Working Together

A collaborative approach to counter illegal, unreported and unregulated (IUU) fishing is under way in Timor-Leste

Timor-Leste (formerly East Timor, now, officially, the Democratic Republic of Timor-Leste, a sovereign State in Southeast Asia) has established, for the first time, a community-based reporting system on illegal, unreported and unregulated (IUU) fishing, aimed at addressing problems of IUU and safety at sea, using recently available consumer technology to engage fishers in a mutually beneficial partnership with State institutions.

IUU fishing has been estimated to produce annual losses of between US$10-23 bn around the world, negatively affecting the environment and livelihoods of many small-scale fishing communities. Most of the IUU fishing in Timor-Leste is conducted by foreign vessels and is concentrated in its southern waters, where enforcement of laws is weak.

As the newest country in the Asia-Pacific region, Timor-Leste faces huge challenges in managing its natural resources, given its budgetary and human-resource limitations. Foreign fishing vessels that illegally operate in the waters off the country's southern coast are well aware of the new nation's lax law-enforcement capacity.

To address this challenge, the National Directorate of Fisheries and Aquaculture (NDFA), in partnership with the Spanish-funded Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP), has put in place a community-based IUU reporting system. The community-based IUU programme is very different from the standard vessel monitoring system (VMS) approach.

In the traditional VMS model, transponders are placed on fishing boats that the government wishes to control. These VMS systems are typically installed on larger commercial boats that are required, by law, to have transponders or have purchased licences or quotas from a country to fish in a specific area.

However, fishers have figured out ways to get around the VMS system, for example, by turning off the system, by leaving it in port and switched on while they go to sea fishing, or putting it on their dinghy or another boat while they go fishing in a restricted area.

Timor-Leste's community-based IUU reporting system takes a different approach, which creates a relationship of trust between artisanal fishers and the State...

On the other hand, Timor-Leste's community-based IUU reporting system, piloted by the NDFA with RFLP support, takes a different approach, which creates a relationship of trust between artisanal fishers and the State, in which artisanal fishers are not seen as targets of control, but are those who control resources in a self-regulatory, non-punitive manner.

Sustainable management

By recognizing their ownership of the resources, they also accept responsibility for the sustainable management of resources, and build their capacity to work with the State institutions, based on mutual respect and common goals. This community-based concept, which was first implemented in Aceh in

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northern Indonesia, with the help of the region's traditional fisheries authorities, the Panglima Laot, was put into operation on a pilot scale in Timor-Leste during February-July 2012. Village leaders were involved in the selection of participants for the project, who were provided with instructions in the local Tetum language.

Initially, two boats operating in the southern waters of the country were loaned the devices. The NDFA has activated seven more devices, which are now ready for distribution. Another 10 will be activated next year, depending on budgetary constraints. Thus, there will soon be over a dozen points along Timor-Leste's coast that can be used to report IUU fishing.

Through reports from fishers in different locations, the authorities involved in maritime affairs have had to revise their operating procedures in order to provide efficient responses; an agreement has since been reached among representatives of the relevant ministries to create a joint body to deal with maritime-security issues, IUU fishing and rescues at sea. The proven system is now in the process of becoming a key element in the national monitoring, control and surveillance (MCS) policy of Timor-Leste.

Timor-Leste's artisanal fishers now have a means to call for help if they get into trouble at sea.

The system hinges on a partnership agreement in which the government loans personal locator beacon (PLB) devices to artisanal fishers. At present, there are only one or two devices per district, which are rotated among the fishers.

These hand-held tracking devices, which are readily available in local electronic shops, are inexpensive, costing as little as US$100 each, with an annual service fee of approximately US$150. Their activation and maintenance do not require special skills. Extensive satellite coverage allows their use in the most remote places, and is thus a viable option for co-managed control of IUU fishing in developing countries.

The PLB devices automatically transmit their positions every 15 minutes via satellites. The devices have two buttons: one, labelled '911', is for use in the event of a life-threatening or critical situation, to notify emergency-service providers; the second, labelled 'illegal', allows fishers to anonymously report IUU fishing activities, of both foreign and national vessels. (Local IUU fishing issues are normally handled by traditional community systems of conflict resoultion, sometimes mediated by the NDFA.)

When the 911 button is pressed, the PLB device sends out an emergency distress signal, giving the boat's location through the same network as the emergency position-indicating radio beacon (EPIRB) system used by boats in the country's western region. The international monitoring centre then sends short message service (SMS) alerts to the cellular phones of the heads of the Maritime Police and Fisheries Inspection departments. Both local and national civil aviation authorities are simultaneously notified of the co-ordinates of the boat in distress.

The 'illegal' button transmits the time, date and position of IUU activity to the Maritime Police and Fisheries Inspection departments. The system ensures anonymity, although staff of the National Directorate of Fisheries and Aquaculture can view the information on a password-protected website.

With these devices, Timor-Leste's artisanal fishers now have a means to call for help if they get into trouble at sea. In exchange for this improved safety, they have agreed to use the devices to report IUU fishing activity in their area to the relevant State authorities in real time.

Database created

As a result, it has been possible to create, for the first time, a database

STEVE NEEDHAM / RFLP

Children of a fishing community in Timor-Leste, which is currently experimenting with a community-based system to report IUU fishing in its waters

on IUU fishing in the country, with regularly updated maps that also indicate fishing patterns in different areas. The system has also improved communication and trust between fishers and State institutions.

The system is ideal for developing countries such as Timor-Leste which have few patrol boats or extremely limited manpower to patrol remote sea areas. The system could be used to help manage marine protected areas (MPAs) or remote areas that are difficult to access.

For more

www.peskador.org
National Fisheries Statistics System of Timor-Leste

www.rflp.org/timor_leste
Regional Fisheries Livelihoods Programme