# Satellite technology for finding fish

The fishing industry in Sri Lanka is taking place in ocean and inland waters. Marine fish production contributes nearly 85% of the total fish catch, of which the coastal fish catch is 50% while the rest (35%) is from deep-sea fish catching. Sri Lanka has an exclusive economic zone (EEZ) which is eight times larger than its land area and access to the high seas of the Indian ocean. Multiday fishing has a few decades of history, and fishers still rely on fishing information from other vessels and instinct to find fishing grounds.

Sri Lanka's geographic position in the Indian Ocean means that great coastal and deep-sea fishing experiences can be obtained in almost every direction of the county's coast. Skipjack tuna, yellowfin tuna and bigeye tuna live in deep waters around Sri Lanka and are migratory fish species. Tuna species are sensitive to temperature and are found in different depth layers of the ocean.

Apart from temperature, oceanic food availability and ocean currents influence tuna migration patterns. Satellites are essential to obtain the information to predict fishes distribution in the ocean. Earth observation satellites provide sea surface temperature, chlorophyll distribution, ocean currents. Long-term fisheries and oceanographic data have been used to analyse the fish distribution. These studies and satellite observations can be effectively used to predict potential fishing grounds. The satellite-based fishing ground advisory is a supporting tool to find potential fishing ground, reduce travel time, and ultimately increase the benefits of the industry. The project is aims to introduce new technology to the fishing sector and motivate investors to use the technology.

#### Benefits of identification of fishing grounds

- Reduce the searching time of fishing grounds
- Save the fuel cost by lowering the time spent in the sea
- Improve the catch efficiency
- Reduce post-harvest loss of catch
- Increase the revenue from foreign export
- Stability of fish market prices
- Attract investors to the fishing industry

#### **Dessimination of information**

Fishing ground advisories are issued every Monday, Wednesday and Friday. This information is disseminated to fishers via email, WhatsApp, Facebook and Nara website (<a href="www.nara.ac.lk">www.nara.ac.lk</a>). Also, you can call our telephone for more information, and you may provide your email and WhatsApp to receive advisories without any delay. We distribute the meteorological report for multi-day vessels supplied by the department of mereology.

### How you can support

You can support us by entering accurate information on the daily fishing operation in your fisheries logbook. This information will improve the fishing industry and secure your job. We invite you to join us to enhance the fishing sector by precision fishing.

## Services are expected to be provided In the year 2022

 Before leaving the port, vessels will receive a potential fishing ground advisory of next 5-7 days

- Special fishing advisories for Bigeye tuna and Billfishes
- Fishing advisory for skipjack tuna gillnet fishery

# **Contact us**

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