# Proceedings

### **Sensitization Workshop**

on

# National Surveillance Programme for Aquatic Animal Diseases (NSPAAD)

of Andaman and Nicobar Islands August 31, 2015

Organized by

ICAR – Central Island Agricultural Research Institute,
Port Blair

In collaboration with

National Fisheries Development Board, Hyderabad & ICAR- National Bureau of Fish Genetic Resources, Lucknow











### Venue

ICAR – Central Island Agricultural Research Institute
Post Box No. 181, Port Blair – 744101
Andaman and Nicobar Islands

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# **Sensitization Workshop on National Surveillance Programme for Aquatic Animal Diseases (NSPAAD) of Andaman and Nicobar Islands**

A sensitization workshop on "National Surveillance Programme for Aquatic Animal Diseases (NSPAAD) of Andaman and Nicobar Islands" was organized at ICAR-CIARI on 31-08-2015. The workshop was aimed at creating awareness among the stakeholders about the importance of aquatic animal disease surveillance with respect to the Andaman and Nicobar Islands. Since there is no detailed systematic report available on the aquatic animal diseases, the proposed project would provide baseline information and also develop the abilities to manage aquatic animal diseases in the Island ecosystem.

### **Inaugural Session**

The session was conducted by Mr. K. Lohith Kumar, Scientist of Fisheries Science Division, ICAR-CIARI. Dr. S. Dam Roy, Director, ICAR-CIARI was the chief guest of the function and Mr. J. Chandrasekhar, Director of Fisheries, Andaman and Nicobar Administration served as Guest of Honour for the function. The programme was started with welcome address by Dr. Kiruba Sankar, R, Head of Fisheries Science Division of ICAR-CIARI. In his welcome address, he welcomed a total of 53 participants including 32 fish farmers from Badmaspahad, Manpur, Hasmatabad, Chouldari and Nayashar of South Andaman, 9 officials from State Fisheries Department, 2 SMS (Subject Matter Specialist) from KVK, South Andaman, 8 Scientists and 2 Technical officers from ICAR-CIARI.



Mr. K. Lohith Kumar conducting the session



Dr. Kiruba Sankar, R delivering Welcome address



Welcoming of Dr. S. Dam Roy, Director, ICAR-CIARI



Welcoming of Mr. J. Chandrasekhar, Director of Fisheries

Followed by the welcome address, an overview on importance of aquatic animal disease surveillance, objectives and plan of work to be followed under the project was explained to the participants by Mr. K. Saravanan, Scientist of Fisheries Science Division and Principal Investigator of NSPAAD Project. He further elaborated that the disease surveillance of freshwater carps and prawns, as well as marine wild shrimps and candidate finfishes will be covered under this project.

Mr. J. Chandrashekar, Director of Fisheries, Andaman and Nicobar Administration and Guest of Honour for the function appreciated the initiative taken by ICAR-CIARI on the aspect of aquatic animal disease surveillance. He further explained that the fish farmers of Andaman and Nicobar Islands are interested in breeding of many important indigenous fish species. But here the main hurdle is lack of knowledge of famers about fish diseases and the possibility of entry of wild fish pathogens into the Island ecosystem. In this regard, he is very sure that the upcoming quarantine facility of ICAR-CIARI will play a major role in



Mr. K. Saravanan explaining the overview of NSPAAD project



Mr. J. Chandrasekhar addressing the gathering

selection of suitable and disease free fish species for breeding and culturing which will definitely change the present scenario of aquaculture of this Island.





Release of Publications by the Chief Guests

Release of Pamphlet on NSPAAD

Followed by this a list of publications were released by the chief guests. The released publications include a pamphlet on "National Surveillance Programme for Aquatic Animal Diseases (NSPAAD) of Andaman and Nicobar Islands", a folder on "Better Management Practices (BMPs) of Freshwater Fish Farm" and a technical bulletin on "Diseases of Freshwater Fishes and Its Management". The publications were released in English and Hindi for the benefit of the farmers and officials of the State Fisheries Department.



