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Field Document No. 3

TECHNICAL COOPERATION PROGRAMME

TRAINING IN SEA SAFETY DEVELOPMENT PROGRAMMES

BASED ON THE WORK OF

Mr. Paul Calvert
FAO Coastal Fisheries and Sea Safety Specialist

(second mission : 4 June – 3 July)

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
BANGKOK, 1998

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The Food and Agriculture Organization is greatly indebted to the organizations and individuals who assisted in the implementation of the project by providing information, advice and facilities.

1. Summary

The Team Leader travelled to Hyderabad, Kakinada and Vishakapatnam for four weeks (4 June - 3 July 1998) to follow up project activities. Spending a day in Hyderabad he met the National Project Director (NPD) and Relief Commissioner and then proceeded to Kakinada by overnight train journey. In Kakinada the initial priority was to ensure the commencement of the Storm Safety Extension Officers (SSEOs) Training Course. This started on 8 June at the new State Institute for Fisheries Training (SIFT) and continued until 17 June 1998. Fieldwork by the SSEOs commenced in the villages with practical experience of resource mapping and PRA techniques. The International Consultant Naval Architect made his mission during this period and researched craft and crew safety, developed a lifefloat for mechanised boat crews and selected the diesel engines for navas. The first batch of VHF radios arrived and one was installed in the Kakinada Shore Station Building. The Fisheries Development Commissioner and FAO Representation from Delhi visited the project. The NGOs Committee finalised their proposal to FAO for the SSEOs fieldwork. The venue, dates and programme for the workshop "Measures to Reduce Loss of Life amongst Fisherfolk during Cyclones" were decided. Details of itinerary, schedule, persons met are listed in Annex 9.

2. Meeting at Kakinada with Fisheries Development Commissioner GOI and FAOR

The programme for this visit is as Annex 1

3. Workshop

The rescheduled dates for the workshop are 1 - 3 February 1999.

- The Fisheries Development Commissioner's office (FDC) offered to handle the workshop preparations and invitations through his office. This offer was accepted. The duration will be reduced to two and a half days as any longer than this will simply not be possible for most participants. The new programme is as Annex 2.
- The participants' list to be forwarded for endorsement to FAOR and Team Leader by the FDC. An indicative list is given in Annex 2
- The Team Leader (TL) and the National Consultant Radio Expert (NCR) subsequently traveled to Vizag to select a suitable venue. The Taj Residency Hotel was selected as having probably the most suitable facilities.
- The Department of Fisheries (DoF) have appointed a liaison officer in Hyderabad for the workshop preparations: Mr. Seshasayana Rao Tel 597103 (w) 2724772 (h)

4. National Consultant (Coastal Fisheries)

This team member had to withdraw from the project for health reasons. It has been decided not to replace him at this stage in the project, the NCR and TL sharing his duties through modified TOR. See Section 18 below.

5. Availability of DoF Staff

The FDC also agreed to expedite authorization to clear the 10 DoF SSEOs from their current duties for full time work on SSEO duties until end February 1999. Similarly for DoF fieldmen to man the shore stations round the clock (three for each). This was discussed in detail at the Kakinada meeting and also followed up in correspondence to the Commissioner of Fisheries in Hyderabad. (See Annex 5)

6. SSEO Fieldwork

The villages covered by this fieldwork, where Storm Safety Action Groups (SSAGs) will be set up, and the designated SSEOs are given in Annex 7

At this time the proposal from ACTION for the fieldwork by SSEOs was in draft format but the importance of this work was endorsed by all. Given importance of this activity and the size of the budget, this work should be subject to fairly close external monitoring in addition to the two-monthly reviews outlined in the proposal (see also District Collector's agreement to chair review meetings - annex 3). This was endorsed by all present, but no one was under the impression that it would be easy to find a suitably qualified and committed person to undertake this work.

The Team leader recommends that the fieldwork proposal be approved at the earliest and funds disbursed in a series of monthly or two-monthly installments. This field work is essential and there is almost no time buffer in the programme due to so many earlier delays. The external monitoring package should be mobilised urgently but without delaying the fieldwork. (Note: The TL will also be monitoring progress in early October 98).

7. Sea Safety

The International Consultant Naval Architect (ICNA) will present his own mission report giving the details of his work. Suffice to report here that it was an extremely useful and productive mission. A very effective buoyant apparatus or lifefloat for the mechanised boats was produced by a local boatyard under the close supervision and guidance of the ICNA. It was demonstrated at two workshops (one to boat owners, some of whom are skippers also, and the other intended for MMD, Port Authority and DoF Instructors) and tested in the fisheries harbour receiving very positive response from the mechanised boat owners, crews and DoF. Mechanised boats were inspected for deficiencies in design, construction, stability and safety. Mechanised boat crew survivors were interviewed to learn more about the nature of craft loss. Nava engine installations and engine suppliers appraised prior to recommendations on engine brand selection and installation design. A local boatbuilder/engineer is to be recruited on when-actually-employed basis for two months to approve engines and supervise installation.

Beneficiaries with suitable navas will be selected in October 1998, when the TL will be on site again. (See also note on beneficiary selection under the heading Equipment)

8. Other Activities

The Team Leader had meetings with the Relief Commissioner, Commissioner of Fisheries, Doordarshan Director, ETV Chief Producer, All India Radio Director; and a telephone call with Wing Commander Chandrashekara, Indian Air Force.

