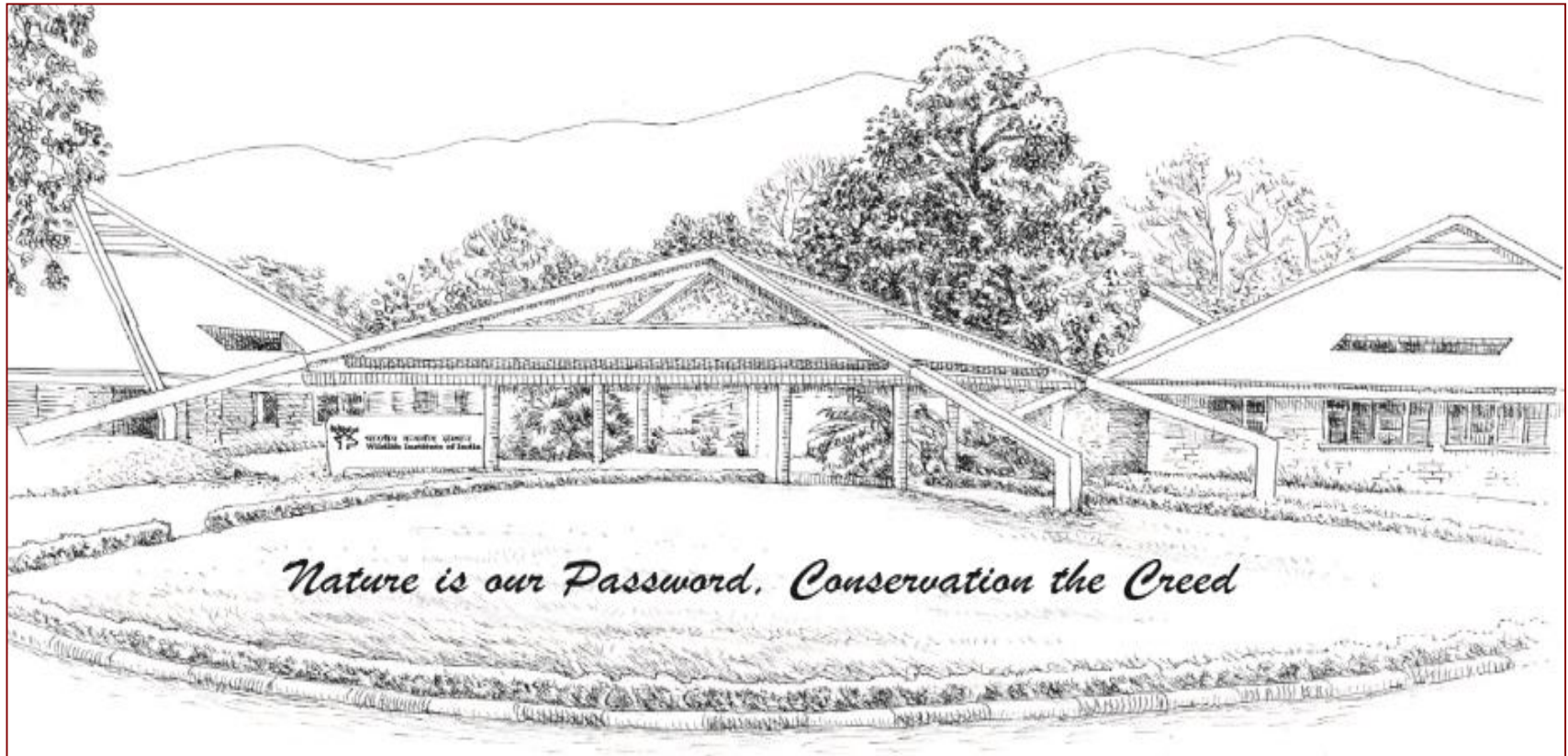


Wildlife Institute of India: *Mandate, Achievements & Activities*



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

BACKGROUND

- ✿ Established as an attached office in May, 1982.
- ✿ Granted autonomous status by the Union Cabinet in November, 1985.

