COMMUNICATION ON ENGAGEMENT (COE)

Hydro – Informatics Institute (Public Organization)

Period covered by this Communication on Engagement

From: January 2022 To: December 2023

Part I. Statement of Continued Support by the Chief Executive or Equivalent

Please use the box below to include the statement of continued support signed by your organization's Chief Executive or equivalent.

6 November, 2023

To our stakeholders:

I am pleased to confirm that Hydro-Informatics Institute (Public Organization) reaffirms its support to the United Nations Global Compact and its Ten Principles in the areas of Human Rights, Labour, Environment and Anti-Corruption. This is our Communication on Engagement with the United Nations Global Compact. We welcome feedback on its contents.

In this Communication of Engagement, we describe the actions that our organization has taken to support the UN Global Compact and its Principles as suggested for an organization like ours. We also commit to sharing this information with our stakeholders using our primary channels of communication.

Sincerely yours,

Dr. Royboon Rassameethes
Director of Hydro-Informatics Institute (Public Organization)

Part II. Description of Actions

Please use the box below to describe the actions your organization has taken in support of the Global Compact. It is strongly recommended that the actions taken are related to one or more of the specific activities suggested. *Please refer to the complete list of suggested activities for your type of organization found here.*

Relation between HII and UN Global Compact

Hydro-Informatics Institute (Public Organization) or HII plays a critical role on science and technology adaptation for water resources management that aligns closely with the Ten Principles of the UN Global Compact especially on the Environment-related principles. HII as a specialized institution focusing on mitigating environmental risks, conserving natural resources, and advancing the responsible management of water-related ecosystems. HII's activities, as outlined below, have effectively highlighted the intricate synergy between the environmental principles of the UN Global Compact and HII's mission. These activities have also demonstrated how HII's initiatives contribute to a more environmentally sustainable and resilient future, with a particular emphasis on water resources management and environmental conservation.

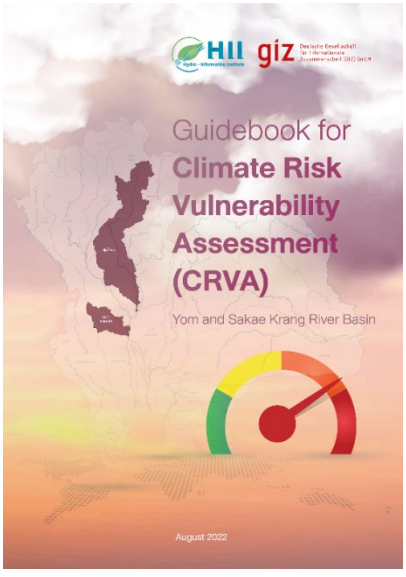
Description of the practical actions

In light of the current climate change phenomena, characterized by rising temperatures and extreme weather events, the situation has now been widely recognized as a global disaster. Mitigating these threats and ensuring resilience demands a unified effort across sectors. The imperative for collaboration across sectors has become increasingly evident, with public-private collaboration playing a pivotal role in harnessing innovative solutions, financing, and policy expertise. A comprehensive approach that combines the innovation and resources of the public research institute and private sector is increasingly necessary. This collaborative synergy not only addresses urgent challenges but also propels sustainable development and global economic growth.

HII collaborated with the Public and Private Sectors to support a precautionary approach to environmental challenges, and to provide information available to stakeholders that illustrates the environmental performance and benefits of using technologies throughout the following activities.

Precautionary Approach to Environmental Challenges

1) Climate Risk and Vulnerability Assessment (CRVA) and Cause-Impact Chains for Risk-informed and Climate-sensitive River Basin Master Plans



The German Agency for International Cooperation Organization (GIZ) in collaboration with Hydro - Informatics Institute (Public Organization) conducted the “Climate Risk and Vulnerability Assessment (CRVA) and Cause-Impact Chains for Risk-Informed and Climate-Sensitive River Basin Master Plans: the Yom and the Sakae Krang River Basins, Thailand”. The project is under “Thai-German Climate Programme – Water” addressing the importance and essential in enhancing knowledge and skills for agencies and stakeholders to develop the River Basin Master Plan, supporting the implementation of ecosystem-based adaptation (EbA) measures, to prevent and alleviate risks from climate change.

As a result, the Climate Risk Vulnerability Assessment Guidebook (CRVA guidebook) has been developed as a learning tool to help individuals to build an understanding of the CRVA conceptual framework, comprehend the process of flood and drought risk analysis related to climate change in the river basin, systematically link and assess problems, causes, and impacts, and apply these insights to determine appropriate measures for the further development of the River Basin Master Plan.

