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Environment, Nature Conservation,
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Office fédéral de l'environnement OFEV
Ufficio federale dell'ambiente UFAM
Uffizi federal d'ambient UFAM



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Resilient nations.

The Biodiversity Finance Initiative (BIOFIN)

Mobilising Resources for Biodiversity and Sustainable Development

Feb 2016



BIOFIN – Objectives & Overview

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- **Overarching objectives of BIOFIN:**
 - Develop and pilot a new approach and methodology to fill the gap
 - Support parties in reporting on resource mobilisation to CBD
 - Build on and help finance the implementation of NBSAPs
 - Transform national-level enabling environment for countries to better mobilise and align domestic and international biodiversity finance
- Initial US\$ 5m from EU to develop methodology and pilot in 8 countries (2012-15)
- Jan 2015: US\$ 28m from Germany (22m), EU, Norway, Switzerland & Flanders





Two Main Axes of Work:

1. Global

2. National



BIOFIN – Axis 1: Global Work

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NORWEGIAN MINISTRY
OF FOREIGN AFFAIRS



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2013-2014: Develop &
Peer Review Approach &
Assessment Methodologies

THE BIOFIN WORKBOOK
A Tool to Mobilize Financial Resources for Biodiversity and Development
2014
VERSION

BIOFIN – The Biodiversity Finance Initiative

UNDP
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Two Main Axes of Work:

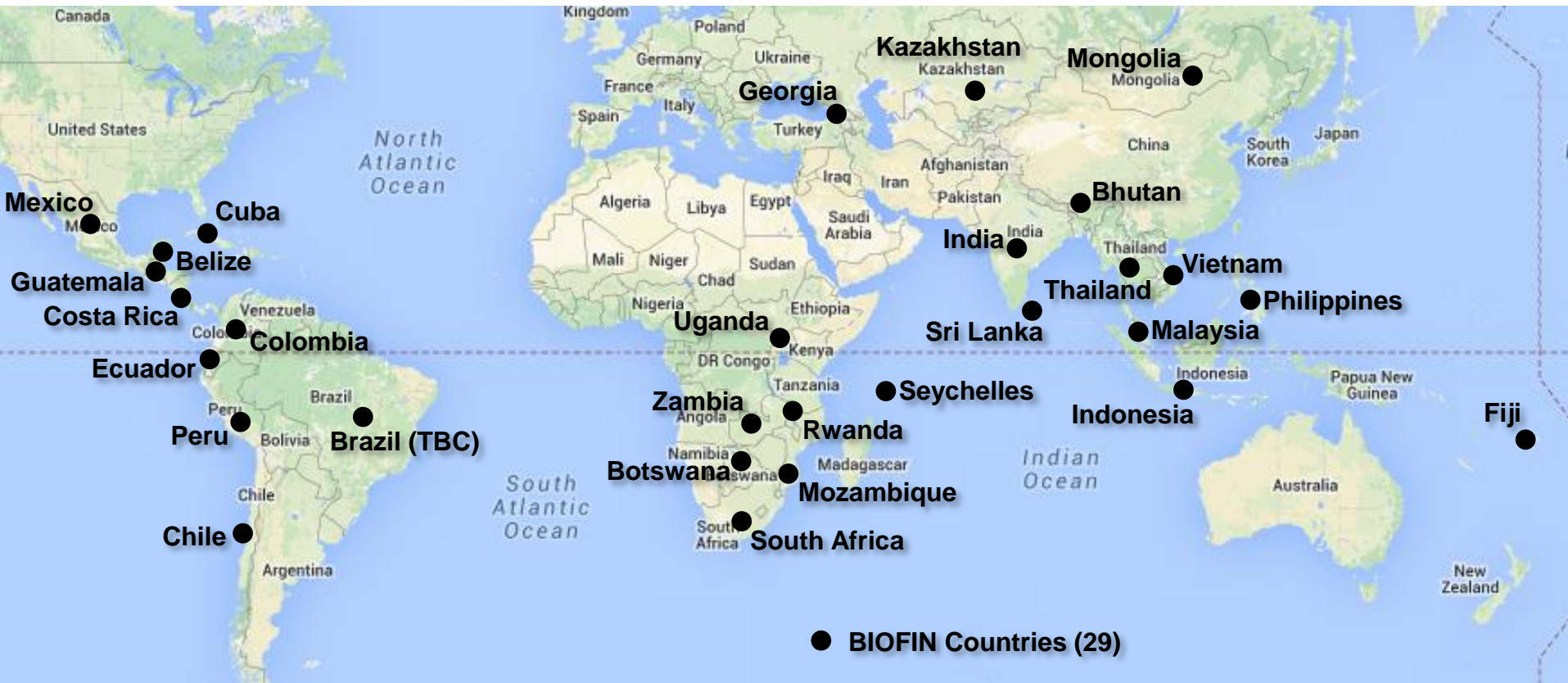
1. Global

2. National



BIOFIN – Axis 2: National Work

- Pilot/implement in 30 core countries (Feb 2016)
- Core country national budgets: from \$468,000 to \$1,000,000
- Outreach to non-core countries globally:
 - regional nodes (S-S cooperation)
 - UNDP-BIOFIN / CBD training and expert workshops on resource mobilisation



Approach

- Policy and Institutional Review (PIR)
- Biodiversity Expenditure Review (BER)
- Biodiversity Financing Needs Assessment
- Biodiversity Finance Plan (Resource Mobilisation)
- Initial Implementation of the Finance Plan

Policy and Institutional Review

- Identifying national vision and key trends for biodiversity and sustainable development
- Identifying sectoral interactions with biodiversity, ecosystems and ecosystem services
 - Status and trends in biodiversity and biodiversity valuation
 - Key economic sectors and their interaction with biodiversity and ecosystem services
 - Prioritized set of key sectors
 - Financial and economic drivers of biodiversity trends
- Current status of biodiversity finance in the country
 - Finance mechanism currently in use in the country, identify
 - Major government subsidies, identify the following
 - Biodiversity finance legislation, laws, acts that contribute to drivers
- Identifying key biodiversity finance actors and stakeholders
- Identifying institutional arrangements and dimensions in biodiversity finance

