NATIONAL SEMINAR ON SCIENCE TECHNOLOGY FOR SABANG MARINE TOURISM DEVELOMENT AND THE 4TH INTERNATIONAL WORKSHOP ON SATO UMI

Science Technology for Sabang Marine Tourism and Sato Umi for Developing Sustainable Aquaculture and Coastal Management

Implementing Agency

Agency for the Assessment and Application of Technology (BPPT)
and
Coordinating Ministry of Maritime Affairs

Supporting by

Ministry of Research, Technology and High Education
Ministry of Tourism
Ministry of Fisheries and Marine Affair
Agency for Meteorology, Climatology and Geophysic (BMKG)
Indonesian Institute of Sciences (LIPI)
Government of Aceh Province
Regional Management Agency of Sabang (BPKS)
Environmental Management of Enclosed Coastal Seas **(**EMECS), Japan
North Pacific Marine Science Organization (PICES)
Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan
Indonesian Engineer Union (Himperindo)
Indonesia Researcher Union (Himpenindo)-BPPT
Indonesian Association of Oceanologists (ISOI)

Jakarta, October 5-6, 2017

1. Background

Indonesia has a great marine tourism potential. But the contribution of marine tourism is only about 10 percent of total foreign exchange earnings in the tourism sector that is amounting to US $ 12.6 billion or around Rp 167 trillion in 2016. In 2017, the Ministry of Tourism projected revenue from marine tourism amounting to US $ 4 billion or approximately Rp 53 trillion. Malaysia's long coastal state is smaller than Indonesia able to reap up to 40 percent of its tourism revenues from marine tourism with a contribution that reaches US $ 8 billion or 8 times Indonesia. For that it needs to do various efforts to accelerate the marine tourism sector as a leading sector in raked in foreign exchange. Sail Sabang is proclaimed by the government to increase of maritime tourism sector in Sabang and all marine tourism area in Indonesia, it become the right momentum to raise the power and all marine tourism potential of Indonesia in the event of national and international marine tourism promotion activities. One of the activities to support the promotion of Indonesian marine tourism through Sail Sabang activities is the organizing of national and international seminars on maritime tourism with its supporting fields. This activity is strategic enough to mobilize various support both at national and international level about marine tourism development program of Indonesia as well as introduce all potential and marine tourism destination of Indonesia.

Meanwhile, Indonesia as the largest archipelagic country in the world with coastline reaching 95,181 km, 5.4 million km2 marine area is very potential to be developed for aquaculture activities other than capture fisheries. Sea cultivation area reaching 12 million hectares, newly used as much as 325 thousand ha or about 2.69% of the total potential. The area of brackish water pond cultivation is 2,963,717 hectares, newly used 657,346 ha or 22.2%. These potential area need to be utilized and developed optimally and sustainable by applying the SATO-UMI Concept that has been applied in various countries. SATO-UMI is a concept of sustainable management of fishery resources where human intervention in fishery resource management in coastal and marine areas can increase productivity and diversity of fishery resources sustainably. Development of SATO-UMI integrated fishery cultivation model such as Integrated Multi Tropic Aquaculture (IMTA) using multi

species of fishery commodity and bio-recirculation system on closed system model (CSIMTA-Closed System Integrated Multi Tropic Aquaculture) and open system model (OSIMTA- Open System Integrated Multi Tropic Aquaculture) under development of BPPT, it is expected that the development of aquaculture activities in coastal areas can be more productive and sustainable. With bio-recirculation systems, inorganic and organic waste from feed residues, fish debris and other sources of pollutants can be reduced and minimized, resulting in more stable, pollution-free and more productive water ecosystem conditions. On a broader scale, the basic concept of SATO-UMI can be applied to maintain the balance of natural resources as a source of food and income for coastal communities by maintaining the stability of their ecosystems. By applying SATO-UMI concept, it is expected that fishery resources and their special environment in coastal areas can run sustainably, more productively and richly diversity of resources in a balanced and harmonious way in accordance with marine tourism development program and fishery and marine sector development to improve community welfare.

