



The East Asian-Australasian Regional Flyway Initiative: Climate Investments that Benefit People and Nature

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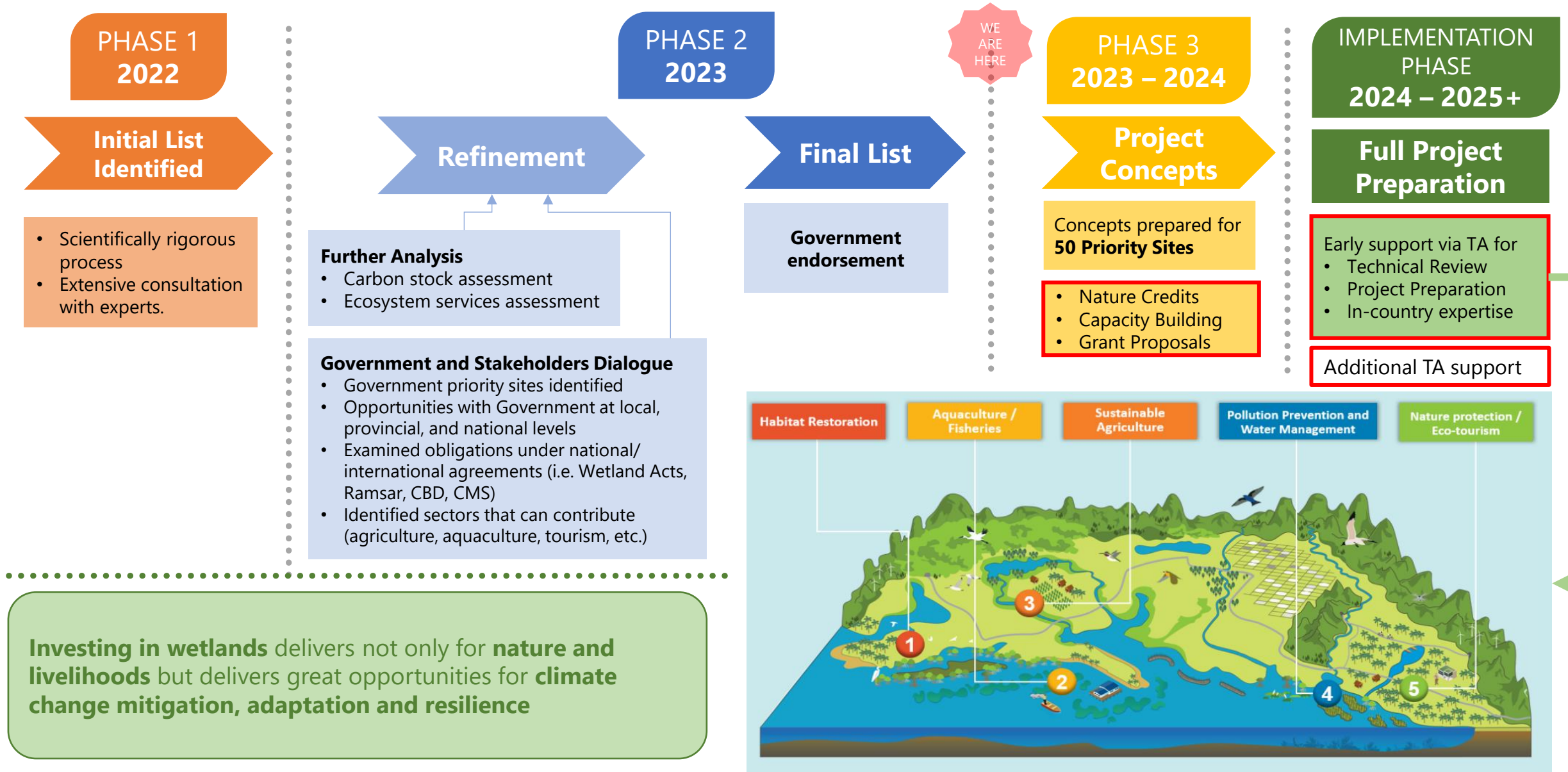
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AMBITION – a regional initiative to mobilize \$3 billion of investment for wetland protection and management to have flyway level impact