Biodiversity Expenditure Review

- Identifying national-level public sector data
- Analyzing public and private biodiversity-related expenditures
- Projecting future expenditures (from historical expenditures and other information)
- Assessing biodiversity-harmful expenditures
- Assessing biodiversity-generated revenue
- Conducting summary analyses of biodiversity expenditure review
 - Total budget with total expenditure, biodiversity-related budget with biodiversity-related expenditures, and biodiversity expenditures with total expenditures on an annual basis

Namibian Government Biodiversity Expenditure Review

Disaggregating Budget and Expenditure Data

National

Total Budget /
Expenditure

Ministry

Ministry of Environment
and Tourism (MET)

Programme

Wildlife and Protected
Area Management

Tourism Development

Activity

Fencing of
conservation areas

Water provision for
game / wildlife

Methodology

Govt. Biodiversity
Expenditure

Non-Govt.
Biodiversity
Expenditure

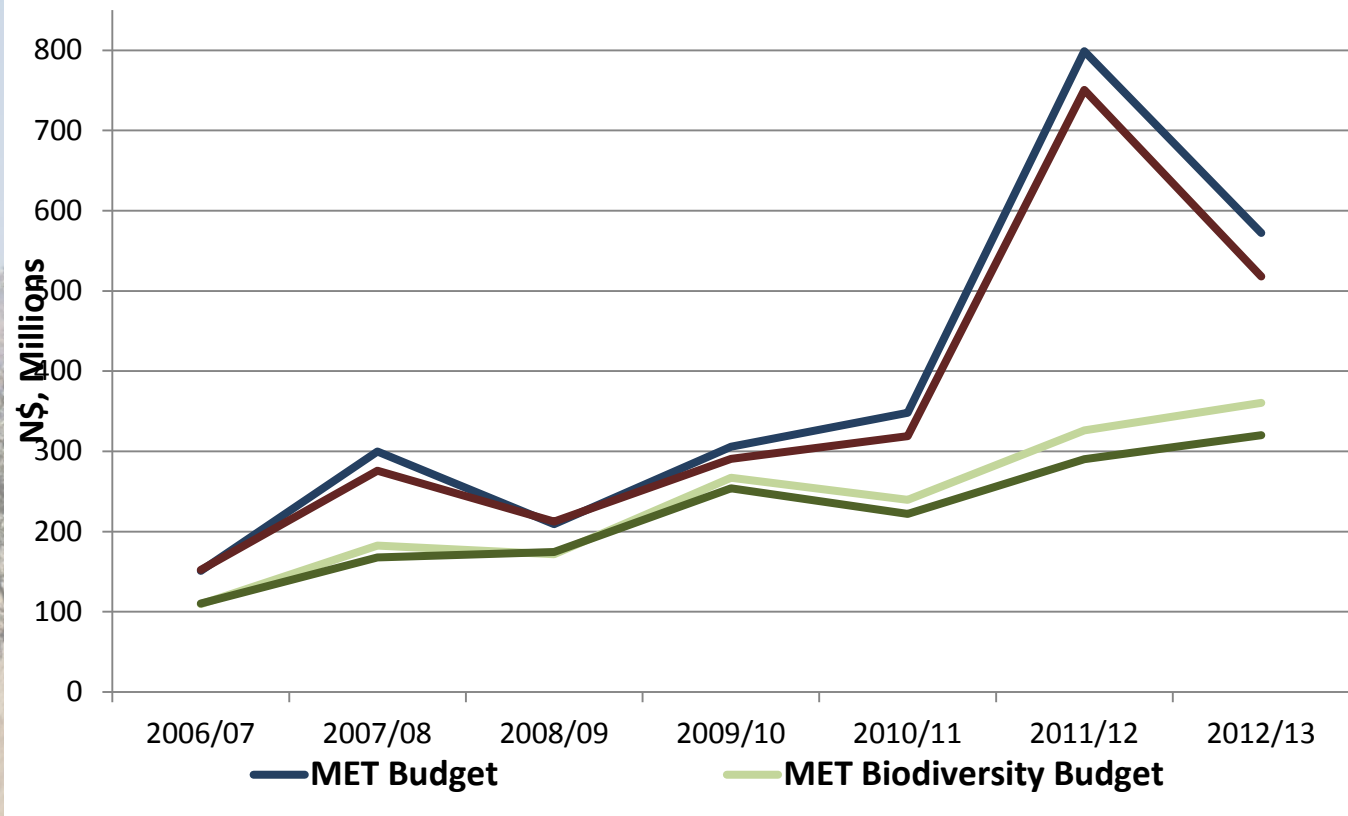
Total Biodiversity
Expenditure

Biodiversity
Expenditure and
National Indicators

Conclusions

Namibian Government Biodiversity Expenditure Review

MET Budget and Expenditure Estimates: 2006/07 – 2012/13



Methodology

Govt. Biodiversity
Expenditure

Non-Govt.
Biodiversity
Expenditure

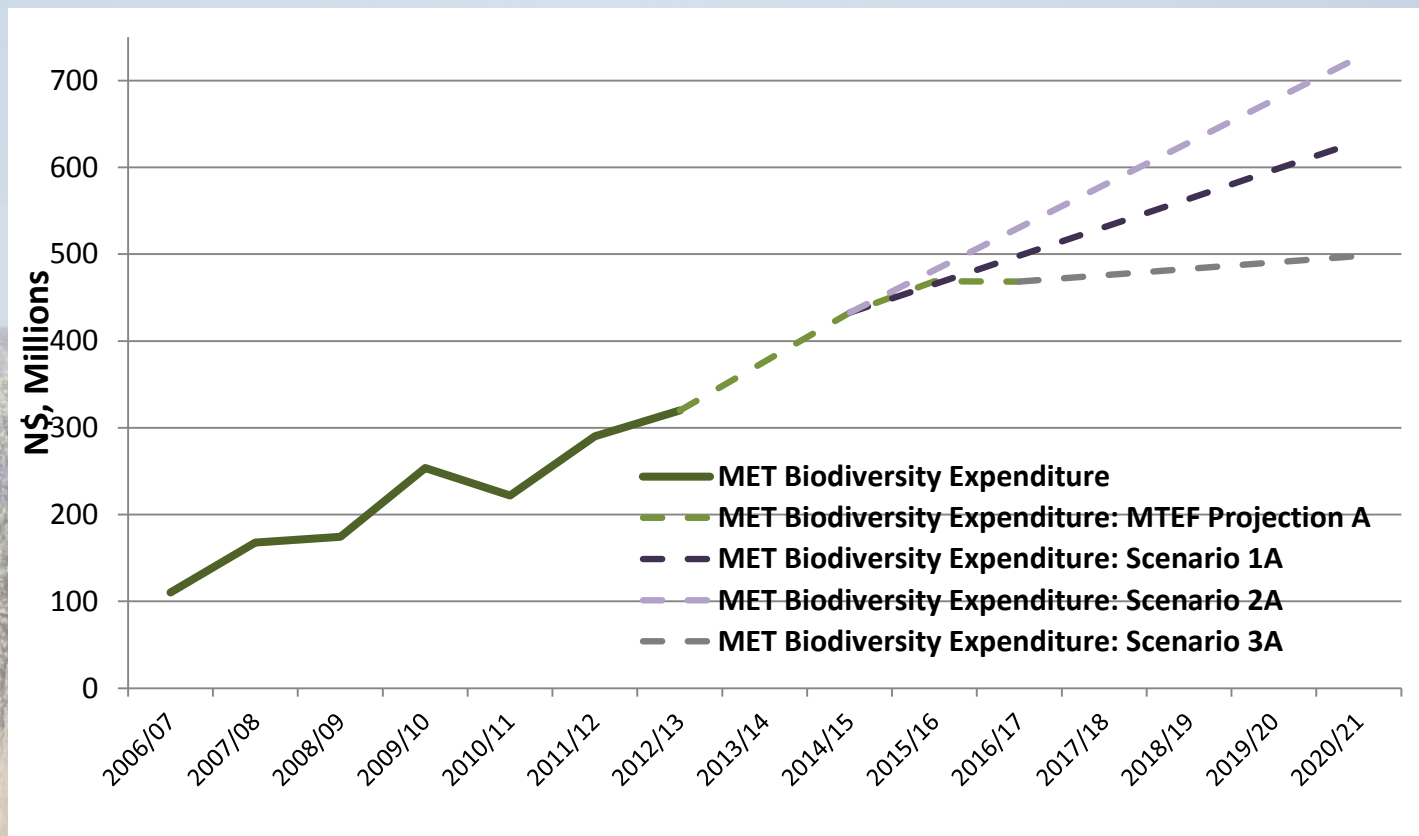
Total Biodiversity
Expenditure

Biodiversity
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National Indicators

