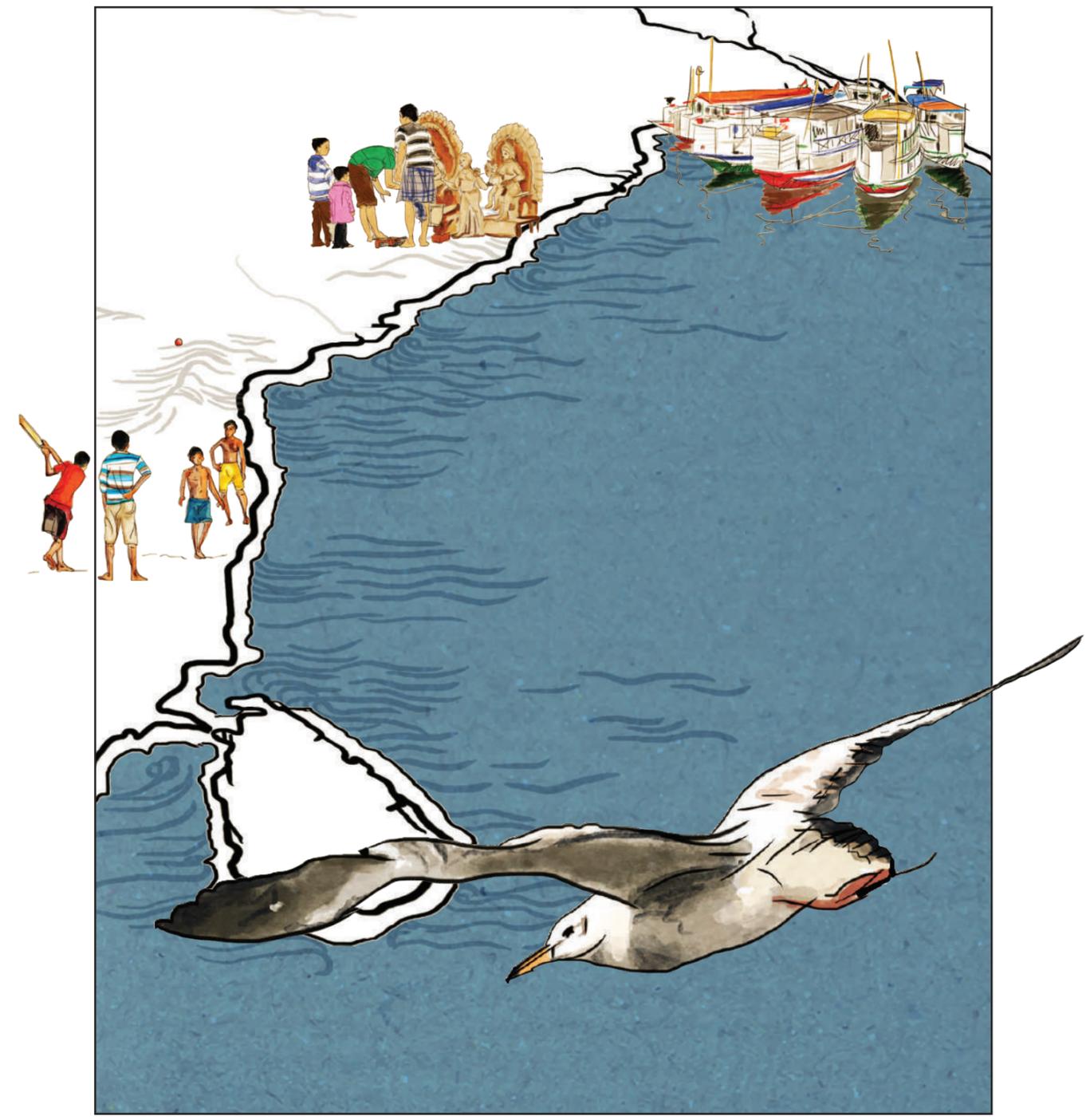


COASTAL COMMONS

A glimpse into the nature and significance of coastal common spaces and resources



The Duleep Mathai Nature Conservation Trust



DONORS: The Duleep Mathai Nature Conservation Trust,
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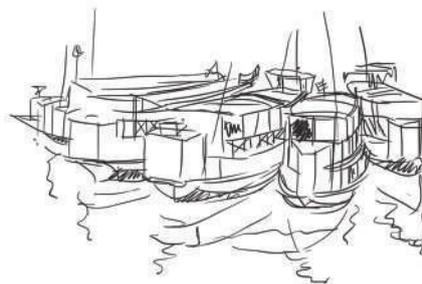
India's 8119 kms long coastline is a beautiful mosaic of diverse coastal landscapes and ecosystems.

These very spaces are also home to 4 million fisherfolk, who live and work alongside these landscapes which help sustain various day to day activities, such as those that support their livelihoods and other socio-cultural pursuits.