Finally, all the project information can be reached through the following project website URL: https://sites.google.com/view/crvaproject/home .

2) Automated Telemetry Station Installation Project for Monitoring Weather Data, Rainfall, and Water Levels in Lao People’s Democratic Republic

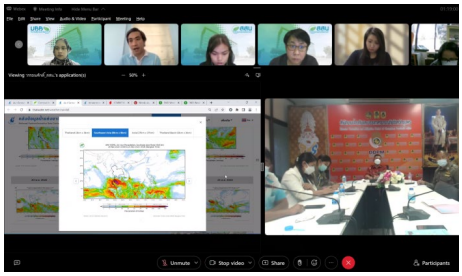
Her Royal Highness Princess Bajrakitiyabha Narendiradebyavati, Chairman of the Friends in Need (of "PA") Volunteers Foundation, Thai Red Cross, graciously presides over the activities of disaster monitoring to alleviate flood impacts and asking the foundation to expand the Installation Project of Automated Telemetry Station to Lao PDR, in collaboration with Hydro-Informatics Institute (Public Organization).

The first Automated Telemetry Station from phase 2 were installed at the Department of Meteorological and Hydrological, Vientiane Capital, Lao PDR

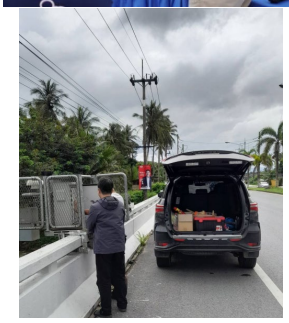
The project comprises of 2 phases including the installation of total 20 Automated Telemetry Stations across the country with the knowledge transfer and capacity building of local staffs from the Ministry of Natural Resources and Environment of Lao PDR enabling them to acquire the skills needed to utilize the data and maintain the system. The project's primary objective is to address climate-related challenges and strengthen the capacity for disaster monitoring and early warning, thus improving preparedness for both normal and crisis periods.

Automated Telemetry Station installation in the area

3) Operational support to the Special Water Resources Management Operation Center in Southern Thailand for flood preparedness and response





HII supported the operation of the Special Water Resources Management Operation Center in flood risk area of Southern Thailand, at Disaster Prevention and Mitigation Regional Center No. 11, Surat Thani Province, during 20 November 2022 – 27 January 2023.

As a working group on water management of Bang Lang Dam, HII supported daily meeting on water situation monitoring, analysis of area at risk of heavy rainfall/ flash flood/ mudslides, surveying riverbank overflow, install and maintain telemetry stations, early warn water situation to networked community and public sectors.

Promote Greater Environmental Responsibility

4) SDGs Talk “We Shift…World Change” EP.15: Water Management for Sustainable Life

In January 2022, HII Director joined as an academic sector's speaker in Global Compact Network Thailand's special SDGs Talk "We Shift…World Change" EP.15: Water Management for Sustainable Life (SDGs target 6: Clean water and sanitation).

The special talk featured academic, business, and social sectors representatives to inspire people and communities to be aware of SDGs on clean water and good sanitation. The talk has also promoted organizations to be widely recognized among environmental sectors in the field of water management.

5) Unlocking Sustainable Development: Harnessing the Synergy of Public-Private Partnerships

MOU between Hydro-Informatics Institute (HII), Federation of Thai Industries (FTI), and the Utokapat Foundation Under Royal Patronage of H.M. the King

Action Together for a Better Thailand on Integrated Water Resources Management (IWRM)

Hydro-Informatics Institute (HII) has partnered with the Federation of Thai Industries (FTI) and the Utokapat Foundation Under Royal Patronage of H.M. the King to spearhead initiatives aimed at fostering sustainable development by leveraging science, technology, and innovation application for disaster risk reduction and climate change adaptation. These three institutes have come together to facilitate the transfer and exchange data from National Hydroinformatics Data Center, operated by HII, to enhance water resources management of Thailand's industrial sector. Besides, they plan to develop a model for area-based water resources management in a community scale and enhance the capabilities of the industrial members' network to excel in water resources management. In a concerted effort, this

collaboration seeks to amplify coordinated initiatives between public and private entities in Thailand, all with the overarching goal of advancing the country's sustainability through the effective and holistic management of its water resources.
At the ceremony commemorating the Memorandum of Understanding signed by the three partners on October 2, 2023, they collectively hosted a forum titled "Action Together for a Better Thailand on Integrated Water Resources Management." This forum included key stakeholders from public, private, and international organizations who shared their insights on the pressing necessity for cooperative action in achieving sustainable development. Their focus was particularly on the utilization of science-based knowledge and innovation to be implemented at all levels including local communities.