Conclusions

Namibian Government Biodiversity Expenditure Review

MET Biodiversity Expenditure Projections: 2006/07 – 2012/13



Methodology

Govt. Biodiversity Expenditure

Non-Govt. Biodiversity Expenditure

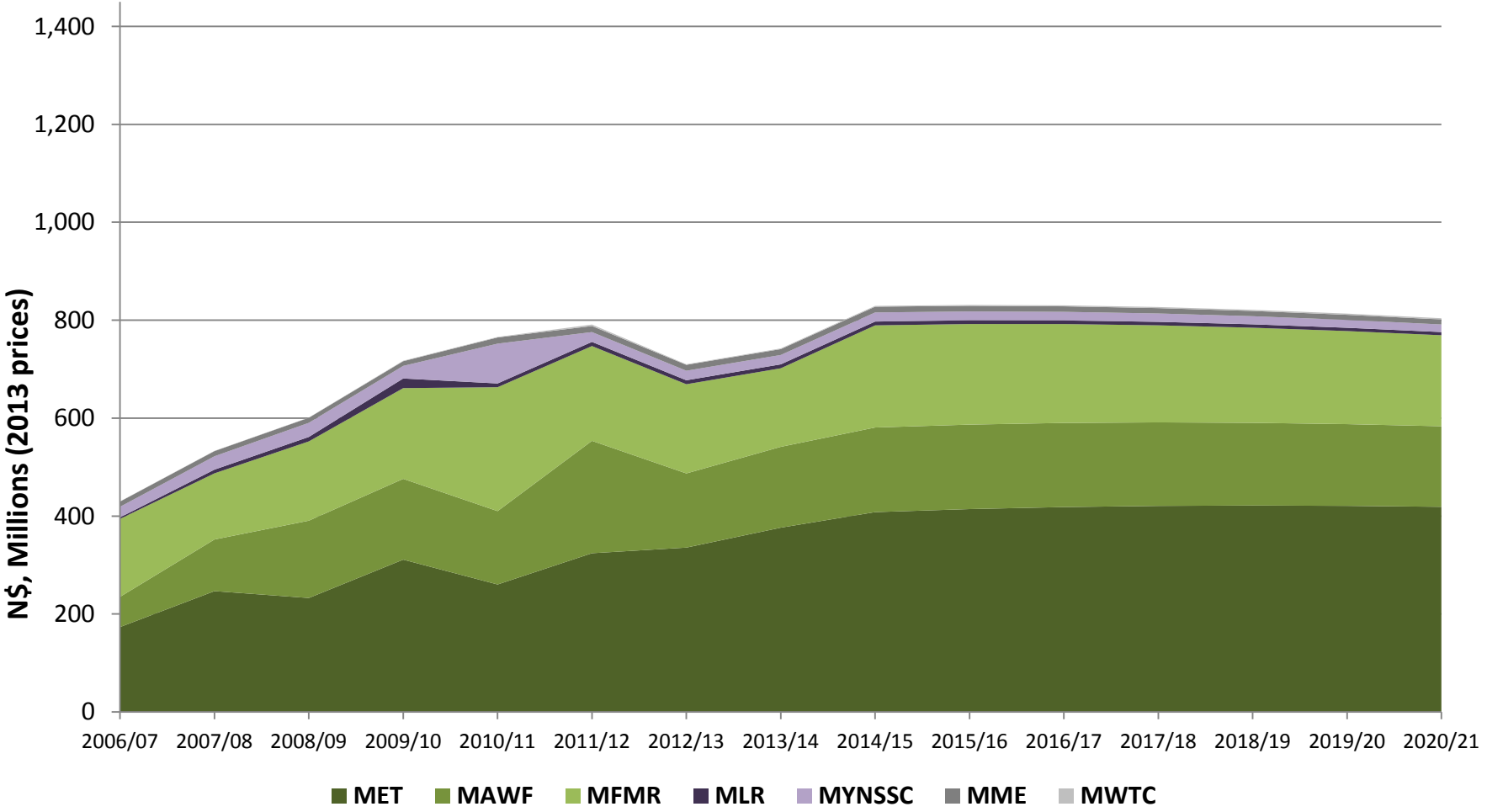
Total Biodiversity Expenditure

Biodiversity Expenditure and National Indicators

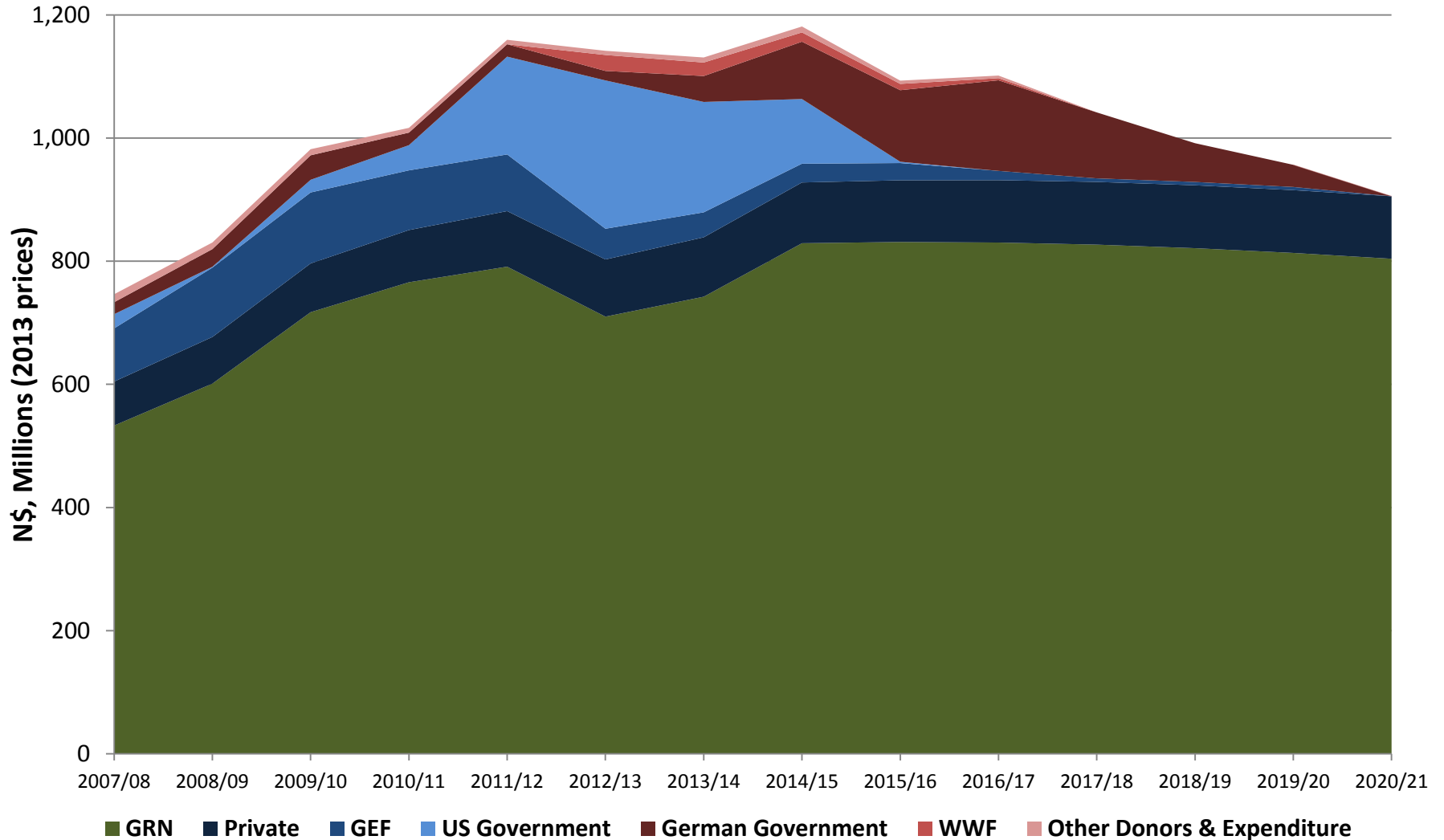
Conclusions

Namibian Government Biodiversity Expenditure Review

Real Govt. Biodiversity Expenditure & Projections: 2006/07–2020/21

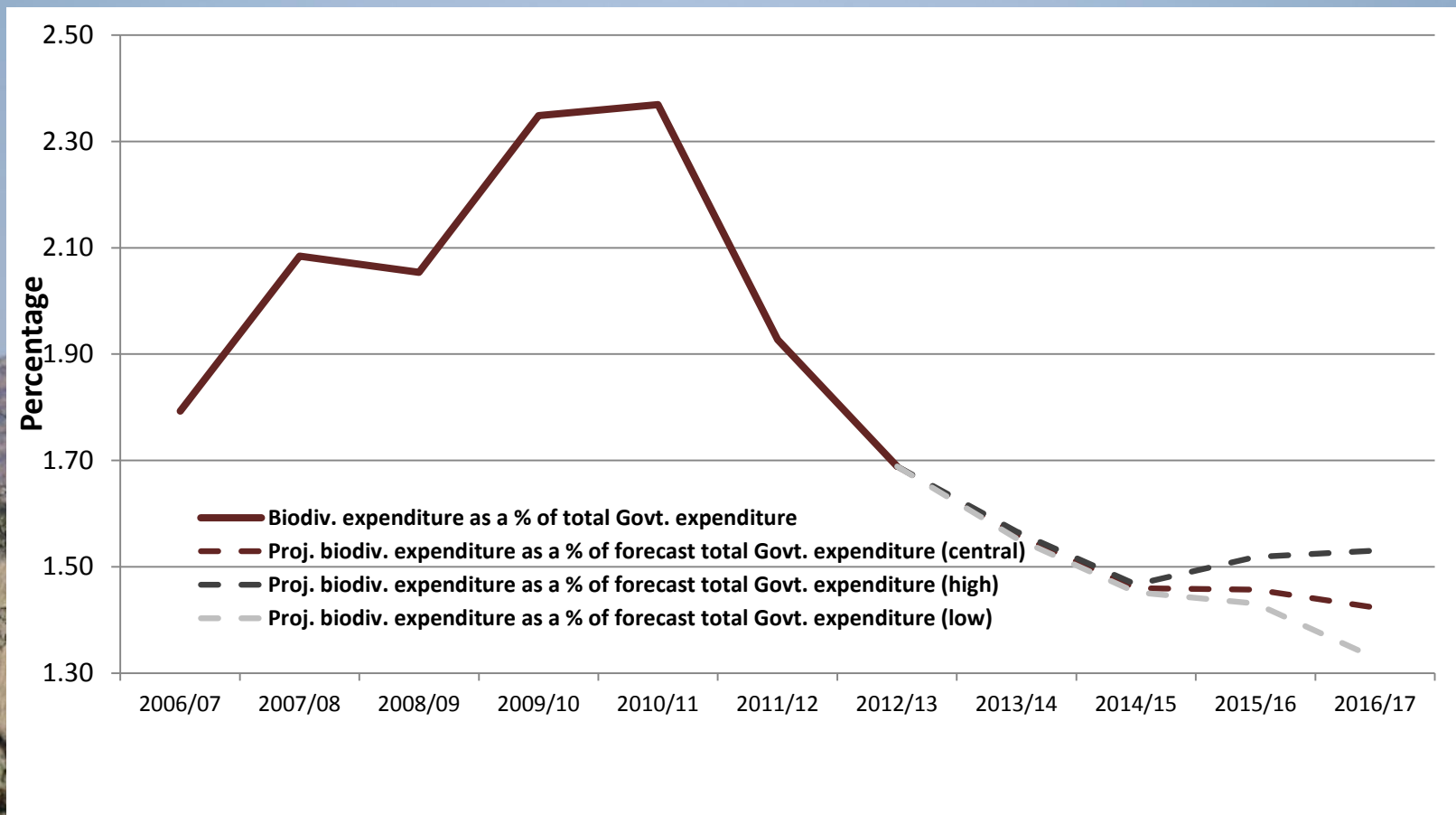


Namibia - Real Total Biodiversity Expenditure: 2007/08 – 2020/21



Biodiversity Expenditure and National Indicators

Biodiversity Expenditure as a Percentage of Total Govt. Expenditure



Methodology

Govt.
Biodiversity
Expenditure

Non-Govt.
Biodiversity
Expenditure

Total
Biodiversity
Expenditure

Biodiversity
Expenditure and
National Indicators

Conclusions

Biodiversity Finance Needs Assessment

- Identifying the key biodiversity actions to be included in the biodiversity finance needs assessment
- Determining the costs of implementing the NBSAP and other key biodiversity actions
- Analyze biodiversity costs
 - Financial actor or set of actors
 - Action or set of actions
- Analyzing biodiversity finance gaps

Clarify NBSAP Activities / Results

- Categories – BIOFIN, Aichi Targets, National Strategies
- Clear Targets
 - Are they quantified?
 - Geographical?
- Clear Activities / Actions / Programs
