

Regional Workshop for South, SE and East Asia on Capacity Building  
for NBSAPs & Mainstreaming of Biodiversity

# BIODIVERSITY ACTION PLAN FOR PAKISTAN

A FRAMEWORK FOR CONSERVING OUR NATURAL WEALTH

## STATUS OF IMPLEMENTATION REVIEW & REVISION

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**Contents:** Biodiversity Action Plan for Pakistan (BAP-2000) contains:

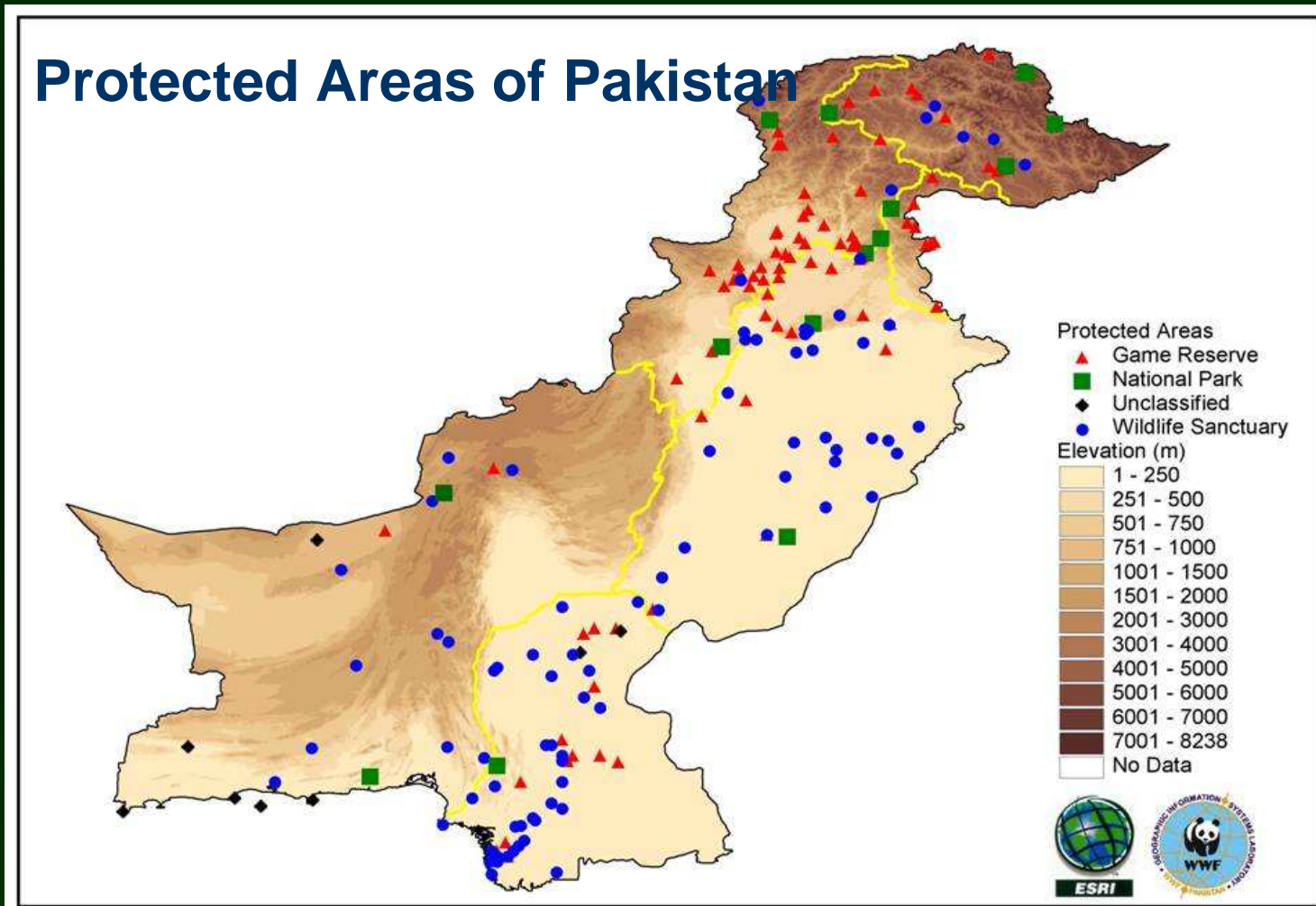
- Brief assessment of the status and trend of the nation's biodiversity
- Outlines of strategic goals and objectives
- Plan of action (including coordination arrangements and implementation measures)

