

Nature Based Solutions

A component of Integrated Flood Risk Management

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TA 9634-REG: Strengthening Integrated
Flood Risk Management

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What is a Nature Based Solution – NBS?

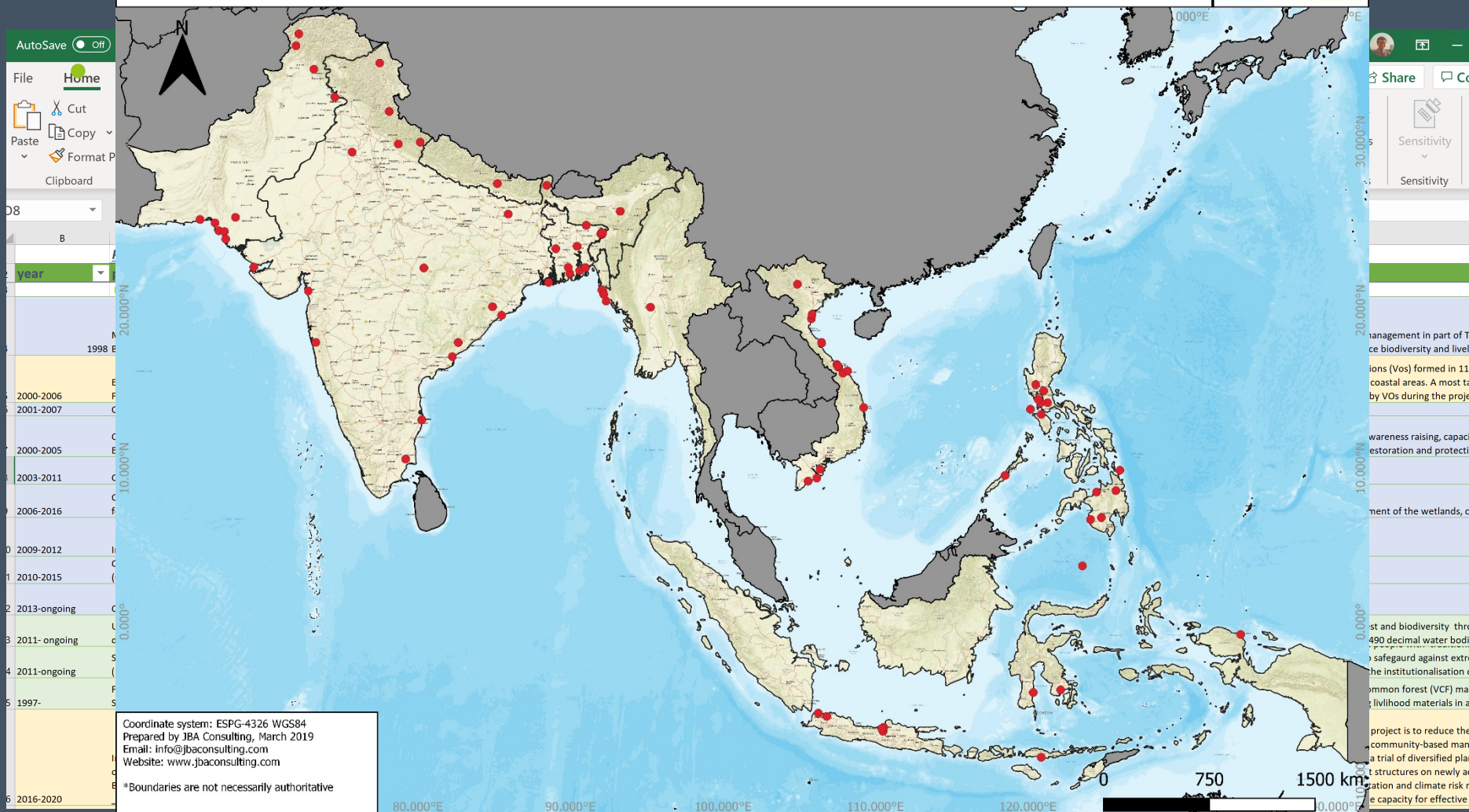
- Working with Nature
- Often a component with multiple benefits not only flood benefits
- Catchment measures – slowing down responses and lowering peaks
- Reconnecting floodplains and restoring river function
- Restoring Estuary processes
- Coastal Processes
- Urban 'Green Infrastructure' and Sustainable Drainage

What is a Nature Based Solution – Are they relevant in Asian countries?