Release of folder on BMPs



Release of technical bulletin on fish diseases

Dr. S. Dam Roy, Director, ICAR-CIARI and chief guest of the function explained the genesis of disease surveillance programme and its importance in the Island ecosystem. He mentioned that this is a national level disease surveillance programme funded by NFDB, Hyderabad and coordinated by ICAR-NBFGR, Lucknow. He explained about the importance of active and passive disease

surveillance. He further added that the cooperation of fish farmers, fishermen, fisheries department and KVK is important for the successful progress of this programme. He also mentioned the role of upcoming quarantine and biosecurity facility of ICAR-CIARI and its importance to this Island ecosystem. In this regard, he added that this biosecurity facility will play a major role to prevent the entry of fish pathogen along with fish seeds imported from mainland. It will also monitor all the imported fish seeds before entry to the cultural system and will certify only those species which are not harmful for the Island ecosystem. At the end of his valuable speech he put one important point that the absence of many fish diseases compared to mainland may be either due to pristine nature of Island ecosystem or lack of proper documentation. Based on all these facts, the present aquatic animal disease surveillance programme is very much important for the Andaman and Nicobar Islands to map the diseases and to develop the management strategies.





Dr. S. Dam Roy delivering chief guest address

### Feedbacks from the participants

Feedbacks were received from the participants and the queries raised by them were addressed simultaneously. At the outset, Mr. S.C. Dey, Assistant Director of Fisheries (ADF) appreciated the initiative taken by ICAR-CIARI to establish the biosecurity and quarantine facility. He added that the fish feeds from Kolkata are not allowed to the Island because of which many farmers are not happy with the system. But the main motive of this action taken by the Department of Fisheries is to prevent the entry of any fish pathogen from the mainland where the diseases of fishes are the major contributors for lowering fish

Mr. Mohammed Tahir, ADF mentioned the utilization of Tsunami affected area for fish culture and further emphasized on the possibilities of shrimp culture in the Island ecosystem. He also explained the importance of quarantine system in this aspect.



Mr. Harimohan Halder expressing his concerns



Mr. Mohammed Tahir delivering his views

Mr. Tapan Kumar Biswas, Assistant Fisheries Development Officer (AFDO) noted that there is a lack of proper documentation of fish diseases in Andaman and Nicobar Islands. He also raised queries on the aspect of aquatic animal disease management. Further added that shrimp culture should be initiated in the Islands by culturing *Penaeus monodon*.

Mr. C. Hamza, AFDO mentioned that during 2009, he and his colleagues found tail bent deformity in some of the freshwater fishes and also found some insect like parasites on the mouth and opercular regions of marine fishes.



Mr. Tapan Kumar Biswas providing feedbacks



Mr. C. Hamza addressing the gathering

production. He further gave the examples of diseases reported from the Island which included dropsy of freshwater fishes; pop-eye disease in marine fish and white spot syndrome in shrimps. Finally he raised a query on a particular disease in which the affected fish shows big head and thin body.

Mr. Arif M. Mustafa, ADF in his address gave emphasis on illegal importation of large quantities of fish seeds from mainland which may carry fish pathogen to this pristine ecosystem. Number of times the officials of Fisheries Department have caught red handed this type of illegal consignments. He was very happy by knowing that the ICAR-CIARI is going to establish a biosecurity and quarantine facility. Further he added that there is a superstition among fish farmers that culture of shrimps will cause the occurrence of white spot syndrome in the culture system. He urges all the farmers that they should not believe it and should go for shrimp culture.



Mr. S.C. Dey addressing the gathering



Mr. Arif M. Mustafa providing feedbacks

Mr. Harimohan Halder, a fish farmer expressed his worries about the illegal import of fish seeds from mainland which is still going on in different places of Andaman and Nicobar Islands. He also emphasized on the illegal fishing by many fishermen using nets with small mesh size than the mesh size recommended by the government authorities. Using small mesh size net causes death of young fishes at an alarming rate. He also worried that if this activity continues, many species of fishes will extinct from Andaman and Nicobar Islands in near future. While addressing this issue, officials from State Fisheries Department mentioned that already mesh size regulation is on place and further assured that such kind of activity will be checked by keeping a strict vigil on the fishermen.