- **Doordarshan**

Doordarshan offered to produce a video for us on Cyclones and Disaster Preparedness in the Fishing Community. We have to produce the outline story and work to develop it with a team already nominated by them at the meeting. This team will be available to visit the project area during the TL's next visit in October 1998. They specified that the DoF must appoint a Liaison Officer for this work.

- **All India Radio**

AIR were also very positive and agreed to depute a team to visit the project area in October. This will be to participate in dialogue in the communities with a view to improving both the communities comprehension of the forecast and looking for scope to improve the appropriateness of the forecasts. Key staff from AIR have been identified for this.

- **ETV**

ETV offered to come and report on the project work and also to broadcast any educational material we produce.

All three agreed to report on the lifefloat for mechanised craft and the Storm Safety Action Groups.

- **Indian Air Force**

The Indian Air Force Wing Commander explained that in contrast to many European countries, or even Vietnam which is very narrow, India has a huge land area. The entire country does not have equal aircover as perceived threats are greater in some areas than others. Consequently the district of East Godavari and coastal Andhra Pradesh are far from any jet aircraft bases.

This makes the use of IAF aircraft for early warning rather unlikely. The response of the Navy and Coast Guard still needs follow-up, and hopefully they can be encouraged to provide a report at the workshop.

9. Overseas Study Tours to Bangladesh and Thailand.

The two candidates benefited immensely from the training at AIT and the exposure in Bangladesh. They found the latter particularly useful. They gave presentations of their experiences during the SSEOs training course. Their Visit Reports are to be sent to the TL and FAOR shortly.

10. Lifejackets and Lifebouys

The equipment supplied was inspected by the TL and found to be unsatisfactory. The supplier is to refund the payment and take back all the equipment. See annex 6.

11. Equipment

The project is now working through a process of interaction with fisherfolk (through the SSEO's) and boat owners and crews. In the case of the latter it is clear that the most appropriate safety equipment the project can promote is the lifefloat, not lifejackets and lifebouys. This is a pilot project and it should demonstrate what is appropriate for the groups it aims to benefit. So, although there are regulations stipulating mechanised craft must carry lifejackets and lifebouys, this project will not provide that equipment. The project will instead use its finite funds for demonstrate the lifefloat as widely as possible. At this stage an initial batch of 50 units is anticipated, starting production on the TL's return in October 98. A further batch of 50 should follow. Cost is likely to be in the region of Rupees 5000. Two yards in Kakinada would do this work.

It is still too early to say what equipment will be most appropriate for the fisherfolk in the villages and shrimpseed collection sites. Under consideration will be transistor radios (possibly with improved antennae) for reception of AIR forecasts and warnings, waterproof watch with alarms for correct forecast times, hand cranked sirens and signal rocket packs for alerting nearby craft and villages, hard hats (orange or yellow) for SSAG members for protection and identification in a disaster situation, etc. However, this will be decided through participative dialogue and feedback from SSAGs and SSEOs rather than by assumption. There is no urgency to spend the equipment budget; it is better that the SSAGs receive the right equipment at the end of the project (when they are just beginning their work) than the wrong equipment early in the project when they are still developing their contingency plans.

The selection of beneficiaries for the 12 diesel engines will be decided on the basis of need. Again this has to wait until the SSEOs and SSAGs have made progress on village mapping. Some of the remote villages, having a significant contingent of shrimpseed collectors, have virtually no motorised navas. On the other hand, a number of motorised navas are evident in Balusuthippa and Bhairavapalem. The picture will become clearer as the SSEOs proceed with their work. Selected navas will have visual markings applied for identification after installation of project engines.

Locally made rockets giving the following characteristics have been ordered for trials as local warning signals. These characteristics cannot be confused with International Distress Signals. The prices are far below the cost of white marine flares and potentially affordable beyond the project period by SSAG mobilized village contributions

Characteristic	Qty	Unit Price	Total IRs
White star burst and explosive sound	25	26	650
White Flare, Parachute	25	30	750
Yellow Smoke, Parachute	25	40	1000

12. Shore Stations

The NCR will report in detail on the status of radio installation in his report. In summary the radio in the Kakinada shore station in the fisheries terminal office building is ready except for needing batteries and charger and a lock on the door for security. The shore station at Balusuthippa is causing major hold up on the VHF work. The building had earlier been completed up to erection of the walls and shuttering for the roof slab. At this point the building, on six reinforced concrete columns sank into the soft subsoil listing heavily to one side. The shuttering collapsed carrying away the brick walls. Work by the fisheries executive engineer and contractor is underway to use water jets to sink the entire building to a horizontal position such that the floor slab, originally at 2.4 metres above ground, sits level with the ground. The columns which were originally the frame for the walls will be extended and a new floor slab, roof and walls built. The Department of Fisheries will bear the cost of this work and ensure its rapid completion. An approach road and power supply are also to be arranged. (NCR's report)

13. VHF Radios and Training Courses

52 VHF sets arrived in Kakinada in the third week of June.

After discussions with the boat owners and later with the Fisheries Development Commissioner and FAOR it was decided that the VHF radio sets be allocated to the boat owners free of cost. 100 radio sets in two batches will be distributed in this way, and there is no complication of who by and how a contribution would be handled. The cost of a VHF Radio Set is very small in comparison to the investment for a single voyage by a mechanised boat. The boat owners' and DoF's opinion is that owners will buy their own sets outright if this project proves their usefulness. In this case the best approach is to get the sets operational as quickly as possible and not delay action with the subsidy approach. The basis of beneficiary selection will be by lottery. Initially 40 sets will be installed: 20 in Kakinada craft, 10 in Bhairavapalem craft and 10 in Balusuthippa craft. This process will be repeated later, and the balance sets will be held, initially for mobile use in key village locations on the basis of remoteness and vulnerability (dependent on the SSEO and SSAG fieldwork results). The first craft installations are scheduled for 17 July.