These coastal landscapes are therefore more than thriving coastal ecosystems, they are also shared use spaces that fishing communities use as commons.

This booklet illustrates the importance of these Coastal Commons in the lives of the community.

Lastly, it briefly discusses the various laws that directly or indirectly provide opportunities in protecting these spaces and provide a framework for decision making around Coastal Commons.

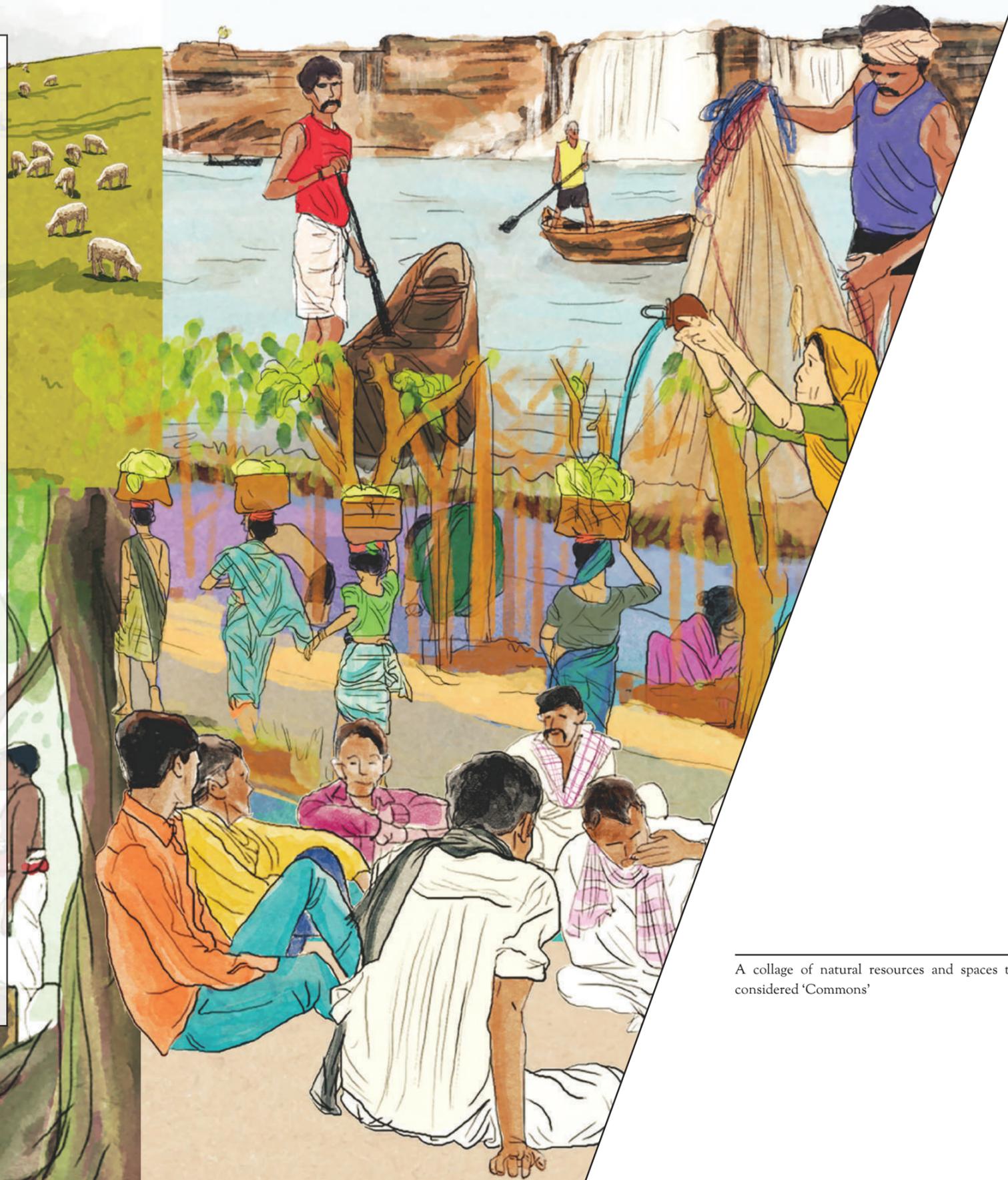


Commons & their Significance

COASTAL COMMONS

Commons are natural resources and spaces such as pastures, fishing grounds, communal forests, sacred groves, open fields, ponds, water tanks, rivers, rivulets and associated banks that can be accessed and used by all members of a community. Commons support the livelihoods, subsistence and socio-cultural practices of natural-resource dependent communities and are vital safety nets for poor and marginalised populations. Commons are collectively governed by community-decided rules of resource extraction, management, usage and conservation.

