were once treated with great honor. "Before if a *vellaikārar* [literally 'outsider/foreigner' but here any non-fisher] touched a net with their shoe we would immediately hit them because it is [like] god to us, but now the attitude is changed", he told me.

There is general agreement in Paṭṭaṇavar communities that for the duration of living memory – a period that only just stretches back the divestment of the French colonies in 1954 – fishers needed to be self-reliant in the face of need or emergency. Some of the stronger villages retain long-established donative practices formerly practiced more widely. For example, in Veerampattinam specific days are still announced for the benefit of the common village fund. Fish caught on those days are given to the panchayat, who return some of the money raised to the fishermen who participated in the catch but keep most for the benefit of the community at large. But the Paṭṭaṇavar flood imaginary has changed in the face of development projects undertaken by the GoPY and foreign aid organizations. Older certainties have come into conflict in recent decades with long-term programs intended to "modernize" fisher communities and the massive rehabilitation initiatives instituted after the devastating 2004 Indian Ocean tsunami. The hard-won, folklore-informed self-reliance of the older generation has given way to a bitter critique of the administration by the younger: "They are nothing. They are not helping us properly. I have only my brother and the other [Manalmedu fishermen] to help me" (personal communication).

From Resilience to Reliance

Informants across the spectrum of relief and rehabilitation ranging from government officials and NGO workers to the fishermen themselves agree that traditional mechanisms of resilience – that is, the ability to withstand and recover from the negative effects of risk – have been replaced with reliance on external actors, an expectation of doles and handouts, and a weakening of community character, a situation that is notably worse in the urban hamlets surrounding Pondicherry town. "Fishermen used to take care of their families", opined one of

the oldest active fishermen living in Vambakirapalaiyam – a mixed, non-majority fisher neighborhood immediately south of the old colonial center of Pondicherry town. "Now sons are beating their mothers for pension money for drink." Another man, a long-time off-and-on community leader, echoed the sentiments during a private interview many weeks later: "the government may give money for houses [to be built after tsunami], but these men, they drink it all away!"

The change in mentality discussed above seems to be rooted in development measures initiated during the period of transition between the 1954 *de facto* transfer and the 1963 *de jure* merger of the French colonies with India. Projects aimed at modernization began with the territory's inclusion in the Second Five Year Plan (II Plan) in the mid-1950s, but the process of change did not really get underway until the late 1970s. The administration's Second Five Year Plan explicitly sought the "transformation of the economic system in India so as to ensure greater efficiency in production as well as equality of justice" (Government of Pondicherry [GoPY] 1956:1). Agricultural development took highest priority, but the development of the coastal economy also received attention that would lay the groundwork for the normalization of the entitlements.

When the Five Year Plan was introduced in Pondicherry in 1956, fisheries development programs were limited to the setting up of cooperative societies, the provision of cold storage units, and training in modern fishing techniques, and these programs were to continue for the duration of the Second Five Year (GoPY 1956:47). Another program intended to directly address quality of life in fisher communities was the initiation of a pilot housing project. A decade later, starting in the mid-1960s, the GoPY began heavily subsidizing the introduction of fiberglass boats and initiated other schemes intended to develop and modernize the life ways and craft of fishing in UTP over the next decade. This is the moment, the mid-1960s to the mid-1970s, identified by many older fishermen as the turning point in the fisher mentality, the moment when local fishermen started to increase their dependence upon the government while simultaneously becoming increasingly complacent regarding their own welfare. It is also worth noting that the last years of this ten year interval came at a time when the central government in Delhi grew to be its most intrusive (viz. the Emergency, 1975-1977).

But if the fisher mentality has changed – if it is not just vocational nostalgia – it is not solely the result of increased doles to Paṭṭaṇavar communities. There has also been a drastic decline of community political structures that in the past fulfilled at least part of the relief role now undertaken by the territorial administration. The bodies of community-level governance traditionally responsible for the day-to-day health of the community, the panchayats, are on the wane across much of the Union Territory. In Vambakirapalaiyam, for example, the caste-based panchayat disintegrated with the influx of large numbers of other caste groups. "We do not have this system now because of village conflict", said Ramalingam. "[Other

castes] kept coming and coming into the village to stay", forcing the fishermen into the margins (personal communication). Many Paṭṭaṇavars agree, some adding that panchayat structures only work in homogenous communities. "Here there are different castes. Their occupations are different. It is hard to control them" (personal communication).