- Review – over 100 different projects identified so far in DMC countries
- Types of schemes identified
Primarily:
 - eBA,
 - Wetland protection and restoration
 - coastal restoration
 - Urban ‘greening’
- South and SE Asian Major Rivers tend to be more natural than other parts of the world. Catchments have been under threat but now opportunity to reverse trend.
- Urban ‘greening’ needs green areas.

What is a Nature Based Solution – Are they relevant in Asian countries?

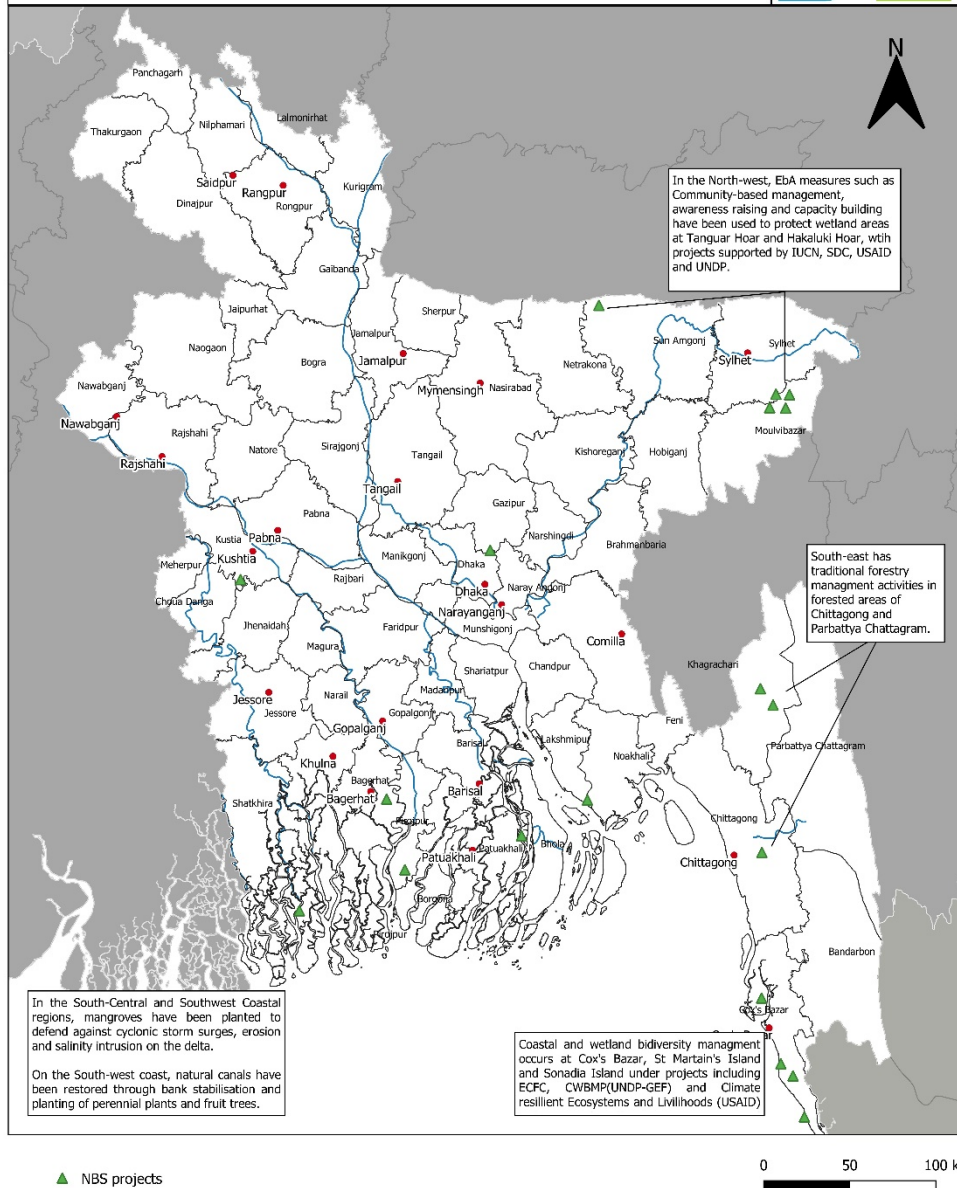
Strengthening Integrated Flood Risk Management - TA-9634 - Locations of NBS projects



