

Natural disasters

Cyclone warning

Under an FAO project in India, a pilot scheme for disaster preparedness training in coastal villages is under way

The FAO project on Training in Sea Safety Development Programmes to Reduce the Loss of Life Amongst Fisherfolk During Cyclones was initiated as a result of the high loss of life amongst fisherfolk in the November 1996 cyclone in East Godavari, Andhra Pradesh, India. Balusuthippa, Bhairavapalem and the surrounding hamlets were amongst the worst affected, resulting in this project being focused there.

A baseline survey commissioned by FAO shows that of the 1,435 fisherfolk lost during the cyclone, the vast majority were from two categories: 830 were shrimp-seed collectors lost from the outlying sand banks and islets; and 569 were fishermen lost at sea from capsized trawlers. The study shows that very few lives were lost in the villages.

For these reasons, this project has been focusing its efforts on reducing the vulnerability of these two most affected groups, namely, the shrimp-seed collectors and the fishermen on trawlers going for several days of fishing. (Fishermen of *navas* and other craft generally go for much shorter fishing trips and, having watched the weather signs, generally do not get caught out in severe conditions).

For both groups, the project intends to work to increase their confidence, comprehension and response to cyclone warnings, and improve their ability and diligence in monitoring them. Wider use of transistor radios and two-way VHF radio communication systems will be encouraged and demonstrated. One hundred VHF sets, provided by the project, are to be installed, mainly in trawlers, but also in fishing villages. The sets in the villages will be mobile ones

which could be relocated to other villages, if required. The District Collector's office and the Department of Fisheries in Kakinada will also have a set each. Two continuously manned VHF shore stations, with 30-in antenna towers, complete the network for this pilot project. The system operators will be trained to communicate timely and appropriate warnings to the villages and trawlers, in addition to general weather and fishing information at other times of the year.

For the trawler fishermen, direct communication about weather conditions and with their colleagues on other craft is intended to assist them in taking more appropriate action in the face of deteriorating weather.

Additionally, the project aims to provide at least 50 lifefloats to trawlers. The lifefloats are based on an established US Coast Guard design adapted by FAO's naval architect for fabrication in local boatyards. A prototype has been tested in Kakinada and meets the approval of the boatowners, fishermen and the Department of Fisheries. Each lifefloat easily supports 10 men in the water.

In the 1996 cyclone, most fishermen drowned after their trawler capsized, because no floatation devices were available—crafts are observed to contradict Marine Fishing Act regulations stipulating the carrying of lifejackets and lifebuoys. However, experience shows that very few crew know how to correctly don a lifejacket. The crews have little confidence in them and the owners do not ensure that they are carried.

Uses of lifefloat

The lifefloat, on the other hand, sits on the roof of the wheel-house, is easily accessible and its use is instinctive. It can

be produced locally and relatively inexpensively, probably cheaper than 10 lifejackets. Initially, pressure from crew may see its more widespread installation, but later, legislation might ensure that it becomes mandatory equipment.

In efforts to reduce the vulnerability of shrimp-seed collectors, it is important that they are brought back from the outlying and low-lying areas before conditions deteriorate to a point where this becomes impossible.

As mentioned above, the village is a much safer place than the shrimp-seed collection grounds. Disaster preparedness training in the villages is under way in a pilot scheme being implemented by a team of 20 Storm Safety Extension Officers (SSEOs) trained by the project.

These SSEOs will mobilize volunteer Storm Safety Action Groups (SSAGs) in up to 30 pilot villages. They will facilitate the development and rehearsal of a community-developed contingency plan of action for each village. These plans are intended to complement the government's Cyclone Contingency Plan of Action and the work of the local revenue officers.

These plans will have two main components developed and rehearsed by the community SSAGs: preparation in the weeks before the cyclone-prone periods;

