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Improving Livelihoods of Fishermen-Case Studies from Andhra Pradesh and Union Territory of Puducherry

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Acknowledgement

It is a privilege to confer acknowledgement for this booklet that encompasses a bunch of case studies reflecting the benefits of knowledge services realized by fisher folk. It epitomizes how Information Communication and Technology (ICT) have been used to provide timely and scientific information to bring about expected changes in terms of benefits to the fisher folk. The enduring objective of this book is to highlight how fisher folk have (a) capitalized the potential of knowledge products rendered through Village Resource and Knowledge Centres related to early warning, Ocean State Forecast and Potential Zone Information (b) translated the scientific knowledge into action and (c) thereby harvested the benefits in terms of economic development, safety and security.

The method that has been used to gather both quantitative and qualitative data exemplifies the underpinning significance of knowledge products and its processes like sourcing, localizing, packaging and disseminating relevant scientific information through appropriate ICTs, its relevance and authenticity which enables fisher folk to translate into action and benefit out of it. The volume of fisher folk's voices that have been presented through case studies connotes explicit ramification upon their social and economic state.

In this connection, I wish to acknowledge the effort of Ms. Velvizhi with due gratitude and profuse thanks for coordinating and guiding the entire process of bringing out this case study book. I would specially like to thank Ms.D Suvitha and Dr. L Vedavalli for reviewing, collating, editing and producing this case study book. I extend my sincere thanks to Dr. Rama Subramanian for providing entire support to accomplish this task.

I wish to record my deep sense of appreciation and acknowledgement to other team members involved in producing the book... Mr. K Dhanraj, Mr. N Veerabhadra Rao and Mr. D Srinivasa Rao for supporting in the data collection process, Ms. N. Dhanalakshmi for giving relevant map and Mr. R Kolappadas in designing the book.

I wish to express our sincere gratitude to INCOIS officials Dr. Nagarajakumar, Dr. Srinivas Kumar and Dr. Satheesh C. Shenoi for extending the support towards this project enabling fisher folk to access and benefit out of scientific information and knowledge that are relevant and valuable to their routine life and livelihood.

Last but not the least; we are highly indebted to the fisher folk who shared us the benefit harvested by them due to the knowledge services through VRC and VKCs. It emphasizes the need for such services to the larger fishing community.

Nancy J Anabel Director(I/C), Information, Education and Communication M.S.Swaminathan Research Foundation, Chennai

Introduction

For over two decades M S Swaminathan Research Foundation (MSSRF) has been in the forefront in taking Information and Communication Technology (ICT) enabled development activities to the rural communities through Village Resource Centres (VRCs) and Village Knowledge Centres (VKCs). In 2003, most of the activities were brought under the aegis of the Jamsetji National Virtual Academy. The VRCs and the VKCs use both traditional and modern technologies to provide information/knowledge to rural women and men with an objective to improve their socioeconomic lives.

MSSRF in partnership with Indian National Centre for Ocean Information Services (INCOIS) has been providing ocean information and advisory services to coastal fishing community from 14 districts across three states of Tamil Nadu, Puducherry and Andhra Pradesh. INCOIS services include Ocean State Forecast (OSF), high wave alert, cyclone warnings, Tsunami alert and Potential Fishing Zone (PFZ). With an aim to build the capacity of fishermen, advisories related to the above mentioned services are disseminated through MSSRF to the target fishermen's mobile phone either as text message or voice message. Fishermen from East Godavari, Krishna and Guntur districts of Andhra Pradesh, Cuddalore, Nagapattinam, Thanjavur, Pudukkottai, Ramanathapuram and Kanniyakumari in Tamil Nadu and Puducherry and Karaikal in the Union territory of Puducherry have been receiving these services. Initially, 40 fishing villages from across six districts in Tamil Nadu and Puducherry were covered under this project but it has steadily been expanded to 225 fishing villages from over 14 districts in Tamil Nadu, Puducherry and Andhra Pradesh. Thanks to the overwhelming demand from the fishing community. Presently, more than 10000 fisher folks are aware of INCOIS services and receive locale specific scientific forecast services such as PFZ, OSF and early warning.

Continuous feedback is obtained from user community through collection of case studies, market study, and village and district level feedback meetings. This is essentially done to strengthen the information services as well as dissemination of content suited to the needs of local fisher folk.

In an attempt to assess the usefulness and effectiveness of INCOIS-MSSRF services detailed interviews were conducted from the fishermen from East Godavari and Krishna districts in Andhra Pradesh and Yanam district of Union Territory of Puducherry. Those interviewed comprised fishermen across different age groups owning trawler or fibre boat. There were also fishing labourers working for boat owners.

From these interviews, thirty case studies of fishermen are presented here which throw light on the various aspects of the advantages of the INCOIS services experienced by the respondents. It has been observed that information services such as PFZ and OSF helped to reduce uncertainty in terms of sustained fish catch and weather variability especially in times of dwindling fish stocks and climate change. The information enable them make critical decisions that help ensure safe fishing at sea and improve their livelihood. Interestingly, the target fishermen are willing to disseminate the mobile based audio advisories to the other fisher folk.

From the case studies it is evident that fishermen have been able to effectively make use of the PFZ information. Fishermen have the confidence that whenever they go for fishing based on the PFZ they would never return without a profit. The information is accurate that a fisherman is able to use the PFZ data even without possessing a GPS instrument. The overall fisher folk who had used the PFZ services had obtained a net gain in income ranging from INR 1000-50000. Besides economic gains it has also been found that they have experienced significant reduction in diesel consumption and time. The adoption of PFZ by small craft fisher folk has been found to be significant as more and more of them started exploring in PFZ areas, moving away from their traditional fishing grounds. As we have already mentioned a fisherman with out using a GPS is able to identify the PFZ as the information is very clear and user friendly.

The case studies reveal the importance of OSF information for the fishing community. According to the fishermen loss of human life is avoided to a great extent. Uncertainty about their return from the sea has come down to a certain level. And they are able to safe guard their fishing boat and other fishing gadgets. Family feels secure about their kin's safety in the sea. Fishermen like Siva, Chokka Venkateswaralu, Chokka Prasad, Matharaju and others are thankful for the services of INCOIS provided through MSSRF. While a great majority are very happy and satisfied with the services in helping to improve their lives and livelihood some felt that if PFZ information could be provided for a short distance it would enable small craft fishermen even better. There are also requests for training on diesel engine mechanism and to arrange for GPS with subsidized rates.

CASE STUDIES FROM EAST GODAVARI, KRISHNA DISTRICTS, ANDHRA PRADESH & YANAM DISTRICT, UNION TERRITORY OF PUDUCHERRY



Name: Bodhana Nageswara Rao

Age : 50

Type of Boat: Fibre Boat

Village : Uppada (kreestunagar)

District : East Godavari District

State : Andhra Pradesh

Bodhana Nageswara Rao hails from Uppada village of East Godavari District. Fishing is his source of livelihood. He owns a fibre boat and uses gillnets, and hooks and lines. He engages a crew of 5-6 labourers in his boat.