One set will be temporarily installed in the vehicle of the SSEO Fieldwork Coordinator to facilitate communication and coordination. Likewise another set will be available in the RDDs office in Kakinada. The FAO project office is at the same location as the Kakinada shore station and will be in communication through that.

The VHF Training Courses will be conducted as outlined in the previous mission report except that the group size will be halved to ensure a better instructor/student ratio. There

will therefore be a proportionately larger number of courses. The NCR will elaborate in his report.

14. SSEO Training Course

This course started on 8 June 1998 and was inaugurated by the District Collector Mr Satish Chandra IAS. 10 DoF and 10 NGO participants were trained during the course which was held at the new State Institute for Fisheries Training (SIFT) from 8 to 17 June.

The second part of this training course is to be held from 17 to 29 August by OXFAM staff in collaboration with the DoF responsible for organising it.

15. SSEO Programme

This is described in a letter to the District Collector. (Annex 3)

16. Shrimp Seed Collector Rescue Demonstrations

These will be conducted in the months of January and February 1999 to demonstrate village and SSAG skills and preparedness. Other aspects of each village contingency plan will also be demonstrated then.

17. Use of Military Aircraft for Cyclone Warning

This was discussed with the Relief Commissioner in Hyderabad, an Indian Air Force Wing Commander in Hyderabad, and the District Collectors of Vizag and Kakinada (See Annex 4).

18. Actions and Responsibilities:

a) National Consultant Radio Communications (NCR)

As per original TOR and TL's First Mission Report, additionally:

1. Obtain detailed quotations and discounts for conference rooms and accommodation from Vishakapatnam Hotels for FAOR
2. Liaise with NPD, TL and FAOR on all project matters as required
3. Proceed urgently with VHF installation work and training
4. Expedite the completion of the Balusuthippa shore station building and commissioning of VHF equipment both there and at Kakinada and Bhairavapalem

5. Monitor SSEO field work and participate in the two monthly reviews and attend weekly SSEO meetings when in or near Kakinada or Amalapuram. (not less than two per month)
6. Assist with video preparation and production work
7. Liaise with the RDD, NGO Committee and SSEO fieldwork coordinator to ensure effective implementation of this work
8. Assist the NGOs Committee and RDD to plan and undertake the second part of SSEO Training Course and provide SSEOs training on VHF use, capabilities and limitations
9. Ensure that trained boat crews receive regular VHF follow-up as per previous mission report. (Initially by NCR and subsequently by a DoF official trained by him.)
10. Prepare mid term report for review by team leader.
11. The delays to the project work, shore stations, increased number of smaller VHF operator courses and other points above will require an additional three man months of the NCRs time.

b) Team Leader

As per original TOR and additionally:

1. Follow up life float approval and production in Kakinada in October
2. Work with AIR on forecast comprehension in villages and Doordarshan on a Cyclone Disaster Preparedness Video. Prepare story line and basic script
3. Guide, review and advise SSEOs fieldwork and assist in practical demonstrations as required
4. Review VHF operator skills

The third mission is proposed in October for six weeks and the final mission in Jan – Feb 1999 for five weeks.

c) NPD

As per original TOR and additionally:

1. Ensure and expedite repayment for, and return to supplier of all lifejackets and lifebouys at project office
2. Ensure the timely action and implementation on all points as per letter to the Commissioner of Fisheries, copied to him, dated 1 July 1998. (Annex 5)

3. Appoint a liaison officer as point of contact with Doordarshan for development of Cyclone Disaster Preparedness Video
4. Liaise with NCR on preparations for the workshop in Vishakapatnam to be held 1 – 3 February 1999.
5. Ensure timely implementation of all project activities.

Programme of Kakinada Visit by Fisheries Development Commissioner and FAOR

Visit to Kakinada by Dr Y.S.Yadava, Fisheries Development Commissioner, GOI; Mr Peter Rosenegger, FAO Representative India and Bhutan; Ms.Renuka Taimni, FAO CPO; Mr.Ch Krishna Murthy, JD Fisheries (M) GOAP.

22 and 23 June 1998

Monday 22 June	Event	Venue
0650	Arrive Kakinada	
0830	Breakfast at Ankita	Ankita Manor
0930	Project Review Meeting	Ankita Manor
1130	Visit Project Office and Shore Radio Station and Fishing Harbour	FTO Building (FAO Project Office)
1300	Lunch	Ankita Manor
1430	October Workshop Proposal/Planning	Ankita Manor
1630	Buoyant Apparatus and Liferaft visit	Boatyard
2030	Informal Dinner with District Collector and Family	Ankita Manor
Tuesday 23 June		
0800	Depart to Bhairavapalem to see field conditions, cyclone shelters, craft, fisherfolk, shrimp seed collection sites	Bhairavapalem, surrounding villages and delta area.
1330	Lunch	Ankita Manor
1430	Dr Yadava departs.	
1830	FAOR and NPD Departure for 1950 train to Hbad	

Useful Numbers

Ankita Manor Hotel 377627
 RDD BV Raghavulu 374621 / 73619 Res.75370
 FAO Project Office 72658