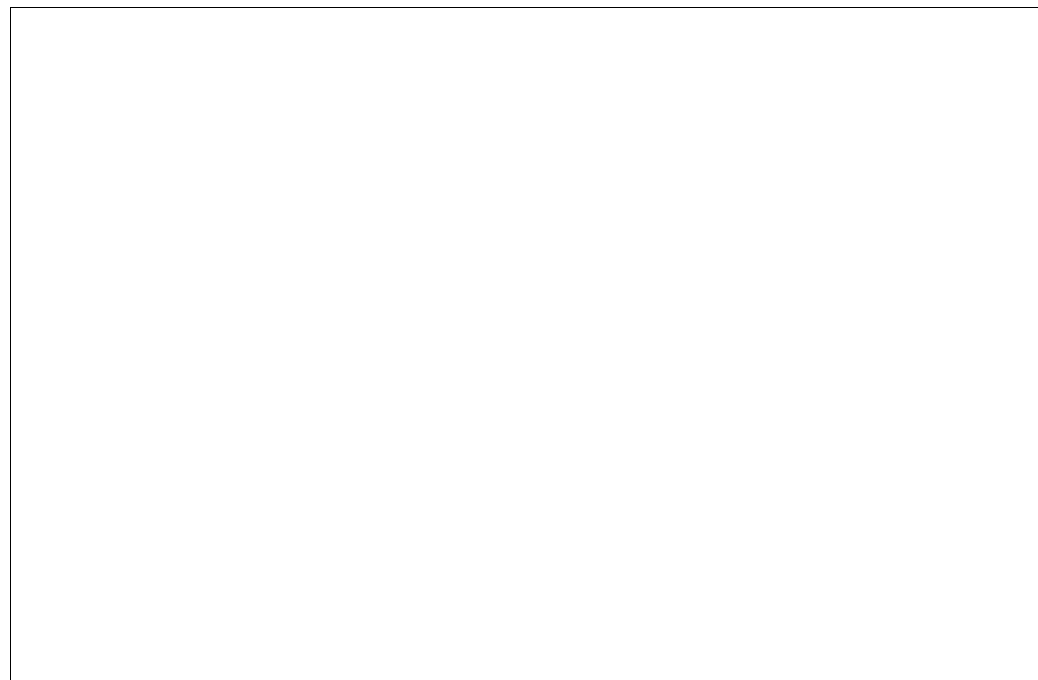
and actions to be taken in the event of an imminent cyclone. They will be location-specific, but will include:

- collection and storage of food, fuel and water at safe houses and cyclone shelters in the weeks before the cyclone-prone periods;
- continuous monitoring of weather bulletins and sharing of information in the community;
- plans for helping sick, infirm, aged and handicapped persons and pregnant women in the event of a cyclone; and
- plans for retrieving shrimp-seed collectors from the outlying areas and bringing them to cyclone shelters and safe houses.

The project will endeavour to provide the SSAGs with some basic equipment, such as transistor radios and yellow hard hats for protection and identification as managers in a crisis situation.

Constraints at work

The retrieval of shrimp-seed collectors from their collection grounds is constrained by the lack of motorized craft in some villages. The project has 12 diesel engines which will be installed in *navas* in villages with significant numbers of people engaged in shrimp-seed collection,



but with very few motorized navas. The beneficiaries of these engines should agree to use their *navas* for retrieval of shrimp-seed collectors, under the co-ordination of the SSAG, in the event of a cyclone.

A video, promoting diligent monitoring of weather bulletins and making sound preparations in the village in the pre-cyclone weeks, has also been planned. The Director of Doordarshan (India's national state-owned TV network) in Hyderabad has offered full support in producing this material.

During 1-3 February 1999, a workshop entitled 'Measures to Reduce Loss of Life Among Fisherfolk during Cyclones' will be held. This will review the events of November 1996 and seek to learn from them. It will also seek to draw on the responses to similar events in other countries and [he experiences gained in this project. The workshop hopes to produce concrete recommendations on reducing loss of life amongst fisherfolk during these type of natural disasters.


The project also proposes a vision for SSEOs' work so that fishing communities become very much more aware of:

- the causes, nature and behaviour of cyclones, and the effects they induce and why their track is hard to predict; and the need for increased confidence in the Indian Meteorological Department/All India Radio weather reports and cyclone warnings;
- what they themselves can do to be better prepared for cyclone disasters; and
- how the government machinery will interact with them in such emergencies.

The SSEOs will, by working closely and participatorily with volunteers, facilitate the development of SSAGs in each village and will be able to co-ordinate their own community-developed contingency plan of action. The result should be that the SSAGs and village community very much

feel ownership of, and commitment to, their plan.

Although many components of the community developed contingency plans of action may be similar, each will probably display a number of specific details which are appropriate to their location and their situation.

The measure of success will be how well the SSAGs are able to sustain and demonstrate the contents of their village plan, rather than how impressive it looks on paper. It is hoped that they will not have to put their plans to the ultimate test, but if they do, it is expected that the diligence of the SSEOs in this work now and SSAGs in future will save lives and minimize suffering. 

This report has been written by Paul Calvert, an independent consultant formerly with ITDG, UK