OUTCOME PAPER

1. BACKGROUND
On May 12, 2015, the Asian Institute of Technology (AIT), in collaboration with the Thai Water Partnership (TWP), and the Pollution Control Department (PCD) of Thailand’s MONRE, carried out an inception workshop at the Miracle Grand Convention Center in Bangkok for a ‘research for development’ project, “developing an operational framework for river health assessment in the Mekong River Basin”. Current health assessments in the basin are centered exclusively on river water quality indicators. The project, to be carried out over three years (2015-2017), and supported by the CGIAR’s Water Land and Ecosystem (WLE) Greater Mekong (GM) Program, seeks to plug existing knowledge gaps by developing a **holistic river health indicator (RHI)** system—capable of addressing a variety of dimensions of river health in the Mekong River Basin. The objectives of this inception workshop were to:

- Sensitize the vast array of national stakeholders (who are, in some way or the other, associated with river health in Thailand) to the project goal and objectives.
- Engage the stakeholders in multi-perspective discussions on matters related to river health in Thailand.

2. SUMMARY OF THE DISCUSSIONS
Following is a succinct summary of the discussions that took place during the workshop:

2.1 General content
- There was a unanimous agreement among the participants, particularly among the government stakeholders, that the state of river health had some kind of bearing on the nature of their work. While the effects of poor river health are sector-specific, the ‘take home’ message is universal —proper river health assessments are integral to ecological and social well-being.
- While traditional definitions of river health have alluded to ecological and physical human health, a modern definition must account for the “psychological”, and “spiritual” satisfaction that healthy rivers provide.
- In order to make an efficient evaluation of the river health, the whole cycle of ecosystem interrelations needs to be scrutinized, not just the river.
- The state of river health has a direct impact on ‘water security’ and ‘food security’ in the region.
2.2 Technical content

- The participants were of the opinion that the factors affecting river health in Thailand can be categorized under four groups:
  1. Agricultural and aquaculture intensification
  2. Land-use change
  3. Climate change
  4. Direction of development

- There was a suggestion that the new RHI could consider monitoring new parameters, particularly pharmaceuticals given that there is very recent evidence of their presence in rivers. The impacts of these chemicals are quite well known and are serious enough to warrant consideration.

- Merely monitoring the river health is not sufficient. A mechanism needs to be established to evaluate the outputs of the monitoring activities, and allow for “reflection and adjustment” in a dynamic cycle. Further, it would be good to provide guidelines to improve the river health, based on the monitoring activities.

- There was a suggestion that the new RHI system should include indicators related to ecosystem services.

- In terms of river water quality, it is important that the monitoring at low flows is carried out since there are more residual components at low flows.

- There was a suggestion that the new RHI takes aspects related ‘groundwater’ into consideration as well, given its obvious interaction with surface water.

- There were concerns that the study area—Songkhram catchment—is very unique (relatively pristine), and the RHI system developed for this catchment may not be easy to transfer to other catchments.

2.3 Discussion on community monitoring systems:

- There was general consensus among the participants that involving communities in the river health monitoring activities was the way forward in ensuring sustainability of healthy rivers. However, the starting capacities of communities will dictate the level of their involvement.

- It was suggested that, in Thailand’s context, the term “community-driven” monitoring system would be more appropriate than “community-based” monitoring system, as originally suggested by the project proponents.

- It was pointed out that given its status as a regional leader, Thailand can be a harbinger in the region for establishing a community-driven RHI system.

- The National Health Commission’s experience with working with communities, albeit in a different context, suggests that “peer to peer” training yields good results. The project proponents were encouraged to consider this in their project.

- In order to bring about a paradigm shift in the way river health decisions are taken in Thailand, it is imperative to consider the social aspect of change—changing people’s behaviour and mentality towards rivers. It was strongly recommended that the proposed RHI system should consider, and incorporate, these social indicators.

- Instituting the community-driven RHI system will require both top-down (for technical dissemination) and feed back up (for long-term engagement) approaches.

- The use of indigenous knowledge (e.g. communities relate milky water to high sedimentation) can add good value to the community-driven RHI system.
2.4 The way forward and potential synergies with other organizations/initiatives

- In order to ensure long-term sustainability of river health, there is a need to raise awareness and educate the public on the implications of river health. A good start would be to get school children involved in project activities (e.g. collect water samples), which is expected to have a multiplier effect at household level.

- At some point in time in the future, it would be good to invest in Information platforms (e.g. river water quality information portal) using the RHI system, and remotely sensed data. The project can look to explore prospective options with the SERVIR Mekong program [https://servirglobal.net/Mekong.aspx](https://servirglobal.net/Mekong.aspx)

- It is important that villages and small cities are also linked to the RHI system.

- The RHI system developed in this project can serve as a useful input to the National Health Commission’s Health Impact Assessment.

- The participants’ indicated their interest in specific aspects of the river health. Some examples are:
  1. Benchmarking of river health.
  2. Ecosystem based approaches for improving river health.
  3. Fish production and diversity.
  4. Biotic Index.
  5. Relationships between rivers and biophysical characteristics of rivers.
  6. Effects of river health on environmental quality and conflicts.
  7. Saltwater intrusion and encroachment of wetlands

During the different phases of the project, all attempts will be made to engage these participants in areas of their interest.

3. KEY ACTIVITIES FOR NEXT PHASE OF THE PROJECT

The following activities are expected in the next phase of the project

- Carry out a similar stakeholder workshop with communities in the Songkhram catchment to understand their point of view on river health issues.

- Develop a river health indicator framework, using contemporary knowledge and science while at the same time considering national and local stakeholder feedback.

- Initiate a massive communication drive to sensitize people in the study area, and beyond, about river health aspects.

*The project proponents extend their gratitude to the workshop participants for a truly productive day, resulting in thought provoking discussions. All kinds of Suggestions and feedback, throughout the duration of the project, would be warmly welcome.*

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