The event was featured as a prominent part of the "Sustainability Expo 2023 (SX2023)", ASEAN's Largest Sustainability Exposition, which was organized by Thai Beverage Public Company Limited in collaboration with over 200 major stakeholders from Thailand's business, government, and civil society sectors. SX2023's theme was "Good Balance, Better World", and it served as a platform for highlighting cutting-edge sustainable practices and technologies. It also facilitated crucial dialogues and partnerships aimed at promoting environmental sustainability and corporate responsibility.

Development of Environmentally Friendly Technologies

6) Water management model in Thailand, collaborated by HII and SCG

HII collaborated with SCG to promote "Water management model" in Thailand local community from 2016 to 2022. In 2022, this project focused on restoring water in the forest area (especially the upstream of reservoir), increasing water storage for dry season, improving water management structure, linking water sources, restoring the canals, improving water consumption system, and developing water plan for agriculture.

The achievement involved the mitigation of flood, flash flood, and drought risks at the community level and the scaling up of best practices to the river basin level. This success also entailed enhancing water recycling systems for greater efficiency, boosting agricultural production, establishing water management committee groups, and setting up maintenance funds.

7) Project of geospatial management with hydroinformatics system for sustainable development, collaborated by HII and Thai Beverage Public Company Limited

In 2022, HII and Thai Beverage Public Company Limited collaborated on the Geospatial Management with Hydroinformatics System for Sustainable Development Project Phase 1: Preliminary area analysis. The study areas were at the Beer Thai (1991) Public Company Limited (sub-company of Thai Beverage Public Co., Ltd.), located in Kamphaeng Phet Province, Thailand, and nearby area in the surrounding radius of approximately 5 km.

The primary goal of this project is to implement a hydroinformatics system for the study and analysis of flood and drought risks. The outcomes of this project can greatly assist in the efficient management of geospatial data, the reduction of local flood and drought risks, and the promotion of sustainable development. Furthermore, the project compiles the results of studies, analyses, and recommendations to mitigate the damage and severity of flood and drought impacts, enhancing disaster preparedness for the future.

Part III. Measurement of Outcomes

Please use the box below to include the most relevant qualitative and/or quantitative indicators to measure the outcome of the activities described in Part II above.

1) Expertise provided by HII to further the aims of Global Compact Local Network in Thailand

- Capacity building: HII provided the training (capacity building) on the telemetry stations installation, data implementation, and the maintenance the equipment to Lao PDR staff for precautionary management.
- Technology transfer: HII transferred technology and knowledge to its partners in private, public, and community sectors for disaster early warning.
- Develop and apply Science, Technology, and Innovation (STI) to the local community, collaborating with private sector, for disaster risk reduction.

2) Partnerships formalized with mutual aims to advance the UN Global Compact principles

The partnerships from **Public Sector** *(1. The German Agency for International Cooperation Organization (GIZ), 2. the Ministry of Natural Resources and Environment of Lao PDR, 3. Disaster Prevention and Mitigation, Surat Thai Province, Thailand, 4. National Water Command, Thailand)* align with **"Precautionary Approach to Environment"** in the following activities:

- Activity 1: Climate Risk and Vulnerability Assessment (CRVA) and Cause-Impact Chains for Risk-informed and Climate-sensitive River Basin Master Plans
- Activity 2: Automated Telemetry Station Installation Project for Monitoring Weather Data, Rainfall, and Water Levels in Lao People's Democratic Republic
- Activity 3: Operational support to the Special Waer Resources Management Operation Center in Southern Thailand for flood preparedness and response

The partnerships from **International Agency** *(1. Global Compact Network Thailand, 2. T.C. Pharmaceutical Industries Company Limited (TCP), 3. Thammasat University, 4. Federation of Thai Industries (FTI), 5. Utokapat Foundation Under Royol Patronage of H.M. the King)* align with **"Promote Greater Environmentally Friendly Technologies"** in the following activities:

- Activity 4: SDGs Talk "We Shift…World Change" EP.15: Water Management for Sustainable Life
- Activity 5: Unblocking Sustainable Development: Harnessing the Synergy of Public-Private Partnerships

The partnerships from **Private Sector** *(1. SCG, 2. Thai Beverage Public Company Limited)* align with **"Precautionary Approach to Environment"** in the following activities:

- Activity 6: Water management model in Thailand, collaborated by HII and SCG
- Activity 7: Project of geospatial management with hydroinformatics system for sustainable development, collaborated by HII and Thai Beverage Public Company Limited