After his participation in awareness meeting conducted by MSSRF-INCOIS on services like OSF & PFZ, since 2011, he and his team have been receiving information on OSF & PFZ through their mobiles and the Electronic Display Board(EDB). Depending on the information they receive, they take the decision regarding venturing into sea. These days he uses GPS technology for fishing. He has used PFZ information more than seven times. Through GPS he navigates the place and also punches the latitude and longitude points for future use. As a boat owner he got profits ranging from Rs. 5,000 to 10,000 after meeting labour and other expenses. He could also save on fuel cost and time.

He is of the view that OSF information particularly wave height, wind speed and direction is very vital for a fisherman like him. He recalled an incident about the difficulties faced by his neighbouring village fishermen as they were not aware of the day to day wind and wave height predictions. This has resulted in heavy material loss due to toppling of the fishing boat, physical injuries to the fishermen and even loss of lives. The economic loss must have been up to 2 to 3 lakhs.

After this incident, he realised the importance of this information and was motivated to share the OSF and PFZ information with *Sammeedi* group. This group consists of members from the surrounding villages which meet daily in the evening in a particular place. Atleast one member from each village would be part of this *Sammeedi* group. The idea behind this sharing of information in the *Sammeedi* was to disseminate the same to the other villages. He expressed that OSF data plays a significant role in the lives of fishermen. Access to this information enables the fishermen to take precautionary measures such as placing their vessels in safe place and shifting their families to cyclone shelters or high altitudes.

He is very glad to mention that he has been able to send his children to school and college without borrowing money from others. He also says that he is able take care of the health of his family members without much difficulty. This is possible only because of the improvement in the economic condition now. He is grateful to MSSRF and INCOIS for this.

Name : Chiranjeevi
Age : 42
Type of Boat: Trawler
Village : Kakinada

District : East Godavari
State : Andhra Pradesh

Chiranjeevi, aged 42 years, resides in Kakinada. Fishing has been his occupation for the past 20 years. He is the owner of a trawler boat. He remains in the shore and concentrates on marketing of fish. Since he has a trawler boat, he employs around 10 labourers for fishing activity who use gears like trawl nets, hook & line and technologies like GPS and eco sounder.

Chiranjeevi attended an awareness meeting conducted by MSSRF where services of INCOIS for fishermen were explained by the staff. During the same meeting, it was also brought to the attention of the fishermen about other supportive activities (hygienic handling of fish and diesel engine mechanism) that could be provided for promoting their livelihood. He used the opportunity provided by MSSRF to use the INCOIS services and other livelihood development training programmes.

In November 2011, he started to receive information on wave height, wind speed, direction and PFZ. Since he is of the view that the information is valuable and dependable, he makes it a point to refer to the advisories though text SMS. He also sees to it that his crew members get this information on time. If the wind speed was high i.e. more than 40Kmph, he would advise the crew to restrict their fishing activity only in the safe zone, not very far from the shore. Sometimes depending on the wind speed and direction, he would tell them not to venture into the sea. He realizes the importance of the early warning messages and shares it with 10 crew members everyday by forwarding it to them.

Chiranjeevi also tries to use the PFZ information effectively. One day, he received information on PFZ when his crew members were already in the sea. When the crew received the message forwarded by Chiranjeevi, they were just 10 kilo meters from the location pointed out in the SMS. His crew members headed towards the predicted direction and the location. They had a good catch of fishes like ribbon, black pomfret, white pomfret and seer fish, apart from getting a considerable catch of tuna fish. The profit was nearly Rs1.25 lakh on that day. He was happy to mention that he enjoyed getting a good catch like this and profit four times during the one year period (November, 2011 to November 2012).

He thanked MSSRF and INCOIS for providing this valuable information and added that if they receive such information regularly, it would be very useful for him and also his peer fisher folks.

Improving Livelihoods of Fishermen- Case Studies from Andhra Pradesh

Name: Ch.Prasad

Age: 45

Type of Boat: Fibre Boat

Village: Uppada

District: East Godavari District

State: Andhra Pradesh

Ch.Prasad hails from Uppada village; he lives with his wife and two children. Fishing is his main livelihood. He has a fibre boat and uses gears such as gill net and hook and line worth about Rs. 3 lakhs. By using his traditional knowledge and methods he used to catch fish varieties like crockers, sardines, pomfrets, mackerel, eels, bombay duck, tuna, seer fish, catfish, ribbon fish, clupeiods, anchovies, crabs and prawns.

Prasad participated in fisheries related training programmes organised and conducted by MSSRF with the support of INCOIS. Once he came into contact with MSSRF, he started to access information through audio advisories (since November 2011) such as Ocean State Forecast (OSF) - wave height, wind speed and direction, weather forecast and Potential Fishing Zone (PFZ) information. He makes use of the information and regularly checks wave height and wind speed before venturing into sea. He says that the information provided is accurate and reliable. Whenever there is prediction on rough condition he does not venture into sea.

After the training on handling GPS he has been encouraged to use this technology for fishing. He finds his fish catch has increased considerably due to this training and information. Information on species specific forecast on tuna helps him to take decision on what type of net to be taken. By applying the PFZ information he got good catch of fish on several occasions. He particularly remembers the yellow fin tuna fish catch on three instances when the harvest and the profit was something very good he never experienced in his life time. The combined profit he earned was nearly Rs 5 lakhs. He also stated that during the same time he could catch other varieties of fish like seer fish, and sail fish and able to earn a profit of 4 lakhs. It is very rare to get this much profit in a short span of time. In Prasad words, "In my life this is the best catch in a short period". According to him this is only because these days they get PFZ information on right time through MSSRF from INCOIS. He is very thankful for providing PFZ information and requested MSSRF to help the fisher men to get GPS with subsidized rate, loan facilities for purchasing boats, engines and nets.

oving Livelihoods of ermen- Case Studies and Andhra Pradesh

Name: Chokka Bujji

Age: 19

Type of Boat: Daily labourer in Fibre Boat

Village: Uppada

District: East Godavari District

State: Andhra Pradesh

Nineteen year old Chokka Bujji hails from Uppada village of East Godavari District. Fishing is his means of livelihood. He is daily labourer in a fibre boat and earns around Rs 300 to 500 per day. He has been engaged in fishing for the past three years. He dropped out of school at a very early age. He is married.

Chokka Bujii's boat owner motivated him to participate in the awareness programme conducted by MSSRF on INCOIS services like OSF and PFZ. He has been getting information since November 2011 through mobile text SMS and EDB. But, he does not know how to read them in English, so he receives message in tonglish. Using English letters the message is conveyed in Telugu.

