



5th Malaysia Statistics Conference

29 November 2017

Sasana Kijang, Bank Negara Malaysia

2017



From Data to Knowledge : The Journey

Statistics for Sustainable Social Environmental Development

The Biodiversity Finance Initiative – BLOFIN : Financing Biodiversity for Sustainable Development

Gan Pek Chuan
UNDP



5th Malaysia Statistics Conference

BIOFIN

The Biodiversity Finance Initiative
combines finance, policies, and
economics to facilitate sustainable
biodiversity management



The Biodiversity Finance Initiative

Measuring better to manage better

*Making the investment case for
biodiversity stewardship*

Systematic underinvestment in biodiversity

Why?

- Short-term profit maximization and political cycles contrast with long-term investment needs and ecological cycles
- Limited public support and consequently political value
- Ineffective communication by advocates
- Economic/financial benefits not visible or easily understood

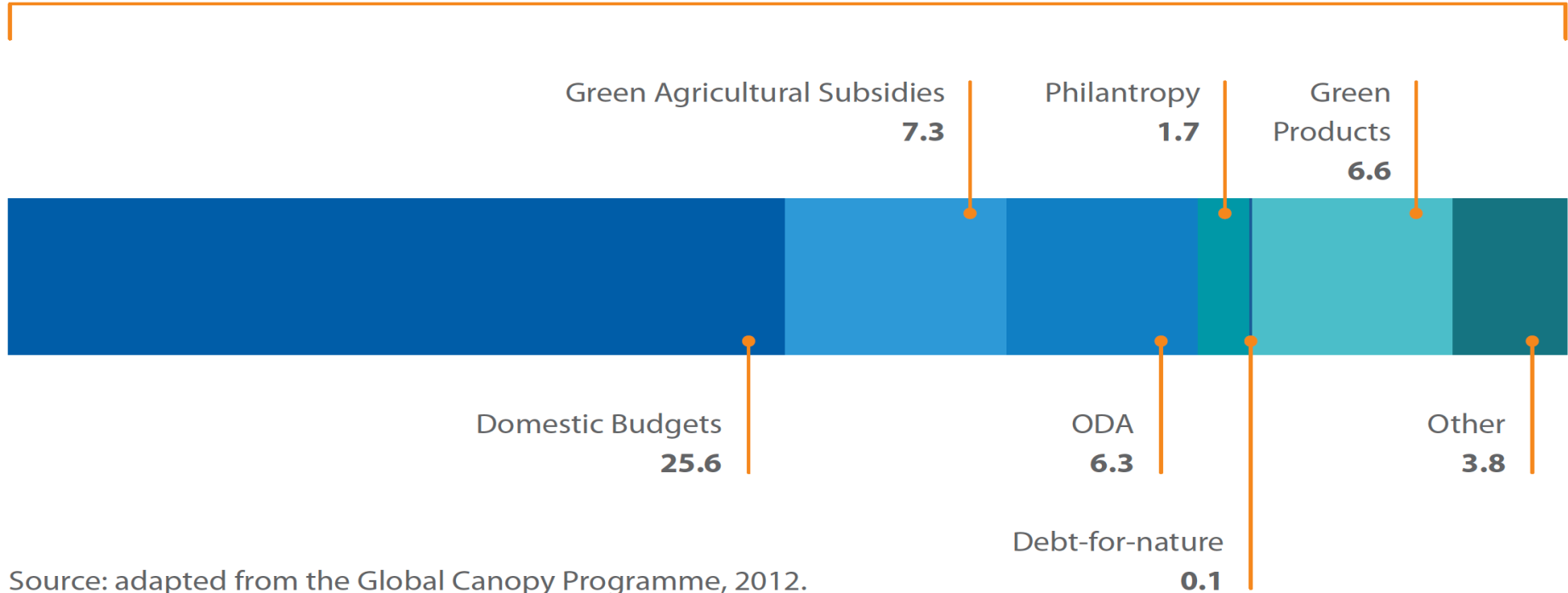
Biodiversity and Ecosystem Services are Natural Capital

- An estimated annual value of the world's natural capital: US\$125 trillion (Costanza et al. 2014)
- A conservative estimate of the economic value of the world's renewable natural assets: US\$44 trillion (2005 data, World Bank, 2011).
- The estimated global financial risk of unpriced natural capital costs to primary production and processing: US\$7.3 trillion per year (13% of global GDP in 2009)



