Learning Deltas Asia Initiative (LDAI)

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Learning Deltas Asia Initiative: A Brief Chronology

- 2014: "Enabling Delta Life" Initiative, a global project drafted with support of Delta Alliance
- Dec. 2015: Regional Workshop on Flood Management, Guangzhou, China
- May 2016: HLP on Water Security and SDGs, Yangon, Myanmar (delta focus)
- July 2016: Early discussion on "Learning Deltas" at Singapore Water Week
- Sept. 2016: Meeting with IFIs at SWWW and planning of Manila Workshop
## Potential Target Deltaic Areas in Asia

<table>
<thead>
<tr>
<th>COUNTRIES</th>
<th>DELTAIC AREAS</th>
<th>MAIN CITIES</th>
<th>RELEVANT ISSUES</th>
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<tbody>
<tr>
<td>Bangladesh</td>
<td>Ganges – Brahmaputra – Meghna Delta</td>
<td>Mongla, Chittagong</td>
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<td>Tonlé Sap, Mekong Delta (transboundary), Bassac River</td>
<td>Phnom Penh</td>
<td>• Saltwater intrusion</td>
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<td>Cambodia</td>
<td>Bohai Sea, Yangtze River Delta, Zhujiang Delta</td>
<td>Tianjin, Shanghai, Guangzhou</td>
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<td>• Erosion/sediment starvation</td>
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<td>China</td>
<td>Calcutta, Chennai, Mumbai</td>
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<td>• Infrastructure on soft soils</td>
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<td>Indonesia</td>
<td>Mahakam Delta</td>
<td>Samarinda, Jakarta</td>
<td>• Ecosystem conservation</td>
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<td>Pakistan</td>
<td>Indus River Delta</td>
<td>Karachi</td>
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<td>Pasig River Delta</td>
<td>Manila</td>
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<td>Myanmar</td>
<td>Ayeyarwady Delta</td>
<td>Yangon, Pathein</td>
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<td>Singapore</td>
<td>Singapore River</td>
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<td>Thailand</td>
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<td>Vietnam</td>
<td>Mekong Delta (transboundary), Red River Delta</td>
<td>Ho Chi Minh, Hanoi</td>
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Learning Deltas Asia Initiative (LDAI): Principal Objective

The principal objective of the LDAI

The LDA objective is to build up an effective SSC learning and innovation Initiative that accompanies rural and urbanizing deltas in better connecting three processes that often unfold in relative isolation:

- Enabling IWRM planning and implementation of Adaptive Delta Management
- Engaging broader sectorial integrated and inclusive societal development processes that guide socio-economic resilience
- Supporting the planning and implementation of investment projects through innovative learning and knowledge processes building commitment and capacities

→ Need to follow an integrated, holistic and inclusive approach!
Learning Deltas Asia Initiative’s Main Characteristics

Methodology

- The LDAI use tailor made learning tools and promote experienced learning. Through these tools, the knowledge from the practice will be capitalized and partners will gain direct access to field-tested, innovative solutions and develop the capacities to sustain learning and change in time:

1. Network development, by acknowledging and bringing together multiple stakeholders through face-to-face activities;

2. Strengthening of national organizations, by equipping them with advance knowledge management and knowledge sharing skills;

3. Documentation and dissemination of ADM best practices and innovation.
Learning Deltas Asia Initiative: How to do it...

- **Bring key players together** in the deltas:
  - IWRM planners (often water ministries)
  - Planning and economic ministries
  - Finance and other sector ministries
  - Knowledge institutes, NGO’s, private sector
  - Multilateral development banks and bilateral donors

- **Learn of the successes, failures and lessons learnt** in delta management and development

- **Promote exchanges of the lessons** between deltas

- **Focus on south-south exchange and cooperation**

- **Taking into account the SDGs**, specifically IWRM in a trans-boundary context
Learning Deltas Asia Initiative: With whom to partner

- **The Delta countries:**
  
  **Key players** to be brought together by GWP’s Country Water Partnerships (CWPs) or Delta Alliance (DA) Wings (in many countries CWP=DA?)