One day before venturing into sea, he received information on PFZ; he marked that information in his GPS. He and other fishermen proceeded to the predicted location. They cast their nets on that particular location and got around 800kg of seer fish. Because of this information, Chokka Bujji and other fishermen could earn Rs. 1500.

He reads daily OSF predictions and shares this with his boat owner to take decision. The OSF information guides in decision making and thus helps in saving their lives and protecting the owner's accessories. He is very grateful to MSSRF for providing INCOIS service on time.

mproving Livelihoods of ishermen- Case Studies

Name: Dharmarao

Age: 42

Type of Boat: Trawler Village: Kakinada District: East Godavari State: Andhra Pradesh

Forty-three year old Dharmarao is a veteran fisherman from Kakinada. He owns a mechanized trawler boat and uses gear like trawl net. He is accompanied by eight crew members while going for fishing. He has GPS, eco sounder and mobile phone in his boat for identifying the fishing area.

Dharmarao came to know about INCOIS awareness meeting conducted by MSSRF and he participated in that. This meeting enabled him to register his name and mobile number for receiving information on wave height, wind speed and direction and PFZ. He has been accessing such information since November 2011 through text SMS and EDB. He finds that the information is 90% accurate.

He has benefitted by using the audio advisories. Recently, on two occasions he and his crew members caught good catch of fish by using PFZ information. First time he caught fishes like carangids and ribbon fish for about two tons and the profit out of that catch was Rs 50,000. On a second occasion, he and his crew members caught mackeral fish worth Rs 40,000. On another occasion when he went to the spot based on the PFZ, he could not harvest any fish as the area was a slushy zone. It was very difficult to use the trawl net in such areas and also dangerous so he and his crew members had to come back.

He is of the view that PFZ information enables him and others to save on fuel and time. He proudly says that the information given by MSSRF is very reliable and needs to continue this service for long time for the welfare of the fisher folks.

nproving Livelihoods of ishermen- Case Studies on Andhra Pradesh

Name: Jogiraju

Age: 55

Type of Boat: Fibre Boat

Village: Uppada

District: East Godavari District

State: Andhra Pradesh

Jogiraju is an experienced fisherman from Uppada village. He owns a fibre boat and gears like gill nets, hook and line. He employs 6-8 persons for fishing. During multidays fishing, the team goes into sea with in a distance of 40 to 60 nautical miles from the shore. He uses GPS technology.

Jogiraju accesses fishing related information such as wave height, wind speed and direction, PFZ, market information and fisheries related government schemes. He came to know of these services through an awareness programme conducted by MSSRF in his village. Since then he has been receiving this information and according to him the accuracy of it is about 90 %. He uses this information every day before venturing into sea. If he receives any high wave alert, he avoids going longer distances into the sea and also advises his peer fisher folks to follow the same. He says OSF is very important in their day today fishing activities. The availability of this information helps to prevent loss of human lives and properties.

While venturing into the sea, Jogiraju checks the PFZ information such as the direction, distance, bearing angle, depth and the latitude- longitude coordinates; this enables him to know the locations with higher chances of obtaining good fish shoals. He marks the coordinates point into his GPS and moves towards the location. He is of the opinion that the information is valuable. Using this information, even if he goes for surface fishing, he would have catch worth Rs 8000 – 10000.

Jogiraju says that INCOIS service is very useful for fisherman like him and he thanks M.S.Swaminathan Research Foundation for providing it.

Improving Livelihoods of Fishermen- Case Studies from Andhra Pradesh

Name: Kameswarao

Age: 47

Type of Boat: Trawler Village: Kakinada District: East Godavari State: Andhra Pradesh

Forty-seven year old Kameswarao resides in Kakinada and has been engaging in fishing for the past 20 years. He owns a trawler boat. He uses technologies like GPS, eco sounder and compass for navigating the fishing zones. He is usually accompanied by eight crew members. Their traditional fishing ground for fish catch is between Machilipatnam and Antarvedi. For prawn catch they move towards North eastern side up to Pentakota. Their fishing trip extends up to 3 days and that of day fishing involves 8 to 10 hours.

Kameswarao has been receiving audio advisories like OSF and PFZ from MSSRF since November 2011. He finds the information valuable and useful and it has increased his confidence level while venturing into the sea. He has also been benefitted economically. His experience in using PFZ has mostly been more than satisfactory. One day, Kameswarao, captured ribbon fish, big eye snapper, seer fish and tuna to the net value of Rs 50,000, by the use of audio advisory on PFZ. Likewise, he caught more fish on three occasions. He is happy about the economic benefits of the catch on all the occasions.

He is grateful to MSSRF and INCOIS for the support and effective assistance to fishermen. He requests for topography sheet and PFZ data for short distance from the sea shore.

Name: Kandala Raju

Age: 28

Type of Boat: Fibre Boat

Village: Uppada

District: East Godavari District

State: Andhra Pradesh

Kandala Raju, a young fisherman lives in Uppada Village. He has a fibre boat and nets like gill nets and hook and lines. He owns boat and nets worth Rs 5 lakhs. He is involved in fishing from the age of fifteen. He is mainly involved in marketing of fish. He has a team of 5 to 6 persons who venture into sea for fishing. On some occasions he also accompanies them. He has caught fishes like prawns, crockers, carangids, pomfrets, mackerel, crabs, eels, bombay duck, tuna, seer fish, catfish, ribbon fish and sardines etc

Raju actively participates in all the training programmes and awareness meetings on INCOIS service like OSF and PFZ, GPS training, hygienic handling etc., Since November 2011, he started to receive INCOIS services through text SMS and EDB. Audio advisories were recently introduced to him and other fishermen in his village. He uses this information every day before venturing into sea and also he shares this information to his peer fisher folks. He would allow his team of fishermen to go for fishing only after seeing this early warning information. Simultaneously, he checks condition of the sea based on his traditional knowledge. He says the information provided is mostly accurate; only on two or three occasions he found slight variation.

As of now he did not use PFZ information directly but he follows Uppada village fisher folks and he got catch of fishes like pomfrets, seer fish, tuna, sword fish and prawns on two occasions. The average catch of fish was about 2 tons and sold at Rs 75000/- . After expenses and labour charge he could get profit of Rs 20,000/-. He is very grateful for this timely information.

Name: Kandala Vijay
Age: 27

Type of Boat: Fibre Boat

Village: Ameenabad

District: East Godavari District

State: Andhra Pradesh

Twenty sevenyear old Kandala Vijay hails from Ameenabad village of East Godavari District. For the past 10 years he is engaged in fishing. He owns a fibre boat and uses gears like gill net and hook and line. On an average he catches 50 to 60 kg of fish worth Rs. 600 to 1,000 in single day fishing and 400 to 500 kg of fish worth Rs. 5,000 to 40,000 during multi-days fishing.