While welcoming all feedbacks given by the participants, Dr. S. Dam Roy explained the role of NSPAAD project to prevent the transboundary diseases and the entry of invasive fish species which will have bad impact on indigenous fish species. In this regard, he gave two examples of invasive fish species viz. Thai magur and Pacu which have already entered the Island ecosystem and start replacing the indigenous fish species. He is also sure enough that intensive fish culture will take place in Andaman and Nicobar Islands in near future. So we should have basic data about different aquatic animal diseases of the Island and in this case, NSPAAD project will certainly help a lot.

Likewise, issues raised by the participants were also addressed by Mr. K. Saravanan. He explained that the disease condition of fish with big head and thin body is called as "pin head disease" which is caused due to nutritional deficiency. Nutritionally balanced diet and feeding twice a day may rectify this deficiency. While addressing the query on lack of proper documentation of fish diseases, he assured that this present project will develop a baseline data on the aspect of fish diseases in the Island. Further mentioned that aquatic animal health management will be assured by following better management practices and by adhering strict biosecurity and quarantine practices at farm level. Also noted that the tail bent deformity is a form of nutritional deficiency disease named as scoliosis and lordosis. Scoliosis is the lateral curvature and lordosis is the ventral curvature of vertebral column caused by tryptophan and Vitamin-C deficiency which can be rectified by supplementing the above said nutrients in the diet. Finally mentioned that the insect like parasites on the mouth and opercular regions of marine fishes may be isopods in which further work has been initiated by our Institute to characterize the same.



Dr. S. Dam Roy addressing the queries



Mr. K. Saravanan addressing the queries

### **Technical Sessions**

The technical session was started with the presentation on "Fish diseases and its management" by Mr. Arunjyoti Baruah, Scientist of Fisheries Science Division, ICAR-CIARI. In his presentation he explained about various bacterial, fungal, parasitic and nutritional deficiency diseases of fishes. He further emphasized on the management of the above said diseases to the participants. Various queries raised by the participants about the fish diseases were addressed by him.





Mr. Arunjyoti Baruah delivering his presentation

Another presentation on "Better Management Practices (BMPs) of Freshwater Fish Farm" was made by Mr. J. Praveenraj, Scientist of Fisheries Science Division, ICAR-CIARI. He explained the management measures to be followed before pond preparation and after stocking the fish seeds so as to avoid disease occurrence during the culture operation. He further noted the detailed procedure to be followed from pond construction, seed selection, water quality management, feeding and health management, biosecurity and traceability.





Mr. J. Praveenraj delivering his presentation





Interactive session between Farmers and Scientists

Followed to this session, there was an interactive session between the Farmers and Scientists, in which the queries raised by the farmers on fish diseases and general husbandry practices were addressed by the experts. The farmers were actively participated in this session and their queries were addressed promptly.

Finally the workshop ends with vote of thanks by Mr. K. Lohith Kumar, Scientist, Fisheries Science Division. He thanked all the participants for their active participation to make it a grand success.

