



# THE ECONOMICS OF ECOSYSTEMS AND BIODIVERSITY FOR PROTECTED AREAS IN PENINSULAR MALAYSIA (TEEB PA)

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TEEB AGRIFOOD MALAYSIA  
INCEPTION WORKSHOP  
2 December 2020



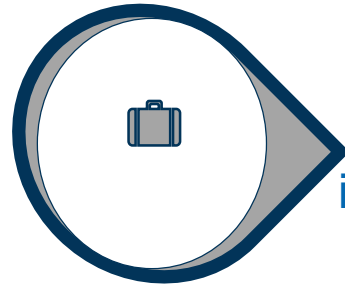
# OUTLINE

- 1 Making Protected Area's Values Visible**
- 2 The Team, Approach, Methods and Data**
- 3 Scoping and Consultation**
- 4 Surveys**
- 5 Early Analysis and Results**

# Making Protected Area's Values Visible



## PA Financing Project

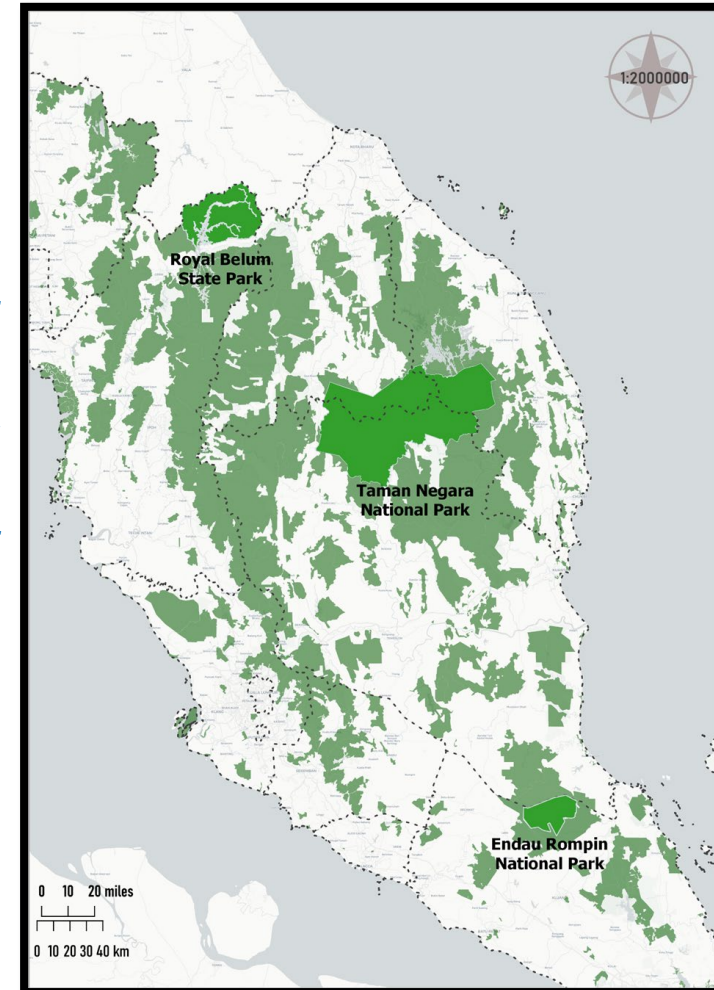


1. **Site-level valuation** assessment:
  - Taman Negara National Park
  - Royal Belum State Park
  - Endau-Rompin National Park
2. **Cost-Benefit Analysis** of investments in PA management to build strong economic case for **sustainable financing**
3. Measure **total economic value** of terrestrial protected areas in Peninsular Malaysia

A performance-based financing structure to support effective protected area management system in Malaysia

- Increased public finance for protected areas – Economic Case?