MSSRF conducted awareness programme on INCOIS services like OSF & PFZ in his village during November 2011. Since then he has been receiving these services through voice SMS. Though he and his team members do not have GPS instrument he is aware of the details and use of PFZ information like data on latitude, longitude, distance from the landing centre and depth etc. while fishing. Having known the benefits of PFZ information he takes efforts to follow Uppada village fisher folks (who uses the instrument) and he catches fishes like seer fish, thread fins, big carangids, tuna and croackers. He remembers getting a good catch on more than four occasions. Each time he earned a profit of Rs 1 lakh. He says, on days when PFZ information is not available, he and his team would fish based on their judgment.

Regarding OSF information, he is of the view that it helps him to decide about his activity related to fishing. He shares this information to his peer fisher folks who do not get OSF data so that they would also benefit by it. These days he happily ventures into sea and his family members are confident that he will reach shore without any difficulty.

Name: P. Musalayya

Age: 22

Type of Boat: Fibre Boat

Village: Uppada

District: East Godavari District

State: Andhra Pradesh

Twenty two year old Musalaya is a fisherman who hails from Uppada village of East Godavari District. He started fishing when he was seventeen years old. His fishing asset includes a fibre boat and gears like gill nets and hook and line. He normally goes with a team of six persons.

He says he catches fishes like crockers, carangids, pomfrets, mackerel, eels, bombay duck, tuna, seer fish, catfish, ribbon fish, sardines, prawns and crabs. He sells his catch in the local market.

For the past one year he receives information on wave height, wind speed and direction, PFZ and weather forecast through his mobile phone. He also comes to know the information through EDB.

Musalaya feels that one can depend on the information provided through text SMS and now through audio advisories. He had a very bad experience in the sea on one occasion. Some months ago he received information on his mobile predicting high wind speed (50 kmph) and wave height (15 m) at sea. Despite that, he ventured into the sea. He did not pay serious attention to it. As he sailed he faced difficulty in moving further. He remembered the message he received that day and immediately returned to the shore. If he had proceeded further his boat might have toppled and would have resulted in physical injuries or loss of lives. He advises his peer fisher folks to use the information and get benefitted.

He is thankful to MSSRF for providing timely information which helps him to plan his daily fishing activity and thus safe guard the team members' lives and fishing gears.

nproving Livelihoods of shermen- Case Studies om Andhra Pradesh

Name: Nati Dharama Rao (Babulu)

Age: 50

Type of Boat: Fibre Boat

Village: Uppada (Kreestunagar) District: East Godavari District

State: Andhra Pradesh

Nati Dharama Rao (Babulu) aged 50 is a veteran fisherman who hails from Uppada (Kreestunagar) of East Godavari District. He is engaged in fishing for more than 28 years. He owns crafts like fibre boat, catamaran, Nava trawler and gears like purse seine, gill nets and hook and lines. He employs 8-10 persons for fishing. He uses modern technologies like GPS and eco sounder for fishing.

After his participation in awareness meeting in his village conducted by MSSRF, he came to know about – INCOIS services like OSF and PFZ. Since November 2011 he and his team use the service and feels the information is reliable. He calls help line number if he wants to confirm the information already received through the text message or voice message on days when there is variations in the sea level or conditions. Once during the month of April, 2012 the wind speed was very high and he immediately got in touch with MSSRF through the help line to know the details of weather information. This was to confirm the message received through the mobile earlier. That particular day he did not go into the sea and thus he could protect his fishing gear, boats and oil tank worth of Rs. 2 to 3 lakhs.

According to him he has benefitted a lot by using the PFZ information. He was very excited to share his experiences of using PFZ information for fish catch. He feels that by using this information, he obtained good yield of fish within a short period which was something unexpected for him. In this context, he mentioned about two major events when the catch was very good. Once, he and his employees went in two boats and got 3 to 5 tons of moon fish which he sold for Rs 9 to 13/per Kg. On another occasion he earned a profit of Rs 45,000 to 55,000 by selling bull's eye fish. He could get it as he had followed the PFZ information on that day.

proving Livelihoods of hermen- Case Studies m Andhra Pradesh

Name: Palleti Nageswararao

Age: 38

Type of Boat: Fibre Boat

Village: Uppada

District: East Godavari District

State: Andhra Pradesh

Thirty eight year old Nageswararao has over 22 years experience in fishing and has studied upto Class five. He hails from Uppada village of East Godavari district. He lives with his wife and two children. He owns a fibre boat and he uses gears like gill nets and hook and Line. He is one of the eight member fishing team. Nageswararao feels that certain species of fish are not available these days. He says it could be due to changes in sea conditions. Often fishermen confront bad weather condition more frequently than in earlier times.

Since November 2011, he has been accessing INCOIS information services like wave height, wind speed and direction, PFZ, and weather forecasting through audio advisories. He feels that the information is reliable and helps him to take decision whether to venture into sea or not. He uses GPS technology for fishing for navigating the fishing ground.

Nageswararao shares the happy moments that had happened in his fishing; on three consecutive days he caught good catch of fish by applying PFZ information. He was glad to say that after his expenses, he got a profit of Rs 5000, Rs 8000 and Rs 10,000. And on another occasion he says that they could get a catch of seer fish based on the PFZ information. Getting a profit of Rs 5000 is something big for them as they often do not get this much profit. Most of the time whatever they earn would be sufficient only to cover the expenses.

He is very grateful to MSSRF and INCOIS for providing such up to date information and requested to continue the same service forever.

mproving Livelihoods of ishermen- Case Studies

Name: Matharaju

Age: 45

Type of Boat: Trawler Boat

Village: Kakinada -2 District: East Godavari State: Andhra Pradesh

Matharaju is a fisherman from Kakinada-2. Fishing is the main source of his livelihood. He is the President of the Boat Owners' Association. He commands the respect of his fellow fishermen. He owns five trawler boats and uses trawl net for fishing. He uses technology like GPS and eco sounder for navigating the fishing ground.. In each vessel, eight crew members venture into the sea for fishing.

Matharaju is familiar with INCOIS services even before the MSSRF's intervention in this region. Through his fellow fishermen he came to know about the INCOIS services provided through VRC of MSSRF in Kakinada. He approached the VRC to get more details. Subsequently, he started to receive audio advisories on wave height, wind speed and direction, PFZ, weather forecast and rainfall details. He finds the information reliable.

Some months ago, Matharaju had a good catch of fish by applying the data on PFZ provided through the audio advisory. He marked the points in the GPS and informed crew members in other boats to do the same. He and his crew members in five trawler boats moved towards that direction and cast their nets at the exact location. He caught tuna fish worth of Rs 50,000 for each boat.