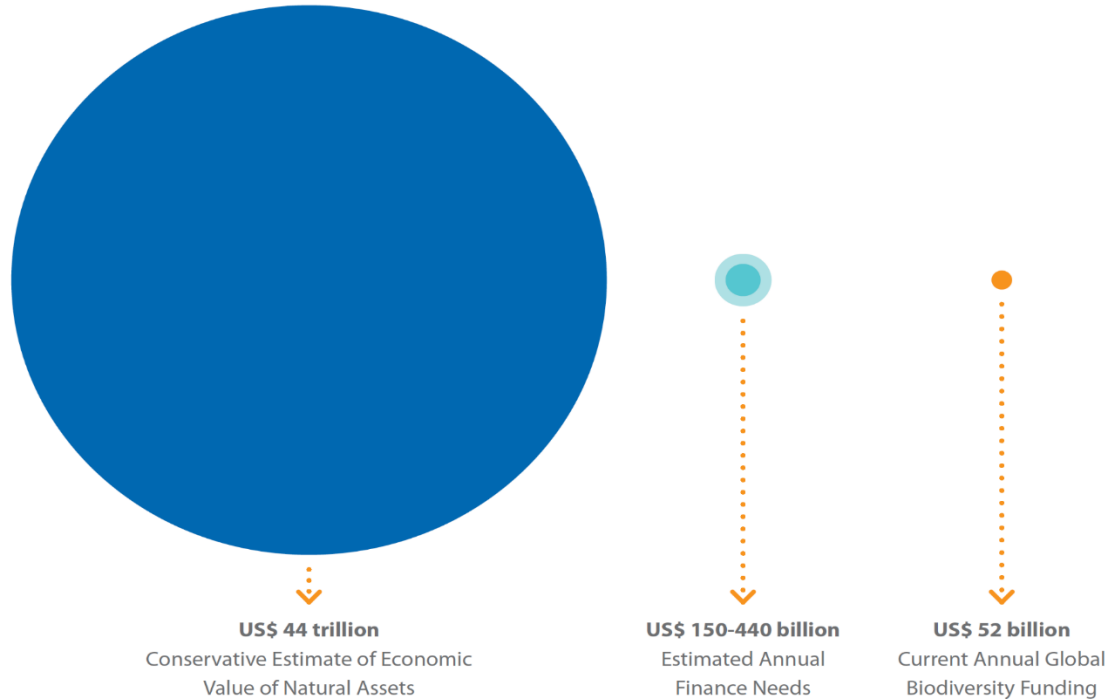
Historical annual biodiversity finance

US\$ 52 billion



Source: adapted from the Global Canopy Programme, 2012.

Biodiversity asset value vs. annual maintenance



What is Biodiversity Finance?

the practice of raising and managing capital and using financial incentive to support sustainable biodiversity management

includes private and public financial resources used to conserve biodiversity, investments in commercial activities that produce positive biodiversity outcomes and the value of the transactions in biodiversity-related markets