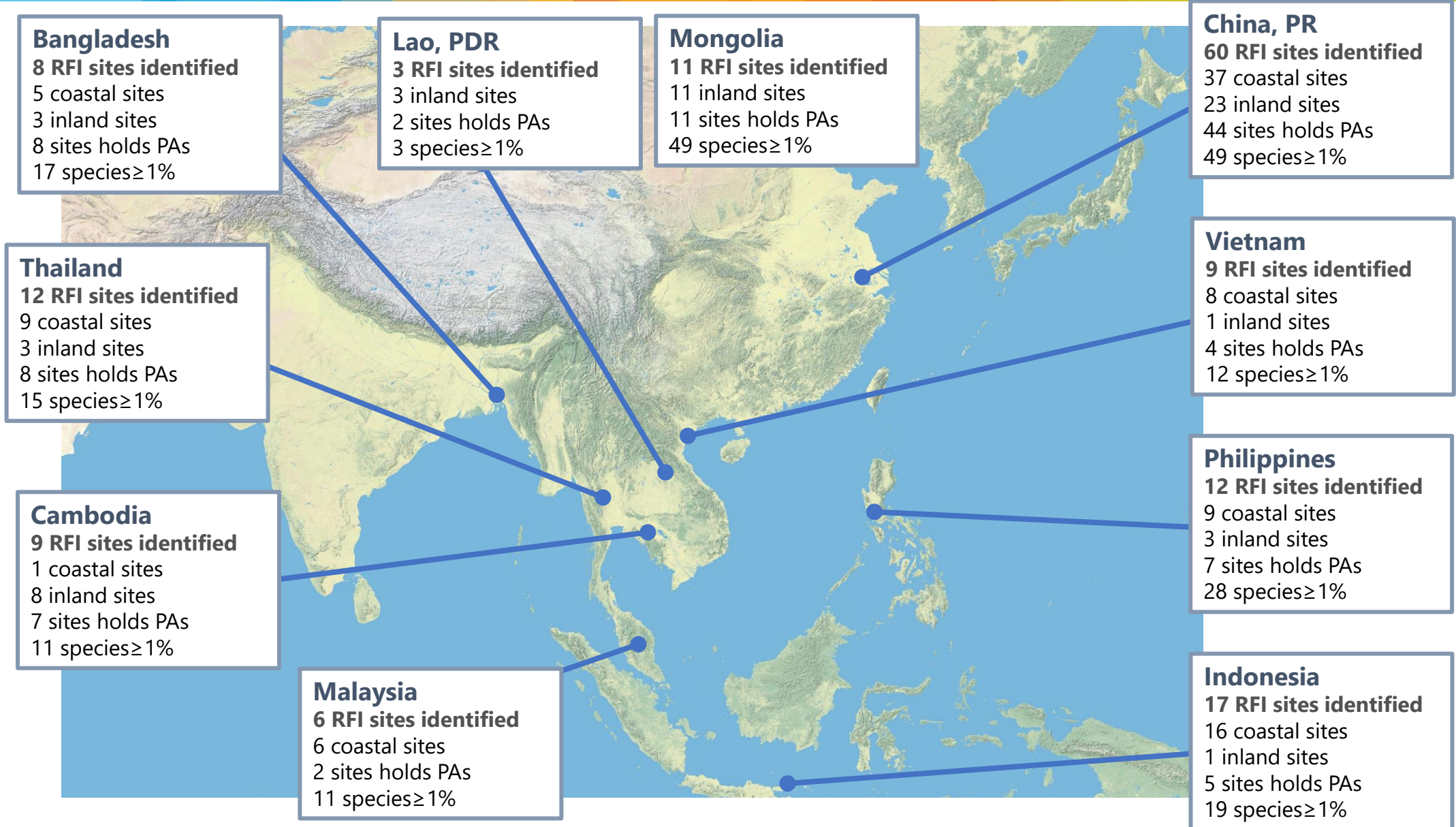
- **Aligned with** EAAFP Strategic Plan, UNCBD, Paris Agreement, Ramsar, CMS, UNESCO
- **\$100 Billion Climate Commitment** ADB target cumulative investment by 2030 – Nature will be key to deliver climate adaptation and resilience
- **Regional.** East, Central, Southeast Asia and Pacific. Initial focus on 10 countries.
- **RFI timeframe. Phase 1 (2021–2025):** project development, **Phase 2 (2024–2034+):** implementation
- **Goal.** Improved management of **50 wetlands** (>2 million ha) → build a network of wetland habitats with species numbers maintained or enhanced
- **Co-benefits.** Healthy wetlands: natural capital and ecosystem services; nature-based solutions; livelihoods.