As a President of the Boat owners association, he shares the information with his crew members and also forwards the message to other fishermen who do not get this service. He is happy that he is able to use the INCOIS services regularly because of VRC.

Improving Livelihoods of Fishermen- Case Studies

Name: Perla Venkata Ramana

Age: 40

Type of Boat: Fibre Boat Village: Dummulapeta District: East Godavari State: Andhra Pradesh

Forty-year old Perla Venkata Ramana is a well experienced fisherman; he resides in Dummulapeta village of East Godavari District. He lives with his wife and two children. Fishing is his main livelihood. He owns a fibre boat and uses gears-like gill nets and hook & Line. While venturing into the sea, he is generally accompanied by five crew members. His fishing ground is between Kakinada to Pentakota covering a distance from 15 to 60 nautical miles. He goes for day fishing.

Venkata Ramana came to know about MSSRF's intervention of providing INCOIS services through his friends. As he realised the importance of such information for his livelihood, he immediately approached the VRC of MSSRF to register his mobile number for getting audio advisories. Just like, his friends, he started to receive OSF and PFZ information to his mobile phone. He uses the information to take decision to venture into the sea or not. For example, if wind speed predictions were above 40Kmph, he decides not to venture into the sea and also advises his crew members and relatives not to undertake fishing activity that day. He finds the information 90% accurate. By following the audio advisories he is able to save his life and also that of his crew members. They are able to avoid damages to their fishing boats and other accessories.

He is very thankful to MSSRF for providing timely information and has requested to be provided with GPS at subsidised rate to increase his fish catch. Though he does not go for deep sea fishing and focuses only within the 60 nautical miles, he feels having a GPS instrument would help him get more catch if there was availability of PFZ information for a short range in the sea. He says INCOIS information plays an important role in their day-to-day fishing occupation.

oproving Livelihoods of Shermen-Case Studies on Andhra Pradesh

Name: Ramu Age: 34

Type of Boat: Trawler Village: Bhairavapalem District: East Godavari State: Andhra Pradesh

Thirty-four year old Ramu belongs to Bhairavapalem village, East Godavari district. Fishing has been his traditional occupation and he has been going for fishing for nearly 20 years. After completing his Class 10, he took to fishing for his livelihood. He owns a trawler boat. He uses GPS, eco sounder for navigating the fishing ground..

MSSRF conducted awareness meeting in his village through which he came to about INCOIS service like OSF and PFZ. Since November 2011, he has been receiving audio advisories.

Whenever he receives PFZ information he makes use of it effectively and finds the catch was more on those days. He says, he has experienced a good catch of fish on more than a few occasions. He shares one such happy instance: usually, he and his team of fishermen used to go for fishing during morning hours. One day, while they were preparing the net, he received PFZ advisory from MSSRF. Based on the audio advisory, they set out towards the location for fishing. He, along with his team, caught nearly 2 tons of fish in short duration. He got a profit of Rs 30,000 after meeting all his expenses. He enjoyed bulk catch of fish more than 3 times with the information he received. He finds the information 90% accurate. He also shares the audio advisories on PFZ prediction with his fellow fishermen.

Apart from PFZ information, he also receives advisories on wave height, wind speed and direction. He has also participated in the training programmes organised by MSSRF on diesel engine mechanism, preserving fish, handling GPS etc.

He is pleased to say that due to improvement in his economic condition, he is able to clear some of his debts. This, according to him, is because of the timely information provided by MSSRF. He says he would be very happy if this timely information could be reached to the entire fishing community.

mproving Livelihoods of Fishermen- Case Studies From Andhra Pradesh

Name: Sangadi Srinu

Age: 38

Type of Boat: Trawler Village: Bhairavapalem District: East Godavari State: Andhra Pradesh

Sangadi Srinu, aged 38 years comes from Bhairavapalem village of East Godavari District. He started to go fishing at an early age and has around 23 years of experience. He owns a trawler boat and gears like trawl net, hook & line. He uses technologies like GPS and eco sounder.

He has been aware of MSSRF's activities in this district for the past 16 months. He has also participated in a few training programmes. He uses INCOIS services like wave height, wind speed, direction & PFZ for safe sea venture and better catch of fish. He says that the prediction provided in the audio advisories through mobile phone is accurate. Therefore he checks OSF information regularly before venturing into sea.

He also makes use of PFZ information. On one day when he received PFZ prediction he marked the points in his GPS and aided by the eco sounder, he proceeded towards that specific area and cast the net to catch fishes. He and his team caught jelly fish worth Rs. 50,000. After the expenses and labour cost, he got a profit of Rs. 5000.

He says both OSF and PFZ are equally important for safe venture and better catch of fish. He is thankful to MSSRF and INCOIS for this valuable intervention.

Improving Livelihoods of Fishermen- Case Studies from Andhra Pradash

Name: Siva Age: 34

Type of Boat: Trawler Village: Bhairavapalem District: East Godavari State: Andhra Pradesh

For Siva, aged 34 years, fishing has been his traditional occupation. He hails from Bhairavapalem village of East Godavari District. He has studied up to Class 10. He is living with his wife and two children. He started to go for fishing for his livelihood from the age of 22. Presently, in addition to going to the sea for fishing, he also works in a fishing jetty as auctioneer. He owns a trawler boat and gears like trawl net and hook and line. He employs six crew for fishing activity. He uses technologies like GPS and Eco sounder.

He learnt about accessing fisheries related livelihood information such as OSF and PFZ through an awareness meeting conducted by MSSRF in his village. Since 2011, he has been accessing this information and finds OSF information quite reliable.

Siva regularly makes use of PFZ information whenever it is disseminated by MSSRF. By making use of PFZ prediction he got good catch of fishes for three times at Narsapur village and once at Bhairavapalem village, his native place. He says the fish yield he got in his village was some thing so good that he had never seen in his life time. He was thrilled when he caught two tons of fishes like ribbon fish, black pomfret, and seer fish and earned a profit of Rs 5 lakhs. Due to this timely information, fishermen are able to save fuel, time and enjoy the economic benefit too to an extent, says Siva.

According to Siva both OSF information and also that of PFZ are equally important; while OSF is essentially life- saving information, PFZ enables a fisherman to get economic benefits. He and his crew members are very thankful to both MSSRF and INCOIS for providing such services to improve the livelihood of fishermen.

proving Livelihoods of hermen- Case Studies m Andhra Pradash

Name: Srinivas

Age: 35

Type of Boat: Trawler Village: Kakinada-2

District: East Godavari District

State: Andhra Pradesh

Thirty five year old Srinivas is a fisherman who has completed Class 5 and has been engaging himself in fishing for the past 20 years. He hails from the village of Kakinada -2 of East Godavari district. He lives with his wife and two children. He owns a trawler boat. Srinivas engages at least 5-6 labourers while going for fishing. He uses technologies like GPS, compass and eco-Sounder for navigation

When Srinivas came to know about INCOIS awareness meeting being conducted by MSSRF in his village, he enthusiastically participated in that. This meeting gave him an opportunity to know about the services like wave height, wind speed, direction and PFZ provided by INCOIS through MSSRF. He has been receiving information through text SMS on OSF and PFZ since November 2011. As he believes the data is reliable, he checks the text SMS prior to venturing into sea.

