

End of AY 2016 Report for SIP -Group12

Project Title

Disease control for neglected infectious diseases

Team

GSDM ID	Name	School	Department	Year (e.g. D1)	Leader/member
14213	Yuki Usui	Frontier Sciences	Computational Biology and Medical Science	D1	Leader
16107	Miyu Moriyama	Frontier Sciences	Computational Biology and Medical Science	D1	Member
15102	Mehtonen Teemu Johannes	Engineering	Department of Mechanical Engineering	D1	Member
(Not GSDM student)	Hiroataka Fujibayashi	Frontier Sciences	Department of International Studies	M1	Member

Objective: Explain what social/global issues that this project tried to address and why the issue is important.

OBJECT: Japan strategy for neglected infectious diseases

Neglected tropical diseases (NTDs) include 17 diseases the WHO identified as primary targets for eradication. NTDs are prevalent in tropical and subtropical developing countries and kill 534,000 people annually in the world [1]. However, countermeasures for NTDs had not been taken for a long time because most of these diseases spread exclusively developing countries. In more recent years, NTDs have become more central to the development agenda. Among the UN-established SDGs (Sustainable Development Goals), Goal number 3 states the following one: “By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases, and combat hepatitis, water-borne diseases and other communicable diseases” [2]. Furthermore, in relation to the health theme of the G7 Ise Shima Summit, NTDs are addressed as one of the major health problems in the world, and G7 declared its commitment to fight this battle [3]. Health is a pressing subject for the international community and each country is expected to contribute based on its experience and resource. Japan promotes international health as an important issue of its diplomacy. The Government of Japan decided to make a 130 million US dollars contribution for the purpose of promoting R&D of new drugs against NTDs by the Global Health Innovative Technology (GHIT) Fund [4].

Challenges and proposal of Japan future policy for NTDs

Compared to the numerous diseases to be addressed as chronic diseases (e.g., cancer, diabetes), research funds for NTDs provided by the Government of Japan are limited. It is important for the government to prioritize which NTD should be supported and need more focus on the activities. However, there is no prioritization of research and development from the epidemiological and technical point of view in NTDs. Therefore, we shall plan to conduct a comparative analysis of 17 NTDs from various perspectives to decide which disease(s) Japan should focus on.

[1] Hotez, P. J., *et al.*, (2007). Control of neglected tropical diseases. *New England Journal of Medicine*

[2] United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. *Resolution adopted by the General Assembly*.

[2] G7 伊勢志摩サミット 2016 成果文書

[3] 国際保健外交戦略 2013 外務省

Method: Explain through what kind of approaches you tried to achieve the objective.

In order to determine the priority order of NTDs, we conduct the scoring analysis and logically think about what to put emphasis on, and choose the best option for Japan. In order to prioritize 17 NTDs, we set five items for scoring each NTD.

1. Population size at risk of infection from NTDs: The number of people at risk of infection by each NTD is obtained and compared.

2. Biological characteristics of each pathogen: 17 NTDs include Chagas disease, Dengue, Chikungunya and so on. These are largely divided into three pathogens (viruses, bacteria, parasites) and there is a detailed classification of pathogens. The drug development approach is different depending on pathogen characteristics. We will also classify 17 NTDs by drug development approach.

3. Research progress level of each NTD in the world: Research progress is evaluated by searching the number of scientific publications. Successively, we shall assess the drug development progress.

4. Regions of the prevalence of each NTD: 17 NTDs were classified by infected region area.

5. Strengths and weaknesses of Japan’s scientific community: We will survey the strengths and weaknesses of Japan’s scientific community. For example, Japan has historically been leading in parasitology. Prof. Satoshi Omura was awarded the Nobel Prize in physiology and medicine by the development of the drug "Ivermectin" against the tropical parasites. On the other hand, Japan has less BSL-3, 4 facilities than other developed countries.

Outcome: Explain what kind of results you obtained from this project and discuss how it addressed your focal social/global issues.