RFI Phased Approach – Development to Implementation



Site Selection Results – RFI Priority Sites across the EAAF



Identifying the most important wetland sites

Criteria for site prioritisation

Biodiversity

- EAAF migratory bird congregations using 1% thresholds based on EAAF conservation status review (CSR1)
- Key waterbird life cycle components at sites (e.g. staging, wintering habitat)
- Critical for ecological connectivity for threatened species
- High quality intertidal and associated habitats present

Conservation potential

- Opportunities for conservation and management
- Opportunities to take effective action because of local context (local government or communities)

Developing preliminary site list based on diverse data sources with national experts

Review by international experts from SSTT (BirdLife, Wetlands International, EAAFP, Paulson Institute)

Compile recent bird count datasets using AWC data, survey reports and studies

Calculate averaged or maximum counts for each species and benchmark against CSR1 thresholds

Sum up scores for internationally important populations at every site. Rank sites by total scores

Review by SSTT, and national experts. Update datasets where necessary



Overview of RFI Sites in Mongolia

Number of sites assessed	48
Number of priority sites identified	11
Number of priority coastal sites	0
Number of priority freshwater sites	11
Number of sites overlapping with protected area(s)	10

Species occurring in large congregations ($\geq 1\%$)

48 species including Dalmatian Pelican, White-naped Crane (VU), Hooded Crane (VU), Swan Goose (VU), Common Pochard (VU) – mostly at breeding locales

Source of count and site data

Peer-reviewed papers, IBA datasheets and Mongolian Red Data Book (birds), expert reviews



Distribution of RFI Sites in Mongolia



Experts

Doug Watkins, Taej Mundkur,
Nyambayar Batbayar, Muntjargal
Myagmar, Amarkhuu Gungaa,
Gankhuyag Purev-Ochir &
Gombobaatar Sundeev

Use of graphics

Josep del Hoyo

Cartography

Tom Lambert

Overview of RFI Coastal Sites in the PRC

Number of sites assessed	66
Number of priority sites identified	37
Number of priority coastal sites	37
Number of sites overlapping with protected area(s)	29

Species occurring in very large congregations ($\geq 10\%$)

32 species including Spoon-billed sandpiper (CR), Far Eastern Curlew (EN), Spotted Greenshank (EN), Great Knot (EN)

Source of count and site data

Coastal Waterbird Census, Yellow-Sea Bohai Coordinated Waterbird Surveys by Wetlands International, Annual Black-faced Spoonbill Census, EAAFP Site Information Sheets, BirdLife Datazone, Paulson Institute, project reports, peer-reviewed papers



Overview of RFI Inland Sites in the PRC

Number of sites assessed	33
Number of priority sites identified	23
Number of priority inland sites	23
Number of sites overlapping with protected area(s)	23

Species occurring in very large congregations ($\geq 10\%$)