- Specific Quantitative Results per Activities
- Initial Costs Assessments
- Reality Check - Cost Effectiveness, Cost Savings
- Refinement of Activities / Results / Targets

ARE THESE STATEMENTS “COSTABLE” OR NOT?

Example 1 . Implement Ballast Water Convention provisions consistent with national legislation

Example 2. Rehabilitate priority inland wetlands including peatlands

Example 3. Harmonize research with conservation agenda

Identification
of all
activities and
sub activities
leading to the
targets

Rehabilitate priority inland wetlands including peatlands

Management of settlements in wetlands is designed and implemented

Reforestation is implemented

Soil conservation technologies in priority wetlands are implemented

Identify marsh areas that are degraded

Use of
Accounting
Codes based
on
Government
Chart of
Accounts

	Personnel Services
701-734	personnel and staff
	MOOE
799	professional services and consultants
	Travel
751	local travel
752	foreign travel
	Communications
771	postage and deliveries
772	landline
773	mobile
774	internet
775	cable, satellite
781	Printing and publications
782	Rent
766-767	utilities
761	gasoline, oil and lubricants

Research
on unit
costs of
common
costs

- ◆ Salaries of government personnel (per grade)
- ◆ Fees of consultants
- ◆ Costs of meetings
- ◆ Costs of travel
- ◆ Costs of equipment
- ◆ Cost of reforestation
- ◆ Labs
- ◆ Bird bands
- ◆ Supplies and equipment