## TEEB PA for Peninsular Malaysia



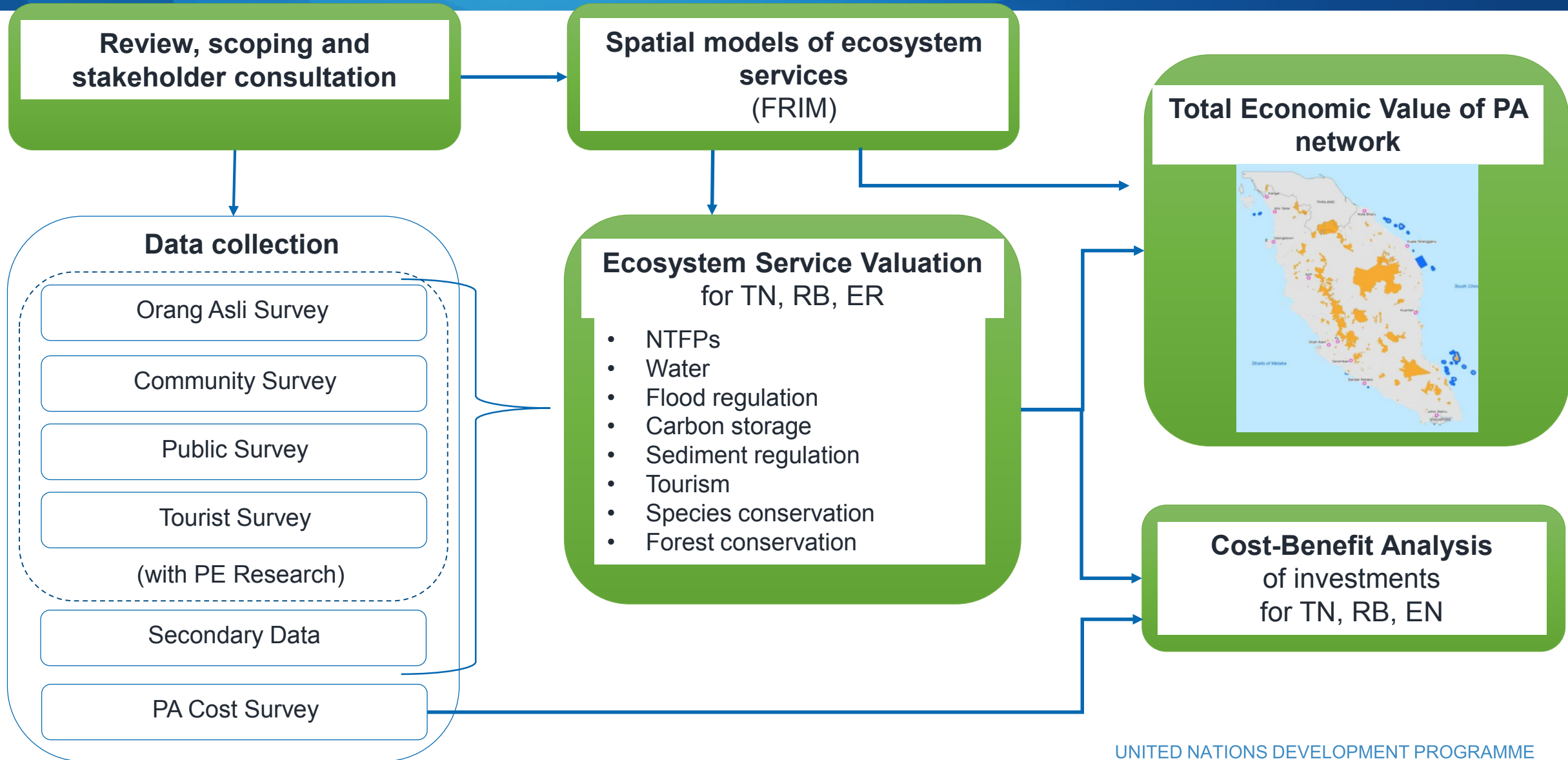


# The Team

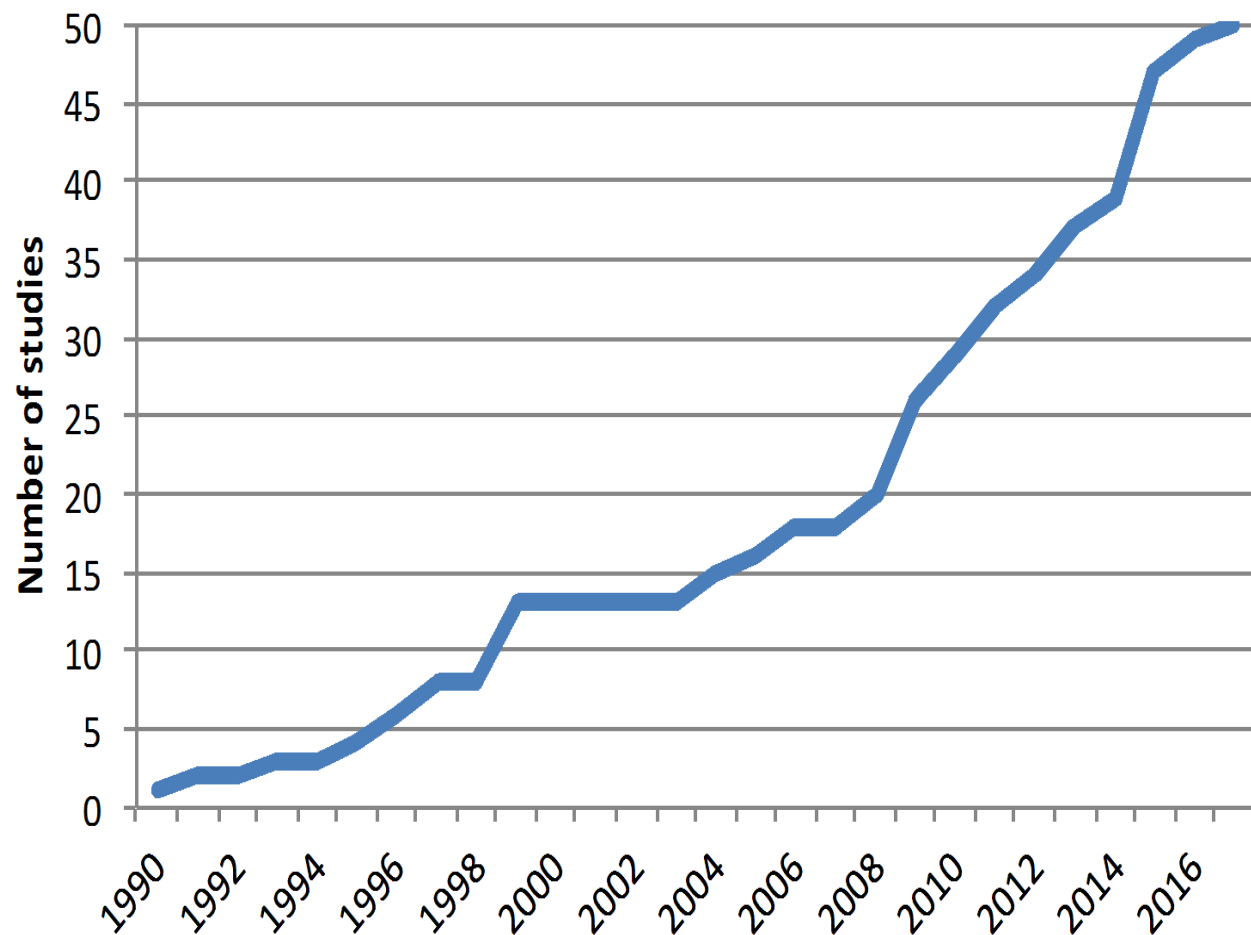


- Mr. Mohd Taufik, National Project Director and Director of Wildlife Conservation Division, Department of Wildlife and National Parks Peninsular Malaysia
- Gan Pek Chuan, Programme Manager, Biodiversity and Sustainable Development, UNDP
- Dr. Luke Brander, Lead Environmental Economist, University of Hong Kong
- Ms. Bee Hong Yeo, Environmental Economist, Expanse Consulting
- PE Research Sdn Bhd – survey