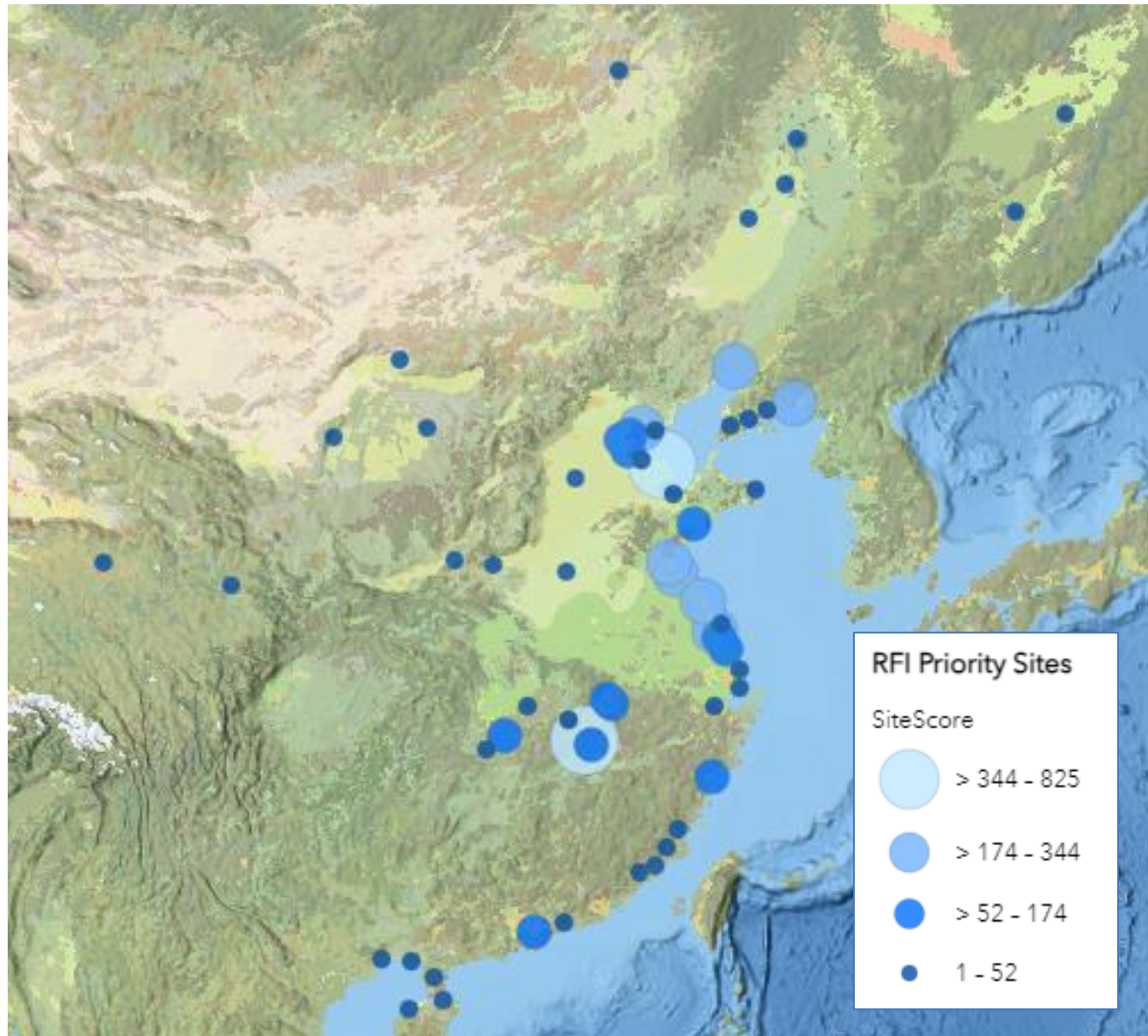
17 species including Swan Goose (VU), Lesser White-fronted Goose (VU), Baer's Pochard (CR), Siberian Crane (CR), White-naped Crane (VU), Red-crowned Crane (VU), Hooded Crane (VU), Oriental Stork (EN), Relict Gull (VU)

Source of count and site data

Peer-reviewed papers, Report on the coordinated surveys for wintering waterbirds of Central and Lower Yangtze, EAAFP Site Information Sheets, BirdLife Datazone