Srinivas is one of the many fishermen who has been benefitted by applying the PFZ information. On more than four occasions, he has experienced the usefulness of this information. He shared one of his happiest experiences: one day, he received the PFZ data through the text SMS. He marked that point in GPS and proceeded to the location forecasted. He and his crew were happy to find PFZ prediction proved to be right. They had a good catch of fishes such as ribbon fish, big eye snapper. The catch came to more than one ton and the profit was Rs 50,000/-. According to him, the advantage of PFZ information is that it not only helps the fisher men to get good catch of fish but also it saves their time, energy and fuel. Prior to receiving the information, this was not the case; they had experiences of spending long hours in the sea for a good catch. Sometimes there won't be any profit at all and there were occasions when they had returned empty handed also. However, these days when they go for fishing based on the PFZ information they are assured they would have a good catch of fish resources and are confident of a reasonable economic benefit.

He is thankful to MSSRF for providing INCOIS service. Because of this information, he feels more secure and confident.

Name : Vanka Konda

Age : 45

Type of Boat: Fibre Boat

Village : Ameenabad

District : East Godavari

State : Andhra Pradesh

Vanka Konda is a Class Four school drop-out from Ameenabad village and has been engaged in fishing for the past 30 years. He lives with his wife and two children. He owns a fibre boat and gears like gill net and hook and line. The team of eight members venture into sea for fishing.

Vanka Konda came to know about INCOIS services through awareness meeting conducted by MSSRF. In the meeting he was informed in detail about wave height, wind speed and direction & PFZ. Through audio advisory he receives that information. He finds that the information is 80 % reliable. The majority of the fisher folks checks the OSF information and compared that with existing condition of sea before venturing into it.

He started using GPS technology since 2012. He receives PFZ information such as latitude, longitude, direction, distance and depth of the sea. One day, based on the audio advisory, he and his crew members reached the predicted location and cast their fishing net. They caught good catch of fishes like tuna, sea bass, seer fish and prawns. After meeting the expenditure including the labour cost, he got a profit of Rs 10,000.

He proudly says that the INCOIS services have helped him in fishing activity and requests to provide information on sea current to improve fishermen's livelihood.

Improving Livelihoods of Fishermen- Case Studies from Andhra Pradesh

Name: Abbas Age: 25 years

Type of Boat: Fibre Boat

Village: YSR Nagar District: Krishna District State: Andhra Pradesh

Abbas, aged 25 years, hails from YSR Nagar of Krishna District. He has studied up to Primary School level. He is married and has two children. He has been engaging in fishing for the past 13 years. He owns a fibre boat and gill nets. He is normally accompanied by his father and his crew of 6 while going for fishing.

Abbas came to know about the INCOIS services and the dissemination of OSF and PFZ information through his friend from his village. His friend, who had already started accessing the information explained to Abbas in detail the benefits of the information on wave height, wind speed, direction and PFZ. His friend also told Abbas to get registered and explained to him as to how to access the text SMS. Encouraged by his friend, Abbas immediately contacted MSSRF in Machilipattinam to avail this service.

Since mid of November 2011, he has been utilizing this information sent as text SMS. Earlier, the fishermen used to know the information through EDB; however it has not been functioning for quite some time, mentioned Abbas. He receives information on wave height in feet and wind speed in km per hour. He values the OSF information as it helps him to decide about venturing into the sea without any confusion.

Abbas also uses PFZ information. One day Abbas and his crew members ventured into sea with PFZ prediction. By applying PFZ information directly he and his team got a yield of 500Kgs of fishes like seer fish and pomfrets. On that day, he earned a profit of nearly Rs 20,000/-. Similar to this, he utilized such information for more than 5 times. Abbas feels that he is not able to make use of the PFZ information to its full potential as he has only a fibre boat for fishing activity. As the fibre boat has a limitation of not being able to go into longer distances, Abbas is not able to use the PFZ information predicted at a longer distance. Due to this he is missing the good yield of fish, says Abbas.

He is grateful to MSSRF for providing INCOIS service. He says it is of great support and help to fishing community. He has requested MSSRF to arrange for buying GPS with subsidized rate.

Name : Anjaneyulu

Age : 52

Type of Boat: Fibre Boat
Village : Gilakaladindi
District : Krishna

State : Andhra Pradesh

Anjaneyulu, aged 52 years, is an experienced fisherman. He hails from Gilakaladindi, a fishing village in Krishna district. He has studied up to Class 10. He owns a fibre boat gill nets. He is accompanied by a team of six members while going for fishing.

He participated in an awareness programme conducted by MSSRF and learnt about INCOIS services related to OSF and PFZ. He has been receiving this information for about one year and he says it is mostly accurate. He is happy that he participated in the awareness programme as it enabled him to know about the details of accessing information sent as text SMS or voice SMS. For example, during the awareness programme, the staff from MSSRF explained in detail the importance of PFZ information and how to use it while going for fish catch. The exposure to the knowledge motivated persons like him to use the PFZ information.

Interestingly, Anjaneyalu and some of the other fishermen do not possess any GPS instrument. However they make use of this information based on the particulars like the distance from the shore, depth and direction provided through SMS; their traditional experience over the years facilitate them in assessing and identifying the fish location. He finds the GPS information very useful particularly when it is for short distances. He cannot use the information if the distance is more. This is because he has a fibre boat with which he cannot undertake fishing if it is far from the landing centre. Mostly, PFZ information provided is utilised by fisher men who venture into deep sea fishing, says Anjaneyalu. However, he does not miss an opportunity if he finds the location and direction details based on PFZ information is not far from the traditional fishing ground. According to him he has utilized PFZ information eight times. He recalls one incident when he received PFZ information with bearing angle, distance from landing centre and depth. By applying this information, within three hours he got a good yield of about 300 Kg of fishes like pomfrets, ribbon fish, carangids and seer fish. He was happy when he got a profit of Rs 32,000/-on that day. Because of this information he is able to save time and fuel. He feels if PFZ information is provided for shorter distances, it would help fishermen like him to fish with less difficulty and thus improve the economic condition. He is grateful to INCOIS and MSSRF for providing these services as it helps them to improve fish catch and thereby their living condition. He is also thankful for alerting the fishermen about the sea conditions; because of this, they are able to save their lives and prevent material losses.