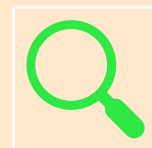
# Approach, Methods and Data



# Review of Existing Valuation Studies



Build on existing valuation results



Identify gaps



Learn lessons for study design

# Scoping and Consultation

- Identify **key ecosystem services** from each PA and their beneficiaries
- Identify **existing data and reports**
- Inputs for **developing future scenarios** for PA management
- Key informant consultations as inputs to the study design (tour operators, park managers, communities, village leaders, tourism players, NGOs)



# Surveys: PA Cost Survey

## Terrestrial parks

(DWNP:32, JNPC:4, JPSM:177, PSPC:4, other: 1)

### Expenditures

- Salaries & allowances
- Recurrent expenditures
- Infrastructure
- Equipment
- Others

### Funding sources

- Federal
- State
- Donor and corporate funds
- Others

### Revenue/ collection

- On-site (entry fees, camping fees etc)
- Off-site (donor funds etc)

### Linkages with communities

### Efforts to improve Sustainable Finance initiatives

- Survey of PA managers
- To estimate the cost/ha of protected areas management
- Sustainable finance profiling for future planning



# Field Surveys

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- Face to face surveys launched in February 2020
  - MCO in March 2020, moved Public and Tourist surveys to online (May to August)
  - Resumed face to face surveys in July and August
  - Surveys were completed in September 2020
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## Public Survey on Protected Areas

Please help the Government to understand how Malaysians value protected areas!

Take the survey at:  
[bit.ly/SurveyProtectedAreas](https://bit.ly/SurveyProtectedAreas)