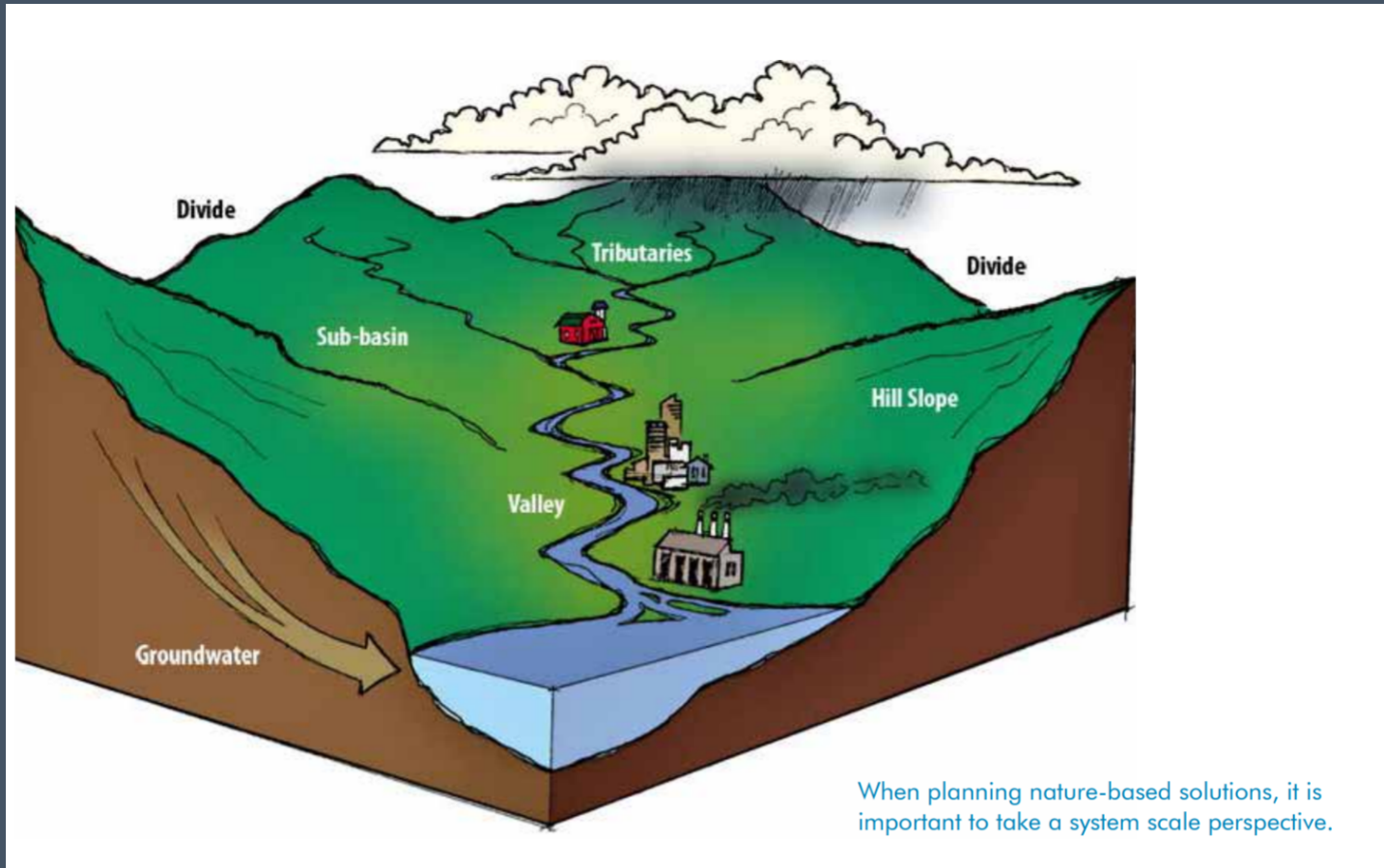
What is a Nature Based Solution – Are they relevant in Asian countries?

- Reafforestation
- Wetlands
- Maintaining 'room for river'
- Meander reconnection
- Lakes & Flooded Forest
- Floodplain storage
- Tidal Prism & beels
- Mangrove

Strengthening Integrated Flood Risk Management- TA-9634 Overview of Nature-based Solution type projects in Bangladesh



Whole Catchment NBS is desirable



Address through a catchment plan working with communities and landowners reach by reach

NBS/NFM/EbA Catchment/River Restoration

- Multiple names and multipurpose
- Tend to be long term not single 'project'
- Water Quality and sediment management
- Address blockages to fish migration
- Resilient measure to adapt to changing climate
- **Community engagement integral**
 - Mobilise Community resources
 - Coordinate different efforts – eg tree planting
 - Coordination of government agencies, environmental groups, forestry etc with one lead

Higher Runoff is proven to occur when Catchments are degraded ==> Restore Catchment

What do you understand by 'Nature Based Solutions' for flood risk management?

- Can you give any examples from your country?
- Do you think they are appropriate?
- Are they cost effective?