In Vambakirapalaiyam fishermen date the decline of their local panchayat to the 1990s when significant numbers of Cinna Paṭṭaṇavars, a different fisher caste found primarily around Chennai, began settling in Pondicherry. Conflict between the two castes shattered the established hierarchy in the village, leading to hooliganism between factions seeking an upper hand in the local economy. But more than tensions between fisher castes, Vambakirapalaiyam was victim to the new caste heterogeneity. "Every caste here has their own community panchayat", said Ramalingam, naming Paṭṭaṇavar, Christian, and Sambavar (an inland fisher caste) as three groups within the village that have their own panchayats.

A similar change has been noticed in Karaikal District, particularly in places where communities displaced by the 2004 tsunami have been relocated to "tsunami nagar", housing colonies built expressly to relocate populations displaced by the tsunami. But here there is less agreement about loss of local power structures. Sriji Kurup, the district director for the Centre for Environmental Education (CEE), an environmental education and development NGO, began noticing changes as soon as Karaikal's tsunami nagars were completed in 2008. Formerly Paṭṭaṇavar communities would nominate up to fifteen members to serve a year-long term. These nominations were based largely on respect and position within the community. When villages were relocated, said Kurup, residents of smaller villages would often be consolidated into larger colonies, destabilizing older hierarchies. In itself this likely would not have been enough to lead to the kinds of disintegration of local level control seen by Kurup, but it did begin a process similar to that described by Ramalingam and others in the Paṭṭaṇavar hamlets around Pondicherry town. "Who will they look to in a crisis?" he asked rhetorically. "They do not know anymore. They will look to the government because they no longer know where to look in the community" (personal communication).

A different reason for the decline of the panchayat system was offered by L. Mohammed Mansoor, District Collector of Karaikal during the 2004 tsunami disaster and later appointed head of the agency overseeing tsunami rehabilitation. Addressing the role of the panchayat system in village life he said that "[i]t keeps them socially cohesive" but added that traditional, village-elected panchayats formerly had too much power over the community. According to Mansoor, "[now] people are more willing to speak out against the panchayat because they are emboldened by government allotments" (personal communication). He explained that community members who had formerly been marginalized by village leaders were gaining new affluence through government doles and development

initiatives. Rehabilitation assistance was not something that local leaders could circumscribe or take away as it was given directly to recipients by the territorial government. Village members no longer had to rely solely on the goodwill of village leaders. Residents who had earned the censure of the panchayat, who had been ostracized or otherwise marginalized from the community center, received government handouts regardless of their status within the community. This freed them to criticize village leaders more openly.

Like Ramalingam, Mansoor recognized the increase of caste heterogeneity in urban hamlets and even cited Vambakirapalaiyam as an example of the resulting tensions manifesting as multiple panchayats. However, Mansoor notably identified the factions not by caste but by religion, naming four active panchayats: Hindu, Christian, Muslim, and elected. But Mansoor did not see the decline of the traditional panchayat specifically as a consequence of heterogeneity and factionalism but rather as the result of the introduction of elected panchayats to the Union Territory in 2006. Under the older, caste-dominated model members were nominated to the panchayat based on respect, influence, wealth, and other signifiers of local position. By contrast, elected panchayats were not only open to any village member who chose to run, but barriers of caste were completely removed in villages with significant minority populations. For example, in Vambakirapalaiyam the formerly Periya Paṭṭaṇavar majority is now under political challenge by significant populations of Cinna Paṭṭaṇavars, Sambavars, Christians, and even Telugu-speaking Ambattars. As a result, the Periya Paṭṭaṇavars are losing their local dominance and facing declining chances of controlling an elected panchayat over the long term.