AGENDA for Project Meeting 22 June 1998

1. Welcome and Introduction. Update on project status by National Project Director:
2. PNC: SSEOs Course and Field Work, NGO Proposal, Workshop.
3. Radios and Radio Courses, Balusuthippa shore station, Manning of shore stations
4. OG: Craft and crew safety; engines.
5. Feedback and observations DoF RDD B.V.Raghavulu
6. Purchased Equipment Quality
7. Availability of FDOs
8. Schedule of work
9. Withdrawal of National Consultant, Coastal Fisheries Expert
10. Dates and venue for Vizag Workshop
11. Video
12. Budget
13. Any other Business

1999 Workshop on Measures to Reduce Loss of Life during Cyclones

Participants arrive **31 Jan 1999**
 Proposed programme: **1-3 Feb 1999**

Day 1		
Registration		0830 - 0930
Welcome Address	Commissioner of Fisheries AP	0930 - 0935
Message from FAOR Representative, Delhi	Mr P.Rosenegger	0935 - 0940
Key Note Address	Min Of Ag GOI	0940 - 0955
Chief Guest's Address	Min Fish AP	0955 - 1005
Presidential Address	Min of State for Agriculture GOI	1005 - 1020
Coffee Break		1020 - 1030
SESSION I	Chair: Principal Secretary.	
Cyclones and Cyclone Forecasting at National and State Level	IMD	1030 - 1050
Storm Surges	NIO	1050 - 1105
Cyclone Contingency Plans and Procedures at the National And State Levels	Commissioner of Relief	1105 - 1120
A Description and Analysis of the Events occurring at sea and on land on 6 and 7 November 1996 in East Godaveri District	Mr Raghu Ram, National Consult. FAO and Fishermen and women reps	1120 - 1205
Discussion		1205 - 1245
Lunch		1245 - 1345

SESSION II	Chair: Commissioner of Relief	
Cyclone Warning and Dissemination Systems in Bangladesh	TCDC Consult.	1400 - 1415
A description of the events occurring on 17-20 May 1997 in Chittagong area	TCDC Consult.	1415 - 1430
Cyclones in Vietnam	TCDC Consult.	1430 - 1450
Cyclones in Philippines	TCDC Consult.	1450 - 1510
Discussion		1510 - 1545
Tea		1545 - 1600
Loss of Mechanised Vessels from Kakinada / Search and Rescue	Fishermen's Assoc. Coast Guard and Military	1600 - 1630
Cyclone Shelters: Design Construction Maintenance and Use	DRDA	1630 - 1645
Discussion		1645 - 1730
Day 2		
SESSION III	Chair	
Awareness Programmes for Disaster Preparedness	Mr Paul Calvert FAO Consultant	0900 - 0930
The Use of Radio Transceivers at sea and on land for Cyclone Warnings	Mr Raghu Ram National Consultant FAO	0930 - 0945
Improvements of Mechanised Fishing Vessels and their equipment	J.M.M. Turner FAO Senior Fishery Industry Officer	0945 - 1015
Discussion		1015 - 1045
Coffee		1045 - 1055

SESSION IV	Chair: Paul Calvert FAO Consultant or NGO	
Introduction to Working groups: 1. Cyclone Warning Dissemination Systems and Co-ordination from State to Fisherfolk 2. Evacuation and Protection 3. Use of Radio, Safety Equipment and SAR 4. Fisherfolk Storm Safety action Groups / Disaster Preparedness	FAO Jeremy Turner or FDC	1055 - 1200
Brief Presentation of Working Group Progress (Max 5 min each group)		1200 - 1230
Interaction		1230 - 1300
Lunch		1300 - 1400
Resumption of Working Groups and drafting of reports		1400 - 1600
Tea		1600 - 1615
Presentation of Working Group reports 15 min each) followed by 30 min Discussion and Finalisation, typing and distribution of reports		1615 - 1730
Day 3		
SESSION V		
Presentation of the Main Findings, Conclusions and Recommendations	FAO Jeremy Turner, Paul Calvert, Raghu Ram	0900 - 1230
Valedictory and Closing Session	Jt. Sec'y GOI	1230 - 1300
LUNCH		1300 - 1430

Clarifications required:

- The first proposal for Session III chairman was Jeremy Turner FAO, but he is the choice for presenting Improvements in Mechanised Fishing Vessels and their Equipment. FDC Please select an alternative

Min of State for Agriculture	1
Min Fisheries AP	1
DoF	10
District Collectors of the 9 coastal districts of AP	9
Sec and Dir of Fisheries of four coastal states (WB,OR,AP,TN)	8
Ch.Man. or Vice Ch.Man of Port Trust; Paradeep, Vizag and Madras	3
AIR, Doordarshan (Vizag)	2

MMD		1
IMD		2
Min of Agriculture		1
Dept of Ocean Development		1
Navy		1
Coast Guard		1
IIT Delhi (Storm Surge Prediction Models)		1
Fishworkers		
Presidents of Boat Owners Associations, Kakinada area		1
Fishworker Apex organisation from Orissa		1
Fishworker Apeex Organisation from Chennai		1
Mech Boat Survivors		2
Shrimp Seed Collector Survivors (female)		2
NGO's ICSF		
	SIFFS	
	AFPRO	
	OXFAM	
	CASA	
	CARE	
	ACTION	
	totally	10
FAOR		2
FAO		3
FAO TCDC		4
WB		1
DFID		1
BOBP		1
Red Cross		1
Total		72
(of which expect 50 -60?)		