All found in Annex to Cost Report

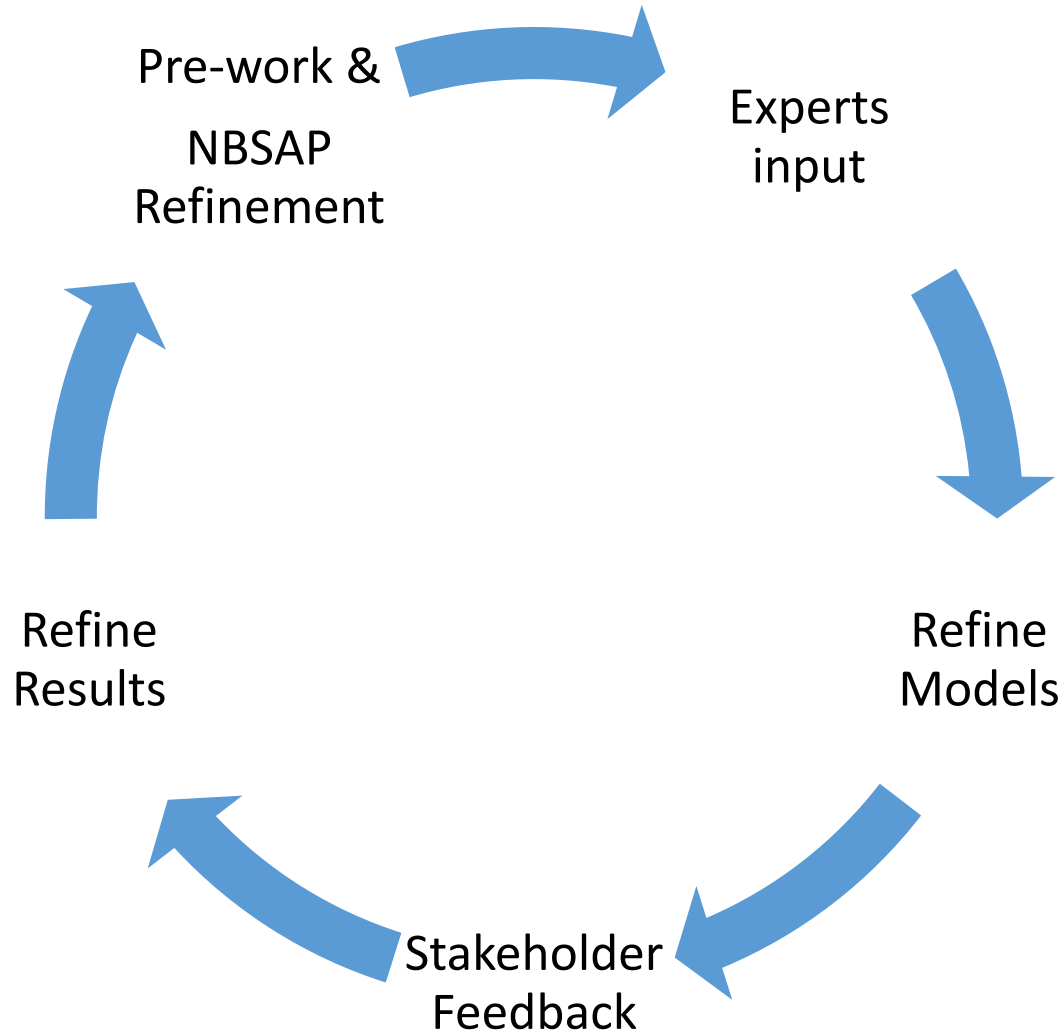
Preparation of
cost
spreadsheet
per thematic
area / per
issue

- ◆ Unit costs
- ◆ Quantities
- ◆ Low Scenario
- ◆ High Scenario

AGROBIODIVERSITY
Strategy: Improve the status of agrobiodiversity and promote biodiversity-friendly agriculture

Direct Actions	ACTIVITIES/ ITEMS FOR COSTING	UNIT COST (LOW)	UNIT COST (HIGH)	UNIT	FREQUENCY	DAYS	TOTAL COST (LOW)	TOTAL COST (HIGH)	
		PhP	PhP				PhP	PhP	
1. Increase the number of in situ and ex situ sites that conserve and propagate diverse indigenous species and varieties	PERSONNEL								
	Personnel (DA)	2,669,412	2,669,412	PhP lump sum per year per site	4		10,677,648	10,677,648	
	MOOE								
	Consultant								
	Plant Breeding Specialists	135,000	180,000	PhP per man-month	10		1,350,000	1,800,000	
	Travel								
	Transportation	12,000	13,800	PhP per pax	6		72,000	82,800	
	Per diem	1,500	8,325	PhP per pax	5	8	60,000	333,000	
	Other MOOE								
	Training	90,000	427,750	PhP per pax	2	3	540,000	2,566,500	
	Internet	600	690	PhP per unit per month	180		108,000	124,200	
	Gasoline, oil and Lubricants	4,000	4,600	PhP per month	36		144,000	165,600	
	Repairs, Maintenance and Improvement	450,000	517,500	PhP lump sum per site	4		1,800,000	2,070,000	
	Supplies and materials	130,000	149,500	PhP lump sum per pax per site	4		520,000	598,000	
	Other supplies and materials	1,696,006	1,950,407	PhP lum sum for accession cost per site	4		6,784,024	7,801,628	
	Water expenses	2,150	2,473	PhP lump sum per month per site	36		77,400	89,010	
	Electricity	12,900	14,835	PhP lump sum per month per site	36		464,400	534,060	
	Research Exploration and Development Expenses	29,670	34,121	PhP per site	4		118,680	136,482	
	Subsidies and donations to LGUs	900,000	1,035,000	PhP lump sum per site	4		3,600,000	4,140,000	
	Subsidies and donations to NGOs	1,500,000	1,725,000	PhP lump sum per site	200		300,000,000	345,000,000	
	Establishment and funding support for new CB breeding program	7,875,000	9,056,250	PhP lump sum per site	2		15,750,000	18,112,500	
	Capital Outlay								
	Office building/ laboratory	3,000,000	3,450,000	PhP lump sum per site	4		12,000,000	13,800,000	
Office equipment	140,000	161,000	PhP lump sum per site	4		560,000	644,000		
SUB-TOTAL							354,626,152	408,675,428	