Fishing is typically visualised as an activity solely dependent on the seascape. However, fishing and allied activities are also immensely dependent on coastal commons that include beaches, mangroves, inter-tidal zones, mudflats and sand dunes. These interfaces between the land and sea serve important economic, ecological, social, cultural and recreational functions in coastal and fishing communities that use these spaces for fish landing, catch processing, boat parking, recreation, religious celebrations and more.



A collage of natural resources and spaces that are considered 'Commons'

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Types of Coastal Commons



Sand dunes and vegetation on sandy shores act as wind and water breaks that protect inland regions from rough winds and high waves Photo Credit: Ananya Majumdar



Fishermen prepare to lay the fishing net near a patch of mangroves in Aghanashini, Karnataka Photo Credit: © Adam Jadhav



Estuarine waters are rich fishing grounds for communities living in the vicinity Photo Credit: © Adam Jadhav

SANDY AND ROCKY SHORES

Sandy and rocky shores protect inland areas, crops and buildings from rough winds and waves and prevent seawater intrusion into underground freshwater reserves. Diverse fauna such as lizards, snakes, beetles, mice, hares, foxes and antelope such as the Blackbuck thrive in coastal sand dunes, while bivalve, octopi and crustaceans are plentiful in rocky shores. Sandy shores enable fishing and allied activities by offering space for boat parking, equipment repair and fish landing and processing activities. Rocky shores act as landmarks and strategic lookouts over the sea.

MANGROVES

Mangroves serve as unique coastal commons and fishing grounds for local communities. The interlaced roots of mangroves are rich spawning grounds and nurseries for a number of fish, bivalves, prawn and other crustaceans. Mangroves bordering villages serve as grazing sites for livestock and provide sheltered havens for parking boats, especially during storms and rough weather.

ESTUARIES

Estuaries are highly bio-diverse and productive ecosystems at the confluence of rivers and the sea. The brackish nutrient-rich estuarine waters are fertile fishing grounds as they are ideal breeding sites and nurseries for various marine species. Estuarine mud flats provide rich harvests of bivalves such as oysters and clams, while estuary banks are ideal for fishing boat parking, net storage, fish drying and bivalve meat shucking.



Mangroves
Photo Credit: © Adam Jadhav

Significance of Coastal Commons

ECOLOGICAL SIGNIFICANCE

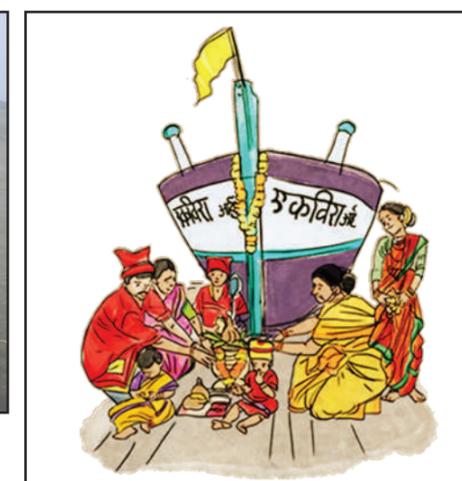
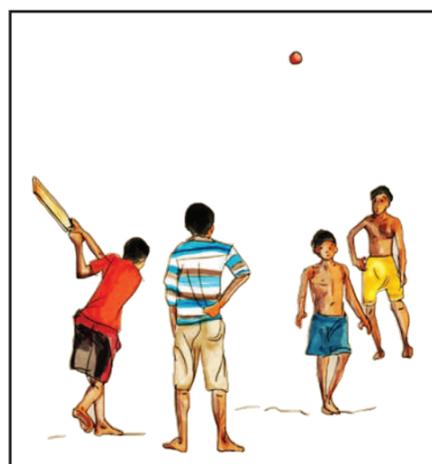
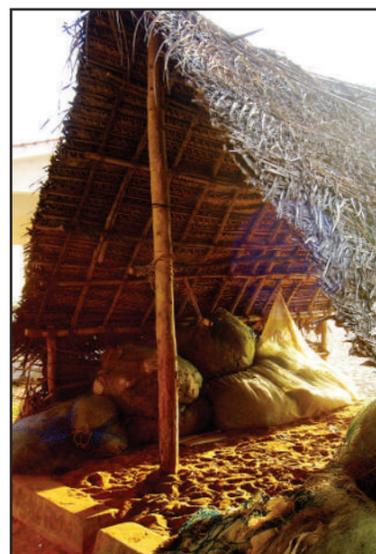
Coastal features such as sandy beaches and dunes are shields against rough winds and waves and salt-water entry into fresh groundwater reserves. Estuaries and surrounding wetlands act as flood buffers and filters of pollutants carried by rivers towards the sea. Fresh and salty estuarine waters safe offer safe breeding grounds and nurseries for diverse marine species and are thus biodiversity hotspots. Mangrove forests regulate climate, sequester carbon and protect shores against erosion and storm, wave and flood devastation.

