

Forecasting with fishers out of a job

Kerala, India

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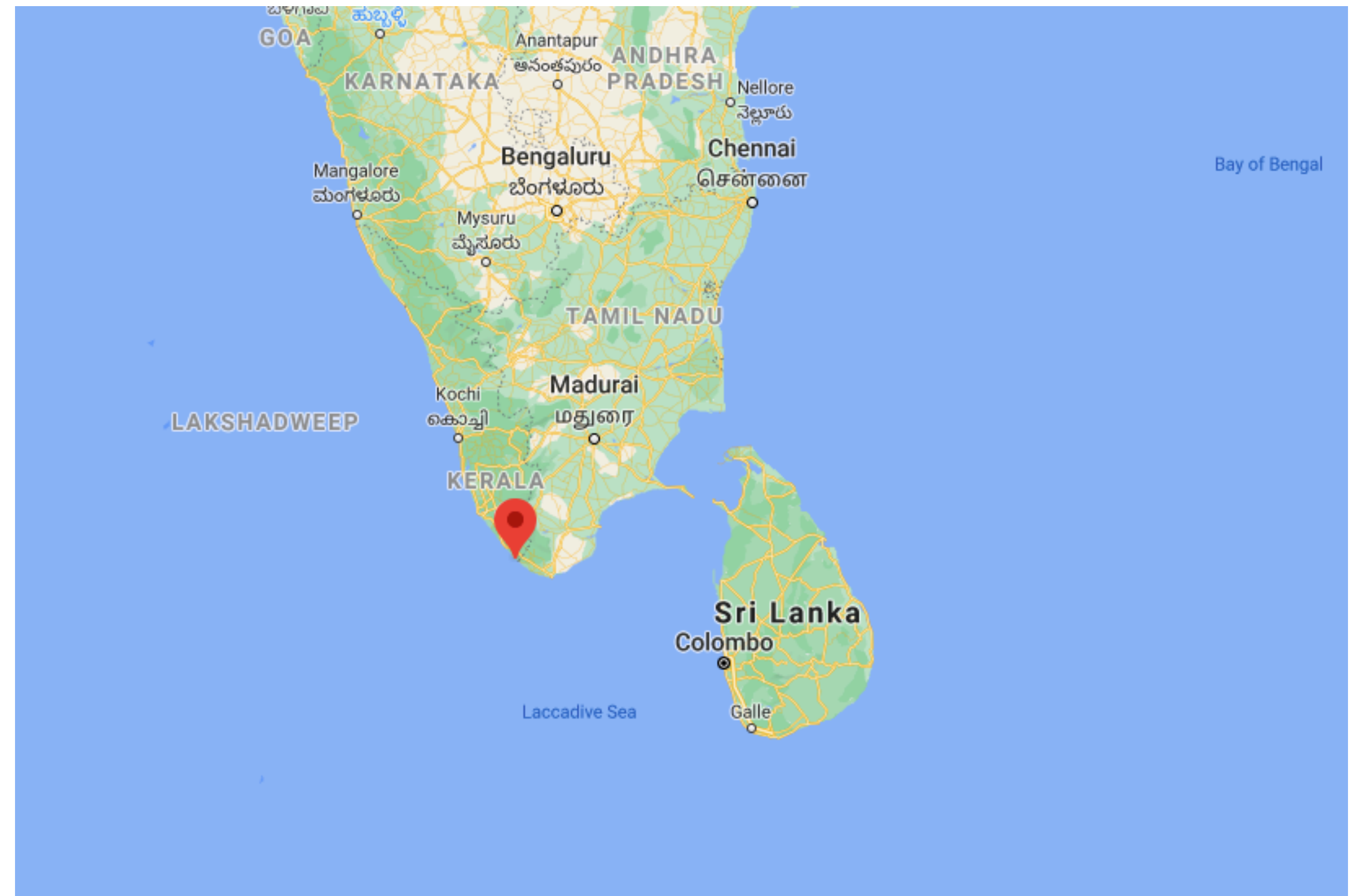
Introduction

Stop-gap research


- Sussex research [Forecasting with Fishers](#) remains suspended
- Here we share the story of one of our three field sites on the southwestern coast of India
- COVID-19-related lockdown and restrictions have pushed fishers into food insecurity and debts.
- We are trying to see whether the fishers are taking more risk to offset losses and how better forecasts can help

Puthiyathura, Thiruvananthapuram

- A dense concentration of artisanal fishers close to the southern border of Kerala on the Arabian Sea coast
- 2000 active fishers and 800 fish vending women among 8000 residents
- Diverse craft: 32 feet boats with twin outboard engines (110), smaller fibreglass canoes (90) traditional lightwood rafts that navigate the coastal waters (40) shore seine units (20)
- Mostly Roman Catholics. The Church collects sales tax and influences socio-economic affairs



Puthiyathura



In late March, under a scorching sun and humid skies, the fishers were looking for a window of opportunity, before the winds changed direction and swell grew, marking the onset of the monsoon season.

Restrictions in fishing and fish sales

Poor and elderly fishermen and women were the worst affected

- Late March: Amidst statewide COVID-19 lockdown, the local church committee restricted timing, type and the crew size involved in fishing, and fish sales
- The government's COVID-19 restrictions – that did not include a blanket fishing or sales ban – were interpreted variously by the local police stations and church authorities, leading to strict controls.
- Shore seine fishing that involves mostly poor and elderly fishers, and boat seine with two or more boats hauling large nets, were not allowed.
- Public auction was restricted, and buyers from outside the village were either prevented or strictly controlled. There was no public transport and informal street-side markets were closed down

Lost livelihoods

The local fishing community suffer huge losses

- The retail fish market collapsed
- Women could not buy, transport or sell fish
- Most of the 2000 active fishermen here could not do much fishing; even when they could, they were reluctant to launch their boats as the returns were low.
- Many fishers lost a third to half of active fishing days – with 50-75% loss in income – and had to take loans on top of grants and free rations given by the government and the local church.

Lost opportunity

Weather turns bad as the monsoon begins

- The lockdown coincided with the transition to the windy pre-monsoon season when fishers have narrow windows for safe fishing
- By May when the restrictions began to ease, the fishers faced shifting strong wind associated with monsoon onset and the impact of distant storms.
- There were two severe cyclones passing by, posing the risk of gusts and high waves, each hitting western and eastern coasts of India further north.
- Then there were also days with low catch.

Two more rounds of lockdown

Coastal villages become COVID-19 hotspots

- Coasts of Thiruvananthapuram became hotspots of social spreading of COVID-19. Fishers were blamed for not taking precautions
- Citywide lockdown (July 6 – August 15)
- Coastal areas of the district declared as containment zones
- Fishing banned (July 6 – August 13); later allowed with restrictions
- Restrictions on door-to-door and street-side sale of fish

Fishers left to their own means

Little aid, more loans

- Little aid, social security or insurance
- The church plays a neutral role with hardly any intervention or aid
- The fishers had to take more loans
- Many fishers launch boats from their local sandy beaches, risking high waves (when the harbour is closed and fishing officially banned)
- No more hope of getting bonus catch during the monsoon season

Takeaway

Fishers likely to take big risks to offset losses – better forecasts help

- Decision-making on whether to go to fish or not is complex – it takes into account the season, weather, safety, fish availability, market, competition etc.
- Fishers take risks during the monsoon to get a bonus catch. After the recent big losses, fishers are likely to take more risks than usual during this season
- There is a need for more precise forecasts in time and space, and a better appreciation of the complexities involved in decision-making on fishing
- These improvements can not only contribute to make fishing safer, but also inform public policy