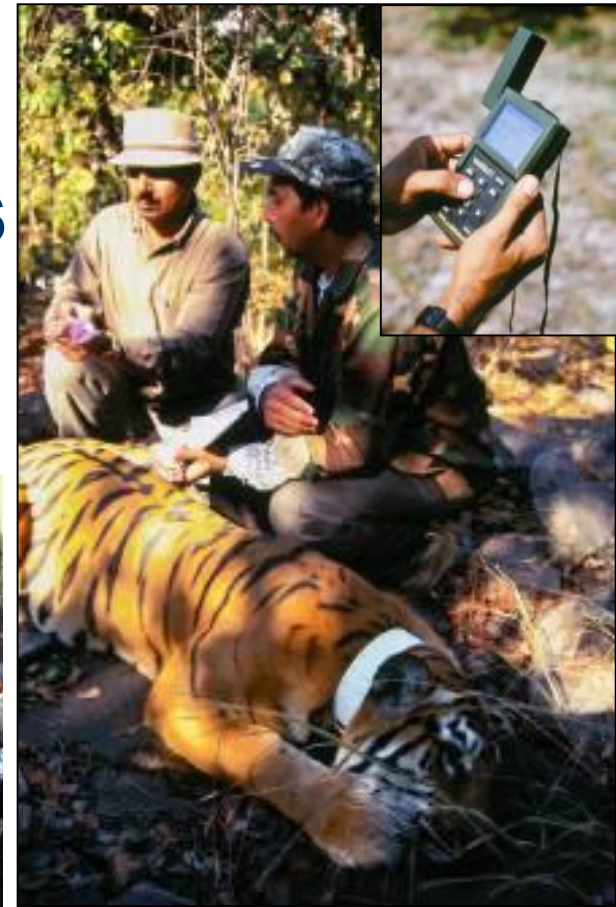
OUR MISSION.....

- ✿ To nurture the development of Wildlife Science and promote its application in conservation, in consonance with our cultural and socio-economic milieu



MANDATE.....

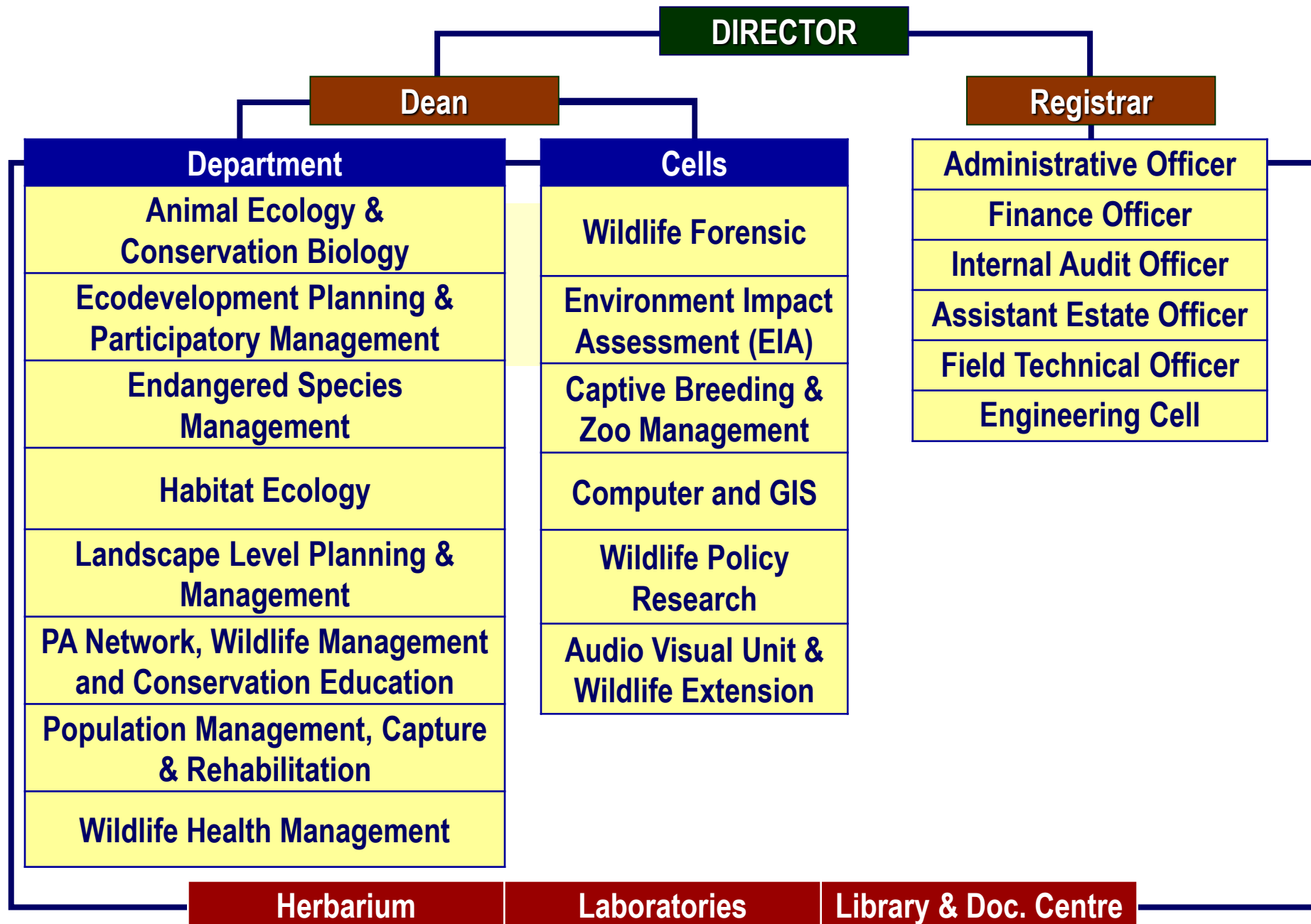
- ☀ To build capacity through training, education and research in the field of wildlife conservation and advice Central and State Governments in wildlife matters.