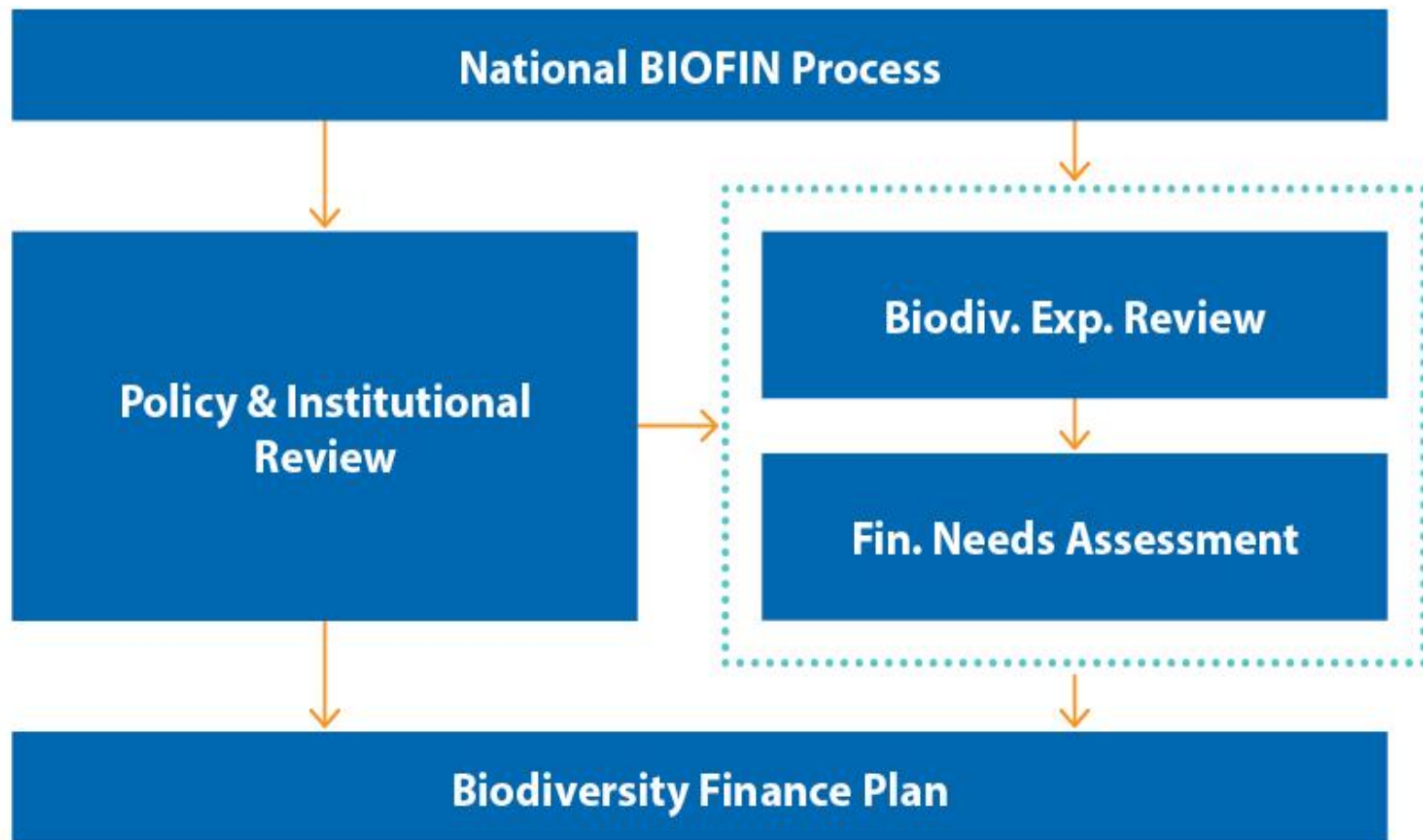


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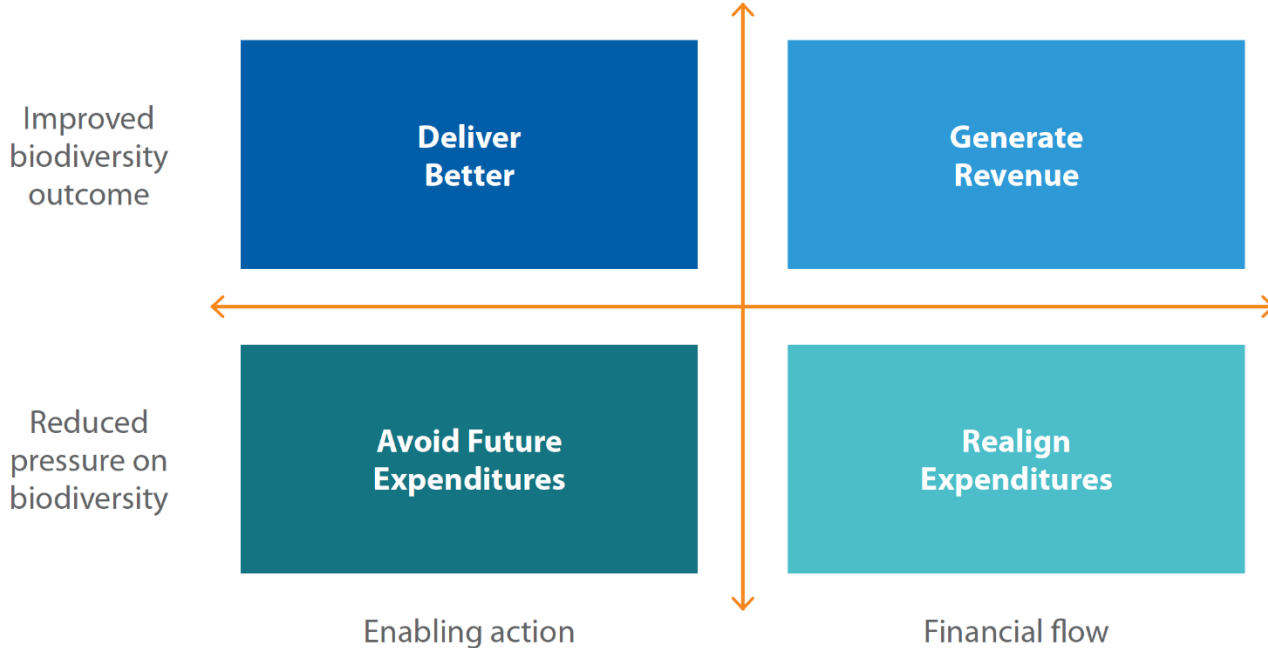
Background

- Launched in 2012, under initial grant from EU, followed by contributions from Germany, Norway, Switzerland & Flanders
- Methodology initially developed and piloted from 2013
- Latest methodology was presented at COP 13 in December 2016.
- Current timeline 2012-2018