**Process:** MOE as the focal Ministry, GEF/WB assistance, BAP is a joint effort of GoP, IUCN-P and WWF-P



- Followed a broad-based consultative process under periodic supervision of Biodiversity Working Group (BWG)
- Inputs of eminent biodiversity scientists and managers/background papers by experts
- One national and five regional consultative workshops during preparation, > 250 participants
- Inspired by national/provincial Conservation Strategies (NCS, SPCS, BCS)

Distribution of Pakistan's Biodiversity Resources is mainly driven by latitudinal, altitudinal and climatic diversity



## Species Richness & Endemism

	TOTAL REPORTED	ENDEMICS	THREATENED
Mammals	174 <sup>1</sup>	6 <sup>2</sup>	20 <sup>3</sup>
Birds	668 <sup>4</sup>	9	25 <sup>3</sup>
Reptiles	177 <sup>1</sup>	13 <sup>2</sup>	6 <sup>4</sup>
Amphibians	22 <sup>7</sup>	9 <sup>8</sup>	1 <sup>7</sup>
Fish			
Freshwater	198 <sup>1</sup>	29 <sup>1</sup>	1 <sup>4</sup>
Marine	788 <sup>9</sup>	-	5 <sup>9</sup>
Invertebrates			
Echinoderms	25 <sup>12</sup>	-	2 <sup>10</sup>
Marine Molluscs	769 <sup>11</sup>	-	8 <sup>11</sup>
Marine Crustaceans	287 <sup>12</sup>	-	6 <sup>12</sup>
Marine Annelids	101 <sup>12</sup>	-	1 <sup>12</sup>
Insects	>5000 <sup>1</sup>	-	-
Plants			
Angiosperms	5700 <sup>14</sup>	380 <sup>15</sup>	9
Gymnosperms	21 <sup>14</sup>	-	9
Pteridophytes	189 <sup>16</sup>	-	9
Fungi	>4500 <sup>18</sup>	2 <sup>18</sup>	9
Algae	775 <sup>17</sup>	20 <sup>17</sup>	9

## Crop Genetic Diversity

- Estimated 3,000 taxa of cultivated plants
- Estimated 500 wild relatives (majority in NAs)

## Livestock Genetic Diversity

Pakistan has

- 2 pure breeds of buffalo
- 8 of cattle
- 1 of yak
- 25 of goat
- 28 of sheep
- 1 of horse,
- 4 of camel,
- 3 of indigenous poultry

## Internationally Threatened Species (IUCN Red List)

Reportedly, 37 species and 14 sub-species in the list occur in Pakistan.

Mammals: Critically endangered mammals are

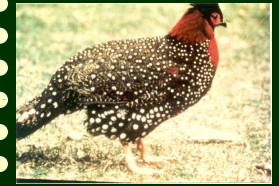
- Balochistan black bear (*Ursus thibetanus gedrosianus*)
- Chiltan goat (*Capra aegagrus chiltanensis*)

Endangered mammals include

- Snow leopard (*Uncia uncia*)
- Indus river dolphin (*Platanista minor*)
- Markhor (*Capra falconeri*)
- Urial (*Ovis vignei*)
- Woolly flying squirrel (*Eupetaurus cinereus*)

Birds: 25 threatened bird species, critically endangered bird are

- Lesser florican (*Eupodotis indica*)
- Siberian crane (*Grus leucogeranus*)
- Great Indian bustard (*Ardeotis nigriceps*)



## Aims of the BAP

- Policy framework to foster sustainable use of BDR
- National biodiversity conservation programmes and develop international and regional cooperation
- Incentives for BD conservation at community level
- Tools and technologies for conserving BD
- Human knowledge, capacity to conserve biodiversity