MLAs and MPs invited as appropriate protocols and interest.

Phases of SSEO Fieldwork and Supervision Managements

Mr Satish Chandra IAS
Collector and District Magistrate
Kakinada
East Godavari District

Paul Calvert
Team Leader FAO
Training in Sea Safety
Development Programmes

2 July, 1998

Dear Satish Chandra,
Subject: Fisherfolk and Cyclones

It was very good to talk to you on the telephone this morning. As promised I put in writing my request to you to chair the review meetings of the Storm Safety Extension Officers work which will be every two months. (see dates below).

The background to the work is of course clear to you. One of the objectives of this pilot project is to develop, in each of thirty fishing hamlets, a volunteer group of 25 persons (ideally at least 50% women) which we call a Storm Safety Action Group. Each SSAG, assisted and facilitated by the SSEOs, is to develop their own village Contingency Plan of Action by end December 98 and have refined and demonstrated it before end February 99. This is to be achieved to the following schedule in which there are four phases:

Phases of Work in Development of SSAGs and Village Contingency Plans

Phase I	Phase II	Phase III	Phase IV
8 - 17 June 1998	18 June - 14 Aug 98	17 - 29 August 1998	31 Aug 98 - 27 Feb 1999
Initial Training of SSEOs Cyclones, Detection and Warning, CCPA, Cyclone Shelters and Cyclone Resistant Housing, Disaster Preparedness, Radio Communications, Qualities of a Trainer	Field Training of SSEOs Developing Rapport in the Villages, Situation Analysis, Prioritisation of Vulnerable groups, resource Mapping and Identification of SSAG volunteers	Additional Training of SSEOs including First Aid Additional Communication Skills, Emergency Rescue Techniques, Relief Camp Management, Evacuation Methods, Disaster Preparedness Drills	Fieldwork by SSEOs in the villages with SSAGs. Transfer of Skills Facilitation of SSAG and Community development of Contingency Plan for each village. Active Demonstration of Plan including evacuation of Shrimp Seed Collectors from outlying areas.

The fieldwork is being taught, guided and coordinated by Mr Gurudutt Prasad of ACTION, Rajamundry. We have 20 SSEOs and these are working in teams of two, thus there are ten teams. One DoF and one NGO person in each team. Each SSEO team has three villages to work in. The list of villages and names of the teams is attached for your

information. There may be some minor modifications in this list of villages before the first review meeting.

Each week's work is to be reviewed and the subsequent week planned every Saturday by all the SSEOs and the coordinator (Gurudutt Prasad). These weekly meetings will alternate between Kakinada and Amalapuram.

Once every two months there is to be a review of the SSEOs and Coordinator's work by a review committee comprising Mr B.V. Raghavulu RDD Fisheries, Mr P. Raghu Ram FAO National Consultant, Ms C. Mohana OXFAM, Mr C.M. Muralidharan AFPRO, (and myself if I am in Kakinada). It is this review meeting we would like you to chair.

The dates for these meetings are as follows:

- 15/16 August 1998
- 17/18 October 1998
- 19/20 December 1998
- 20/21 February 1999

I expect to be present for the October and February reviews.

I enclose the project proposal for this component of the work. Please note that we have a small amount of funds to buy such things as a transistor radio for each of the Storm Safety Action Groups and probably the Shrimp Seed Collector groups also. We can probably also provide a pack of firework rockets to be used for local warning propagation if this proves appropriate. These things will be decided in Phase IV when the SSAGs should be more cohesive and better placed to decide what is most appropriate in their circumstances.

Other components of this pilot project are:

- Installation of 100 VHF radio sets in mechanised boats and appropriate training and follow-up for their operators. Selection of beneficiaries by lottery and distributed in a ratio of 2:1:1 Kakinada : Bhairavapalem : Balusuthippa.
- Establishment of two shore radio stations (Kakinada and Balusuthippa) and training of DoF staff to man them.
- One VHF set at your office.
- Mobile VHF sets for at least five villages for use in the cyclone prone periods and associated training for SSAG operators.
- Fabrication of Lifefloats for use by mechanised boat crews in the event of loss of their vessel in bad weather. Upto 50 units to be distributed to demonstrate and advertise the technology. Selection of beneficiaries by lottery and not to include those who had VHF radio sets.

- We also have 12 inboard diesel engines to install in Navas. It is too early to decide to whom or where these will be deployed. It will somewhat easier to decide this after I return in October. I imagine we will best use them for motorising Navas in villages where there are shrimp seed collectors who work in out lying areas and where also there are only un-motorised Navas.
- An educational video in colloquial Telegu on Community Disaster Preparedness and Cyclones based on this project work.
- Workshop “Measures to reduce loss of life amongst fisherfolk during cyclones”. Please note the new dates for this are 1, 2 and 3 February 1999 in Vizag.

Once again I thank you for your interest and participation in this work. I look forward to seeing you again in October.

Let me take this opportunity to wish you and your family well in these coming months and hope that you will find some time away from work to be with them.

Kind regards,

Paul Calvert,
FAO Team Leader,
TCP/IND/6712.

cc: review committee members

encl: Proposal “Field Training and Supervision of SSEOs....”

The Use of Military Aircraft for Cyclone Warning

The dramatic difference in the human toll from the 1977 and 1990 Devaseema Cyclones illustrates the effectiveness of the current Cyclone Contingency Plan of Action (CCPA) (Over 10,000 lives lost in 1977 and none in 1990).