BIOFIN sees biodiversity finance contributing to four financial results



Biodiversity finance goes beyond mobilizing new resources

Generate revenues

- Generate or leverage financial resources
- Ex: Impact investment, green taxes

Realign expenditures

- Re-orient existing financial flows
- Ex: Phase out harmful subsidies (e.g. fishery)

Avoid expenditures

- Prevent/reduce future expenditures needs
- Ex: taxes on pesticides, insurance products

Deliver better

- Reduce costs through efficiency, synergies
- Ex: Challenge funds, central procurement

COUNTRIES

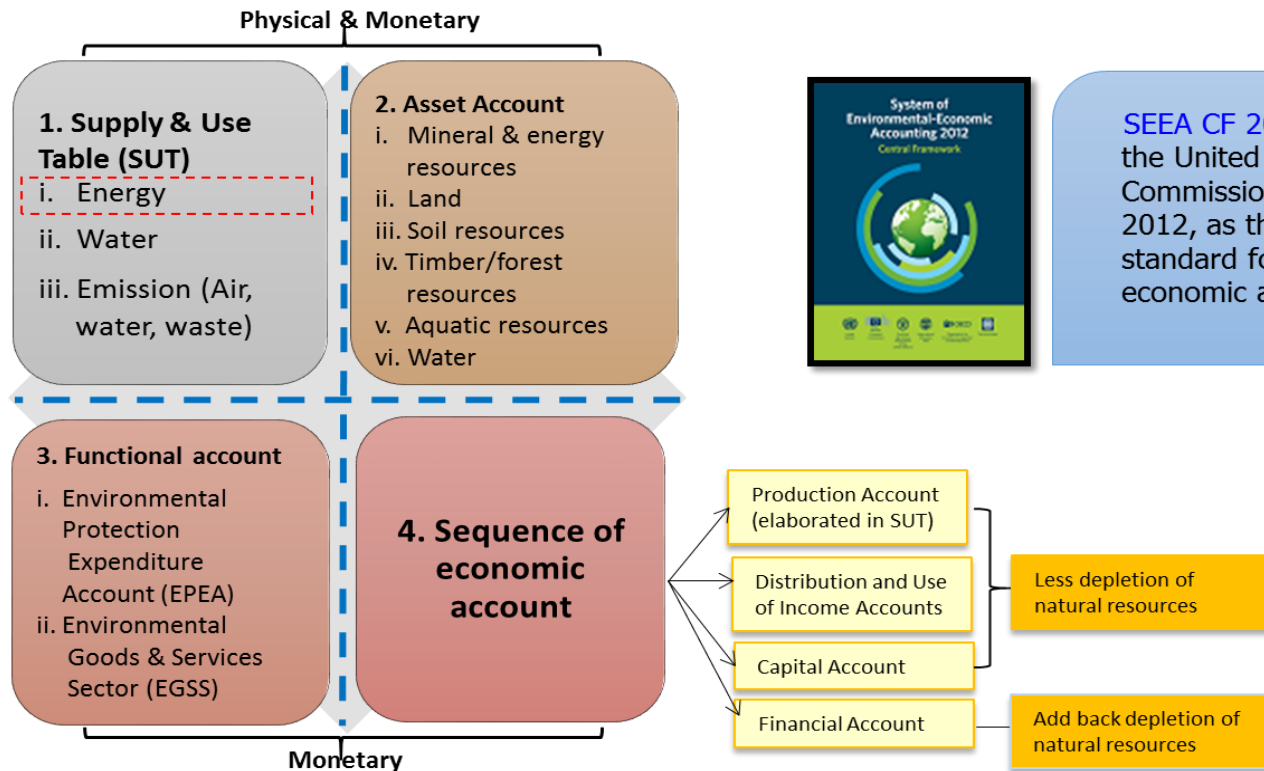


BIOFIN Results: Toward institutionalisation

- **New information:** Current spending and investment needs
- **New policy:** Enabling conditions, removal of inhibiting conditions
- **New accounting systems:** Pilot budget tagging and attribution across SDF objectives
- **New sources of finance:** Beyond publicly funded cost centers to biodiversity investment strategies.

New wine in old bottles?

SEEA CENTRAL FRAMEWORK



SEEA CF 2012 was adopted by the United Nations Statistical Commission, at its 43rd Session in 2012, as the international standard for environmental-economic accounting.

Nota: SEEA applies the accounting concepts, structures, rules and principles of the SNA (i.e. Production boundary, definition of products and territory/residential approach.)