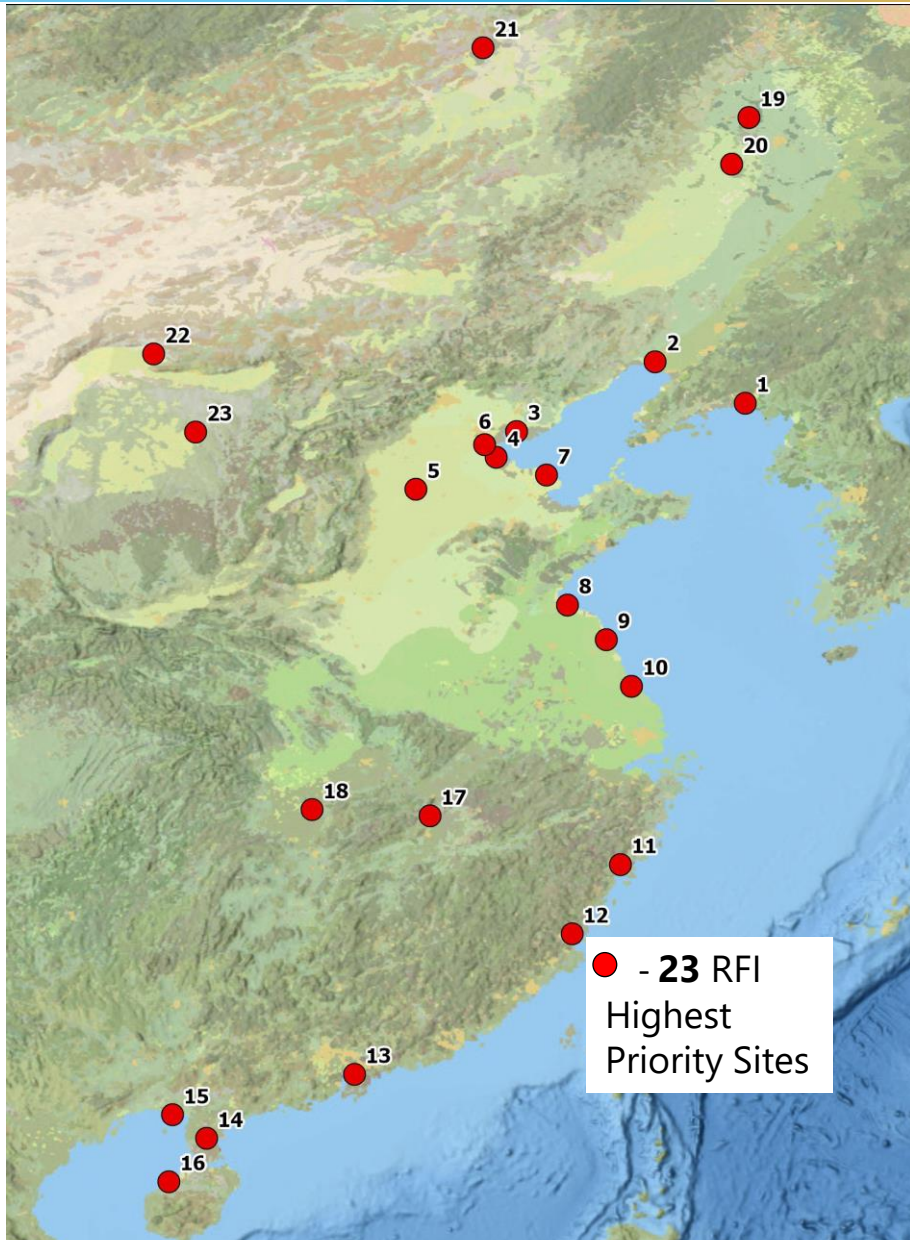


Short-listed 60 Priority Sites in PRC



Criteria / Data	Coastal	Inland	Total
Sites Assessed	66	33	99
Priority Sites Identified	37	23	60
Number of site overlapping with Protected Areas	29	23	52

Highest Priority Sites in PRC - For Further Discussion



Site Number	Priority Site Names	Province
*1	Yalu Jiang Estuary	Liaoning
2	Liaohu Estuary National Nature Reserve and Inner Gulf of Liaodong,	Liaoning
3	Luannan-Zuidong Coast	Hebei
*4	Huanghua Lake National Nature Reserve	Hebei
5	Hengshui Lake National Nature Reserve	Hebei
6	Beidagang Wetland Nature Reserve	Tianjin
*7	Yellow River Delta National Nature Reserve	Shandong
8	Lianyungang Coast	Jiangsu
*9	Yancheng National Nature Reserve, Tiaozini Wetlands and Dongsha Shoals	Jiangsu
10	Rudong and Dongling	Jiangsu
11	Wenzhou Bay	Zhejiang
12	Min Jiang Estuary	Fujian
13	Inner Deep Bay and Shenzhen River Estuary	Guangdong
14	Zhanjiang-Leizhou Peninsula Coast	Guangdong
15	Beihai Coast	Guangxi
16	Danzhou-Lingao Coast	Hainan
17	Poyang Lake Landscape	Jiangxi
18	Dongting Lake Landscape (Includes East and West Dongting NNR),	Hunan
19	Zhalong National Nature Reserve	Heilongjiang
20	Momoge National Nature Reserve	Jilin
21	Dalai (Hulun) Lake National Nature Reserve	Inner Mongolia
22	Wuliangshuai National Nature Reserve	Inner Mongolia
23	Hongjianlao National Nature Reserve	Shaanxi