Homogenous communities like Veerampattinam, which remains a predominantly Paṭṭaṇavar village, stand in stark contrast. Kankayan, the panchayat president in 2010, was sanguine about the traditional leadership: "There is no problem here. Dalits and Vanniyars are minimal in number here, so they are not fighting with us" (personal communication). These two castes, Dalits and Vanniyars, total less than five percent of vote-eligible village members, so even in an elected leadership there is little chance of minority castes garnering enough votes to disrupt Paṭṭaṇavar control. But the introduction of a popularly elected leadership that subverts historical caste dominance goes beyond the loss of caste influence within a given community. As one revenue officer noted, rehabilitation agencies must as a matter of law deal not with traditional panchayats but rather with the formally elected leadership. This change has flipped familiar structures of resource control and reciprocity on their head (e.g. Inden and Nicholas 1977; Raheja 1988). Caste leaders have lost control over public resources within the community. This double undercutting of traditional local power structures – giving *ex gratia* payments and development-oriented doles directly to recipients and transferring power from caste-determinative to non-caste-determinative village-level leadership – has

greatly weakened traditional panchayats, especially in the heterogeneous, urban hamlets in Pondicherry District.

The decades-long project to develop coastal fisher hamlets has further undercut community resilience by bureaucratically socializing many within the contemporary administration to subtly – and sometimes not so subtly – infantilize entire communities, often giving them little scope to contribute meaningfully to their own development. This image stands in stark contrast to how fishers imagine themselves: independent, resilient, accustomed to risk. These Paṭṭaṇavars used their catamarans to rescue victims marooned by a 1966 cyclone (Antony 1982:536), and they did the same thing for the French administration in 1885 (Martineau 1917:296). These fishermen, in the estimation of Sriji Kurup, "are more daring. They take more risks [because] these are their lives" (personal communication).

These conflicting images of the Paṭṭaṇavar community and the tensions that arise when trying to resolve such conflicting identities came to a head in the wake of the 2004 tsunami. To be sure, maritime fisher communities in Pondicherry and Karaikal were some of the hardest hit by the disaster. Development gains made over fifty years were swept away in an instant and early attempts to rehabilitate devastated communities resulted in a shift from resilient to reliant communities. This shift is typified by two very different housing projects undertaken following the tsunami, both of which undermined traditional strategies of resilience and likely increased future reliance on government assistance. The first is the project to build *new* communities in coastal Karaikal – the previously mentioned tsunami nagar – on sites deemed "safe" by officials; the second, the reconstruction of houses *in situ* in the urban fisher hamlets surrounding Pondicherry town. Each presented challenges specific to their setting.

In the words of the Director of Public Works under the colonial administration in 1937, Karaikal:

> [i]s separated from the sea by a sandy plain… All of its houses are away from the sea and there is not, as in Pondicherry, a promenade along the coast. It is said to be quite an agreeable location because it is not over-built. (Girod 1937:95)

This remains an accurate description of Karaikal town, though it does not take into account the coastal fisher hamlets like Karaikalmedu, Kilinjilmedu, Akkapettai and others located several kilometers from the town center. Because of the stark rural/urban contrast between the town and its Paṭṭaṇavar satellites then District Collector Mohammed Mansoor decided that new homes for tsunami victims should be built well outside the zone of immediate risk of coastal flooding. In fact, there was a sizable faction within the post-2004 Government of Pondicherry that wanted to aggressively relocate fisher communities entirely outside of the Coastal Regulation Zone (CRZ) as defined by federal rule S.O. 114 (E). Mansoor, for his part, acted quickly to acquire empty lands outside the CRZ. Arguing to landowners that the land was now barren due to salinization, Mansoor's district

office bid "almost market value" concluding that it would be "better to sell them to the government than to invest in desalinization" (personal communication).

The Project Implementation Agency (PIA) – the agency created in 2005 to oversee tsunami recovery – prepared to build a large colony of more than 500 houses with financial inputs and expertise from several donors, including the Government of Maharashtra. To mitigate the risk of flooding, the colony dubbed Mahatma Phule Nagar was built atop an earthen plinth two meters high (*Summary on Relief* 2005:27). The reinforced concrete homes were completed in January 2008, but by August 2010 more than 90% of the homes remained vacant. Why should this be so? Each home included electricity and shared water, attached water closets, paved walkways, public lighting and common spaces, public school, and an emergency shelter. A deep U-drain running along the northern and eastern sides of the colony moved excess water away from inhabited areas.