Biodiversity Expenditure Review in Malaysia - Preliminary Findings

- Estimated national biodiversity expenditures is RM2.93 billion/year.
- The largest contributor is the private sector but this is largely due to their expenditures to control pollution (>90%) - compliance motivated
- Public sector is still the largest contributor that covers the most number of NPBD targets and biodiversity functions

	Public sector	NGO	Private sector	MLO
No. of NPBD targets identified	15	13	2	8
No. of BIOFIN categories identified	12*	11	4	5
No. of BIOFIN subcategories identified	27	29	--	9

Public sector did not cover Target 11 on invasive alien species and Target 14 on access and benefit sharing. NGO did not cover targets 11,12,13 and 14

**For the sub-sample that had BIOFIN sub categories, they covered only 9 BIOFIN categories*

National estimate of bio-d expenditure	per year (RM)	% share
A. Public sector - Federal	1,603,214,597	e) 54.6%
Stakeholders- 5% level involvement with biod	267,770,118	
Stakeholders- 20% level involvement with biod	615,526,212	
Stakeholders- 80% level involvement with biod	181,272,418	
Stakeholders- 100% level involvement with biod	538,645,849	
B. Government trust funds	5,036,271	f) 0.2%
National conservation trust fund	1,516,412	
Marine Reserve and Park Trust Fund	3,519,859	
C. State governments (12 states)	454,545,455	g) 15.5%
D. Private sector	812,362,034	h) 27.7%
Environmental Protection Expenditure	551,350,000	
Sustainability reports	261,012,034	
E. NGO, CSO	37,294,811	i) 1.3%
Small sized	16,925,245	
Medium sized	20,369,566	
F. Multilateral and bilateral organisations	25,382,006	j) 0.9%
UNDP type of projects	10,556,643	
SGP type of projects	14,825,363	
Grand total	2,937,835,172	100%

Total national expenditures – supply OE and DE
(2016)

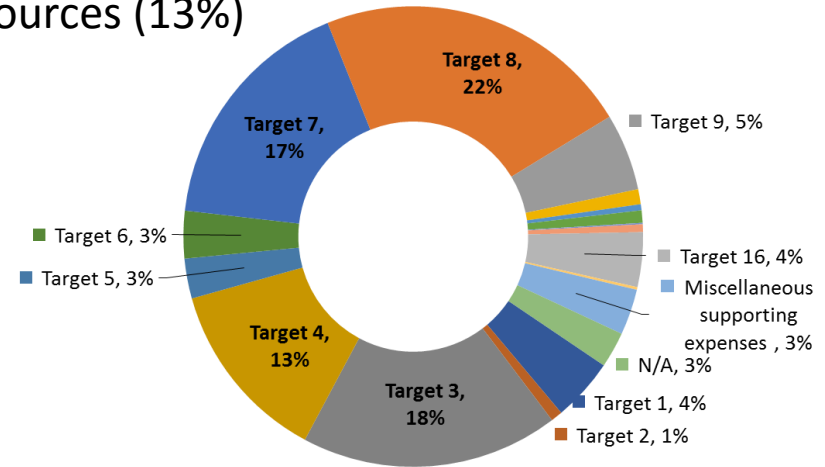
202,015,082,181

% share of bio-d in national expenditures

1.5%

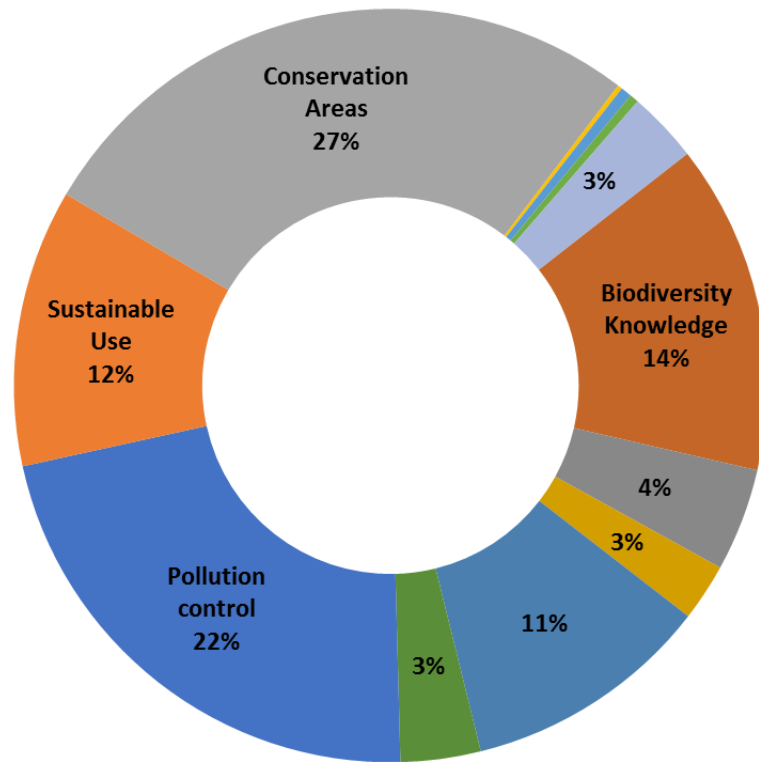
Expenditures by NPBD target (sample)