The events of the 6 November 1996, when a cyclone caused extensive loss of life in the East Godaveri District of Andhra Pradesh, prove that however good the Cyclone Contingency Plan of Action is, there can still be a breakdown in the chain of communication. It relies on many individuals doing their job diligently and promptly. In addition to the human element it also relies on many technical links from radios, telephones, batteries and power supplies, vehicles, bicycles and boats, any of which may suffer from a fault on the crucial occasion.

One signal that could be given to remote villages in particular and to fishing fleets at sea is one from a military aircraft. The military are in any case monitoring the weather and the cyclone. Their fast aircraft can easily dash in ahead of the cyclone and release warning flares, smoke and explosive (sound) signals. The details of the type of signal obviously needs to be worked out with the military authorities. These signals, be they a string of flares with explosive sound by night or coloured smoke and explosive sound by day, dropped by a fast aircraft just upwind of the villages and craft threatened would be totally unequivocal. The colours of the flares and smoke must clearly not be confused with internationally recognised distress signals. (Red flares, parachute and hand-held and orange smoke are the international distress colours).

The response time of such a system would be extremely rapid and even permit response to sudden changes in Cyclone track as it approaches the coast.

This idea is not unique since in Vietnam military aircraft are used for alerting fishing vessels at risk from approaching cyclones.

Some opponents of this approach might argue that the cost is too high. But in reality there should not be any significant cost. The military anyway conduct regular training missions with a whole variety of aircraft, ordinance and objectives. This is a mission with good training components and a humanitarian role. A mission like this is in fact an extremely good exercise in pinpoint navigation and weapon delivery (in this case flares or smoke). In fact there seem to be a number of aspects which make it an extremely attractive proposition for the military. The task is effectively a "pre-emptive strike on the cyclone" with the objective of saving many lives in coastal communities by providing an unequivocal and very timely visual and aural warning. In addition it hones the pilot's skills and those of his support infrastructure in rapid response to a dynamic situation possibly in challenging and deteriorating weather conditions. Can the military ask for a better peacetime test of their skills?

Availability of DoF Staff

To:
Mr M.S.Prasad IAS
Commissioner of Fisheries
Hyderabad

From:
Paul Calvert
FAO Team Leader
Hyderabad

1 July, 1998

Dear Mr M.S.Prasad,
Subject. TCP/IND/6712
Training in Sea Safety Development Programmes

For the smooth implementation of Project work I request your sincere cooperation in taking the following immediate actions:

1. Appoint a single person as point of contact in the Department of Fisheries in Kakinada. This will greatly assist project work there and avoid duplication of effort. Please inform the National Project Director Ch Krishna Murthy (JD Fisheries) and RDD Kakinada Mr B.V. Raghavulu, DD Training and DD Brackishwater, myself and National Consultant Mr Raghu Ram by letter of the same.
2. Issue appropriate instructions to Department of Fisheries in Kakinada to substitute one of the FDOs currently engaged in the Storm Safety Extension Work with an Assistant Inspector. This is necessary because we require one FDO for work with the National Consultant (Radio Communications) on VHF training and follow up.
3. Immediate instructions to expedite the remedial and completion works on the shore station building at Balusuthippa. This instruction requires regular follow up as work is severely behind schedule.
4. Initial fieldwork by the SSEOs is encouraging and has the potential of producing some very good results by February 1999 if sustained effort and commitment by the SSEOs are assured. Please do ensure that there is no doubt existing amongst any of the Department staff associated with this work that the 10 FDO/AI are appointed full time for these SSEO duties.

Thanking you for your continued cooperation,

Regards,

Paul Calvert, Team Leader, FAO, TCP/IND/6712

cc: NPD, Nat Consultant(RC)

To:
Mr M.S.Prasad IAS
Commissioner of Fisheries
Hyderabad

From:
Paul Calvert
FAO Team Leader
Kakinada

18 June, 1998

Dear Mr M.S.Prasad,

Subject. TCP/IND/6712
Training in Sea Safety Development Programmes

In my mission report of 11 - 22 March 1998 I recommended to the National Project Director (Joint Director Marine, Hyderabad) that 10 DoF staff (FDO/AIF cadre) be made available FULL TIME for 8 months for training as extension officers and subsequent field work. I quote: (see point 4)

“4. 10 FDO/AIF Full time for 8 months for training as extension officers and subsequent field work. They must be fully available and committed to the idea of spending their working time in the villages for the purpose of developing storm safety committees and action groups for the duration of the project. Ideally 50 % should be women. For these 10 the FAO project will cover their TA/DA for the period of field work.”

We have now trained these 10 DoF staff, and I am surprised to find any doubt over their availability for work on the project. I request, with some urgency, that they be officially cleared at the highest level to be unequivocally released for full time work as Storm Safety Extension Officers (SSEOs) for the duration of TCP/IND/6712 (end February 1999).

This project has the potential of providing extensive benefits to coastal communities if it is implemented diligently. Unless the SSEOs complete the full 8 months of fieldwork (which is effectively a continuation of their training), the objectives of the project cannot be achieved . Neither can they be considered competent to train others to continue the work in future. It is essential therefore that they be made fully available for the duration of the project.

In view of the above points, clear instructions should be issued immediately to ensure these 10 FDOs are released for full time duties on the Training in Sea Safety Development Programmes TCP/IND/6712 from 8 June 1998 to 28 February 1999. The order should include appropriate authority for DoF to appoint other staff to supervise the current duties of these 11 FDOs.

