# Kairampani – The Traditional Shore Seine Fishing of Karnataka

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# **Abstract**

Kairampani, the traditional shore seine of coastal Karnataka in South India, is an effective indigenous fishing operation, still practiced along coastal Karnataka. A larger version of this shore seine, namely Rampani has become obsolete with the advent of mechanization in craft and gear. The following study on the use of the mini shore seine, which is on the verge of extinction, revealed that Kairampani is now being used sporadically across coastal Karnataka and the number has dwindled to few units from hundreds during ancient times. It is used mainly during the monsoon months of June-August. It is a labor-intensive operation involving 40-50 fishermen pulling the nets from the shore with their hands, as the dhoni (a traditional boat), with its crew fishes at sea with the encircling nets. Hence the name "Kairampani" where 'kai' in the local Tulu dialect has dual meaning, i.e., 'hand' or 'small'. The Kairampani catch mainly consists of prawns (Metapenaeus dobsonii, Parapenopsis stylifera), sciaenids (Johnius glaucus, Otolithes ruber), Lactarius lactarius, soles (Cynoglossus cynoglossus), mackerels, and sardines. Though the rapid mechanization of crafts and gears have phased out traditional fishing operations such as Kairampani, these traditional methods nevertheless are being used sporadically in certain parts of coastal Karnataka during the monsoon season when there is mechanized ban and ensure fresh quality of fish at a higher price during the lean season.

Of the many fishing crafts and gears in marine fisheries, indigenous fishing methods have been scarcely documented in capture fisheries but such practices in culture fisheries are abundant and well documented. The paper documents the traditional shore seine Kairampani operation in coastal Karnataka in South India.

Kairampani, the traditional shore seine of Karnataka, has almost become obsolete with

the advent of modern mechanized crafts and gears. Nevertheless, this unique fishing is still in operation sporadically in the state of Karnataka. Kairampani is the shore seine fishing operated by the traditional fishermen of Karnataka who form 80 percent of the fisher population but yet get only 20 percent of the total catch, the rest being the share of the mechanized fisherfolk. This traditional shore seine operation is

practiced along Baikampady and Panambur areas of Dakshina Kannada, along Yermal, Padukere, Kodikanyana, and Manoor villages of Udupi district, and Murudeswar of Uttara Kannada district. Kairampani fishing is a traditional indigenous fishing practice handed down the generations by ancestors of the fisherfolk to posterity. Such traditional practices are sustainable in terms of land use, utilization of locally available materials, labor, money and could be operated without any specialized skills (Saha and Dilip Nath, 2013). So far, no concrete attempts have been made to document this traditional fishing practice as a whole barring a few references made with respect to the landings of different fish species caught in this shore seine (Sukumaran, 1987). Hence it was felt imperative to document this traditional fishing practice which is on the verge of extinction.

# Methodology

Of the three coastal districts of Karnataka namely, Dakshina Kannada, Udupi, and Uttara Kannada, the district of Udupi where Kairampani fishing operations are still widely used, was selected. Four villages, Badayermal, Thenkayermal, Padukere, and Kodikanyana in Udupi district were randomly selected (Fig. 1). During November-December 2012 the primary data on the Kairampani operations were collected from fisherfolk involved in Kairampani fishing. A sample of 20 fishermen was selected from each of the four selected villages to form a total sample of 80 respondents. Participatory rural appraisal (PRA) techniques such

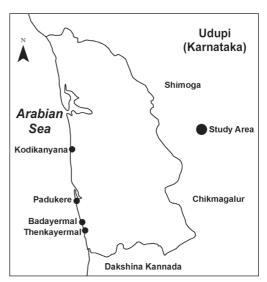


Figure 1. Map of Udupi district of Karnataka, India showing study villages.

as transects across the coastal villages, focus group discussions, and freewheeling interviews were used for data collection (Brandt, 1984; Schonhut and Kievelitz, 1994; Chambers, 2002). The traditional knowledge and the related information were collected from the fisherfolk, with Prior Informed Consent (PIC). A questionnaire was framed consisting of questions related to the craft and gear, method of operation, time of operation, manpower, fishes caught, and details pertaining to average catch per day during different seasons.