## OBJECTIVES

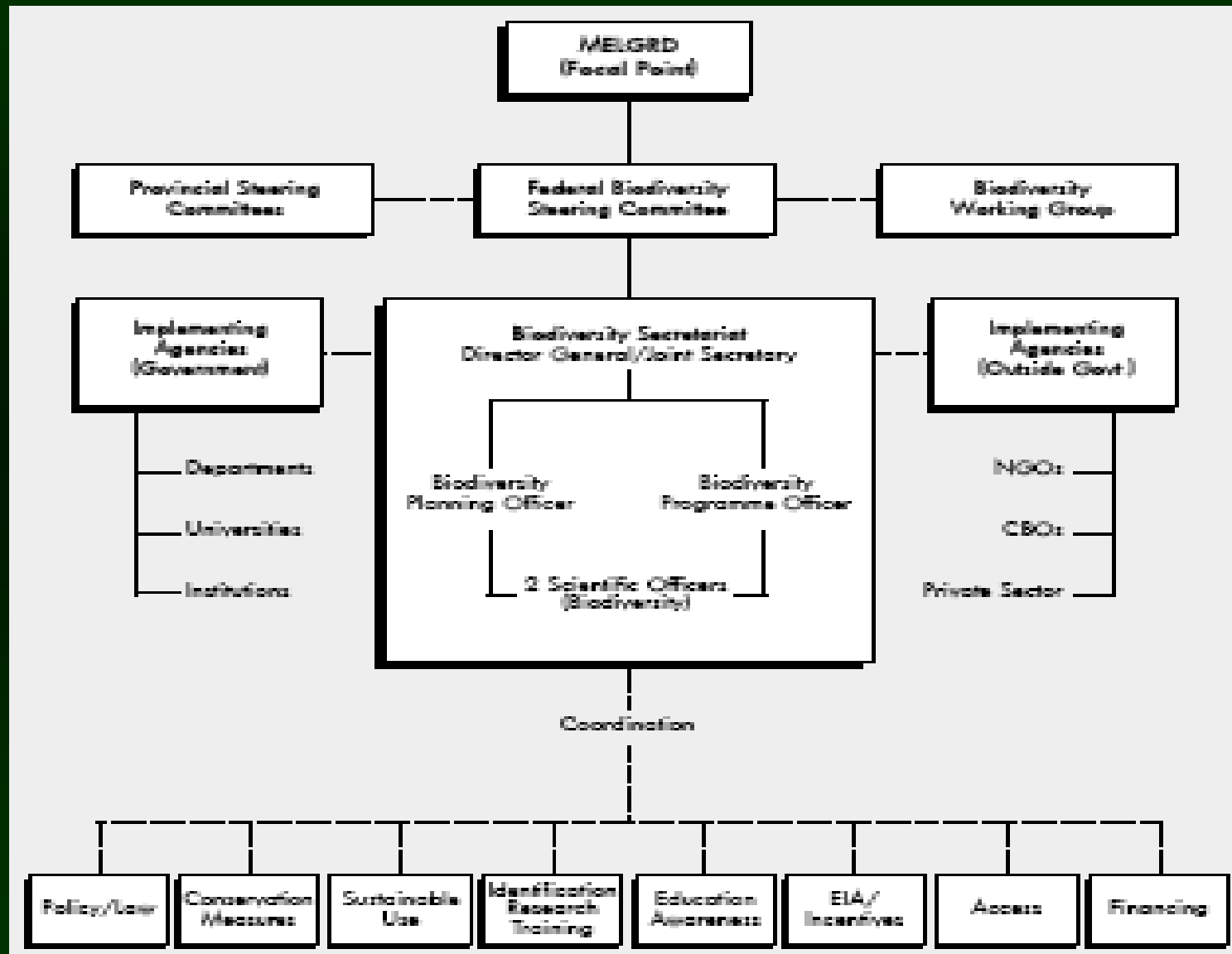
- Objective 1: Adopt appropriate policies and plans, integrate BD into sectoral plans and programmes
- Objective 2: Effective legal framework
- Objective 3: Enhance the enforcement of biodiversity-related laws
- Objective 4: Expand and improve the information base
- Objective 5: Systems to monitor key elements of biodiversity
- Objective 6: Strengthen the PA system in Pakistan
- Objective 7: Conserve biodiversity outside protected areas
- Objective 8: Strengthen ex-situ programmes
- Objective 9: Policy and legal framework to encourage sustainable use
- Objective 10: Establish, monitor and regulate sustainable use limits of selected biological resources



