

Notes on the Ambon research station and moluccan waters

(Atjep Suwartana)

Notes on the Ambon Research Station and The Moluccan Waters, sebuah naper sebagai pengantar brain storming antara tenaga-tenaga peneliti Stasion Penelitian Ambon LON-LIPI dengan misi Perancis yang terdiri dari ahli-ahli oseanologi pimpinan Mr. Gerard Piketty.

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I. THE AMBON RESEARCH STATION

This station is under the National Institute of Oceanology, Jakarta. It was officially established in February 1973, immediately after the end of the UNESCO sponsored Rumphius Expedition I. The personnel of this station includes 24 officials, and among the staff are 7 researchers with a University degree. The whole personnel serves in 3 departments: the department of biology, the department of oceanology and the ecology department.

The research activities of this station cover taxonomical studies (plankton, fishes, corals, mollusca, etc) and studies on environmental factors, such as physical and chemical characteristics of the sea water, that are related with living resources (plankton, necton, benthos) within the marine global ecosystem.

Most of the research done involve several specialists working in a team. The Study of the Ambon Bay involves biological research (plankton and livebait fishes), simultaneously with oceanographical investigations (characteristics of water masses) and the detection of pollutants in the Ambon Inner Bay.

This station has not made any productivity measurement, using radioactive carbon (C-14) yet.

So far, the plankton study done by this station has been stressing on the quantitative distribution and the total organism of the zooplankton and the phytoplankton.

This station has currently a project in studying the physical, chemical and biological characteristics of the Piru Bay (Ceram) and its adjacent waters on a seasonal basis.

These local surveys are operated using the research vessel "TIRTA" of 25 tones, and property of this station. To conduct extensive oceanographical and biological surveys in the east Indonesian waters, a research vessel "SAMUDERA" of 191 tones, and property of the National Institute of Oceanology was frequently used.

Some of the results are published in the "Marine Research in Indonesia", and the "Oseanologi di Indonesia" bulletins. Together with the Provincial Fisheries Office of Maluku this station is also conducting feasibility studies on biology and oceanography for possibilities of algae cultivation at the island of Geser, located at about 180 km from Ambon.

The staff members of this station are also involved in the teaching and training activities at the Faculty of Fisheries, Pattimura University and Ambon Fisheries Training Center. The UNESCO sponsored Rumphius Expedition I, II and III, which conducted research work in 1973, 1975 and 1977 used this station as its land base, and the Rumphius IV expedition scheduled in the September – October 1980 timespan will use this station again.

The first Rumphius Expedition had collected more than 900 specii. This expedition was led by Professor Serene, a French expert. The Rumphius II led by Professor Serene, again and another French expert, Professor Theodore Monod of the "Museum d'histoire Naturelle" in Paris participated in this expedition.

These are attempts in strengthening ties between Indonesian and French scientists.

II. THE PROVINCE OF THE MOLUCCAS AND THE MOLUCCAN WATERS.

Maluku or the Moluccas, one of the Indonesian provences, and lying in a tropical region, is situated in between Sulawesi or Celebes in the west and Irian Jaya (West Irian) in the east. Its consists of about a thousand large and small islands, seperated from each other by several seas, among others the deep Banda Sea and the Arafura Sea.

The Pacific Ocean floods the Moluccan waters from the north and Indian Ocean from the south.

As a part of Indonesia, Maluku has been attracting many world scientists because of its richness in fauna and flora. The interest of the world in the faunistical and floristical wealth of Maluku has been shown by quite a member of visits since the 17th century, either by individual persons or by scientific expeditions with the intention to amass taxonomic data of this area.

In the first half of the 20th Century considerable work had been carried out on various aspects of the natural history of Maluku as had been shown by a series of scientific expeditions with the consecutive results published as monographs or other kind of publications which amassed many libraries of countries in different parts of the world.

As far Maluku itself, this area still provides rich resources of marine animals and vegetation of considerable economic importance. So many of them are still beyond our capacity to specify and enumerate.

The upper and middle water layers in the Moluccan seas provide a specious living habitat for greatest portion of the tropical sea animals in Indonesia. The sea bottom of the Maluku waters is estimated to house seabed minerals. The study and researches done by scientific expeditionary teams in the waters of Maluku have led to the estimation that the seabed minerals the bottom of the sea contain, include manganese nodules, nickel, cobalt, cuprum and earth oil. These seabed minerals, however, still require further exploration and research. Fish specii, available in the area, include

"cakalang" (*Katsuwonus pelamis* LINNAEUS), "tatihu" (bluefin tuna), "albakere" and other species of the tuna fish, as well as other fish species and shrimp varieties. In the efforts to assess the potency of marine products for commercial purposes, there is a

serious lack of inventory data. It is therefore important to maintain and to intensify the inventory activities in this area as to amass new data around the marine products as well as to amass more taxonomic data of this marine environment.

