

1st China-ASEAN Dam Science Popularization Contest

Greetings:

Supervisors:

The Department of Asian Affairs, Ministry of Foreign Affairs, P. R. China

Department of International Cooperation, Science and Technology, Ministry of Water Resources, P. R. China

Organizers:

Nanjing Hydraulic Research Institute

Lancang-Mekong Water Resources Cooperation Centre

Co-organizers:

Dam Safety Management Centre, Ministry of Water Resources, P. R. China

Prisco O. Boco III

Civil Engineer

Dam Designer

Environmental Planner

Tacloban City, Philippines

Both are equally important drivers for our
social and economic development ...



**What are the
social and
economic
impacts of
a dam?**

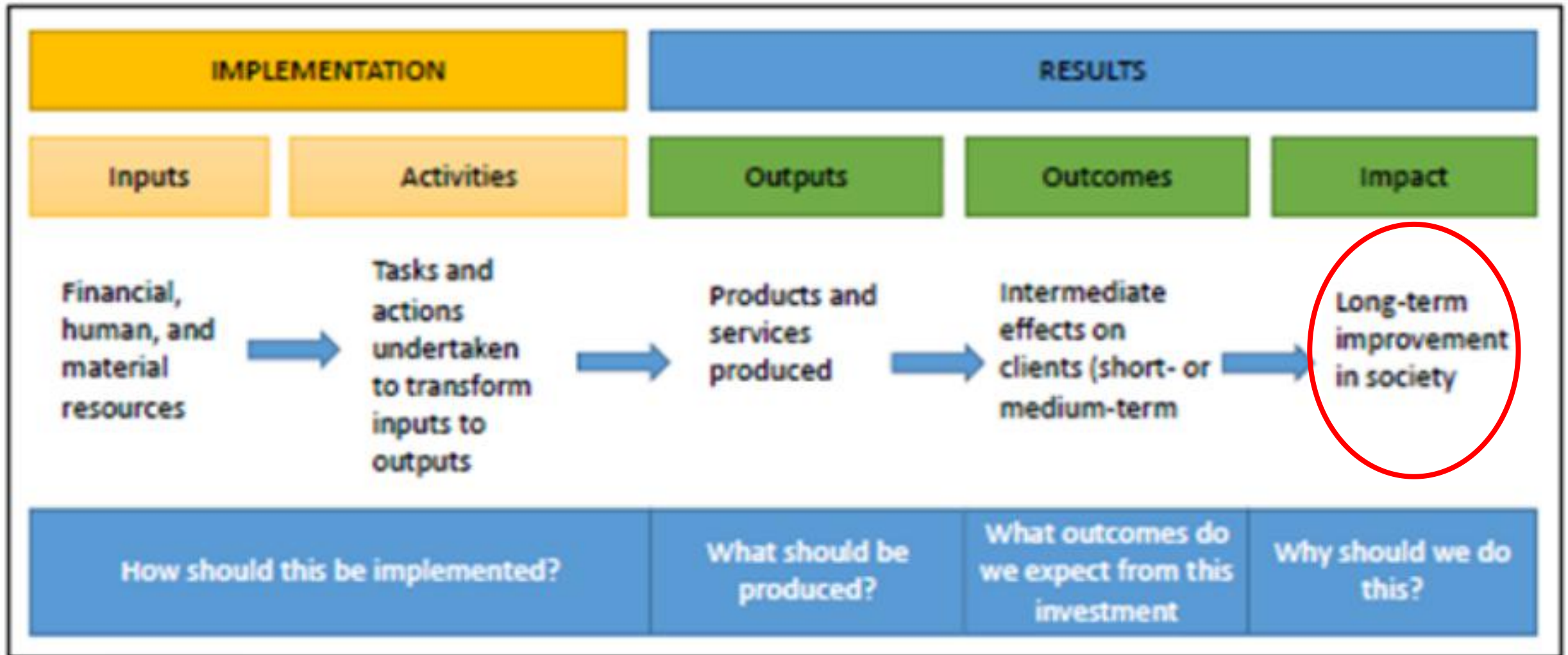


1st China-ASEAN Dam Science Popularization Contest

Impacts of Dams on Social and Economic Development

Presented by:
Engr. Prisco O. Boco III
Tacloban City, Philippines
priscoiib@gmail.com
November 2021

Understanding “*Impact*” from the Results Chain...



Output:

Constructed Dam Structure

Identified Positive Outcomes:

- Power Generation
- Domestic Water Supply
- Commercial Water Supply
- Industrial Water Supply
- Irrigation Water Supply
- Flood Control
- Tourism / Recreation Site

Identified Negative Outcomes:

- Submersion of the Reservoir Area
- Realignment of River Flows
- Reduction of River discharges at downstream portions
- Blocks life forms that moves upstream and downstream

Tabulated Results

Major Output	Positive Outcomes	Positive Impacts
Constructed Dam Structure	<ul style="list-style-type: none">• Power Generation• Domestic Water Supply• Commercial Water Supply• Industrial Water Supply• Irrigation Water Supply• Flood Control• Recreation Site	<ul style="list-style-type: none">• Improved standard of Living• Better Health Status• Increased Economic Activity, Productivity, and Opportunity

Tabulated Results

Major Output	Negative Outcomes	Negative Impacts
Constructed Dam Structure	<ul style="list-style-type: none">• Submersion of the Reservoir Area• Realignment of River Flows• Reduction of River discharges at downstream portions• Blocks river life forms to move upstream	<ul style="list-style-type: none">• Increased carrying capacity imposed on the environment by the dam and its users• Permanent adjustment of habitats and routes of flora and fauna at the river• Adverse effects on the historically significant features of the land• Need to adjust in the economic, culture, psychological, and other factors for the project affected persons.

Summary of Impacts of a Dam on our Social and Economic Development

Major Output	Positive Impacts	Negative Impacts
Constructed Dam Structure	<ul style="list-style-type: none">• Improve standard of Living• Better Health Status• Increased Economic Activity, Productivity, and Opportunity	<ul style="list-style-type: none">• Increased carrying capacity imposed on the environment by the dam and its users• Permanent adjustment of habitats and routes of flora and fauna at the river• Adverse effects on the historically significant features of the land• Need to adjust in the economic, culture, psychological, and other factors for the project affected persons

**Knowing the Impacts of Dam on
Social and Economic Development...**

WE will know what to mitigate...

We will know what to propagate...

Development should not upset the environment...

**Conservation of environment should not stop
development...**

Sustainability is the key...

Harmony, Peace, and Progress



Environment and Humanity

谢谢你

THANK YOU