Yours sincerely,

Paul Calvert

cc: Dr Y.S.Yadava, Fisheries Development Commissioner, Delhi.
Mr Ch. Krishna Murthy, NPD and JD (M), Hyderabad.
Mr P. Rosenegger, FAOR Delhi.

Inadequacy of Safety Equipment Delivered by Supplier

The following letter faxed to NPD for transmittal to supplier:

Mohsin Brothers
Harbour Road
Visakhapatnam 1
530001
Fax: 0891 561448

24 June, 1998

Dear Sirs,

Subject: Safety Equipment Supplied to FAO Project Development in Sea Safety Development Programmes at Department of Fisheries Kakinada.

Reference: FAO order number TCP/IND/6712 Dated: 3 April 1998.

The Safety Equipment viz. 100 Lifejackets and 100 Lifebuoys, supplied by your company have been inspected by the FAO project team leader and found to be seriously inadequate as per the notes below.

Life jackets

1. These are not new equipment.
2. They were manufactured in the years 1989, 1990, 1991.
3. They have been issued to at least one ship (Chinese) previously and are clearly second hand equipment.
4. This is reinforced by the fact that all of these life jackets are soiled, some to an extreme degree.
5. A number of these lifejackets are seriously inadequate and could result in the loss of life of a person dependent on them as the fastening tapes are incomplete.
6. The reflective tapes on at least half the consignment are extremely old and non reflective. In some cases they are torn or damaged.

Lifebuoys

1. The reflective tapes are applied on one side only.
2. As such there is a good chance that a survivor would not be located at night as the lifebuoy has a fifty percent chance of having landed in the sea with the tapes downward.
3. The weight of these lifebuoys varies from less than 1 kg to almost 6 kg.
4. The buoyant material inside this equipment is clearly highly variable in density and is loose and crumbling in some cases.
5. The shape and size of the cross section also vary considerably, a further indication of lack of standardisation.

The FAO is not prepared to risk its reputation or the lives of Indian fishermen, women and children by accepting such equipment.

In view of the above you are requested to remove all the said equipment from RDD Kakinada at Fisheries Terminal Office Building and refund the payment to FAO within three weeks of receipt of this letter.

Ch. Krishna Murthy
National Project Director
Joint Director Of Fisheries (Marine) GOAP

cc Dr Y.S. Yadava, Fisheries Development Commissioner, Delhi.
Mr P. Rosenegger, FAO Representative in India and Bhutan, Delhi.
RDD DoF Kakinada
FAO Project Office, Kakinada

Storm Safety Extension Field Work Coverage

TEAM	Name of SSEO	VILLAGE	NGO active in these villages
Team I	Mrs. Persis M. Nageswara Rao	Pedavalasala China Valasala Lakshipatipuram	SRAVANTHI
Team II	V. Rama Mohana Rao B.L. Narasimha Raju	B.C.V Palem B.P.V Palem Ramannapalem	FIRM
Team III	P. Krishna Rao Sreerama Murthy	Gadi Moga Uppalaka	FIRM
Team IV	P. Rama Mohana Rao A.C.S. Reddy	Challangi Peta Matla Palem Dindi	SRAVANTHI
Team V	K.S.R. Raju Muralidharan	Bhirava Palem Neelapalli	VJNNS
Team VI	V. Peddi Babu K. Amaleswari	G.M. Polam Guttindevi Kusunakru	SRAVANTHI
Team VII	P. Sree Ramulu Ch.V.V. Satyanarayana	Gokulanka Pallia Vinjaram Ganesh Nagar	ARTIC
Team VIII	P. Rama krishna Raju P. Kanakambaram	Balusuthippa Siriyanam	ACTION
Team IX	B. Muneswara Rao K. Bhima Sankara Rao	Gatchakayala Pora Nagapatnam Yatlapalem	ARISE
Team X	K. Suryanarayana Satyanarayana	Masanithippa Neelaravu Pora Pandi Pallam	SHAKTHI CREATORS

Training and Equipment Budget Projection as at July 1998**TRAINING**

Item	\$
VHF Training Courses	2000
SSEO Training Course	5000
SSEO Field Work	43000
Overseas study Tours	13500
February Workshop	6000
Video	8000
TOTAL	77500
Budget	70000
Balance in Training Budget	-7500

EQUIPMENT

Kirloskar Inboard Diesel Engines 12@1700	20400
Buoyant Apparatus / Life Float (to be made in local yards 100 @ IRs 5000)	12000
Lifejackets 150@35 <i>New supplier</i>	5250
Lifebouys 100@58 <i>Canceled</i>	0
Kakinada, Btippa & Bhai'palem VHF Set with Batts and Charger @1325	3975
More like this (7?) for key villages	9275
Mechanised Boat VHF Sets up to 100 @ 370	37000
Development of Lifefloat	1000
Equipment for SSAGs 30 @ ~1120 per Vill.	33600
TOTAL	122500
Budget	130000
Balance in Equipment Budget	7500

Net Balance of Funds in Training and Equipment 0
Budgets

Itinerary and Persons Met**Itinerary**

Trivandrum		4.6.98
Hyderabad	4.6.98	5.6.98
Kakinada	6.6.98	28.6.98
Vishakapatnam	28.6.98	30.6.98
Hyderabad	30.6.98	3.7.98
Trivandrum	3.7.98	