ECONOMIC SIGNIFICANCE

Coastal commons enable fishing operations and their viability. For example, sandy beaches allow for boat launching, parking and repair, fish catch landing and processing through salting/ sun drying/ smoking, and catch auctioning and sales. Sandy shores are also essential for 'shore seining', which is the deployment of long fishing nets called 'shore seines' that are pulled ashore by several fishers working in unison. Sandy commons further enable construction of sheds for storing dried fish and boats and equipment in the off-season. Rocky shores are similarly over-sea vantage points, landmarks and sites of opportunistic fishing for bivalve, octopi and crustaceans.

SOCIO-CULTURAL SIGNIFICANCE

Coastal commons are important recreational, social, cultural and religious meeting venues for fisher communities and coastal dwellers. For example, beachfronts in Karnataka, Goa and Maharashtra are the traditional sites of local fishing communities' Ganesh Chaturthi and Narali Poornima celebrations.



(Clockwise) Every year Olive Ridley turtles nest by the hundreds on Orissa's coasts. Nesting turtles prepare to return to the ocean after the Aribada at the Gokurkuda beach in Orissa. | Palm sheds are often erected on the beach to store fishing equipment and nets. | Fish is dried on bamboo racks in parts of Gujarat, Maharashtra and West Bengal. | Fishing boats parked in a patch of mangrove in Aghanashini, Karnataka. | Fishing communities offer prayers on Narali Poornima. | Fishers require unhindered access to the beach as this enables them to launch and land their boats for fishing trips. | Children playing cricket on the beach.

Photo Credit: (Clockwise)
 (Turtles & Palm shed) Ananya Majumdar, (Boats among mangroves) Adam Jadhav, (Fishermen at the beach) Aarthi Sridhar, (Illustrations) Deepthi R



Photo Credit: © Shwetha Nair

(Left) Smoked tuna being sun-dried on the beach in Agatti, Lakshadweep. (Below) Fishers sort fresh catch from the fishing net in.



Photo Credit: Ananya Majumdar

Use of Coastal Commons



Temporary homes and fish drying racks erected in preparation for the fishing season, in Sagar Island, West Bengal Photo Credit: Ananya Majumdar

REGIONAL VARIATIONS IN USE

India's coastal landscapes and fishing practices are as heterogeneous as the nation's fisher folk who hail from various castes, communities and socio-economic backgrounds. Coastal commons use is influenced by regional geographies and socio-cultural contexts and thus highly varied.

For example, some communities live along the shore and fish year-round. Others such as the Waghers in Gujarat and West Bengal's Sagar Islanders maintain permanent residences inland and alternate occupations as cultivators and daily-wage labourers. During the fishing season, these communities relocate their entire households; livestock and all, to temporary shore-side settlements, and devote their labours primarily to fishing.



Permanent, concrete structures used to store fishing equipment in East Medinipur District, West Bengal Photo Credit: Ananya Majumdar

Fisheries & Coastal Commons



Photo Credit: Ananya Majumdar

SIGNIFICANCE OF FISHERIES IN INDIA

India's 8119 km long coastline is home to 4 million fisher-folk spread across nearly 3,400 fishing villages. 6% of India's agricultural GDP and 15 million livelihoods are derived from fishing and allied activities. With fishing villages located almost every 2 kilometres along the coast, fisheries are an important contributor to India's economy and food security.



(Left) A fish landing centre in Pulicat, Thiruvallur District, Tamil Nadu. (Below) Boats parked along the banks of the Ennore creek in Ennore, Tamil Nadu. In the background is the Ennore Thermal Power Station.

THREATS TO FISHERIES & COASTAL COMMONS

Industrial expansion, mechanised fishing, commercial pressures and opportunistic development of coastal areas are altering marine resources and landscapes and reducing small-scale fishers' access to these spaces and resources.



Photo Credit: Ananya Majumdar

Complex Challenges

COMPLEX CHALLENGES FACED BY COASTAL SYSTEMS IN INDIA

Coastal systems in India face complex and simultaneous challenges, such as dwindling fish stocks due to over-fishing and marine pollution, coastline erosion due to ill planned development projects and increasing vulnerability of coastal spaces and communities to climate change. Industrial expansion, mechanized fishing, commercial pressures and opportunistic development of coastal areas are altering marine resources and landscapes and reducing small-scale fishers' access to these spaces and resources.



(Clockwise) Construction of coastal infrastructure such as groynes, coastal roads, breakwaters etc. also restrict fishing activities by limiting the space that can be used for fishing-allied activities. Developing ill-planned tourist facilities on spaces formerly used as commons by the fishing community negatively impact fisher livelihoods by restricting access to these spaces and violating coastal protection laws. Catch from a shore seine net employed near the Marina beach, Chennai. The haul here shows a depleted catch. Although sea walls are constructed to keep the sea water from entering the hinterland, not only do they impact beach commons used by the fishing community, but also cause insidious coastal erosion.