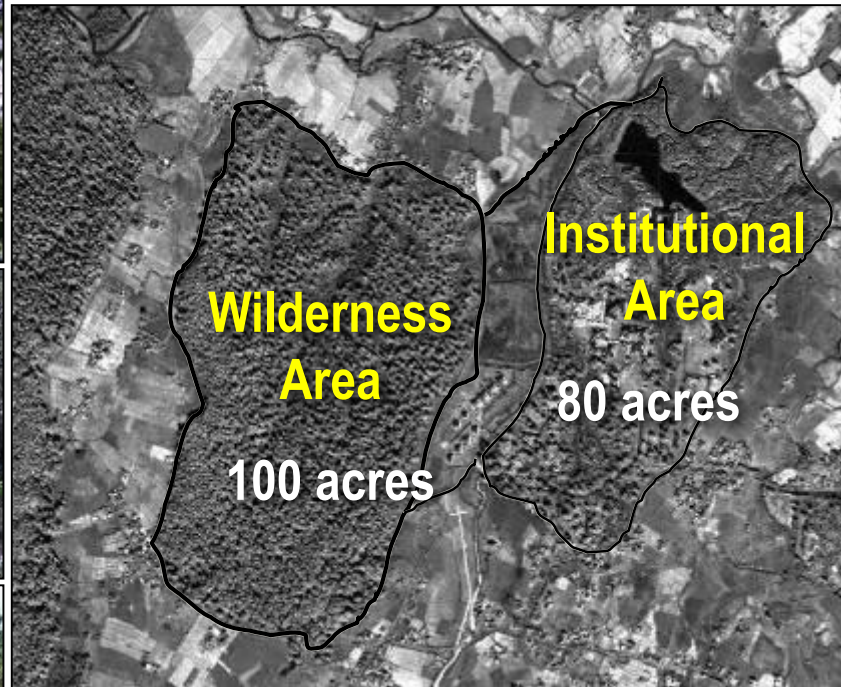
WII - Governance

WII-Society (49 Members)	Chaired by Hon' ble Minister of Environment, Forest and Climate Change, Government of India
WII-Governing Body (21 Members)	Chaired by Secretary, Ministry of Environment, Forest and Climate Change, Government of India
WII-Finance Committee (7 Members)	Chaired by Director General of Forests & Special Secretary, MoEFCC
WII-Training, Research & Academic Council (29 Members)	Chaired by an eminent person in the field of wildlife nominated by President, WII Society

WII-Organisational Structure



GLIMPSES OF CAMPUS BIODIVERSITY



- ◆ ~ 616 spp. of vascular plants
- ◆ 314 species of birds
- ◆ 20 species of mammals
- ◆ 22 species of snakes
- ◆ 4 spp. of turtles
- ◆ 10 spp. of fish
- ◆ 90 species of butterflies
- ◆ 17 families & 190 species of moths
- ◆ 102 species of spiders
- ◆ 26 species of Ants
- ◆ 18 species of Borers (*Coleoptera*)