## OBJECTIVES

- Objective 11: Protect/encourage community-based BD mgt systems
- Objective 12: Mechanisms to BD valuation into national accounting
- Objective 13: Strengthen inter-sectoral & federal/provincial coordination
- Objective 14: Create an integrated system of incentives and disincentives
- Objective 15: Minimize perverse incentives impacts on BD
- Objective 16: Strengthen research
- Objective 17: Strengthen human capacity
- Objective 18: Comprehensive strategy for public education /awareness
- Objective 19: Use the formal education system
- Objective 20: Use informal channels
- Objective 21: Institutionalize and strengthen EIA procedures
- Objective 22: Develop policies and laws on ABS
- Objective 23: Strengthen information management systems
- Objective 24: Develop national funding mechanisms to support
- Objective 25: Increased bilateral and multilateral funding for BD program

# BAP IMPLEMENTATION MECHANISM



## COMPOSITION OF FEDERAL BAP STEERING COMMITTEE

- Chair: Federal Minister, MoE
- Secretary, MoE
- Inspector General of Forests
- Director General Environment, MoE
- Representative, Kashmir Affairs & Northern Areas Division
- Representatives of Provincial Biodiversity Steering Committees:
  - Punjab, Sindh, NWFP, Balochistan, Northern Areas & AJK
- Representative, Ministry of Food, Agriculture & Livestock
- Representative, Pakistan Agricultural Research Council
- Representative, Marine Pollution Control Board
- Representative, Ministry of Finance
- Representative, Ministry of Defence
- Representative, Planning & Development Division
- Representative, National Biosafety Committee
- Representatives, Two from Biodiversity Working Group
- Member, Planning Commission
- Director General, Pakistan Environmental Protection Agency
- Director General, Pakistan Museum of Natural History
- Country Representative, IUCN Pakistan
- Director General, WWF Pakistan
- Chief Executive Officer, Sustainable Development Policy Institute
- Representatives, Two from private sector

## **Progress: Policies & Legislation**

- National Environment Policy (2005)
- National Forest Policy (2008)
- PC Development Vision 2030
- National Vision 2030 on Forest Biodiversity Conservation
- Pakistan Environmental Protection Act 1997
- CBD Guidelines on BD-inclusive EIA
- National Biodiversity Act (drafted)
- Provincial Forest Laws of NWFP and Balochistan
- CITES
- Ban on commercial logging

**Progress:** In situ & Ex situ Conservation

- Mountain Areas Conservancy Project (now PMAC)
- Protected Areas Management Project
- Sustainable Land Management Project
- Pakistan Wetlands Programme
- Community-based, NGO-lead programmes on
  - Himalayan ecosystems*
  - Mangrove ecosystem*
  - Juniper ecosystem*
  - Dryland/desert ecosystems*

## **Progress: Sustainable Use, Incentives**

- Experience of Trophy Hunting (community gets benefits)
- Alternate livelihoods, alternate resources in some PAs
- Community Funds (FPA, MACF)

## **Progress: Awareness, education, participation**

- Regular campaigns, BD Day, walks, competitions etc
- Participatory planning and decision making in some PAs
- Private sector to lead federal level funds
- CEPA PoW: Full-fledged programme under development



Participatory planning decision making

PA / BDC Clubs



Alternate Fuels



## **Progress:** Baselines, Research & Monitoring

- Baselines established for key species of some PAs
- Isolated research on species and ecosystem BD
- C&I-based PA Monitoring System under development
- GTI – Focal Point established (ZSD)
- Capacity of national institutions enhancing on the use RS/GIS for species and ecosystem monitoring



## **Progress:** Information Exchange, Cooperation

- Communication Reports
- SAARC Agenda
- ECO Working Group on BD

## **Progress:** Financial sources

- Medium Term Development Framework (2005-10) > \$ 150 m
- Forestry Sector Mega Projects > \$ 200 m
- On-going GEF projects, GEF RAF-4
- Bilateral support
- Non-conventional sources / facilitation in carbon trading

## Review & Revision

- In-house review of BAP conducted last year
- Recommended to rebuild BAP on established baselines
- Post-BAP developments require complete revision
- In line with CBD PoWs and guidance for revision
- With renewed national priorities, regional agendas
- Thrust on devolved ownership and responsibilities
- Adequate treatment of ecosystem, species and genetic diversity + cultural
- Addressing anthropogenic as well as natural threats
- Based on flexible programme approach
- When to revise ? After 4<sup>th</sup> Report (Progress of 2010 Targets)

Thank You