Budgeting Refinements

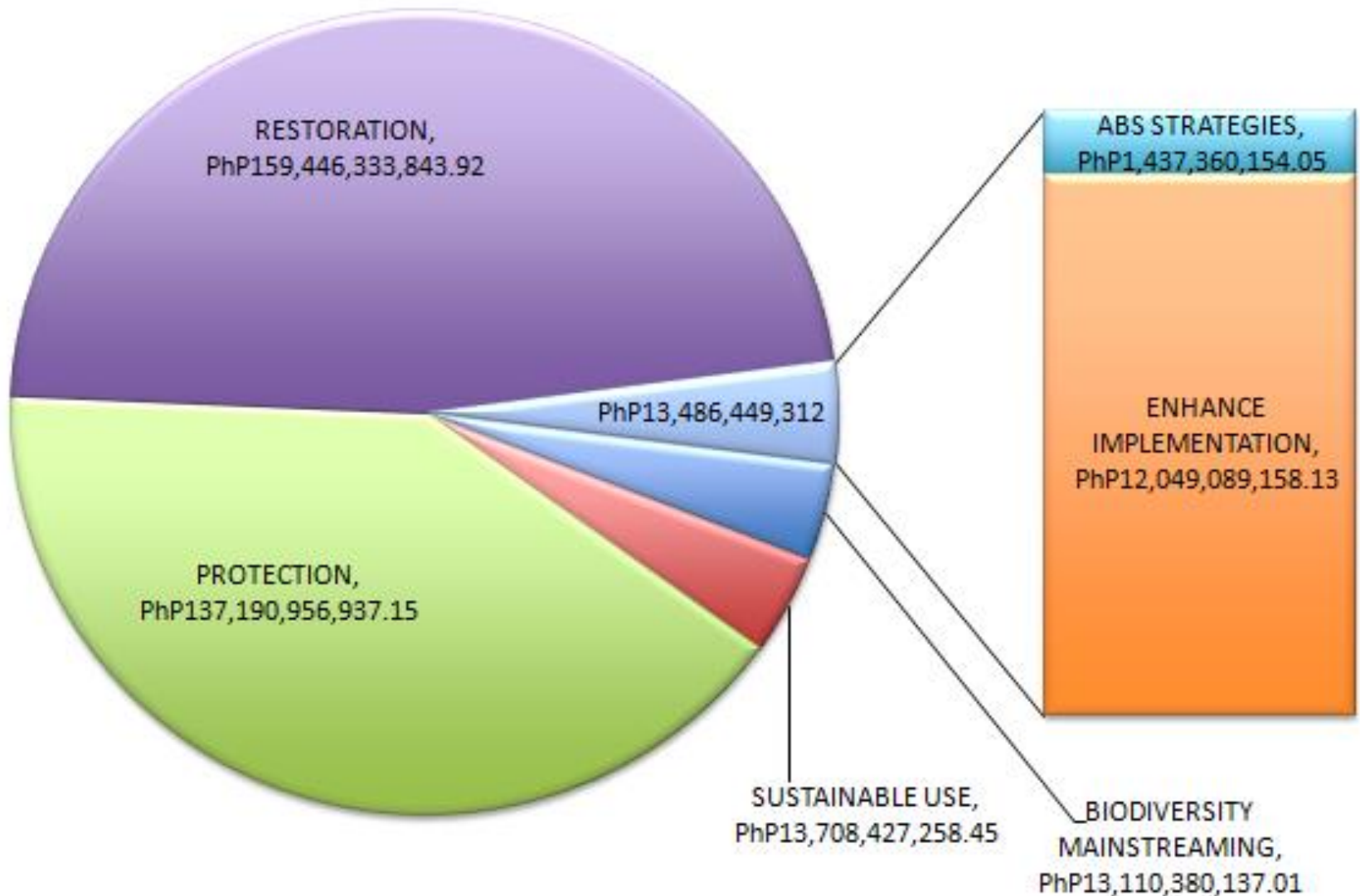


Summary of Cost per Thematic Area

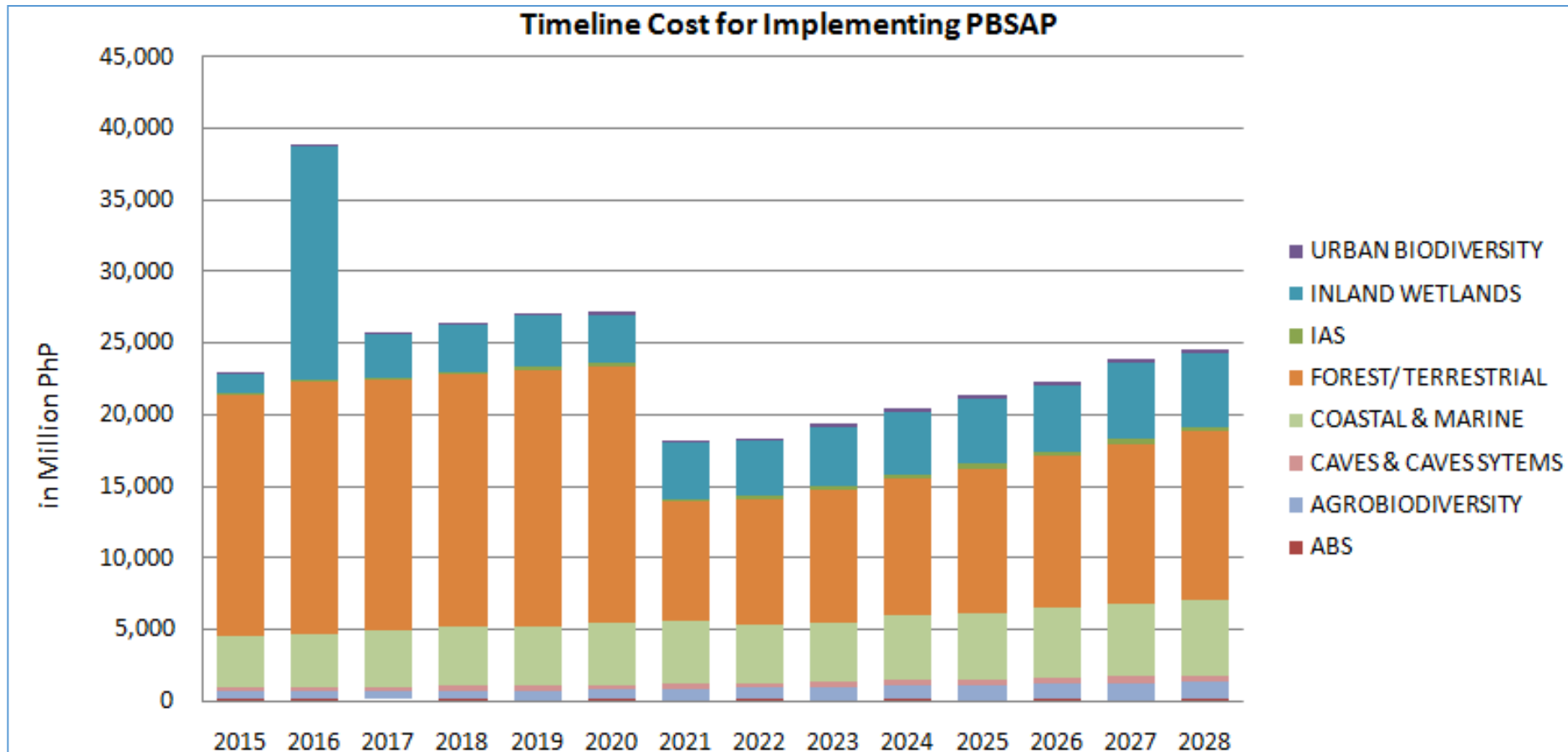
THEMATIC AREA	LOW		HIGH		PERCENTAGE
	PhP	USD	PhP	USD	
ABS	1,437,360,154	31,941,337	1,822,595,204	40,502,116	0.4%
IAS	3,430,242,055	76,227,601	4,190,651,067	93,125,579	1.0%
URBAN BIODIVERSITY	2,779,459,958	61,765,777	3,726,644,438	82,814,321	0.8%
INLAND WETLANDS	67,099,361,104	1,491,096,913	77,745,127,907	1,727,669,509	19.9%
FOREST/ TERRESTRIAL	185,338,276,089	4,118,628,358	214,078,338,789	4,757,296,418	55.0%
AGROBIODIVERSTIY	10,879,902,182	241,775,604	13,091,891,532	290,930,923	3.2%
CAVES & CAVE SYSTEMS	5,368,174,648	119,292,770	7,626,725,164	169,482,781	1.6%
COASTAL & MARINE	60,609,771,298	1,346,883,807	69,890,187,089	1,553,115,269	18.0%
TOTAL	336,942,547,489	7,487,612,166	392,172,161,190	8,714,936,915	100%

Estimated Cost of Implementing PBSAP

Estimated Cost of PBSAP According to Aichi Targets (Low)



Estimated Cost of Implementing PBSAP



An average of **PhP24 Billion pesos** (USD 534 million) is required on a yearly basis from 2015-2028 (Low Scenario)

Biodiversity Finance Plan

- Review and analyze results of BIOFIN Assessment
- Analyze existing biodiversity finance solutions
- Analyze new opportunities for finance solutions
 - Realigning expenditures (including environmental fiscal reform)
 - Avoiding future expenditures
 - Additional resource mobilization
 - Improving delivery of biodiversity management services
- Review the financial gap for each NBSAP Strategy to identify potential mechanisms
- Assess the feasibility and prioritize each finance solution identified
 - Description of the solution
 - Responsible party
 - Key stakeholders
 - Timeline
 - Potential revenue and/or savings
 - Start-up and ongoing costs
- Building the business case for the biodiversity finance plan

Financing mechanisms can...

Generate revenues

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

Realign expenditures

- Re-orient existing financial flows
- Ex: Elimination of harmful fishery subsidies

Avoid expenditures

- Prevent or reduce future expenditures / investment needs
- Ex: Taxes on sugar content or tobacco (health expenditures)