Photo Credit: © Severine Barale

(Left) Trawlers parked in the Mangalore harbour

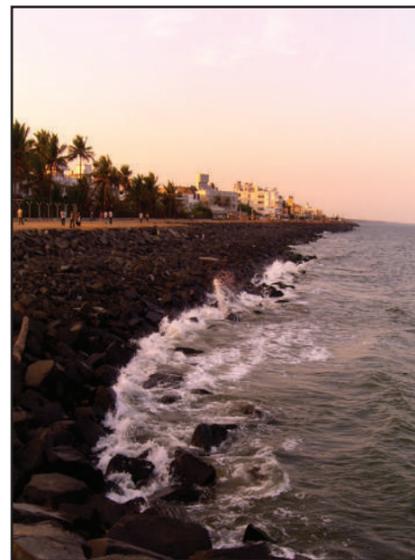


Photo Credit: (Clockwise)
(1, 4, 5-7) Ananya Majumdar, (2-3) Aarthi Sridhar

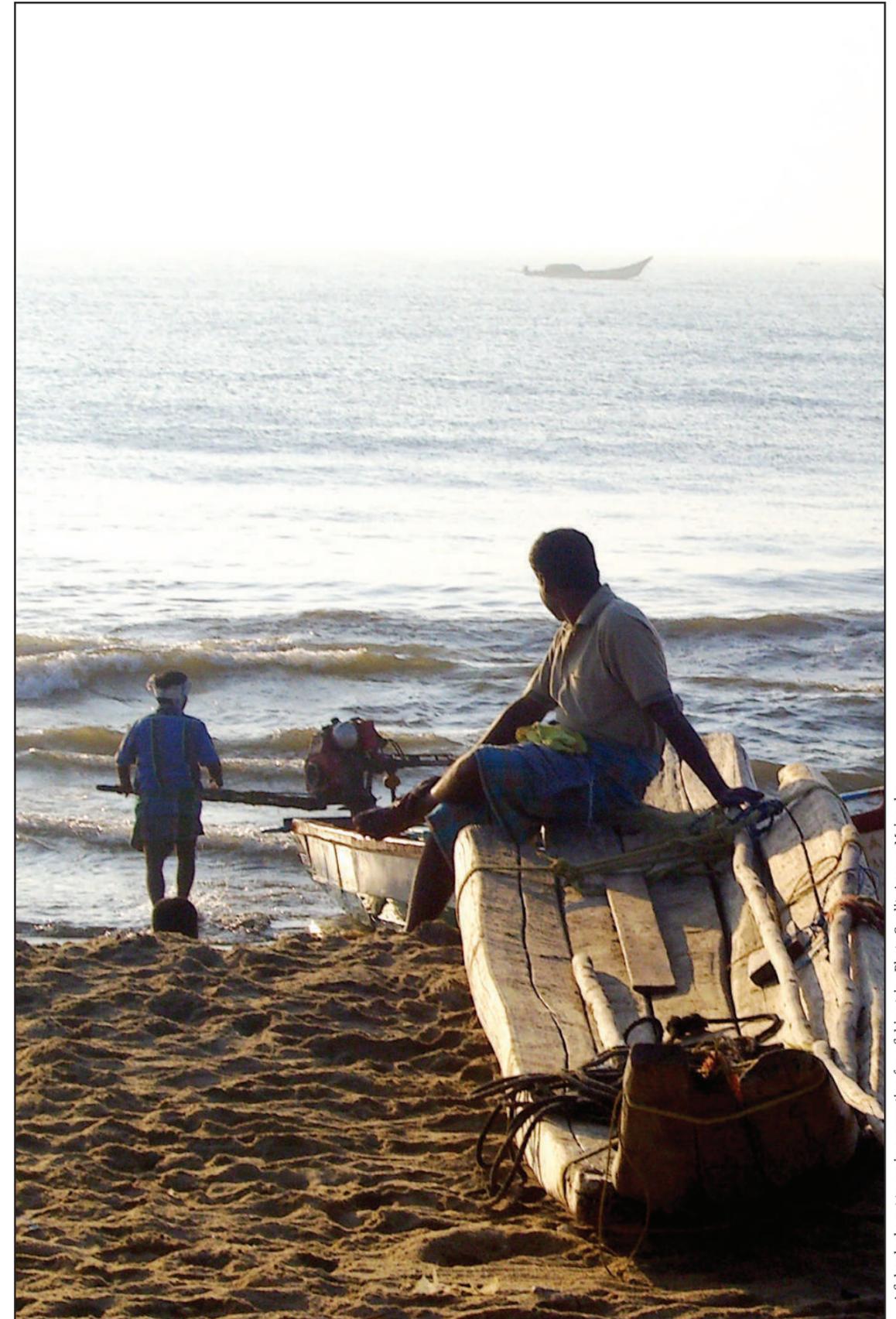
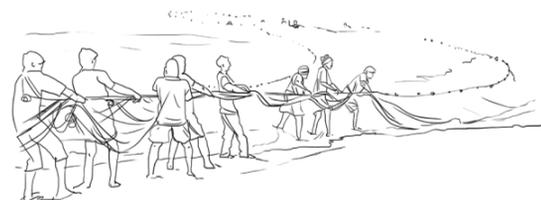
Unrestricted Access



A beach in Pondicherry. The beach face is an invaluable commons for fishing communities, who use this space for various fishing related activities such as boat parking, net mending and storage, etc. Photo Credit: Ananya Majumdar

WHY IS UNRESTRICTED ACCESS TO COASTAL COMMONS VITAL TO FISHERS?