Schedule

- 4.6 Travel Trivandrum Hyderabad
- 5.6 Meetings NPD and Relief Commissioner GoAP. O'night train to KKD
- 6.6 Mtgs, NCR, RDD Fisheries, OXFAM, mech craft construction sites and wkshops
- 7.6 Mtgs, Dt Collector, RDD, OXFAM, ACTION, AFPRO, Check SSEO Venue
- 8.6 Inauguration of SSEO Course and commencement
- 9.6 SSEO Course, Mtgs NGO Committee, Naval Architect
- 10.6 SSEO Course, Mtg NPD, RDD, NCR & Naval Architect. NGO Com Proposal
- 11.6 SSEO Course, NCR Radio Comms Class
- 12.6 SSEO Course, class: Shrimp Seed Collector rescue and flares
- 13.6 SSEO Course, AIR, cyclone accounts, old fisherman.
- 14.6 SSEO Course,
- 15.6 SSEO Course, mtg. OXFAM ACTION
- 16.6 SSEO Course, fieldwork planning, ACTION, NCR, SSEO Course Feedback
- 17.6 SSEO Course Village allocation to SSEOs, Travel arrangements, videos
- 18.6 NGO proposal, mtg exec engr re B'tippa shore station, budget review
- 19.6 Workshop planning, equipment checking, vhf radios
- 20.6 Survey village response to AIR forecasts, ngo mtg re fieldwork
- 21.6 Mtg RDD, discussions NCR workplans
- 22.6 Prep FAOR visit, NGO proposal
- 23.6 Visit by FAOR and Fisheries Development Commissioner
- 24.6 Bhairavapalem with FAOR and FDC. Mtgs FAOR&FDC
- 25.6 NCR, self, workshop programme, equipment etc. Boat Owner sea safety class
- 26.6 Mtgs RDD, NGOs, Lifefloat trial in harbour
- 27.6 Work plan scheduling, SSEO feedback session
- 28.6 Review meeting RDD and FAO team, clear accounts, travel Vizag
- 29.6 Meet District Collector, CWC Director, airticket, fishing harbour and signal stn.
- 30.6 Meet DRO, Indian Navy, Check Workshop Venues, fly Hyderabad
- 1.7 Meet NPD, Comr Fisheries, ETV, Doordarshan, All India Radio
- 2.7 Meet Relief Commissioner, NPD, Talk with IAF, Inspr of Police for Res.Permit
- 3.7 Fly Trivandrum

Persons Met

Hyderabad

Mr. MS Prasad	Commissioner of Fisheries GoAP
Mr. AK Tigidi IAS	Relief Commissioner GoAP
Mr. R Venkateswaru	Director Doordarshan Kendra Hyderabad
Mr. Sri Shree	Dep Dir Doordarshan Kendra Hyderabad
Dr MR Rao	Dep Dir Doordarshan Kendra Hyderabad
Mr. Hanumath Rao	Asst Dir Doordarshan Kendra Hyderabad
Mr. Giri Rao	Prog Exec Doordarshan Kendra Hyderabad
Mr. Y Hanumantha Rao	Chief Producer Eenadu Television, ETV
Mr. Kabir Ahmed	Station Director AIR Hyderabad
Mr. P Raja Rao	Asst Stn Dir AIR, Vizag
Mr. EL Narayana	Asst Stn Dir (Ag Progs) Hyderabad
Mr. KM Sharma	Asst Stn Dir
Dr Vijaya	Prog. Exec Rural Programmes

Kakinada

Dr YS Yadava	Fisheries Development Commissioner
Mr P Rosenegger	FAOR
Ms R Taimni	FAOR
Mr Oyvind Gulbrandsen	Consultant Naval Architect
Mr Satish Chandra IAS	Collector and District Magistrate
Mr YS Prasad	Project Director DRDA
Mr Ch Krishna Murthy	National Project Director, Jt.Dir of Fisheries
Mr P Raghuram	National Consultant Radio Communications
Mr BV Raghavulu	RDD Fisheries
Mr Y.Prakash Rao	DD Brackish Water Fisheries
Mr Suresh	DD Training Fisheries Training Institute
Mr Babu Thomas	CASA
Ms. C Mohana	OXFAM
Mr. C Muralidharan	AFPRO
Mr. Prasad	ARTIC
Mr Gurudutt Prasad	Exec Sec ACTION
Mr YG Reddy	Station Director AIR Vizag
P Suriya Narayana	Old fisherman from Bodduchina Venkatayapalem
Mr. S Chandra Mohan	Reg. Mnger Godaveri Fertilisers
Mr. P Trinadha Rao	Rapporteur at SSEO Training Course, Advocate
Mr. Baburao Vemagiri	Boatbuilder
Mr. Koteswara Rao Koli	GRP Boatbuilder Kolli Fibres
Mr. Silarapu Rama Rao	Gen Sec Mechanised Fishing Boat Owners
Mr. Voleti Kannayya	Secretary Welfare Association Kakinada
Ms. Rupa Mukerji	TARU Leading Edge, Consultant
Mr. Jaganath Rao	DoF
Mr. Venkata Raju	DoF

Vishakapatnam

S Narsing Rao IAS
Cdr. JVR Murthy
Lt.Cdr. PTH Prasad
Dr JVM Naidu
RDD Fisheries
Hemanth K Naidu
Neelam Sharma
B Srinivasa Rao

Collector and District Magistrate
Indian Navy
Indian Navy
Director Cyclone Warning Centre
Vizag
Hotel Green Park Dy Manager
Taj Residency, Banquet Executive
MD SBS Marine Exports Ltd
An Owner of Beam Trawlers in Vizag