- **The Delta Coalition:**
  
  High level governmental cooperation between delta countries
  
  At this moment 12, of which 8 in Asia, growing

- **The IFIs (ADB and WB):**
  
  Supporting the process and bringing in some finance
Learning Deltas Asia Initiative: Outcome & Ultimate Beneficiaries

✿ **Outcome of LDAI**
- an enhanced capacity of engaged stakeholders and institutions in policies and political efforts to enable higher levels of impact and sustainability while allowing for scaling up of resilience of urban deltas and assisting in climate change adaptation

✿ **Ultimate Beneficiaries of LDAI**
- the local communities in the deltas and relevant DRR communities, RBOs, NGOs, civil societies, private sector, etc. will be involved
The Pilot Phase

Main outcomes of the Mission to Bangladesh in February 2017

- Building a joint Learning Agenda for Myanmar and Bangladesh. The pilot will focus on three ADM priority learning areas for Bangladesh and Myanmar:

I. Polders management
II. Tidal River Management
III. Integrated Water Resource Management
THE PILOT PHASE

MAIN OUTCOMES OF THE MISSION TO BANGLADESH IN FEBRUARY 2017

Bangladesh Learning Territory
1. Coastal Area
2. Barind Tract Area.
THE PILOT PHASE

MAIN OUTCOMES OF THE MISSION TO MYANMAR IN JUNE 2017

- Most of the deltas parts are relatively undeveloped but at the same time near the urban areas are developing rapidly.
- New approaches will have to be in line with the framework proposed by the Sustainable Development Goals together with IWRM concept and implementation of Adaptive Delta Management (ADM).
- In this early stage Global Water Partnership Organisation (GWPO) provided a platform for Myanmar and Bangladesh to promote the exchange of experience and knowledge on development of deltas and filling the gaps by initiating the Learning Delta Asia Initiative (LDAI).
THE PILOT PHASE

MAIN OUTCOMES OF THE MISSION TO MYANMAR IN JUNE 2017

Myanmar Learning Territory
Delta Area

1. Polders Area

Location Map of Polders and Embankments in Ayeyarwady Delta

Locations of Kyet hpa mway zaung polder area
THE PILOT PHASE

MAIN OUTCOMES OF THE MISSION TO MYANMAR IN JUNE 2017

Myanmar Learning Territory

2. Tidal River Management

Location Map of Nyaung Done Polder controlled by Tidal River Management

Mezali Sluice Gate  Paddy Cultivation

Drainage Channel

Fishing and Aquaculture
THE PILOT PHASE

MAIN OUTCOMES OF THE MISSION TO MYANMAR

Myanmar Learning Territory

3. Integrated Water Resources Management

Nyaung Done Town river bank protection works

Improvement of river system

Bank protection at Bo Myat Tun Bridge

Mangrove Forest Education Centre
THREE STEPS IN LDAI PHASE 2

1. Learning Route
   - Preparation stage
   - Implementation stage
   - Follow-up stage

2. Capacity Development
   - Trainings/workshops/conferences
   - Institutional strengthening
   - Financial planning

3. Learning Delta Engine
   - Training materials and case studies
   - Research and innovations
   - Policies and strategies

Cap-Net
UNDP
Way Forward
LDAI - Phase 2 inception meeting

- LEARNING DELTA ASIA INITIATIVE - PHASE 2 INCEPTION WORKSHOP held in Yangon, Myanmar in (6th to 7th) December
- Setting-up the LDAI project level steering committee, declaration of LDAI learning agenda in line with national planning of Deltaic countries, and enhance relevance and stakeholder cooperation for LDAI.
- Learning route implementation in Bangladesh and Myanmar
- Learning Materials development under 5 learning priorities
- Delivery of training programme, experts workshop
- Establishment of Learning Delta Engine
The LDAI is a new way to explore learning together, which is found interesting by all parties involved.

The LDAI assumes that participants will be funded by themselves or their organizations on an individual basis, which is so far not (yet) the case.