Name : Appaji
Age : 25

Type of Boat: Fibre Boat

Village : YSR Nagar

District : Krishna District

State : Andhra Pradesh

Appaji, aged 25 years, resides in YSR Nagar of Krishna District. After completing his class 10, he has taken up fishing as his livelihood. He owns a fibre boat and gill nets for fishing. His fishing crew consists of six persons.

Since November 2011, he has been accessing text SMS for the information on OSF and PFZ. When MSSRF conducted awareness meeting in his village, he registered his mobile number for receiving the text SMS. According to him, the OSF information which he receives from MSSRF, is very clear and helpful. He strongly feels that OSF information is very important for fisherman like him. Previously, he used to take long time to decide about venturing into sea. Now this OSF data helps him to take decision immediately as he believes it is accurate.

Though he does not have GPS, he uses PFZ information whenever it is provided. Even with out having GPS instrument he is able to use the information and get benefit out of it. As the advisory clearly gives the distance from the landing centre, the bearing angle and other details in a clear manner he is able to navigate to the exact location. Once by applying PFZ data he got a good catch of fish for about 125kgs. He caught a good yield of fishes like scionids, carangids and pomfrets which enabled him to gain a net profit of Rs.12000/-. Due to the clear information, he does not miss possessing a GPS.

He is thankful to MSSRF for providing such innovative information. He request to be provided a GPS with subsidized rate and training on diesel engine mechanism to enhance his livelihood.

roving Livelihoods of nermen- Case Studies n Andhra Pradesh

Name : Gantaiah

Age : 30

Type of Boat: Nachugunta
District: Krishna

State : Andhra Pradesh

Gantaiah, who is a fibre boat owner, hails from Nachugunta village of Krishna district. He has studied up to Class eight. He has been engaging in fishing activity for more than 11 years. He uses gill nets; while going for fishing he is accompanied by five members.

Gantaiah uses his mobile phone for receiving OSF and PFZ information. He has been availing this service through MSSRF since November 2011. The awareness programme conducted in his village provided him and other fishermen an opportunity to learn the details of INCOIS services and how they help in enhancing economic benefit. He normally checks the OSF information before venturing into sea and finds it reliable. He says, OSF information helps him to decide whether to venture into sea or not.

While talking about the benefits of PFZ information he feels handicapped that, on most of the days, he is not able to make use of this service; as he is a fisherman who does not undertake deep sea fishing. The PFZ information disseminated is such that it can generally be used only by fishermen who go for deep sea fishing. Sometimes he finds that the information is useful for fishermen like him also. In such situations, he has used the PFZ information during four occasions. On all these days he got a good yield of fish. For example, few months ago, by applying PFZ information he got a good catch of 150 Kg of fishes like seer fish and ribbon fish in his native village. He was happy that. Within a very short time, he could earn a profit of Rs.10, 000/- on that day. He is of the view that if INCOIS could provide PFZ information for a shorter distance on regular basis, it would be helpful for him and others like him.

He is thankful for being provided with the INCOIS service on time. He will be very grateful if MSSRF could arrange for getting a GPS with subsidized rate and training on Diesel Engine Mechanism.

မ္မို္င္ Name : Nagulaswami

Age : 33

Type of Boat: Fibre boat

Village : Sorlagondi

District : Krishna

State : Andhra Pradesh

Sorlagondi is a fishing village in Krishna District from where 33 year old Nagulaswami has been engaging in fishing for 10 years. He has studied up to Class eight. He owns fibre boat and gill nets. He employs five crew members for his fishing activity.

He participated in fisheries related awareness programme conducted by MSSRF. Through this programme he came to know about INCOIS services. Since November 2011 he started receiving information via text SMS. Nagulaswami says early warning information like cyclonic weather depression and tsunami helps him to keep his fishing accessories in safe place. He shares the information with his friends so that they can also take precautions.

Nagulaswami also uses PFZ information and he finds it to be very helpful and useful in locating the fish shoals and get a good catch. So far he has used PFZ information nearly eight times and has gained by it. For instance, one day by applying PFZ information he got good catch of fishes like Bombay duck, shark, seer fish weighing about 200 Kg. He got a net profit of Rs 18,000/- .He trusts the PFZ information so much that he is very confident that he would definitely have a good catch of fish whenever he goes for fishing using the PFZ information; he is sure of more economic gain.

He says fishermen like him are very happy to get such information. If MSSRF and INCOIS disseminate weather reports and PFZ information on a regular basis, it would be a great support for the fishing community.

Name : Sridhar

Age : 28

Type of Boat: Fibre boat

Village : YSR Nagar
District : Krishna

State : Andhra Pradesh

Sridhar, who is 28 years old, hails from village of YSR Nagar in Krishna District. He has been engaging in fishing for about 6 years. He owns a fibre boat and gill nets for fishing.

Sridhar participated in awareness meeting conducted by MSSRF where details such as how to access and use INCOIS services of OSF and PFZ were provided. Since November 2011, he has been receiving information through text SMS in his mobile. These text messages are very timely and guides the fishermen to take a proper course of action particularly during cyclone and tsunami alert. They safe guard their lives and belongings.

He is yet to buy a GPS. He does not feel handicapped without GPS as the Text information helps him to navigate to the PFZ location without any difficulty. The points are given very clearly which enables a fisherman to locate the PFZ. Once, by applying PFZ information he got 200 Kg of scionids, carangids, bombay duck and prawns. After deducting the labour and other costs, he earned a profit of Rs 12000/- . This information helps him to save on fuel and time.

It is only because of the support from MSSRF and INCOIS, fisherman like him feel very happy and secure too. He has requested to be provided a GPS at subsidized rate and also some training on diesel engine mechanism.

Name : Veera Raghavaiah

Age : 47

Type of Boat: Fibre boat
Village : Giripuram
District : Krishna

State: Andhra Pradesh

Forty -seven year old Veera Raghvaiah is a resident of Giripuram village of Krishna district and has been engaging in fishing for nearly 32 years. He has studied up to Class five. He owns a fibre boat and a few gill nets. His fishing crew consists of five persons. Normally, he sets out for fishing activity during early morning hours and returns to the shore by noon.

Since November 2011 he has been receiving OSF and PFZ information through text SMS. If the received information is on high wave and wind alert he immediately contacts fisheries helpline to confirm and then decides his next course of action. He is of the view that the information is accurate. He had an opportunity to participate in the awareness programme on INCOIS services; it was during that meeting he came to know about the details of PFZ and its advantages. The information received is very clear; even without GPS, he is able to reach the predicted location. He had so far made use of PFZ information on seven occasions. Recently, by using PFZ information he caught 200 Kg of seer fish and carangids within a short time and got a profit of Rs 15,000/- "If PFZ information is provided regularly for a shorter distance from landing centre, I can save fuel cost and increase labourers' salary" says Veera Raghavaiah.

He is very thankful for providing such innovative information. He wants to know whether he would be able to buy GPS on subsidized rate. He wants training on GPS handling and Diesel Engine Mechanism.