- All targets were covered except for Target 11
- Main areas spent on:
 - Target 8: Ecological corridors identified, protected and restored (22%)
 - Target 3: Biodiversity conservation mainstreamed (18%)
 - Target 7: Vulnerable ecosystems protected and restored (17%)
 - Target 4: sustainably harvested natural resources (13%)



Expenditures by BIOFIN category (sample)

- All 12 BIOFIN categories were covered by the expenditures
- Conservation areas followed by pollution control where most expenditures were made
- Topics that was only identified by one stakeholder group:
 - Biosafety – Invasive Alien species – *only public sector*
 - Resilient infra – urban systems, water systems – *only NGO*
 - ABS – Nagoya protocol – *only Multilateral organisation*



Spending patterns – BIOFIN sub-category (sample example)

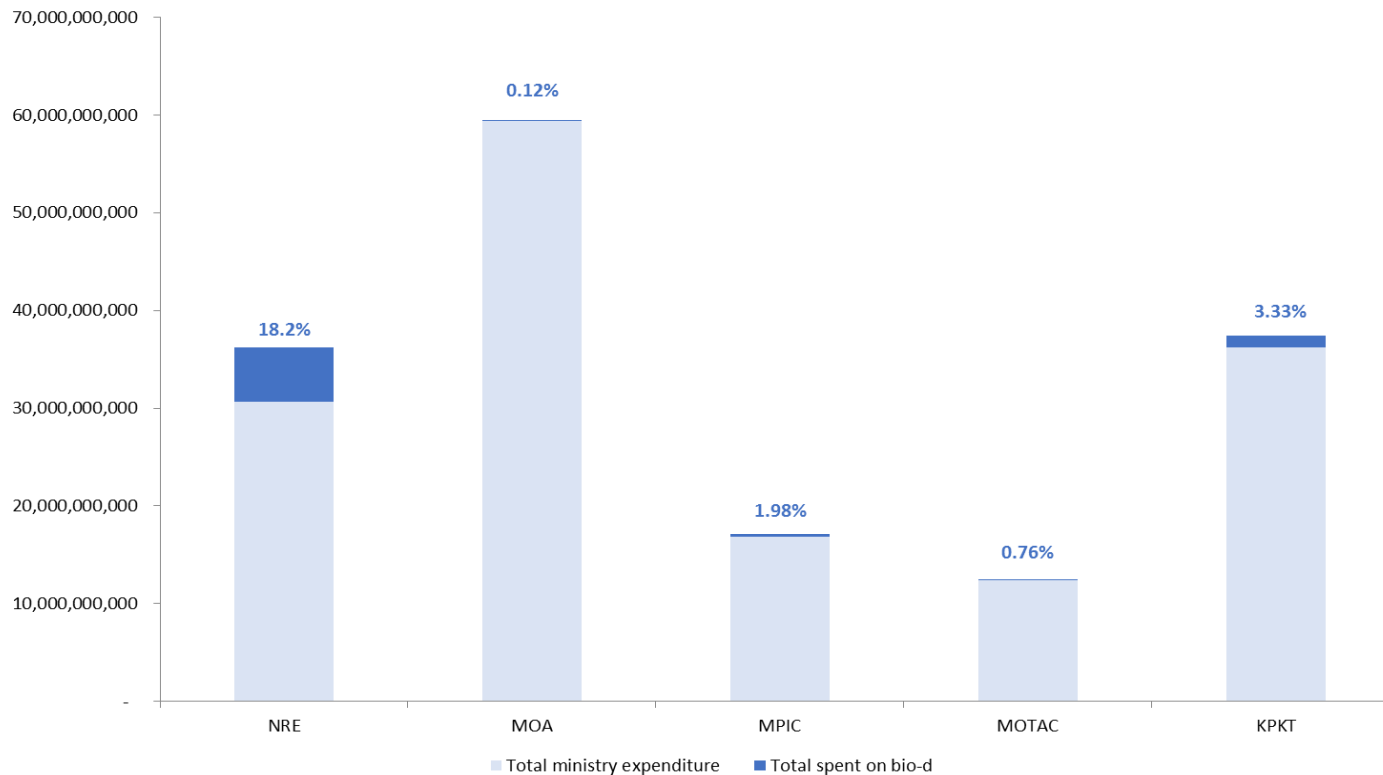
	NGO	MLO	Public sector	Total
Biodiversity Knowledge	26,330,628	12,102,401	103,968,340	142,401,369
Biodiversity knowledge improved, shared and applied	7,334,823	9,735,275	99,416,612	116,486,710
Biodiversity education	17,250,863		5,667,735	22,918,598
Indigenous and local community knowledge	882,652		3,312,244	4,194,896
Managerial and technical capacity increased	801,537	2,367,126	1,728,864	4,897,527
Evaluation, accounting and monitoring methods	38,547		109,630,489	109,669,036
Biodiversity communication	22,206		300,109,213	300,131,419