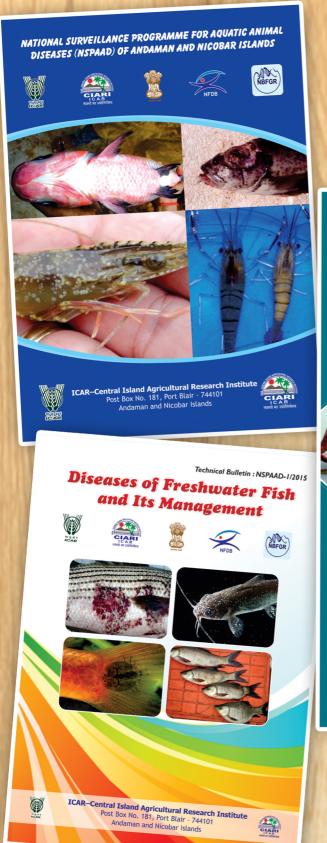


Mr. K. Lohith Kumar delivering vote of thanks

### **List of Participants**

S.No.	Name	Designation/ Address	
Participants from State Fisheries Department			
1	Mr. J. Chandrasekhar	Director of Fisheries	
2	Mr. Arif M. Mustafa	Assistant Director of	
		Fisheries	
3	Mr. S.C. Dey	Assistant Director of	
	,	Fisheries	
4	Mr. Mohammed Tahir	Assistant Director of	
		Fisheries	
5	Mr. C. Hamza	Assistant Fisheries	
		Development Officer	
6	Mr. Tapan Kumar	Assistant Fisheries	
	Chakraborty	Development Officer	
7	Mr. Tapan Kumar Biswas	Assistant Fisheries	
		Development Officer	
8	Mr. B. Chakraborty	Assistant Fisheries	
		Development Officer	
9	Mr. G. Amalatheeban	Assistant Fisheries	
		Development Officer	
Participants from KVK, ICAR-CIARI			
10	Dr. Shailesh Kumar	SMS (Fisheries), KVK,	
		Nimbudera	
11	Dr. N.C. Choudhari	Assistant Chief Technical	
		Officer (Animal Science),	
		KVK, South Andaman	
_	nts from Fish Farmers		
12	Mr. Ganesh Chandra Halder	Chouldari	
13	Mr. V. D. Chakraborty	Hasmatabad	
14	Mr. ManindraDhasi	Chouldari	
15	Mrs. PabithoJoydhar	Manpur	
16	Mr. SushitFalia	Manpur	
17	Mr. SanjitBaidya	Manpur	
18	Mr. Samir Mondal	Badmaspahad	
19	Mr. GowrimohanHalder	Chouldari	
20	Mrs. LaxmiMondal	Badmaspahad	
21	Mrs. RinaGhurimar	Badmaspahad	

22	Mrs. Rita Saha	Badmaspahad	
23	Mrs. Purnima	Badmaspahad	
24	Mrs. Kaushya	Badmaspahad	
25	Mrs. Kamulaputhri	Chouldari	
26	Mrs. LalithaBoidhi	Hasmatabad	
27	Mrs. Vasundhara	Chouldari	
28	Mrs. KolashaAbhishas	Chouldari	
29	Mrs. PrabhatiBala	Chouldari	
30	Mrs. Molly Biswas	Chouldari	
31	Mrs. Anita Das	Chouldari	
32	Mr. DebajitSarkar	Chouldari	
33	Mr. RinkuSarkar	Chouldari	
34	Mr. RishavSarkar	Chouldari	
35	Mrs. Sujata	Chouldari	
36	Mrs. UjjwalaHalder	Chouldari	
37	Mrs. SusmaDey	Chouldari	
38	Mrs. SabitaHalder	Chouldari	
39	Mrs. Jyotsna Rani Mondal	Chouldari	
40	Mrs. BasanaBala	Chouldari	
41	Mrs. Baby Dey	Chouldari	
42	Mrs. BinapariBarai	Chouldari	
43	Mr. TarakMistry	Nayashar	
Participants from ICAR-CIARI			
44	Dr. S. Dam Roy	Director, ICAR-CIARI	
45	Dr. KirubaSankar, R	HoD, Fisheries Science	
		Division	
46	Mr. K. Saravanan	Scientist	
47	Mr. K. Lohith Kumar	Scientist	
48	Mr. ArunjyotiBaruah	Scientist	
49	Mr. J. Praveenraj	Scientist	
50	Mr. Venkatesh R Thakur	Scientist	
51	Mr. T. Sivaramakrishnan	Scientist	
52	Dr. S. Murugesan	Senior Technical Officer	
53	Mr. Benny Varghese	Senior Technical Officer	



# **Released Publications**





# Sensitization workshop on **NSPAAD** held at CIARI



sensitization workshop on nal Surveillance

and Nicobar Islands was Pahad,

PORT BLAIR: A (NSPAAD) of Andaman fish farmers from Badmas organized at ICAR-CIARI Hasmatabad, Chouldariand Monday. Altogether, 53 Nayashar of South See... Page... 02

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## Sensitization workshop on NSPAAD of A&N Islands held

Port Blair, Aug 31

A sensitization workshop on National Surveillance Programme for Aquatic Animal Diseases (NSPAAD) of A&N Islands was organized at ICAR-CIARI today. A national level disease surveillance programme funded by NFDB, Hyderabad, the workshop was coordinated by ICAR-NBFGR, Lucknow.