The fishermen for whom the colony was planned voiced several reasons for not moving into the new houses – size and shoddy construction being frequently cited – but two deficiencies were particularly egregious. The colony was too far from the shore and it flooded in a way that their older hamlets did not. By raising both the colony and the access road without providing for drainage *through* them, PIA had inadvertently constructed barriers to the natural drainage. As a consequence, water that would have followed the watershed to the sea remained trapped inland during even the most average monsoon (Fig. 1).

Figure 1. Mahatma Phule Nagar, Karaikal District, January 2009. (Author's photograph)

"Why should we want to live in these homes when where we live now is dry and close to the sea?" reasoned one of the fishers for whom the colony was intended (personal communication). Most fishers in the region preferred to live on the quick-draining dunes, even if doing so meant the loss of government doles for rebuilding, in part because these early efforts failed to take into account Paṭṭaṇavar knowledge, needs, and preferences in colony design.

Pondicherry offered a different set of rehabilitation challenges. According to the colonial-era descriptions, "its rectilinear streets and colonnaded homes push right against the sea" (Girod 1937:89). Twenty years later, the first post-colonial administration also identified "the peculiar town-building plans" in which "houses are built right on the road and touching each other without open areas or compounds" as a challenge to urban development in general (GoPY 1956:22). Paṭṭaṇavar building practices in Pondicherry had long been lost under a veneer of urbanization, as had many traditional fishing practices. Taking the lessons learned from housing rehabilitation in Karaikal the administration sought to mitigate many of its previous mistakes by encouraging more cooperative strategies of rehabilitation in urban areas. Without open space in which to build new colonies, the territorial government agreed to allow affected fishers rebuild *in situ* and took into account the recipients' own needs and desires. Rather than providing houses, or even blueprints, the administration settled on an *ex gratia* amount to be paid in installments as specific construction benchmarks were achieved. Fishers were allowed to rebuild in any way they desired as long as a government engineer approved the design. But it became apparent that this model of owner-driven rehabilitation was also unsatisfactory.

Aid recipients quickly discovered the shortcomings underlying owner-driven reconstruction. While the administration gave money to begin building it gave no provision for shelter during the reconstruction. Recipients had to tear down their old house to qualify for reconstruction grants but were given nowhere to live during the interim. This was partly due to the inherent limitations of the crowded, urban location. But several administrators confided that the decision not to provide temporary housing was intentional: it was hoped that personal honor would encourage quick reconstruction in preference to an indefinite guest-status among family and neighbors. A second problem was that construction costs were necessarily much higher in Pondicherry than in Karaikal, due precisely to the "peculiar town-building plans" pertaining there. Due to the narrow lanes found throughout urban fisher hamlets (Fig. 2) materials needed to be carried in by hand, making labor costs untenably high. Additionally, because the houses lost to the tsunami had often been improved over years and decades, the *ex gratia* amount was often too small to rebuild back to the level lost. As of August 2010 many urban Paṭṭaṇavars, even those who had been given money to rebuild, were living in worse condition than they had been prior to the tsunami.

Figure 2. Sivaraman's Alley, Vambakirapalaiyam, Pondicherry District, July 2010. (Author's photograph)

It is almost impossible to quantify the degree to which government programs have reduced Paṭṭaṇavar resilience. Narrative accounts are the only way to recover whatever sense of community resilience Paṭṭaṇavars might formerly have had. While a certain comparative measure can be made by reviewing decades of government development plans, relief memoranda, and other documents such calculations fail to account for the Paṭṭaṇavars' *belief* that maritime fishers in the Union Territory were once more resilient and less reliant on government handouts. Nevertheless, there are specific and clearly traceable ways in which state development and rehabilitation projects in Paṭṭaṇavar communities have combined to disrupt indigenous strategies to mitigate risks *as they are perceived by the at-risk community*. This is not to say that building atop sand dunes and returning to wooden catamarans is the solution to the endemic problems besetting Paṭṭaṇavar communities. Rather it is to suggest that by ignoring the local folkways and knowledge systems of those who live closest to risk, states pursuing internal development schemes increase the risk of failing marginal communities most in need of development.

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