From Myanmar side, field based learning, rather than theoretical learning, is preferred.
Thank you for your attention.
Learning Deltas Asia Initiative: Expected results

The LDAI, as a thorough knowledge exchange mechanism between key Asian deltas would:

- Increase the understanding of challenges faced by communities/populations living in Asian deltas
- Foster cooperation to develop joint solutions for increased water security and climate resilience in Asian deltas
- Strengthen the capabilities of local institutions to enhance targeted outreach, impact and sustainability of MDB/Climate Fund co-financed projects and to improve the quality of project pipeline proposals
- Eventually lead to strengthened resilience of populations living in coastal/deltaic areas in Asia
Learning Deltas Asia Initiative: How to do it...

- **Bring key players together** in the deltas:
  - IWRM planners (often water ministries)
  - Planning and economic ministries
  - Finance and other sector ministries
  - Knowledge institutes, NGO’s, private sector
  - Multilateral development banks and bilateral donors

- **Learn of the successes, failures and lessons learnt** in delta management and development

- **Promote exchanges of the lessons** between deltas

- **Focus on south-south exchange and cooperation**

- **Taking into account the SDGs**, specifically IWRM in a trans-boundary context
Learning Deltas Asia Initiative: Organizational set-up

- **Focus on deltas in Asia**
- **Core to be established in one of the countries**
  - e.g. Bangladesh
  - in a professional institute of the Country Water Partnership
  - external financially supported (GWP, bilateral donor?)
  - to be considered as the ‘Engine’ of the Learning Deltas initiative
- **Projects to be developed**
  - in and between delta countries
  - that fits in on-going operational projects of ADB and WB
  - to be financed by those projects
- **South-south orientation and cooperation**
  ... and with external support (e.g. by Delta Alliance, Procasur)
Learning Deltas Asia Initiative: Proposed Organizational Set-up

Steering group
- GWP, WB, ADB
- Delta Coalition
- All participating countries

Learning Deltas Engine
- hosted by BWP (Bangladesh)
- with staff from other CWPs
- overall management
- content manager

Projects / activities
- managed by CWPs
- in participating countries
- where possible with several delta countries involved

Methodological drivers
- Procasur
- Delta Alliance
- TEC of GWP

Financing partners
- supervising ‘their’ projects / activities

Capacity building
- training
- exchange visits
- int. conference
- etc.

Studies Δ-issues
- scenario dev.
- transboundary
- comparative assessment
- etc.

Strategy develop.
- framework of analysis
- adaptation
- no-regrets
- etc.

Project develop.
- developing bankable projects
- investment planning
- etc.

Etc....
LDAI’S MAIN CHARACTERISTICS

METHODOLOGY

1. LDAI supports the expansion and adaptation of successful policies, programmes, projects and formal knowledge, so the countries can leverage resources and partners to deliver larger results in a sustainable way.

2. South South Cooperation (SSC) and South South and Triangular Cooperation (SSTC) are at the core of the LDAI growth and sustainability strategy and will also explore complementary venues to the North-South technical assistance and funding model by engaging with governments and International Financial Institutions (IFIs) investing in the countries.
LDAI’s Main Characteristics

• Phased Approach

Short term (February to December 2017)
- Inception and conception of SSC initiative with increasing participation of ADM stakeholders in Asia.
- Pilot: Scoping Phase of a first knowledge exchange between Myanmar and Bangladesh ADM stakeholders.
- Pilot: First Learning Route in Bangladesh, including participative design, cofinanced implementation and peer to peer follow up.

Mid term
- Organize a number of exchange and learning events between several countries
- Expand from the Bangladesh and Myanmar pilot to other deltas in Asia
- Strength policy dialogue and position ADM in the countries’ agendas.
- Enabling Myanmar and Bangladesh for organizing peer to peer learning
- Partnering with investment projects (WB, ADB, IFAD, etc.) to pilot or scale up ADM innovations and best practices in Myanmar and Bangladesh

Long term
- ADM mainstreamed in public policies and programmes in various regions.
- Horizontal cooperation (SSC-SSTC) between ADM practitioners.
- DC/GWP/CWP/DA country actions links shorten
- CWPs/DAs services to members, partners and stakeholders diversified and strengthen
- Learning Deltas is a global and open Initiative, anchored locally.
Starting to Push the Reel
Learning Deltas Asia Initiative (LDAI)

- Selection of 5 Asian Delta Countries
  - Bangladesh, Myanmar, Vietnam, Cambodia, China

