### Summary of Science Talk (Infectious Diseases Group)

#### 1. Significance of Infectious Diseases

All infectious diseases, including Neglected Tropical Diseases (NTD), Tuberculosis (TB), Dengue and Bird flu are common issues of South East Asia region. Shortage of human resources, poverty, changes in life styles and many other issues are closely related with infectious diseases. They make the situations more serious. However, infectious disease itself has been neglected by international funding.

On this basis, it is important to join forces by utilizing international networks which already exist to conduct research for control, treatment and prevention of infectious diseases since there is no border for any diseases.

#### 2. Necessity of International Collaboration and Expected Synergetic Effects

Sharing the experiences, knowledge and data through international research cooperation is important because there is no border for infectious diseases. Moreover, taking the following facts into consideration, it can be said that the international collaboration is required.

- Data and knowledge collected from a huge number of populations would help.
- Standardization of treatment should be shared by all the countries.
- Development of human resource on national programs would be urgent.
- Health education for behavior change, treatment and environmental control is important.

Affected countries are expected to play different roles. Not only they send specimen to Japan and Japan does the data analysis on molecular level, but also partner countries can prepare the research field as well as the human resources to do the research as equal partners. At the same time, Japan can introduce the social and bio technology to combat to control these diseases with the basis of the experiences of advanced field and laboratory researches.

In addition, some countries already have existing collaboration networks. For instance, Parasite control programs and nutrition programs have been introduced by Japan to countries in the region with adjustment for each country. Indonesia has existing collaboration with Japan under TB, Dengue, Parasitic infection and Bird flu. The Philippines also have been collaborating with many academic institutions in Japan for researches on parasitic infections as well as microbial diseases. Thus, it is not that much difficult to start new multilateral collaboration.

### 3. Identified Areas for Cooperation

Participants to the "Science talk on Infectious Diseases" have identified possible future collaboration as follows.

a. Dengue: Indonesia, Japan, Philippines, Lao PDR

Indonesia stated that Dengue would be one of the first diseases that we could tackle together because member countries have identified experts in Dengue. The plan is to agree

on 2 to 3 research projects. Funding would have to be sourced to support these projects.

- b. <u>NTD, especially Parasitic infection</u>: Philippines, Lao PDR, Japan
- The Philippines emphasize research on Schitosomiasis because it is an endemic in the Philippines, Indonesia, China, Lao PDR and Cambodia. Countries that could be involved are the Philippines, China, Indonesia, Lao PDR, Cambodia and Japan. In addition to Shistosomiasis, Lao PDR also mentioned the research on other parasitic infection. For example Soil Transmitted Helminthiases (STH), and Liver fluke is widely endemic among Mekong countries and China. Integration of diagnosis, treatment and health education should be focus to conduct research, among these diseases.
- \* Since no delegates of the countries which participated in the science talk were specifically interested in Bird flu and/or TB (\*), there are no exact matches for those two infectious diseases in the science talk. However, there was an overall consensus that research collaborations under these topics are equally important and necessary. Therefore, if there is an offer from any country or funding agency to participate / collaborate in the Bird flu and/or TB research, Japan is ready to make it a topic of collaboration. In addition, Indonesia is still interested in collaborating in Avian Influenza and TB research, but since it should minimally include three countries, we need to wait for response from the third country. Moreover, the Philippines have experts on TB. Thus, collaboration on TB research with the Philippines also should not be discounted.
- \* Delegates of the countries which are interested in Bird flu and/or TB could not participate in the science talk due to the administrative reasons.
- c. Bird flu:

Bird flu causes not only economical damage to livestock industries but also public health concerns. Japan has experiences of collaboration on animal influenza research with Myanmar, Thailand and Vietnam.

d. Tuberculosis:

Japan has experiences of collaboration with Vietnam, Thailand and China. Japan stated that TB is rather program-based activity and standardization is the key. However, due to the shortage of human resource and other issues, program manage is not working well. Scientific activity and research will be a good chance for human resource development. Indonesia also place importance on TB. Research Collaboration on TB between Indonesia and Japan does exist. WHO has assigned Department of Microbiology, Medical Faculty University of Indonesia in Jakarta as a TB reference center for Indonesia. Moreover, the Philippines will be interested in any collaborative research on TB especially since TB continues to be a main health problem in the country.

- (Note1) Indonesia had already completed the process of the call for proposal for 2012. Thus the new call for proposal would be only possible from FY2013.
- (Note2) The infectious diseases issues should be addressed from three directions; diagnosis, prevention, and treatment.
- (Note3) Further discussion (bilateral or trilateral) should be encouraged, preferably electronically.

## 4. List of Participants

<u>Japan</u>

- 1. Dr. Tamotsu Nakasa MD., M.PH, Director of the Department of International Medical Cooperation National Center for Global Health and Medicine
- 2. Dr. Takehiko Saito DVM, PhD, Viral Disease and Epidemiology Research Division, National Institute of Animal Health, National Agriculture and Food Research Organization (NARO)
- 3. Dr. Naoto Keicho MD., Ph.D. Director, Department of Respiratory Diseases Research Institute, National Center for Global Health and Medicine
- 4. Dr. Satoshi Mitarai MD, PhD, Head, Department of Mycobacterium Reference and Research Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association (RIT/JATA)
- 5. Associate Prof. Jun Kobayashi, Graduate School of International Health Development, Nagasaki University

## (Observer)

Dr. Yoshiko Okamoto, Chief, Center of Research Network for Infectious Diseases

# Indonesia

1. Prof. Amin SOEBANDRIO, Minister's Advisor for Health and Medicine

Laos

1. Dr. Bouakham VANNACHONE, MD, MCTM, DAPE. M&E officer, PR office, Ministry of Health

# Philippines

1. Prof. Lydia R. LEONARDO, Chair, Department of Parasitology, College of Public Health, University of the Philippines Manila