Areas for improvement

- Sample size is small – less robust findings and more assumptions
- Other sources of funds not included – Most primary data so far only includes federal allocations, other sources of funds have not been included and analysed
- Incomplete data included – Due to the cut-off time set for the draft report, data collected then is included in analysis (*Official cut-off now has been set at 16th of November*)
- Double counting avoidance methods not tested in this study
 - Data collected from public sector had not yet considered other funds
 - Private sector participants have not submitted data on funds they disperse to NGOs

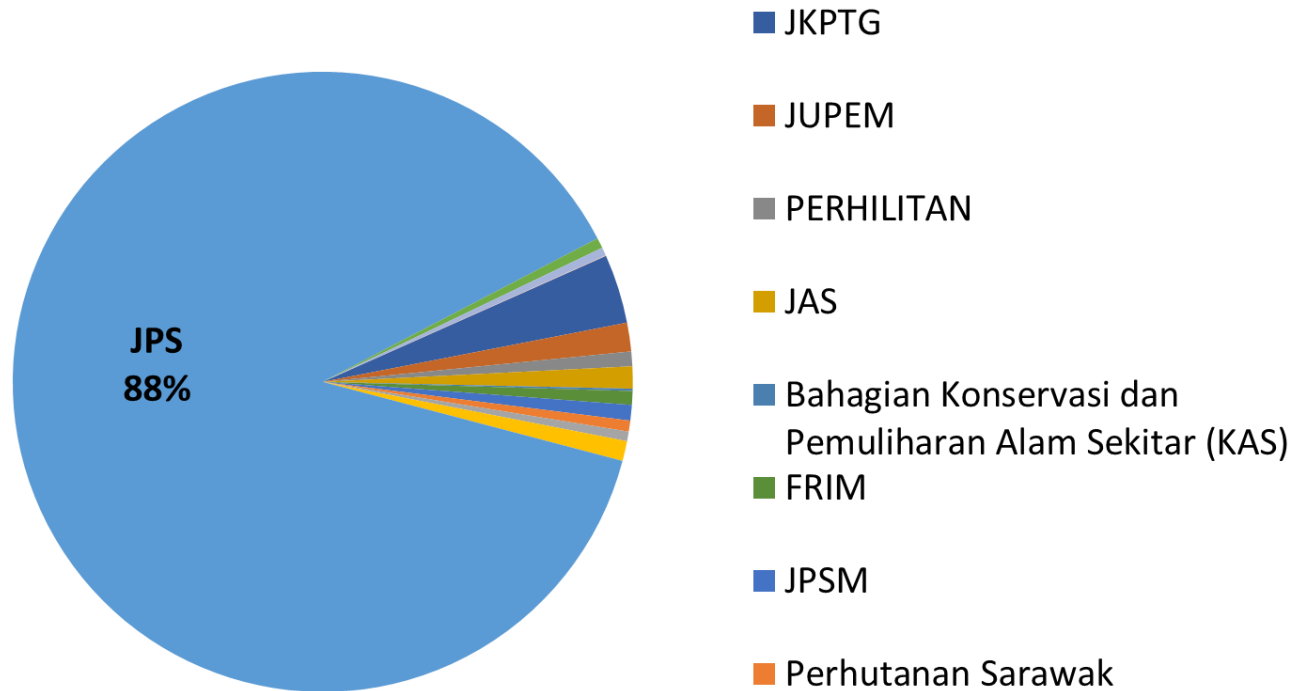
Public sector – BioD share of expenditures

Total spent on biodiversity vs Total ministry expenditures (2006-2017)