Name : Venkateswara Rao

Age : 60

Type of Boat: Labourer in Fibre boat

Village : Giripuram District : Krishna

State : Andhra Pradesh

Venkateswara Rao, sixty years, comes from Giripuram village of Krishna district. He has studied up to Class five. He works as a labourer for a fisherman who owns a fibre boat. His employer trusts Venkateswara Rao and takes his guidance as he is an experienced fisherman.

Venkateswara Rao took part in the awareness meeting conducted by MSSRF; this enabled him to access INCOIS services such as wave height, wind speed, direction and PFZ. Since November 2011, he has been accessing INCOIS services provided through text SMS; he finds the information by and large to be accurate. If the text message indicates that wind speed will be more than 30 Km per hour, he would not venture into the sea on that particular day. He recalls an incident which has happened prior to receiving INCOIS services. It was a high windy day when his owner and other crew members ventured into the sea for fishing. Due to the heavy wind, the fishing accessories were damaged and the owner incurred an economic loss worth Rs 10,000/-. It caused physical injuries to the fishermen also. These days, he says one could avoid going into the sea as they get information on high wind alert well in advance. This prior INCOIS information helps them to safeguard their materials and also save their lives.

Venkateswara Rao makes use of the PFZ information also although the owner of the boat does not possess one. He says one can reach the predicted location even without a GPS as information provided is very precise and clear. He has utilised PFZ information more than 5 times and benefitted a lot. Previously he used to identify fishing zone based on the traditional knowledge. In this method there is a great likelihood of fuel wastage and time. The fish catch also might not be more! Once, by applying PFZ information he got a good catch of 200 kg fishes like pomfrets and sharks. The owner got a profit of Rs 16,000/- within a short duration. He says that whenever he uses PFZ information, he finds it to be very useful; apart from saving time and fuel there is definitely good economic benefits also. If there is economic gain to his owner, it means it is beneficial to him also as he would also get better wages. He is happy that there is economic gain for both the owner and his labourers.

He is thankful to MSSRF and INCOIS for providing such innovative information. He expressed his desire to buy a GPS on subsidy if it is available. He stated that training on GPS handling and diesel engine mechanism would go a long way in enhancing the capacity of the fishermen and thus improve their economic conditions.

CASE STUDIES FROM YANAM DISTRICT, UNION TERRITORY OF PUDUCHERRY

Name : Malladi Jayram

Age : 49 years

Type of Boat: Fibre Boat

Village : Savitrinagar

District : Yanam

State : Puducherry

Malladi Jayram resides in Savitrinagar village of Yanam District, Puducherry and has been engaged in fishing for about 8 years. He is illiterate. He owns a fibre boat and uses nets like gill, hook & line. He normally goes for fishing with a team of 8 members.

Malladi Jayram avails the INCOIS services of OSF such as wave height, wind speed and direction and PFZ through his mobile phone from MSSRF VRC since June 2012. Based on this information and his own experiences, he observes the prevailing conditions of the sea and takes the decision about going into the sea.

He says that the information he receives on his mobile is 80 % reliable and he is able to engage in fishing based on it and his experience. The information on sea conditions he receives gives him reassurance.

Malladi Jayram has experienced the benefits of GPS information on more than three occasions. Interestingly, he does not own any GPS instrument, but some of his relatives, who own trawler boats and GPS from Bhairavapalam are supportive to Jayram. They inform him before they plan their fishing activity and tell him to follow their GPS route. He is happy to mention that on three occasions, he could catch nearly one ton of fishes like seer fish, rays, crockers and ribbon fish on each time. After his expenses and labour charges, he got a profit of Rs. 2000. He does not have to spend unnecessarily on fuel and saves his time too! Earlier, it used to be a hand- to- mouth existence for him. He says he able to see the difference now!

Apart from using PFZ information he also refers to OSF information; as it is important not only for their livelihood but also for the safety of their lives and possessions while at sea.

He says that INCOIS services are very useful for fisher folks like him. He has requested to provide a GPS instrument at subsidized rate and loan facility for purchasing the boat, engine and net.

CASE STUDIES FROM YANAM DISTRICT, UNION TERRITORY OF PUDUCHERRY

Name : Ramakrishna

Age : 30

Type of Boat: Trawler Boat

Village : Savitrinagar

District : Yanam

State : Puducherry

Ramakrishna is a young fisherman who owns a trawler boat; he hails from Savitrinagar in Yanam district. He has been engaging in fishing for about six years. He uses trawler boat and nets like hook & Line. He uses GPS and eco sounder for identifying the fish shoals. He ventures into the sea for fishing along with a team of eight members. Mostly the team concentrates on catching prawns, big fishes like tuna, sword, sharks and so on.

Since June 2012, he has been receiving information through audio advisories on wave height, wind speed, direction and potential fishing zone. He finds the information more or less accurate.

He uses PFZ information whenever it is available. He shares an excited moment that happened in his fishing life. One day he received PFZ information and he passed the same to his peer fisher folks who were in separate boats. The team went in to the sea and all of them got a good catch of fishes like seer fish and jellyfish. There was nearly a profit of Rs 46,000 for each boat.

He is grateful to MSSRF for proving such advance information and he expresses the need for regular PFZ information.

CASE STUDIES FROM YANAM DISTRICT, UNION TERRITORY OF PUDUCHERRY

Name : Venkateswarlu

Age : 43

Type of Boat: Fibre Boat

Village : Savitrinagar

District : Yanam

State : Puducherry

Venkateswarlu hails from Savitrinagar of Yanam district. He has 30 years of experience in fishing. He owns a fibre boat and uses nets like gill and hook & line. He sets out for fishing with a group of six persons. His traditional fishing ground is between Kakinada and Antravedi. The average catch of fish in a single day is about 40 to 50 Kg and the average profit is between Rs 800 and Rs 1000

When he shares about MSSRF & INCOIS intervention, he is very happy because of INCOIS services he able to decide whether it to venture into sea and he able to secure his life and property. He came to know about this service through awareness meeting conducted by MSSRF and also he is well trained to access the information. He started to receive OSF & PFZ information through SMS and EDB. OSF information helps him to save fuel cost and time.

Though he does not possess GPS he observed carefully when MSSRF explained about latitude, longitude details, and distance from landing centre and he later developed interest on it. As he knows the utility of PFZ information he closely follows the routes of fishermen using this facility from a village called Bhairavapalem. Some time back he could catch 1.5 tons of tuna fishes by following the fishermen from the other village. He earned a net profit Rs 10,000. When PFZ information is not available he and others go for fishing using the traditional knowledge.

Venkateswarlu expressed his wish to buy a GPS at a subsidized rate. He said he would be very grateful to MSSRF if it helps him in this regard; it would improve his livelihood.





