

## Summary of the first FishPhytO Project Science Team Meeting

The first meeting of the Project Science Team (PST) for the project on “*Creating a phytoplankton-fishery observing program for sustaining local communities in Indonesian coastal waters*” (a.k.a FishPhytO), funded by the Ministry of Agriculture, Forestry and Fisheries (MAFF) of Japan, through the Fisheries Agency of Japan (JFA), was held on July 8, 2023, immediately after the training workshop (July 5–7, 2023), in Lombok, Indonesia.

The main objectives of the meeting were: (1) to review the outcomes of the July 2023 training workshop, and (2) to discuss a workplan for Year 1 of the project in order to set up a logistically feasible sampling program for benthic phytoplankton and fisheries in the Lombok/Gili Matra region so that data collection can begin early in the project. Participants of the meeting are listed in Appendix 1.



Participants of the first FishPhytO PST meeting (July 8, 2023, Lombok, Indonesia). Naoki Tojo missing from photo.

The general sense of July 2023 workshop leaders was that the training sessions effectively reached the capacity-building goals. Participants seemed more motivated than in the previous seminars because the sessions contained fewer, more focused participants. A consensus was that small-group workshops may be better for technology training, but more extensive workshops are better for knowledge dissemination. The primary concern was to ensure that participants quickly begin using the knowledge so that the activity remains fresh in their minds. This will require frequent contact to generate and sustain momentum in obtaining and analyzing samples over the next few months. Dr. Naoki Tojo has plans to return to Lombok in October 2023 with his research team, which will be a significant help to the project in establishing a sampling effort.

The plankton sampling portion of the project will be based in the Gili Islands. This effort will require participation and support from local residents, and there need to be more funds to arrange sampling programs by the University of Mataram. Two organized groups are operating in the region: a group comprising tourism operators and an Observation Protection group working together to pressure policy on the Islands. These groups will be essential collaborators, helping with collection of plankton and macroalgae samples as well as with dissemination aspects of the project. The intent will be to co-develop the monitoring program using individuals from the two groups and summer undergraduate students on the Gili Islands.

The fisheries portion of the project will be based mainly on the Lombok fish markets. The Gili Island fishers have been slowly turning to support the emerging ecotourism presence in the islands, so local fishing is minimal. One possible approach will be to form university student sampling "teams," perhaps through establishing a club-type linkage. Doing so would help to ensure continuing efforts, as the club membership regenerates with new members as older students graduate. This topic would be for follow-up discussion, perhaps with some financial incentives.

From financial and training effectiveness perspectives, the next workshop is expected to be small and focus on teaching the teachers (training the trainers). This workshop should be led by the users of the project's tools (*e.g.*, FishGIS smartphone application, HydroColor, Planktoscope). To help identify these individuals, we should monitor who is adding data. Dr. Zamroni at the University of Mataram (Biology), would be the person to contact about providing some seed funds to help students gather data (~\$500 USD). If data are available by January 2024, we should teach a data processing class to show them how to use these data.

A new direction identified for the next workshop period is to develop and implement social surveys, in collaboration with the director and faculty of Marine Studies at the University of Mataram, and any NGOs interested in the project goals.

Other comments of note were that we should be working to refine a model activity for project training that can be implemented in other countries. This would be developed from the current workshop strategies.

## ***Appendix 1***

### **First Project Science Team meeting participants**

#### Members

Daisuke Ambe (Japan, representing TCODE)  
Mitsutaku Makino (Co-Chair; Japan, representing HD)  
Shion Takemura (Japan, representing HD)  
Naoki Tojo (Japan, representing FIS)  
Charles Trick (Canada, representing MEQ)  
Mark Wells (Co-Chair; USA, representing MEQ)

#### Other

Adam Larson (Stanford University, USA)  
Arief Rachman (BRIN, Indonesia)  
Suhendar I Sachoemar (ITI and BRIN, Indonesia)  
Drajad Seto (University of Maine, USA)