### ENQUIRIES

PHONE: +603-78042664 (9AM-5PM) MR KHAIRUL/MS AISYAH/MR LEE

WHATSAPP: +6018-2667145

FACEBOOK: FACEBOOK.COM/TEEBSSURVEY



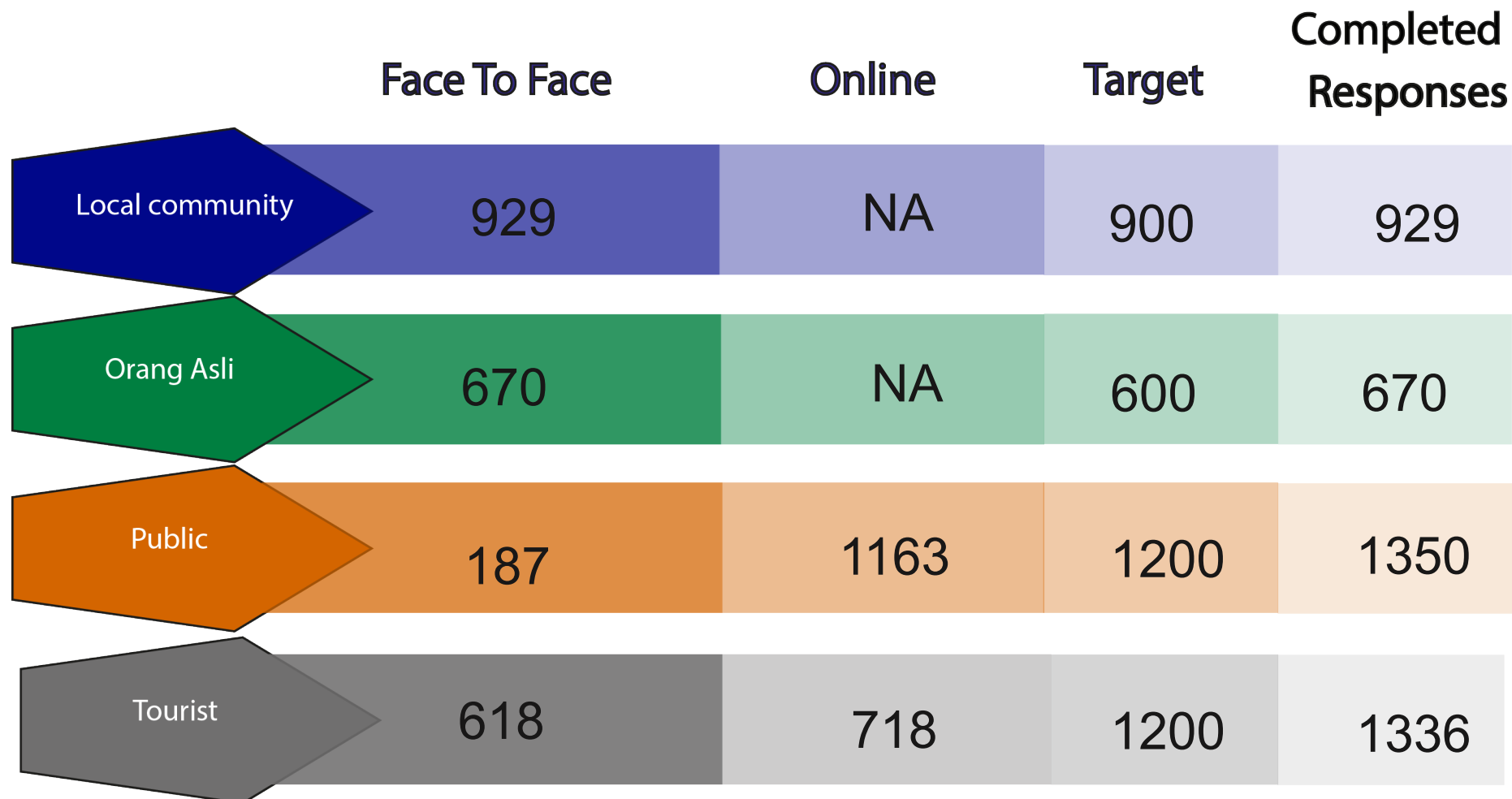
## NATIONAL PARKS

How much are protected areas worth?  
*Let the government know by taking the survey here:*














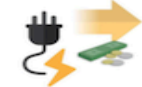
<https://bit.ly/TouristSurveyMPA>

# Beneficiary surveys



# Stated Preference Valuation

- Choice experiment method
- Estimate willingness to pay to avoid:
  - Deforestation
  - Species extinctions
  - Flooding
- Local community and general public pay through electricity bill
- Tourists pay through entrance fee

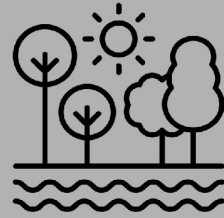
	Option A	Option B	No additional protection
Natural forest cut during next 10 years (hectares)	 20,000 ha cut	 No natural forest cut	 20,000 ha cut
Animals locally extinct during next 10 years	 10% locally extinct	 No extinctions	 40% locally extinct
Flooding frequency (floods per year)	 1 flood per year	 No floods	 4 floods per year
Increase in monthly electricity bill (RM/month)	 RM5 increase	 RM10 increase	 No increase

	Deforestation prevention (RM/1,000 ha)	Extinction prevention (RM/percentage point)	Flood prevention (RM/flood)
Local residents (household/month)	1.77	1.21	6.63
General public (household/month)	1.77	1.21	6.64
Tourists (person/visit)	10.17	7.1	20.63