- Objectives of LDAI
  - Enable IWRM planning and implementation of Adaptive Delta Management;
  - Engage broader sectoral integration and inclusive societal development processes that guide socio-economic resilience; and
  - Support the planning and implementation of investment projects through innovative learning and knowledge processes building commitment and capacities

- Companion Countries
  - Bangladesh and Myanmar
  - Vietnam and Cambodia
  - China
The Pilot Phase

1. The Scoping exercise between Myanmar and Bangladesh.

In February 2017 the pilot phase began with a scoping exercise between Bangladesh and Myanmar. The exercise main objectives are:

i. Building a joint Learning Agenda on Adaptive Delta Management between Bangladesh and Myanmar

ii. Selecting two Learning Territories, one in Myanmar and another in Bangladesh where to pilot Adaptive Delta Management best practices and innovations

2. The Learning Route in Bangladesh.

As a result of the scoping exercise a Learning Route will be designed. The Learning Route is a peer to peer in the field training on ADM best practices in Bangladesh, customized to Myanmar learning priorities. The training will target practitioners from government, civil society, private sector and academia institutions working on ADM, selected under criteria of converge work in a same territory.
**The Pilot Phase (Myanmar Mission to Bangladesh)**

**Overall Description of the Mission to Bangladesh**

- Between the 23rd and 28th February the mission was carried out as planned and professionally led by the IWMBD and the BWP.
- It considered lectures, Q&A and field visit on nine learning areas
  1. Bangladesh Delta Plan (BDP 2100) by GED
  2. Climate Change Modelling and Coastal Resilience by IWMBD
  3. Community level flood management, by CEGIS
  4. Flood forecasting system, by IWMBD
  5. Ecosystem services for poverty alleviation by BUET
  6. Climate Change and Water Governance, by BCAS
  7. Land reclamation by BWDB
  8. Tidal River Management by IWMBD
  9. Mangroves conservation

- The field visit focused on Land Reclamation by BWDP.

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<th>No</th>
<th>Name</th>
<th>Position</th>
<th>Organization</th>
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<tbody>
<tr>
<td>1</td>
<td>Dr Zaw Lwin Tun</td>
<td>Director</td>
<td>Design Branch, Irrigation and Water Utilization Management Department, Ministry of Agriculture, Livestock and Irrigation, Republic of the Union of Myanmar</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Representative of Myanmar Water Partnership Wing Coordinator, Myanmar Delta Alliance Wing</td>
</tr>
<tr>
<td>2</td>
<td>Mr Hla Moe</td>
<td>Deputy Director</td>
<td>Directorate of Water Resources and Improvement of River Systems, Ministry of Transport and Communication, Republic of the Union of Myanmar</td>
</tr>
<tr>
<td>3</td>
<td>Mr Aye Myint</td>
<td>Senior Water Resources Engineer</td>
<td>National Engineering and Planning Services Co. Ltd (NEPS)</td>
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<td></td>
<td></td>
<td></td>
<td>Director (Retired), Irrigation Department, Ministry of Agricultural and Irrigation</td>
</tr>
<tr>
<td>4</td>
<td>Mr Kyaw Nyein</td>
<td>Executive Committee member</td>
<td>Executive Committee, Forest Resource Environment Development and conservation Association (FREDA)</td>
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</table>
THE PILOT PHASE

MAIN OUTCOMES OF THE MISSION TO BANGLADESH

• It was agreed to organize a Learning Route on the late period of the Monsoon, most probably after the 15th of September.

• The training would last approximately 7 to 10 training days and place special emphasis on learning directly from the public and private stakeholders of the experiences.

• The Myanmar delegation will be guided in the collaborative design of one or more Improvement Plan(s) for the adaptation and adoption of best practices and innovations to their intervention contexts.