As fishing requires both the waterscape and adjoining landscape or shore commons in order to be carried out, relocation and rehabilitation of marine fisher communities away from the seascape is a death knell for small-scale fishers. Shore presence and unhindered visibility of the sea are necessary for these communities to plan fishing trips based on weather conditions and shoal movements. Restricted and altered access to coastal commons creates widespread livelihoods loss and displacement among fisher communities that also adds to the burden of poverty in urban areas where these groups migrate in search of alternative opportunities.



A fisher looks out to sea in preparation for a fishing trip. Photo Credit: Ananya Majumdar

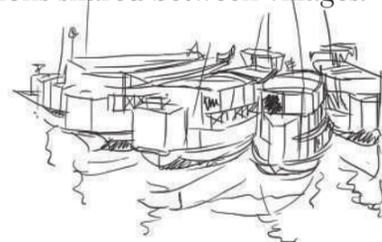
Traditional Governance



A Jamaat meeting in session in Agatti, Lakshadweep. Photo Credit: Mahima Jaini

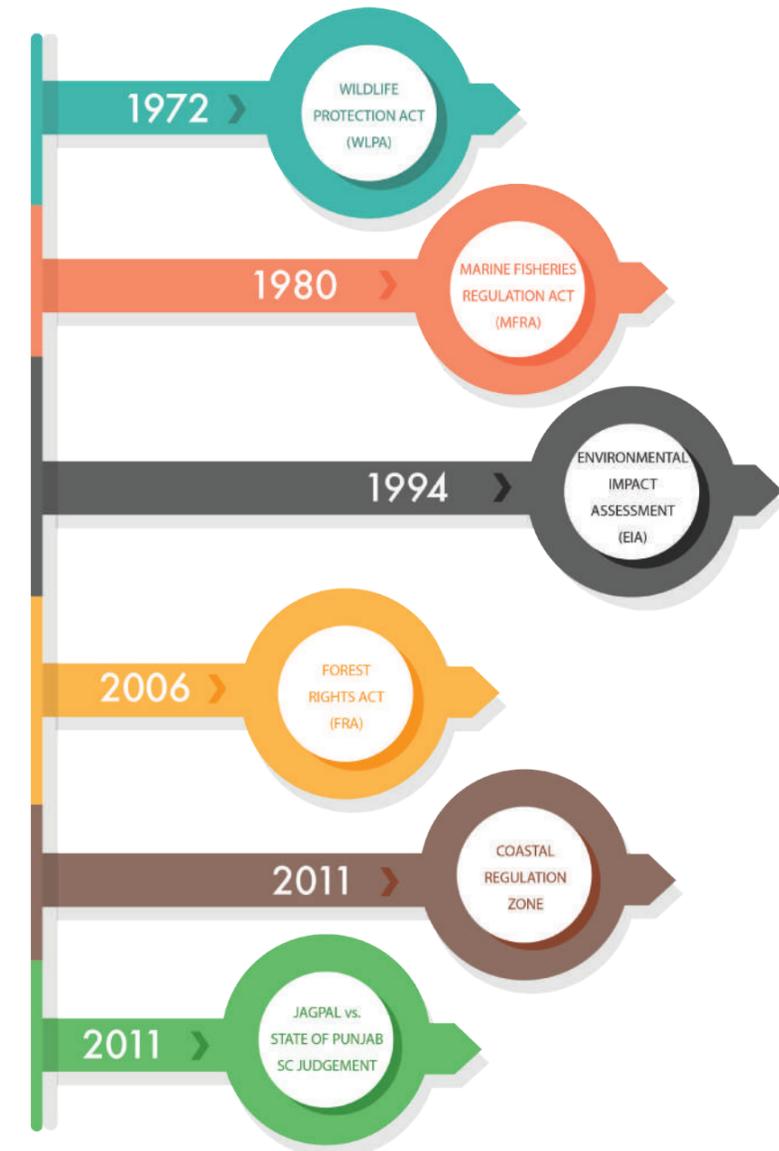
HOW ARE COASTAL COMMONS TRADITIONALLY GOVERNED?