To support the Sabang Sail program and the development of maritime tourism of Indonesia organized in the framework of the implementation of IPTEK Jamboree activities of the Coordinating Ministry of Maritime Affairs in cooperation with BPPT, in parallel will be held National Seminar on Science Technology for Sabang Marine Tourism Development and The 4th International Workshop on Sato Umi that is planned to be held on October 5-6, 2017 at BPPT II Building Lt. 3 JL. MH. Thamrin Jakarta.

The results of this seminar and workshop are expected to give input to the Government and inspire and give new spirit to the stakeholders in developing marine tourism program both in Sabang and other marine tourism area in Indonesia. In the future, the government together with the community must be able to manage and utilize all marine tourism potentials and fishery, coastal and marine resources in an optimal, harmonious, productive and sustainable way to ensure marine tourism sustainability, development of minawisata and ecotourism, Fisheries for the glory of the nation and the State. In the next 5 years, Indonesia is developing Techno Park with several development activities in several coastal areas where there are fishery cultivation activities, ecotourism including marine tourism and other fishery activities. The development of Techno Park is directed to become the New Economic Growth Center in Indonesia to improve the welfare of society, nation and state. Hopefully, Sato Umi concept which has the same spirit with Techno Park can be applied to support the implementation of Techno Park program in Indonesia. Techno Park Area on the base of fisheries can be used also as marine tourism area.

The seminar and workshop will be attended by experts, speakers and officials from the Coordinating Ministry for Marine Affairs, Ministry of Research and Technology, Ministry of Marine Affairs and Fisheries, Ministry of National Development Planning/Bappenas, Ministry of Tourism, Agency for Assessment and Application of Technology (BPPT), Meteorology Agency, Climatology and Geophysics (BMKG), Indonesian Institute of Sciences (LIPI), Aceh Provincial Government, Sabang Area Management Board (BPKS), Universities, students, private, fishery and community industries, Sato Umi experts from Kyushu University and International EMECS Center of Japan, PICES (The North Pacific Marine Science Organization), MAFF (Ministry of Agriculture, Forestry and Fisheries) of Japan, FRA (Fisheries Research Agency) Japan, Association of Indonesian Oceanology (ISOI), Indonesian Engineering Association (HIMPERINDO), Indonesian Researcher Association (HIMPENINDO).

2. Objective

The purpose of this seminar and workshop is to socialize Sabang Sail Program and Maritime Tourism Development of Indonesia, and disseminate Sato Umi concept to support Sustainable Fisheries and Coastal Management Development Program in Indonesia. The results of this activity are expected to provide a recommendation to the Government, employers, communities and other stakeholders in utilizing all potential marine tourism resources both in Sabang and other regions in Indonesia optimally. Implementation of the concept of Sato Umi is expected to optimize the utilization of marginal and idle farms and fishery resources in Coastal Areas and Techno Park Indonesia Area in order to

improve the welfare of local and regional, national and local economic income.

3. Venue

The seminar and workshop will be held for 2 days consisting of:

1) Seminar and Workshop on Thursday, October 5, 2017 at the Auditorium and Main Commission of BPPT II BPPT Bld 3rd Floor, JL. M.H. Thamrin No. 8, Jakarta 10340.

2) Field trip on Friday, October 6, 2017 to the Brackishwater Aquaculture and Mangrove Area in the Northern Coastal Area of Karawang. Aquaculture Bussiness Unit of the Ministry of Marine Affairs, and Fisheries Center of Brackiswater Aquaculture of West Java Province Region.