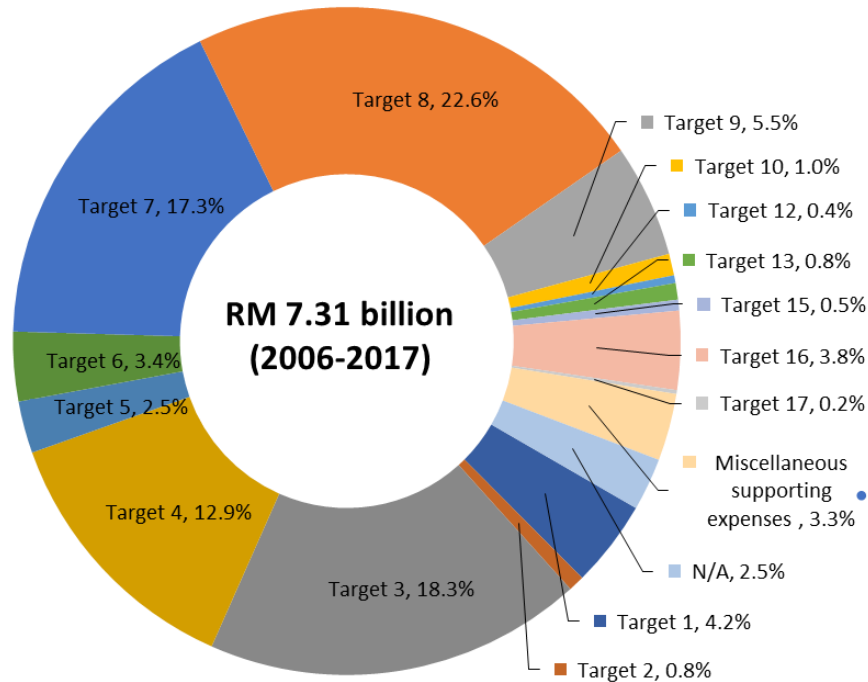


Public sector – NRE's DE breakdown

2009 - 2011 Breakdown of NRE DE by Relevant Agencies

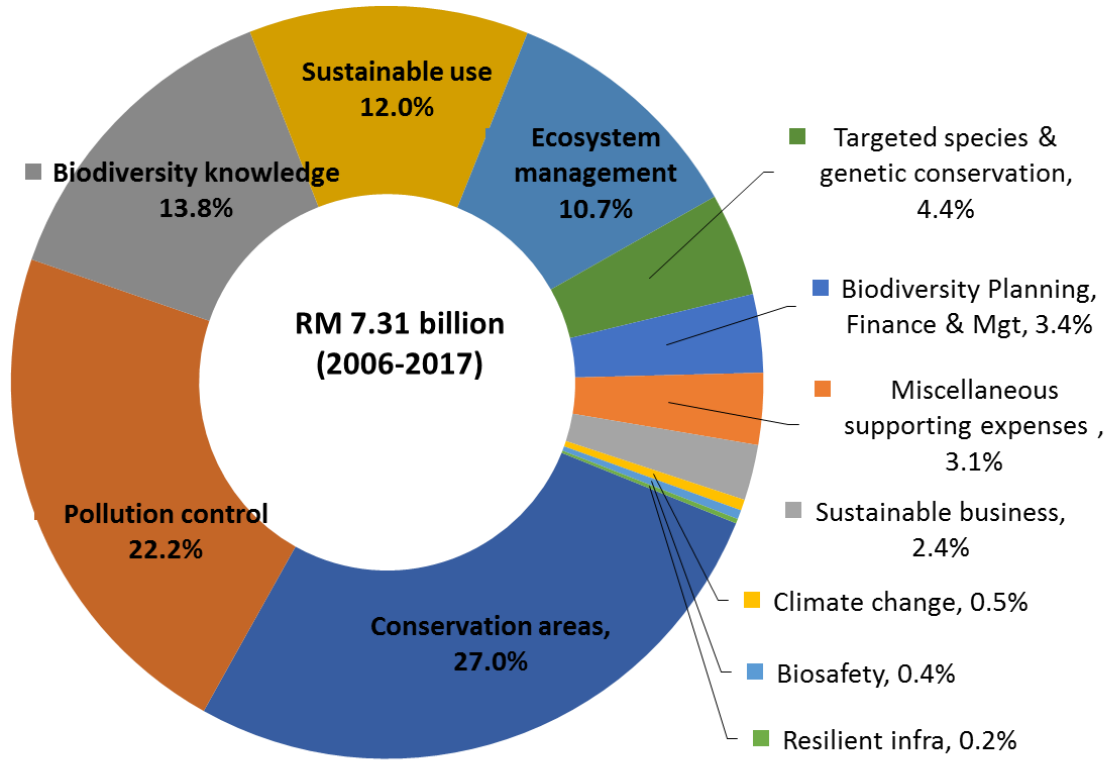


Spending concentrations – NPBD targets



- Most expenditures spent on:
 - Target 8 on ecological corridors
 - Target 3 on mainstreaming biodiversity
 - Target 7 on protecting and restoring vulnerable ecosystems
 - Target 4 on sustainable harvesting of natural resources
- Biodiversity related expenditures that did not fit into any of the NPBD targets (2.5%)
- Miscellaneous supporting expenses was 3.3%

Spending concentrations – BIOFIN category



Thank you!