Traditional community institutions typically decide on rules for sharing, management and sustainable use of coastal spaces and resources. For example, the ooru panchayats in Tamil Nadu and the fisher jamaat in Minicoy Island in Lakshadweep, regulate local fishing practices and resource usage. In Kerala and Tamil Nadu, sophisticated resource-sharing practices known as the Padu ensure equitable intra-village access to prime fishing grounds. Similarly, customary waterscape and shoreline boundaries are mutually drawn up to regulate coastal commons shared between villages.



Legal Frameworks

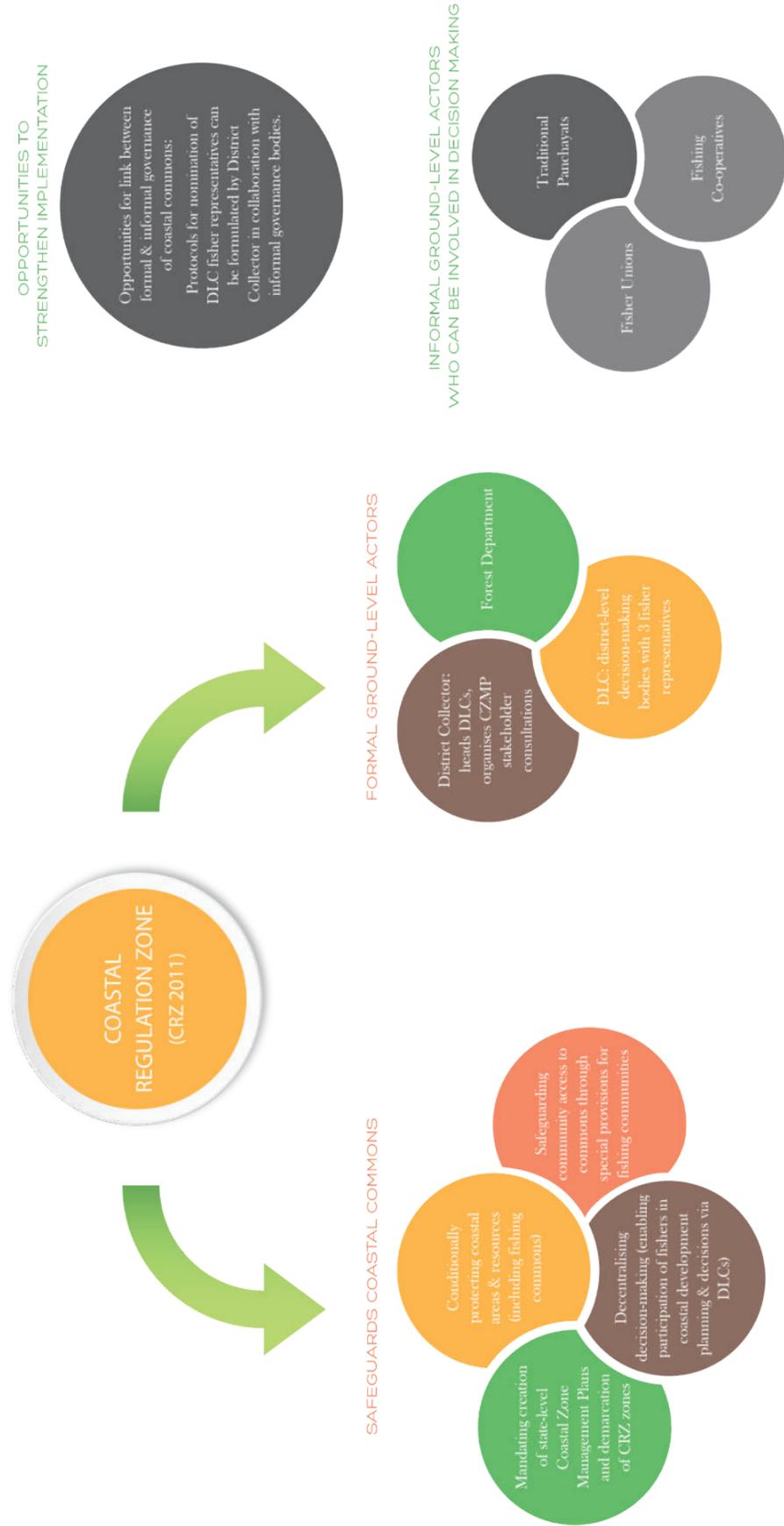
Legal Frameworks Governing Coastal Commons



A number of legal frameworks directly or indirectly protect coastal spaces and commons. For instance the Coastal Regulation Zone Notification 2011 directly does so by providing a framework for coastal protection and governance, while others, such as the Environmental Impact Assessment Notification provide opportunities for community participation in decision making for development projects. Still others like the Forest Rights Act and Wildlife Protection Act 1972 protect community rights to or access to their commons.