AGENDA

1ST DAY : Thursday, October 5, 2017-Seminar and Workshop at The Auditorium and Main Commission Hall of BPPT. BPPT II Bld. 3rdFl. JL.M.H.Thamrin No. 8 Jakarta 10340	
08.30-09.00	**Registration**
09.00-09.10	**Opening, National Anthem (Indonesia Raya), Prayer, Saman Dance**
09.10-09.20	**Report of the Organizing Commiitee** Prof. Ir. Wimpie Agoeng Nugroho, A, MSCE., Ph.D Deputy Chairman of BPPT for Natural Resources Development Technology
09.20-09.30	**Wellcome Address of Chairman BPPT** Dr. Ir. Unggul Priyanto, M.Sc
09.30-09.45	**Keynote Address of Honorary Advisor for Ministry of Tourism** Prof. Dr. Ir. Indroyono Soesilo, M.Sc
09.45-10.00	**Keynote Speech of Sato Umi Development for Sustainable Aquaculture, Ecotourism and Coastal Management** Prof. Dr. Tetsuo Yanagi Prof. Emeritus of Kyushu University and International EMECS Center, Japan
10.00-10.10	**Keynote Address of Governor Aceh** Dr. H. Irwandi Yusuf, M.Sc
10.10-10.20	**Deputy for Coordination of Human Resources, Science and Technology and Maritime Culture, Coordinating Ministry of Maritime Affairs** Dr. Safri Burhanuddin, M.Sc
10.20-10.30	**Keynote Address and Opening by Minister Research Technology and High Education** Prof. Mohamad Nasir, Ph.D., Ak
10.30-11.00	**Photo Session, Press Conference Coffee Break**
SESSION-1 (Paralel) **National Policy for Developing Sabang Marine Tourism and Sato Umi for Sustainable Aquaculture and Coastal Management**	

	Auditorium Room	**Main Commission Room**
	National Policy for Developing Sustainable Aquaculture and Coastal Management Development Based on Sato Umi **Moderator :** Prof. Dr. Ir. Suhendar I Sachoemar, M.Si Head of Center for Development, Education and Training BPPT	**Development of Sabang Marine Tourism** **Moderator :** Dr. Ir. Wahyu Pandoe, M.Sc Deputi Chairman for Industrial Technology and Engineering Design of BPPT

11.00-11.15	**Development of Techno Park Aquaculture** Dr. Ir. Gatot Dwianto, M.Eng Deputy Chairperson of BPPT for Technology Policy Agency for the Assessment and Application of Technology (BPPT)	**Sail Sabang Programe** Dr. Safri Burhanuddin, M.Sc Deputy for Coordination of Human Resources, Science and Technology, and Maritime Culture, Coordinating Ministry of Maritime Affairs **National Policy on Marine Tourism Development** Dadang Rizki Ratman, SH, MPA Deputy for Tourism Destination and Industry Development Ministry of Tourism **National Program of Marine Tourism Development** Dr. Ir. Arifin Rudiyanto, M.Sc Deputy Chairman for Maritime and Natural Respurces of Bappenas **Development of Sabang Island As a Marine Tourism Destination** Ir. Fauzi Umar Director for Bussiness and Investation Board of Regional Management Agency of Sabang
11.15-11.30	**National Policy for Developimg Sustainable Aquaculture and Coastal Management Based on Sato Umi** Dr. Ir. Slamet Soebjakto, M.Si Director General of Aquaculture Fishery-Ministry of Fisheries and Marine Affairs	
11.30-11.45	**Development of Coastal Management Method to Realize the Sustainable Coastal Sea Based on Sato Umi** Prof. Dr. Tetsuo Yanagi International EMECS Center, Japan	
11.45-12.00	**Ecosystem-based fisheries management for Asia-Pacific** Dr. Mitsutaku Makino PICES/FRA-Japan	

12.00-12.15	**Development of Fishery Production Technology** Prof. Dr. Eng. Eniya Listiani Dewi, B.Eng., M.Eng Deputy Chairperson of BPPT for Agro Industry and Biotechnology	
12.15-12.45	**Discussion**	**Discussion**
12.45-13.30	**LUNCH BREAK**	
SESSION-2 (Parallel) **Marine Tourism and Sato Umi for Sustainable Aquaculture and Coastal Management Development**		
	Auditorium Room	**Main Commission Room**
	Development of Coastal Management Method to Realize the Sustainable Coastal Sea (S-13 Project) **Moderator :** Prof. Dr.Tetsuo. Yanagi International EMECS Center, Japan	**Marine Tourism Development** **Moderator :** Prof. Ir. Wimpie Agoeng Nugroho, A, MSCE., Ph.D Deputy Chairman of BPPT for Natural Resources Development Technology
13.30-13.45	**Management of Nutrient Concentrations in the Seto Inland Sea (Theme 1: Seto Inland Sea)** Dr. Tetsuji Okuda Ryukoku University, Japan	**Infrastructure Development, Infrastructure and Institutional Facilities To Support Marine Tourism Development** Dr. Ir. Ridwan Djamaluddin, MSc Deputy Coordinator Ministry of Maritime for Infrastructure/President of Indonesian Association of Oceanologists (ISOI)