In this semester we focused on the construction of the project research method and discussed many times among members, and finally created a framework of the work process. The analysis will be finished in the next semester. We have interviewed Dr. Yuki Furuse, Assistant professor of Department of Virology Tohoku University Graduate School of Medicine in November. He worked in West Africa as a WHO medical staff member during the Ebola outbreak. He taught us about the details of current NTDs research in the world, and each stakeholder’s opinion about NTDs research (***)1).

We collaborated with the United Nations Forum and held the medial session on 7th, January 2017 in Tokyo University. The session title was “Global Health Policy and Practice in Developing Countries: Challenges and Reforms—How the International Community Can Contribute to Improving Health in Developing Countries”. We invited various panelists from the different stakeholders such as government, NGO and NPO. (***)2). After the presentation from panelists, we proposed several discussion points to the panelist and audiences as student discussants. (e.g., We asked why Japan should support global health. We also asked how the governments or NGOs should respond to the emergency situations of NTDs and new infectious diseases.)

In addition, we collaborated with the SIP No.9, and joined their IELs as a speaker on 2nd March 2017. The IEL entitled as “Let’s play a game and broaden our ethical horizons in decision-making!”. We gave group 9 an ethical case issue related to NTDs for playing a game. After playing a game, we gave a short presentation about the details ethical points of mosquito eradication research.

All activities in this semester were meaningful to be linked to activities in the next semester.

Budget: List the budget this project implemented. *About the details, add the appendix.

Purposes	Expense
Total	0 yen

Appendix (option)

***1

List of interviews

Date:16/11/02

Interview with Dr. Yuki FURUSE (Usui and Moriyama went to interviews). We ask him about the background of NTDs research.

***2

UN Forum, Medical sessions (17/01/07) are cited from http://www.unforum.org/offkai/19-notice_med.html



Discussion Session

Global Health Policy and Practice in Developing Countries:
Challenges and Reforms—How the International Community Can
Contribute to Improving Health in Developing Countries

Date: 7 January 2017

Time: 4:00pm-5:40pm

**Location: Seminar Room 211, Faculty of Engineering Bld.2,
University of Tokyo, Hongo Campus (admission free)**

Kokuren Forum (“United Nations Forum”) and Tokyo University GSDM Graduate School will organize annual Networking Conference on January 7th, at University of Tokyo, offering an opportunity to discuss various global challenges and sustainable development with a wide range of participants from academia, the civil society as well as public and private sectors. This year, Kokuren Forum and GSDM convenes an English discussion session addressing global health, particularly focusing on the linkage between policy and practice, as well as community engagement in the field. Panelists include leading figures from the Japanese Government, JICA and NGO.

Context:

Japan has demonstrated leadership in global fora, including the G7 and the UN, in promoting Universal Health Coverage (UHC) and Health System Strengthening (HSS) both through supporting policy planning and ODA funding. There is, however, still gaps between global health policy and the needs in the field, where a cohesive and coherent rationale should be required to achieve the goals.

Ministry of Health, Labor and Welfare (MHLW), together with relevant

Ministries and partners, has successfully established leadership through the G7 presidency in 2016 to bring together global momentum to address concerns of both developed and developing countries. JICA has provided support for many developing countries to putting the global policies to practice. Non-profit organizations such as Rocinantes has introduced innovative ideas to facilitate community engagement and participation, linking medical services and other areas such as information technology and water supply. Now what is necessary is to identify the gaps between policy planning and practice, then to fill them with consistent logic, resources and operations.

This session will be conducted by policy strategists and a representative from Rocinantes to discuss methodologies and potential solutions to promote UHC and HSS through community engagement as well as comment on global policy and funding trends.

Panelists:



Naoyuki Kawahara
Representative
Rocinantes

Satoshi Ezoe
Senior Coordinator
for Global Health,
MHLW

Tomoko Ono
JICA Sudan Office

Kazuo Tase
Co-Founder
Kokuren Forum
(Facilitator)

Discussion session in UN forums organized by SIP12 students