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Phased Approach to Sites Selection Process

Phase 1

Country	No. of Priority Sites (Totals)	No. of Coastal	No. of Inland
Cambodia	9	1	8
Bangladesh	8	5	3
Indonesia	17	16	1
Thailand	12	9	3
Philippines	12	9	3
Malaysia	6	6	0
Vietnam	9	8	1
Lao PDR	3	0	3
PRC	60	37	23
Mongolia	11	0	11
TOTAL	147	91	56

Phase 2 – Indicative*

- 3 Sites
- 3 Sites
- 3 Sites
- 8 Sites
- 7 Sites

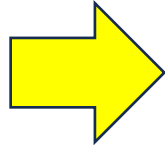
*Indicative only – Stakeholder Engagement and Ecosystem Services Assessment ongoing.

[147 RFI Priority Wetland Sites - Development Asia link](#) and QR



Ecosystem Services Assessment – RFI Approach

**Step 1:
ES documentation**



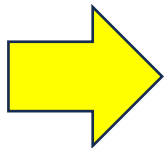
In-country participatory workshops → TESSA toolkit:

a) Preliminary Scoping Appraisal:

- Define site boundaries.
- Classify the habitat types within site boundaries.
- Documentation of ES.
- Drivers of change impacting each site.

b) Determining alternative states: To understand changes on provision of ecosystem services under plausible future changes.

**Step 2:
ES assessments**



Likelihood-related ecosystem services (1-2 sites per country):

- Cultivated goods
- Harvested wild goods
- Nature-based recreation and tourism

Field techniques: workshop and household questionnaires.

Country specific approaches?

**GROSS
ECOSYSTEM
PRODUCT**

Coastal protection

Desk-based: Modelling toolkit (InVEST) used with published global datasets.

Global climate regulation (carbon storage)

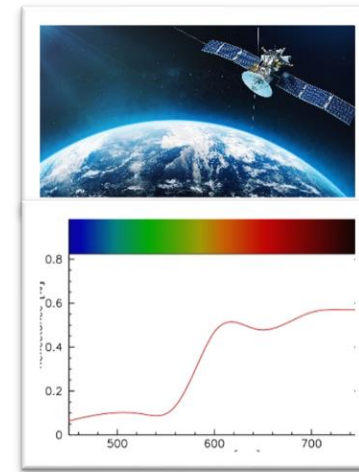
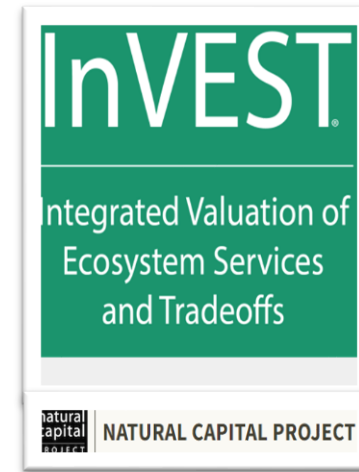
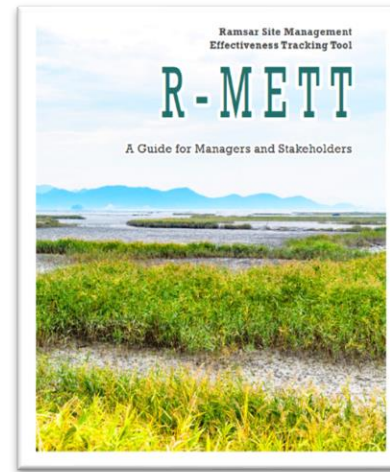
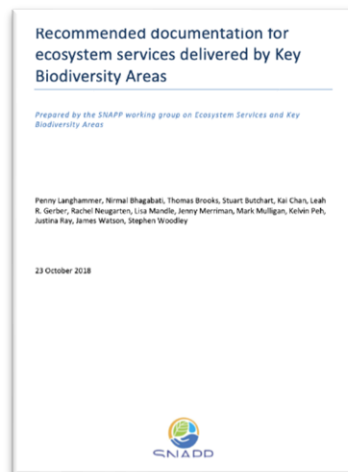
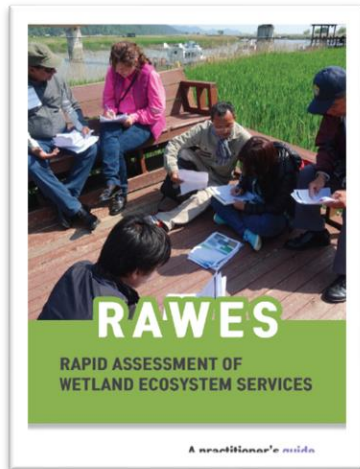
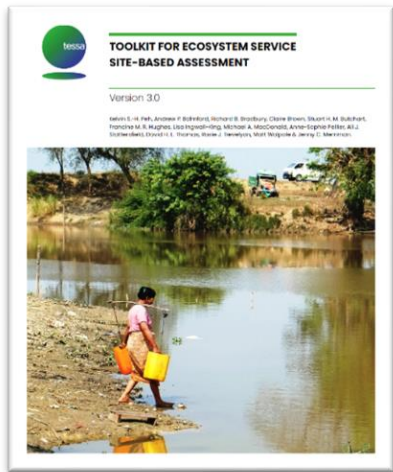
Desk based: Remote sensing techniques.