# Surveys – Orang Asli

## Royal Belum State Park



3 within, 4 bordering Villages



Hulu Perak

1,539 population



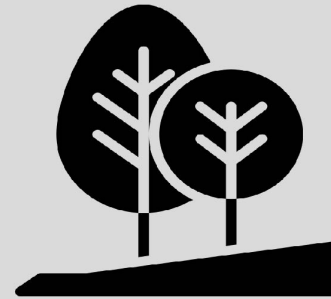
361 households



253

70%

## Taman Negara National Park



3 within, 9 bordering Villages



Jerantut and Lipis

1,600 population



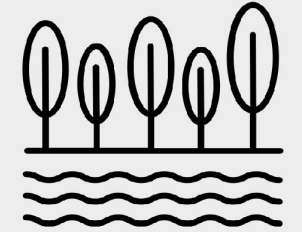
340 households



211

62%

## Endau Rompin National Park



4 bordering Villages



Mersing and Segamat

963 population



206 households

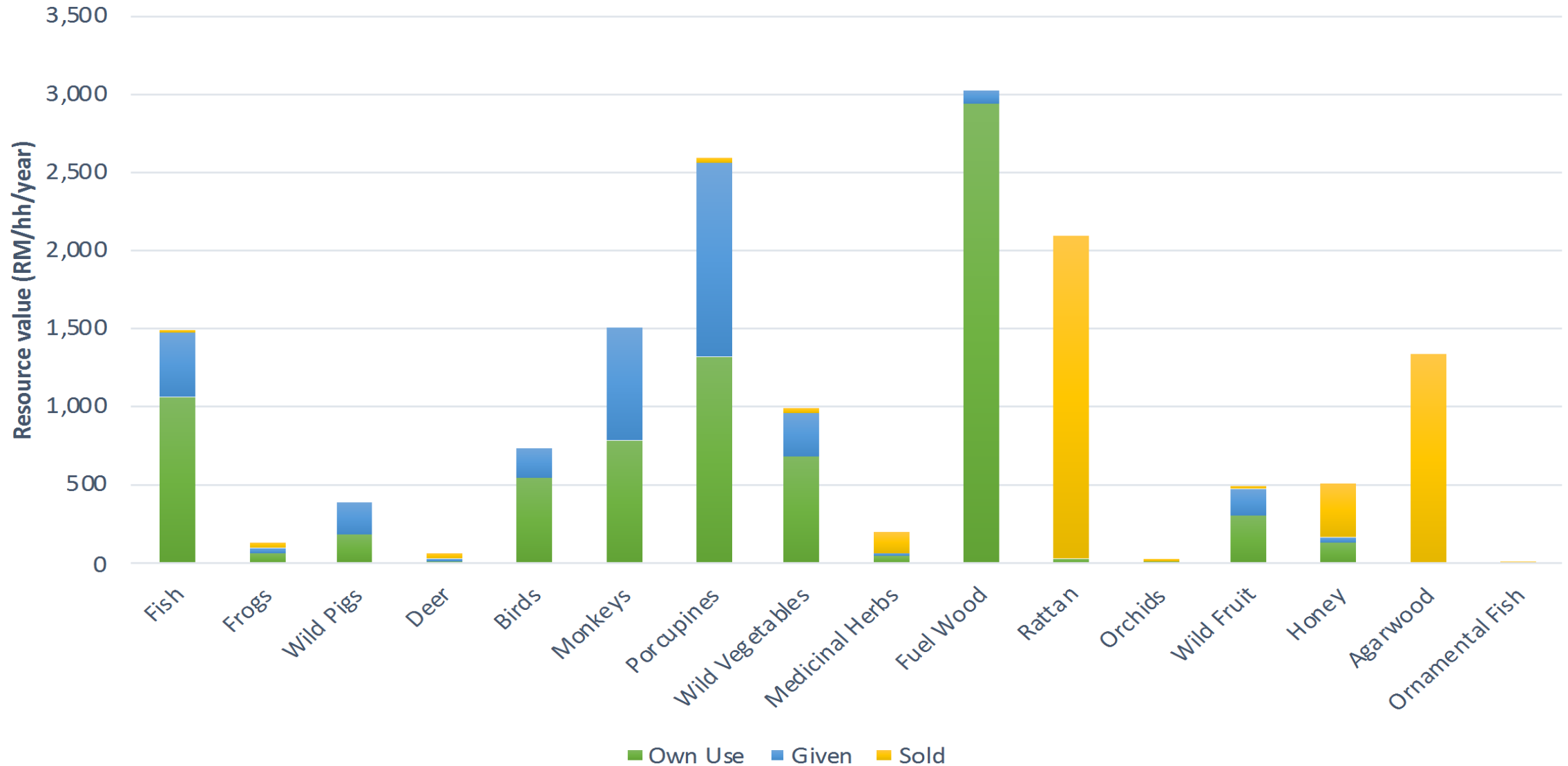


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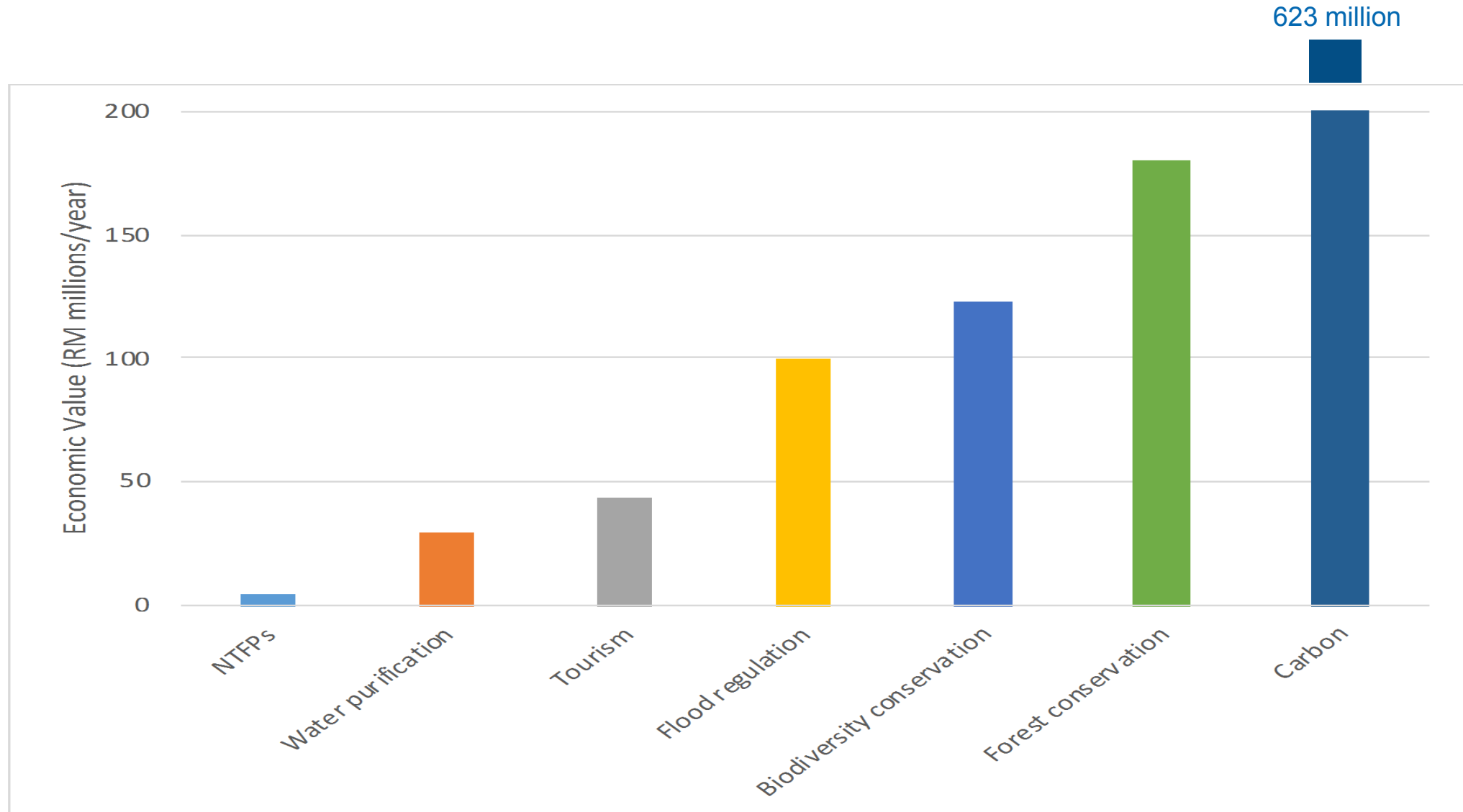
75%



# Taman Negara NTFP Values



# Early Analysis: Taman Negara Total Economic Value



# Conclusion

- Cost survey: local community employment
- Orang Asli communities:
  - High value of subsistence use
  - High interest in tourism
- Financing opportunities for protected areas:
  - Tourist entrance fees
  - Electricity bill conservation fee
  - Carbon + Biodiversity credits?
- Economic case for Ecological Fiscal Transfer







# Thank You

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UNDP for Malaysia, Singapore and Brunei Darussalam

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