### Observations and discussion

Kairampani is a smaller version of Rampani. Kairampani, as the name suggests, is derived from the word "kai" meaning "hand", implying that the net is pulled by hand and not by rope. The name "Kairampani" is widely used along the Mysore coast (Prabhu, 1967). The practice employs a traditional boat called

dhoni measuring 20 feet in length and 5 feet in breadth, manned by 8-9 fishermen and a net which is deployed in the water and pulled from the shore once it is full. These nets are operated at depths of 1–4 m, and consist of 10-15 pieces, each measuring 4.5-6 m in length and 3.5–4.5 m in height with a mesh size ranging from 1.5 cm at the center to 2.5 cm at the end. Rampani, was named after a Portuguese Christian priest Rampaan who is said to have introduced Rampani in Goa. It was later introduced in coastal Karnataka from Goa. This system of fishing is practiced in shallow waters at sea to mainly catch shoal fishes. It is a massive fishing operation. This kind of fishing operation starts in Bhonthal (September/October) by collecting all the nets and putting them in order and erecting a temporary structure (dhompa) as shelter for assembling and storing necessary things. The fishing season normally comes to an end in Paggu (March/April) when nets are dismantled and stored and padav (boat) is kept in shelter to protect it from rain water during monsoon. Rampani is a shore seine of exceptionally large size having a length of about 2000 m. The net requires about 100 persons for operation. With the introduction of large-scale commercial purse seining in 1978, a large number of fishermen families who were dependent upon Rampani fishing were displaced from their otherwise traditional livelihood option, causing serious hardship to the coastal fisherfolk. When a shoal of fish is located near the shore, one end of the net is fixed on the shore and the other end is steered around the shoal by the Rampani boat bringing the catch ashore or kept impounded in water near the shore and marketed in stages according to the demand (www.Mogaveeracommunity.com).

The Rampani fishing method started around 1910. Most of the villages along the Karnataka coast had 2 to 5 *Rampani* units. The ownership of one unit was shared by about 100 families; all of them were actively involved in the operation. Rampani fishing represented the Mogaveera community's capacity to adopt new method of fishing by organizing cooperative method of sharing the benefits among themselves and with all other communities. The Mogaveera community self-regulated all fishing operations. To prevent overfishing, fishing after sunset, i.e., night fishing, etc. were banned for Rampani and all major fishing operations. But the mechanized fishing has overthrown all such prudent checks and balances.

Kairampani is a similar fishing operation done during the monsoon season in June to August. Here the formation of net is the same but the net is smaller in size and the boat used is large, which can be manned by around nine to ten people. The fish caught are generally of non-shoal type and the catch depends more by chance. The statistical data of 1972-73 published by Government of Karnataka show that 114

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Kairampanies were in operation. While the Rampani stopped operating in some coastal villages, Kairampanies are still in operation. At present there may be less than 60 units of Kairampani operating throughout coastal Karnataka. Padukere in Udupi district is exclusively known for the Kairampani operation. The village is known for its well streamlined coast, and has calm seas which facilitate smooth shore seine operations. The Kairampani catch mainly consists of prawns (Metapenaeus dobsonii, Parapenopsis stylifera), sciaenids (Johnius glaucus, Otolithes ruber), Lactarius lactarius, soles (Cynoglossus cynoglossus), mackerels, and sardines which are the major catches of Kairampani fishing. During the monsoon season, the average catch is 2000-4000 kg per haul. During June–August (monsoon) the operation is carried out from 5 am in the morning to 5 pm in the evening and 5 hauls are carried out. During the other seasons (September-May) an average of 300-500 kg per haul is obtained and 2–3 hauls are carried out per day. During Sepetmber to May the fishing is done from 5 am to 10 am. The fish caught in Kairampani fishing is fresh and the quality is much superior to

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the ones caught in purse seine or trawl nets. Besides, due to the superior quality, the catch fetches a higher market price than the fish caught in modern-day trawl and purse seine nets.

# Fishing nets

Three types of nets are used in *Kairampani*:

- 1. **Thangees bale:** It is a monofilament net having a mesh size of 30 mm. It is used to protect the middle net, i.e, nylon net.
- 2. **Nylon net:** All the fishes are caught in this net. It has a mesh size of 16–18 mm. The nylon threads in this net make it stronger than the other two nets.
- 3. **Main net:** It has a mesh size of 16–18 mm. The fishes caught in the nylon net are led into this net and the fishes get collected in the cod-end of this net.