Ecosystem Services Assessment – RFI Approach

Combination of toolkits and resources:

Participatory workshops

Desk-based



Main framework

- Documentation of ES.
- Assessments of livelihood-related ES.
- Valuations of ES: current vs. alternative state.

- Classification of ES.
- Tailored for wetlands.

- Recommended fields for ES in KBS.

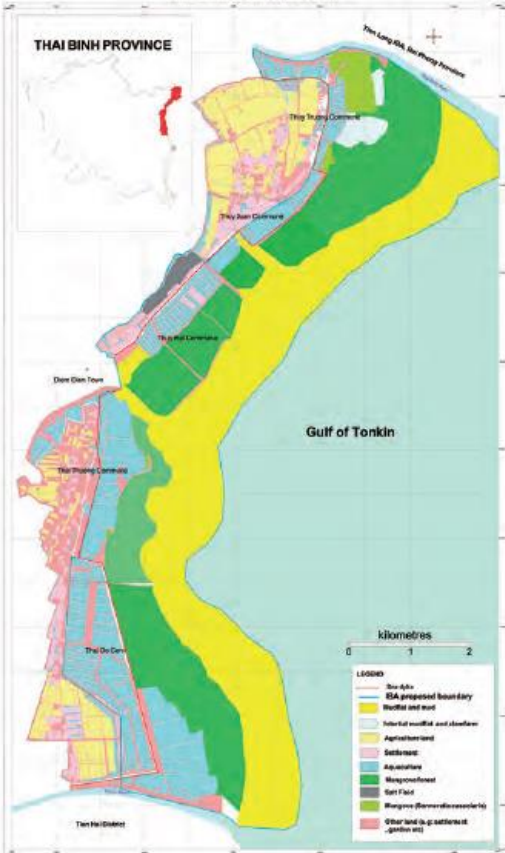
- Classification of drivers of change.
- Tailored for wetlands.

- Modelling tools using published global datasets.
- For coastal protection & flood protection etc.

- Remote sensing methods.
- For carbon storage.

Ecosystem Services results – TESSA output example: Thai Thuy, Viet Nam

Habitat and Land-use of Thai Thuy Wetland Area
Thai Binh province, Vietnam



Land use	Area (ha)
Intertidal mudflat	3,766
Mangrove forest	1,754
Aquaculture	1,411
Salt farm	50
Total	6,981

Map and land use of Thai Thuy Wetland

Benefit



Harvested Wild Goods \$2.2 million/year

Fish harvested in Thai Thuy district \$1.37 million/year¹
Shellfish collected in the mudflat \$0.87 million/year