COASTAL REGULATION ZONE (CRZ 2011)

OPPORTUNITIES FOR STRENGTHENING COASTAL COMMONS GOVERNANCE THROUGH LEGAL FRAMEWORKS



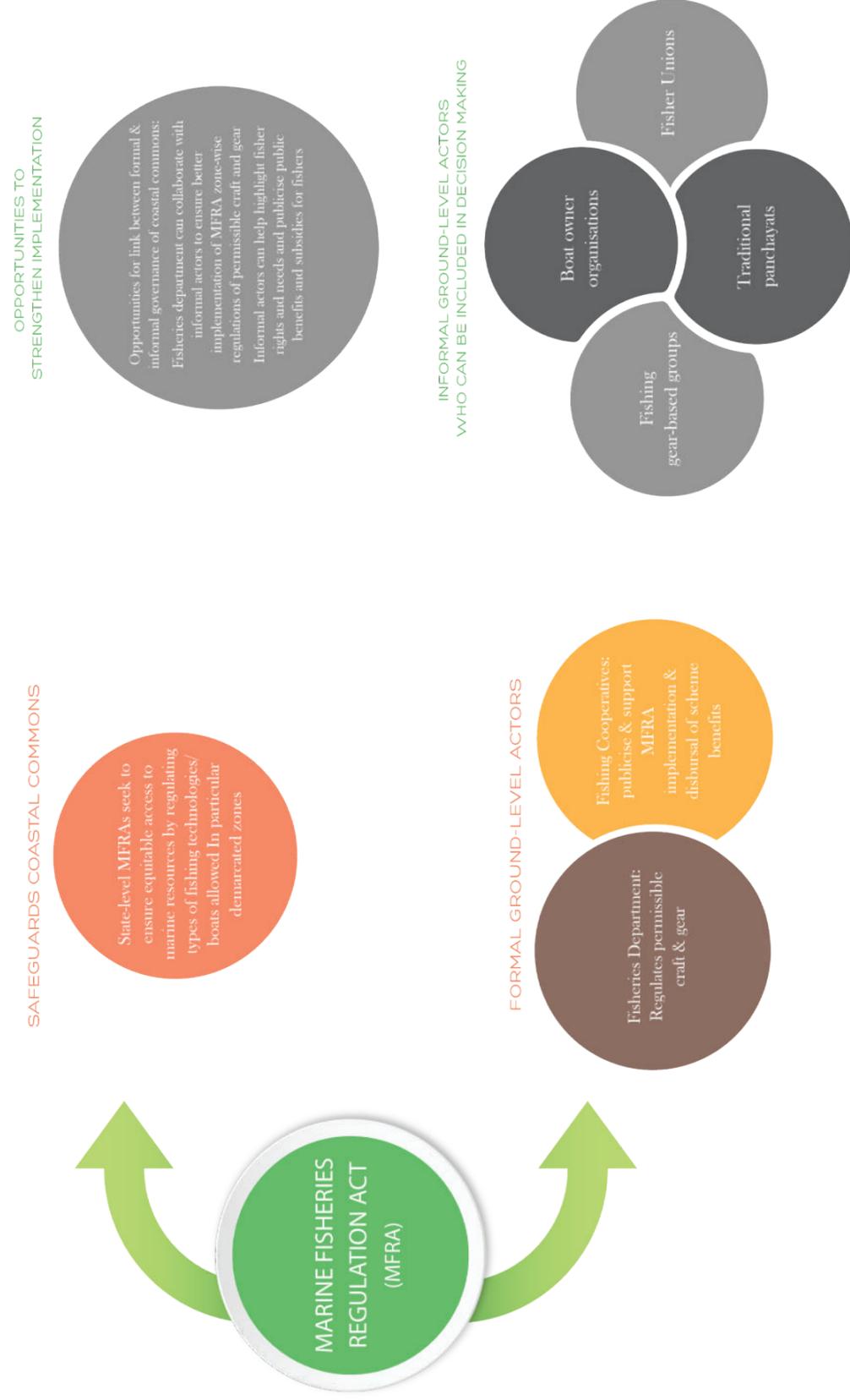
WILDLIFE PROTECTION ACT 1972 (WLPA 1972)

OPPORTUNITIES FOR STRENGTHENING COASTAL COMMONS GOVERNANCE THROUGH LEGAL FRAMEWORKS



MARINE FISHERIES REGULATION ACT (MFRA)

OPPORTUNITIES FOR STRENGTHENING COASTAL COMMONS GOVERNANCE THROUGH LEGAL FRAMEWORKS



THE SCHEDULED TRIBES AND OTHER TRADITIONAL FOREST DWELLERS (RECOGNITION OF RIGHTS) ACT (FRA 2006)

OPPORTUNITIES FOR STRENGTHENING COASTAL COMMONS GOVERNANCE THROUGH LEGAL FRAMEWORKS



- SAFEGUARDS COASTAL COMMONS
- FORMAL GROUND-LEVEL ACTORS