Deliver better

- Enhance effectiveness, efficiency, and synergies
- Favor a more equitable distribution of resources
- Ex: Challenge funds, climate funds

Components

Source

- Willingness to Pay / Ability to Pay
- Intended and Unintended Consequences

Management

- Reliability of interest / capacity to manage
- Long term availability / investment

Disbursement

- Planning / budgeting process
- Administrative ease / challenges

Consumer

- Efficiency of use
- Additional benefits / costs

- Justification (biodiversity project/strategy)
- Rationale (political, social, economic)
- Expected financial results
- Market analysis (demand, competition)
- Risks analysis
- Capacity analysis (technical and managerial)
- Critical design elements
- Timeline, responsibilities and operational steps
- Budget for start-up and implementation
- Milestones for monitoring progress
- Other critical considerations (e.g. social safeguards)

**For each
priority
solution or
project**

5 to 15

Ecological
fiscal
transfers

Fiscal

Phase out
harmful
subsidies
(e.g. fishery)

Attract
impact
investment

New
lottery

Market

Fuel
taxes

Tourism-based
taxes and fees

Payment
for
ecosystem
services

Facilitate
bioprospectin
g

Negotiate
Debt-for-
Nature
Swaps

Debt/
equity

Social or
development
impact
bonds

Establish
blue/green
lending
facilities for
SMEs

Blue/green bonds

Introduce
regulatory
reforms to
reduce
investors'
risks (de-
risking)

Risks

Establish
climate and
environmental
risk
insurance
schemes



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The Biodiversity Finance Initiative

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Resources



Expenditure Reviews

[UNDP Climate Change Expenditure Reviews - Methodological Note](#)

[UNDP - Climate Change Expenditure Reviews: Lessons Learnt](#)

[PEI - Rwanda Public Environment Expenditure Review Manual](#)

[Public Expenditure and Institutional Review - Thailand Climate Change](#)

[Public Expenditure Review - Agriculture Kenya](#)

[Public Expenditure Review - Agriculture Philippines](#)

[Public Expenditure Review - Bhutan Environment](#)



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