The size of net used in *Kairampani* is  $135 \text{ m} \times 12.5 \text{ m}$  of mesh size 8-12 mm. The depth of operation is 4-6 m and the distance of operation of net is a quarter mile (0.4 km) from the shore.

#### Method of operation of Kairampani

The *Kairampani* fishing makes use of one single boat, namely *dhoni* without motor. In very rare instances a 9.5 hp engine is used in the *dhoni*. Usually 9 men go in the *dhoni* up to 1–1.5 km from shore. The operating nets are kept in the boat. A 400-m length of nylon rope attached to the net is taken; 25 men hold one end of the rope and another 25 men go to the other shore. The *dhoni* 

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along with the fishing nets are launched into the water. The fishing nets are then spread in the water. The fishing operation lasts for  $2\frac{1}{2}$  hours and when the net becomes full, the net is pulled from both sides, till it is lifted. It is a labor-intensive operation and around 50–60 people take part in this operation (Figs. 2 and 3). The owner takes 30 percent of the value of the catch and the remaining 70 percent of the value of the catch is shared among the fishermen.

# Fishing season

The main fishing season is from June to August. This is the time of ban for mechanized fishing vessels. The fishermen



Figure 2. Kairampani dhoni and nets being launched into the sea.

who otherwise work as crew in the mechanized fishing vessels involve in Kairampani operations intensively during these rainy months and earn income. The operations are also carried out during September to December but the frequency of operation is less. According to the fisherfolk, during the monsoon period from June to August, fish availability in the market is less due to the mechanized ban, and the market rate of fish is high enabling the fishermen to use Kairampani operation in a judicious and economical way. During the season of plenty, i.e., during September-December, the market price of fish is relatively less making the cost of operation more and hence it is not considered feasible by the fishermen.

During June–August, which is the main season of Kairampani operation, a fisherman on an average earns ₹ 200–300 per day and during the other months (i.e., September-May), he earns ₹ 50–100 per day. The dhonies used in Kairampani fishing in earlier days were made of wood. They were preserved by periodically coating them with the oil extracted from oil sardine. Besides in earlier days the brain of dolphins were dried and the oil extracted from the dried brains were used for preserving the wood of Kairampani boats. Nowadays wooden Kairampani dhonies have been replaced by fiber reinforced dhonies.

### Conclusion

The use of indigenous fishing operation, namely the Kairampani is fast dwindling due to stiff competition with mechanized crafts and gears. Other than the monsoon

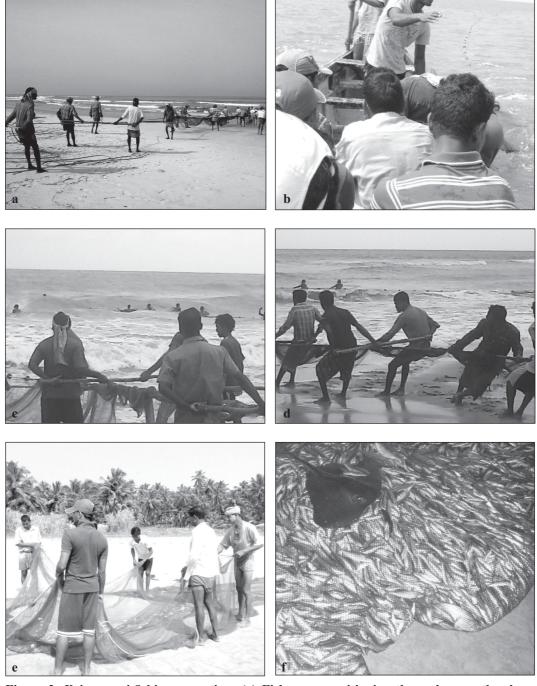


Figure 3. Kairampani fishing operation: (a) Fishermen positioning themselves on the shore to launch the fishing nets; (b) Nets being lowered into the sea; (c) Fishermen pulling the nets filled with fish towards the shore; (d) Fishermen lifting the encircled nets filled with fishes; (e) The catch from Kairampani nets; and (f) Fish catch being removed from Kairampani nets.

season when mechanized ban is enforced in Karnataka, these operations are rarely used and have almost disappeared into oblivion. Kairampani fishing is used for subsistence fishery and helps the fisherfolk to get good catches at remunerative prices during the monsoon season when fish catch is scarce and when the fisherfolk can get remunerative prices for their fresh and high quality catches.

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