Speaking as the chief guest on the occasion, the, Director, ICAR-CIARI, Dr. S. Dam Roy explained the genesis of disease surveillance programme and its importance in the Island ecosystem. He further added that the cooperation of fish



important for the successful progress of this programme.

The Director of Fisheries, A&N Administration Shri J. Chandrashekar, who was the guest of honour, appreciated the initiative taken by ICARfarmers, fishermen and aquatic animal disease CIARI on the aspect of Fisheries Department is surveillance and explained

the importance of breeding and aquacult activities in Andaman pointed out that present scenario aquaculture in the Islan will change after establishment of quaranti system by ICAR-CIARI.

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# अण्डमान निकोबार

### जलजन्त रोगों के लिए राष्ट्रीय निगरानी कार्यक्रम पर जागरूकता कार्यशाला

केन्द्रीय द्वीपीय कृषि अनुसंघान संस्थान की ओर से अंडमान निकोबार द्वीपसमूह के जलजन्तु रोगों के लिए राष्ट्रीय निगरानी कार्यक्रम पर जागरूकता कार्यशाला का आयोजन किया गया। कार्यक्रम में दक्षिण अंडमान के बदमाशपहाड़ मानपुर, हस्मताबाद, छोलदारी तथा नयाशहर के 32 मत्स्य पालकों सहित 52 प्रतिभागियों ने भाग लिया। कृषि अनुसंधान संस्थान के निदेशक डॉ. एस. दाम रॉय कार्यक्रम में मुख्य अतिथि थे। उन्होंने रोग की उत्पत्ति पर निगरानी कार्यक्रम और द्वीपों की पारिस्थितिकीय प्रणाली में इसके महत्व पर चर्चा की। उन्होंने बताया कि हैदराबाद के मत्स्य विकास बोर्ड के वित्तपोषण तथा लखनऊ के आईसीएआर-एनबीएफजीआर के सहयोग से राष्ट्रीय स्तरीय रोग निगरानी कार्यक्रम का आयोजन किया जा रहा है।

उन्होंने इस कार्यक्रम की सफलता के लिए मत्स्यपालकों, मछुआरों, मत्स्य विभाग से सहयोग की अपेक्षा की। मत्स्य निदेशक श्री जे चन्द्रशेखर कार्यक्रम में सम्माननीय अतिथि थे। उन्होंने जलजन्तु रोगों की निगरानी के विभिन्न पहलुओं पर केन्द्रीय द्वीपीय कृषि अनुसंघान संस्थान द्वारा की गई पहल की सराहना की।

संस्थान के मत्स्य विज्ञान प्रभाग के प्रमुख डॉ. कृपाशंकर ने उपस्थिति का स्वागत किया। मत्स्य विज्ञान प्रभाग के वैज्ञानिक श्री के. सर्वणन ने जलजन्तु रोगों के महत्व तथा परियोजना के उददेश्यों एवं कार्य योजना पर प्रस्तुति की। परियोजना के तहत तालाब की बड़ी मछलियों झींगा, वन्य झींगा व केंडिडेट फिनफिश को शामिल किया गया है।

तकनीकी सत्र में वैज्ञानिक श्री अरूणज्योति बरूआ ने मछलियों के रोग तथा इसके प्रबंधन पर प्रस्तुति की। वैज्ञानिक श्री जे. प्रवीणराज ने मीठे पानी की मछलियों के प्रक्षेत्र के बेहतर प्रबंधन कार्यों पर प्रस्तुति की। मत्स्य विज्ञान प्रमाग के वैज्ञानिक श्री के लोहित कुमार ने धन्यवाद ज्ञापन किया।

# **Notes**