13.45-14.00	***Satoumi* Approach for Realizing Sustainable Coastal Use in a Rias-type Bay: a Case of Shizugawa Bay in Sanriku Coast after the Huge Tsunami on 11 March 2011 (Theme 2: Sanriku Coast)** Prof. Dr. Teruhisa Komatsu Yokohama College of Commerce, Japan	**Strengthening Research and Innovation in Marine Tourism Development** Dr. Ir. Jumain Ape, MSi Director General of Innovation Reinforcement Ministry of Research Technology and High Education **Development of Oceanographic Research Station: Marine Resources and Marine Tourism** Dr.Ir. Zainal Arifin, M.Sc Deputy Chairman for Earth Science, LIPI **The Importance of Information System of the Earth Quake and Tsunami Early Warning System of BMCG to support marine tourism** Dr. Muhamad Sadly, M.Eng Deputy for Geophysic. Agency for Meteorology, Climatology and Geophysic
14.00-14.15	**Management for Sustainable Use of International Semi Enclosed Sea, Japan Sea(Theme 3: Japan Sea)** Dr. Takafumi Yoshida Northwest Pacific Region Environmental Cooperation Center (NPEC), Japan	
14.15-14.30	**The Integrated Coastal Zone Management Based on Ecosystem Services (Theme 4: Social & Human Science)** Dr. Satoquo Seino Kyushu University, Japan	
14.30-14.45	**What's Next : Integrating EMECS Experience into Disaster-Resilient Coastal Management** Singo Kochi Director, International EMECS Center, Japan	
14.45-15.15	**Discussion**	**Discussion**

SESSION-3 (Paralel-Continue)		
	Auditorium Room	**Main Commission Room**
	Coastal Management at Okinawa and Sato Umi Development in Indonesia **Moderator :** Dr. Mitsutaku Makino PICES/FRA-Japan	**Pengembangan Wisata Bahari II** **Moderator :** Dr. Andi Eka Sakya,M.Eng Principal Engineer BPPT
15.15-15.30	**Community-based monitoring toward sustainable management of mangrove forest in Okinawa, Japan** Dr. Shion Takemura PICES/FRA-Japan	**Utilization of Science and Technology for Marine Tourism Development** Dr. Nani Hendiarti, M.Sc Assisstent Deputy of Maritime Science and Technology Coordinating Ministry of Maritime Affairs
15.30-15.45	**Sustainable Aquaculture Development Based on Sato Umi in The Coastal Area of Indonesia** Prof. Dr. Ir. Suhendar I Sachoemar, M.Si Head of Center for Development, Education and Training-BPPT	**Potency of Marine Tourims of Aceh Province** Prof. Dr. Adlim, M.Sc Dean Faculty of Marine Science and Fisheries, Syiah Kuala University, Aceh
15.45-16.00	**Development of Technopark at Bantaeng, South Sulwesi** Ir. Arief Arianto, M.Sc Director of Center for Agriculture Technology Production-BPPT	**Potency of Marine Tourims of Riau Island Province** Dr. Agung Dhamar Syakti, S.Pi., DEA Dean Faculty of Fisheries and Marine Science, UMRAH
16.00-16.15	**Discussion**	**Discussion**

16.15-16.45	**General Summary (Panel)** Moderator : Prof. Ir. Wimpie Agoeng Nugroho, A, MSCE., Ph.D Deputy Chairman of BPPT for Natural Resources Development Representative of PICES, EMECS, BPPT, Coordinating Ministry of Maritime Affairs, Ministry of Tourism
16.45-17.00	**Clossing** Dr. Ir. Soni Solistia Wirawan, M.Eng Principle Secretary BPPT

2nd DAY : Friday, October 6, 2017 **Field Trip to the Brackishwater Aquaculture and Mangrove Area in the Northern Coastal Area of Karawang**	
07.00-16.00	Visiting the Brackishwater Aquaculture and Mangrove Area in the Northern Coastal Area of Karawang, Aquaculture Bussiness Unit of the Ministry of Marine Affairs and Fisheries and Center of Brackiswater Aquaculture of West Java Province Region.
16.00	**Return to Jakarta**