Cultivated Goods \$ 11.7 million/year

Fish and Shrimp harvested from semi natural aquaculture \$0.58 million/year (\$2,524/ha/year)²
Fish harvested from intensive aquaculture \$8.93 million/year (\$7,558/ha/year)²
Clam harvested from clam culture in mudflat \$ 1.93 m/year
Salt production in the salt farm \$0.22 million/year³



Disaster Risk Reduction \$ 1.1 million/year

Protective benefits of mangrove forest \$1.05 million/year⁴



Climate Regulation \$60.3 million

The benefit of global climate regulation from the carbon stored in the wetland is \$ 60.26 million. This is an one-off stored value, i.e. not an annual value.⁵

Net Benefit : \$ 15.0 million / year
Plus \$ 60.3 million of carbon storage function

Stakeholder engagement during workshops in the Philippines, Cambodia, Thailand, and Bangladesh



Philippines – Balanga, Bataan (2023)



Cambodia – Boeung Prek Lapouv, Takeo (2023)



Thailand – Pak Thale, Phetchaburi (2023)



Bangladesh – Baikka Beel, Hail Haor, Sylhet (2024)



Ecosystem Services Assessment – Contribution to Project Concept Development

Ecosystem Services Assessment

- **Identification of key natural assets**
 - ES work identifies key natural assets
 - Establishes monetary value
- **Identification of threats / opportunities**
 - Identifies negative drivers
 - Identified existing degradation and threats
 - Identifies opportunities
- **Stakeholder Feedback**
 - Includes feedback from stakeholders



Early Project Concept

- Rapid Appraisal
- Enabling Environment
- Identify Co-benefits
- Non-committal Recommendations

RFI Implementation Phase – Investment Ideas

Projects [e.g. Nature-based Solutions]

RFI INVESTMENT CONCEPT 1 HABITAT RESTORATION AND PROTECTION



Restoring and protecting mangroves and other wetland habitats has clear economic and ecological benefits.

RFI INVESTMENT CONCEPT 2 SUSTAINABLE AQUACULTURE



Sustainable aquaculture and fisheries support food, nutrition and water security for wetland communities.

RFI INVESTMENT CONCEPT 3 SUSTAINABLE AGRICULTURE



Sustainable agriculture can strengthen long-term food and livelihood security while delivering net gains for biodiversity.

RFI INVESTMENT CONCEPT 4 POLLUTION PREVENTION AND WATER MANAGEMENT



Preventing pollution and sound water governance offers massive benefits

RFI INVESTMENT CONCEPT 5 NATURE PROTECTION AND ECO-TOURISM



Protecting natural wetlands creates massive ecotourism benefits and opportunities



Financing



**Innovative Financing Ideas –
key to unlocking investment**

Investing in **wetlands** delivers not only for **nature** and **livelihoods** but delivers great opportunities for **climate mitigation, adaptation and resilience**

Jiangsu Yancheng Wetlands Protection Project

An Integrated Approach to Preserving the Wetlands in the People's Republic of China

TOTAL
PROJECT
COST:



- ADB: \$27.2 million
- GEF: \$1.4 million
- Government counterpart funding: \$30.5 million



- **Loan** - Sovereign Loan with some nominal blended grant financing and government co-finance
- **Payment for Ecosystem Services** - Model used to reduce pollution and support livelihoods.
- **Community Benefit** - 2,900 people benefited from project through direct employment, 40 hotels opened 1 million visitors per year
- **Nature Conservation** - 4,554 ha wetland restored and rehabilitated; 365% increase in bird population in Rare Bird Nature Reserve
- **UNESCO WHS Listing** - Project contributed to 2019 listing of Yancheng as Natural World Heritage Site
- **Spring Festival Update** - 2023 launch of World Coastal Forum in Yancheng; 11,700 ha restored in 2023 alone!



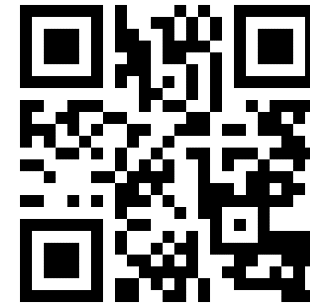
DATA ROOM

Regional Flyway Initiative



Further Reading

[ADB Data Room: Regional Flyway Initiative - Development Asia link](#) and QR



Thank You!