• The financial support needs to be ensured.
**OVERALL DESCRIPTION OF THE MISSION TO MYANMAR**

- Between the 1st to 5th June according to discussions that had taken in the consultation meeting of Myanmar delegation mission to Bangladesh
- The second LDAI consultation meeting between Bangladesh Water Partnership (BWP), Institute of Water Modelling (IWM) and Myanmar Water Partnership (MmWP) representatives to define initial priorities and a timeline of learning menu options
- The meeting was co-organized by GWPO, MmWP and GWP-SA
- It considered presentations, Q&A and field visit on eight learning areas

1. Introduction to Myanmar Water Partnership, Delta Alliance (Myanmar), Delta Coalition (Myanmar), & IWUMD by SC member of GWP-SEA SC for MmWP
2. Disaster Risks in Ayeyarwady Delta by Director, Ayeyarwady Region, IWUMD
3. Introduction to DWIR, Improvement of River System in Ayeyarwady Delta by Deputy Director, DWIR
4. Introduction to FD, Governmental Strategy on Mangrove Forest Management and Conservation in Ayeyarwady Delta by Assistant Director, FD
5. Introduction to FREDA, Mangrove Reforestation Activities in Ayeyarwady Delta, NGO Context by Executive Committee Member, FREDA

### Participants

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<tr>
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<th>Position</th>
<th>Organization</th>
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<tbody>
<tr>
<td>1</td>
<td>Prof. Dr Mohammad Monowar Hossain</td>
<td>Executive Director</td>
<td>Institute of Water Modelling</td>
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<tr>
<td>2</td>
<td>Ms. Ismat Ara Pervin</td>
<td>Associate Specialist</td>
<td>Water Resources Planning Division, Institute of Water Modelling</td>
</tr>
<tr>
<td>3</td>
<td>Mr. K L Induruwage</td>
<td>Regional Coordinator</td>
<td>GWP South Asia Regional Office C/O International Water Management Institute</td>
</tr>
<tr>
<td>4</td>
<td>Mr. Ariel Halpern</td>
<td>Vice President</td>
<td>PROCASUR Corporation, Procasur Asia</td>
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</tbody>
</table>

6. Integrated Ayeyarwady Delta Strategy, Plan, Progress and Future by Deputy Team Leader, IADS Team, NEPS Co. Ltd.
7. Integrated Water System Development of PanHlaing River Rehabilitation Project by Director, IWUMD
8. Pan Hlaing River Integrated Development Plan by Team Leader, Water Business Line, Royal HaskoningDHV, Myanmar

- The field visit focused on Polders management, Integrated Water Resources Management and Mangrove
Thank you for your attention

contact: kozawlwin@gmail.com
Coastal cities in Asia and percentage of national urban population in low elevation coastal zone

# Climate-related Disasters – Top 10 Countries

Table 1: The Long-Term Climate Risk Index (CRI): the 10 countries most affected from 1994 to 2013 (annual averages)

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<td>1 (1)</td>
<td>Honduras</td>
<td>10.33</td>
<td>309.70</td>
<td>4.60</td>
<td>813.56</td>
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<td>14.00</td>
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<td>2786.28</td>
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<td>7 (6)</td>
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<td>9 (10)</td>
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Deltas in a Changing Climate: Key Features

- **Deltas – low lying coastal areas**
  - fertile, food baskets
  - often strongly urbanized
  - rich ecosystems
  - often in transboundary river basins

- **Challenges**
  - vulnerable to extreme weather events, including flooding from 3 sources (rain, river and sea)
  - salt intrusion
  - soil subsidence
  - erosion/sediment starvation

- **Aggravated by**
  - climate change, incl. sea level rise
  - upstream developments
  - transboundary water management
Learning Deltas Asia Initiative: How to do it...

- **Bring key players together** in the deltas:
  - IWRM planners (often water ministries)
  - Planning and economic ministries
  - Finance and other sector ministries
  - Knowledge institutes, NGO’s, private sector
  - Multilateral development banks and bilateral donors

- **Learn of the successes, failures and lessons learnt** in adaptive delta management and development

- **Promote exchanges of the lessons** between deltas

- **Focus on south-south exchange and cooperation**

- **Taking into account the SDGs**, specifically IWRM in a trans-boundary context
Adaptive Delta Management (ADM)
An approach that develops common-sense measures to deal with large uncertainties in future developments (Delta Programme, 2014).

Key points of Adaptive Delta Management:
1. Linking short-term decisions with long-term objectives
2. Incorporating flexibility in possible solution strategies depending on developments
3. Linking different investment agendas.