Capacity Building for Wildlife Conservation through Training

Regular Courses for in-service forest officials

- ☀ **10-month Postgraduate Diploma Course in Advanced Wildlife Management**
 - *41 courses; 727 professionals including 117 foreign trainees from 15 countries*



Foreign Trainees in Postgraduate Diploma Course

Afghanistan	Kazakistan	Myanmar	Tanzania
Bhutan	Laos	Nepal	Vietnam
Cambodia	Malaysia	Palestine	Bangladesh
China	Maldives	Sri Lanka	

Capacity Building for Wildlife Conservation through Training

Regular Courses for in-service forest officials

- ☀ **3-month Certificate Course in Wildlife Management**
 - *35 courses; 627 professionals including 167 foreign trainees from 16 countries*



Foreign Trainees in Certificate Course

Bhutan	Laos	Pakistan	Vietnam
Cambodia	Malaysia	Singapore	Zambia
China	Mauritius	Sri Lanka	Bangladesh
Indonesia	Nepal	Thailand	

Customized Training Courses...

- ☀ Attachment of Customs & Central Excise Probationers from NACEN for Training (2 weeks)
- ☀ Training module on Wildlife and Biodiversity Conservation for the IFS Officers as part of their Mid-Career Training (MCT) Programme at the IGNFA, Dehradun
- ☀ Zoo Management Course (1 week)
- ☀ IFS Compulsory Course (1 & 2 weeks)
- ☀ Sensitization Programmes for Central Military and Para-military Organizations
- ☀ Study tours for PA managers of neighboring countries

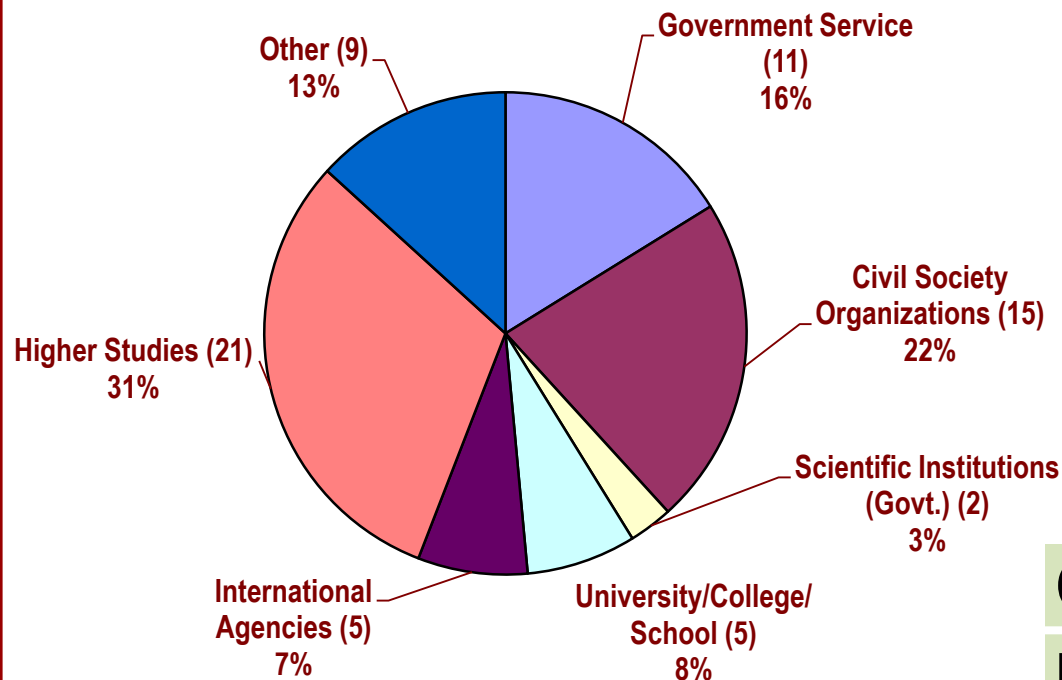


Capacity Building for Wildlife Conservation through Education

2-year Masters Course in Wildlife Science

☀ Courses completed - 16

☀ Students passed out - 165



Foreign Students in M.Sc. Course

Guyana

Malaysia

Mongolia

Myanmar

Nepal

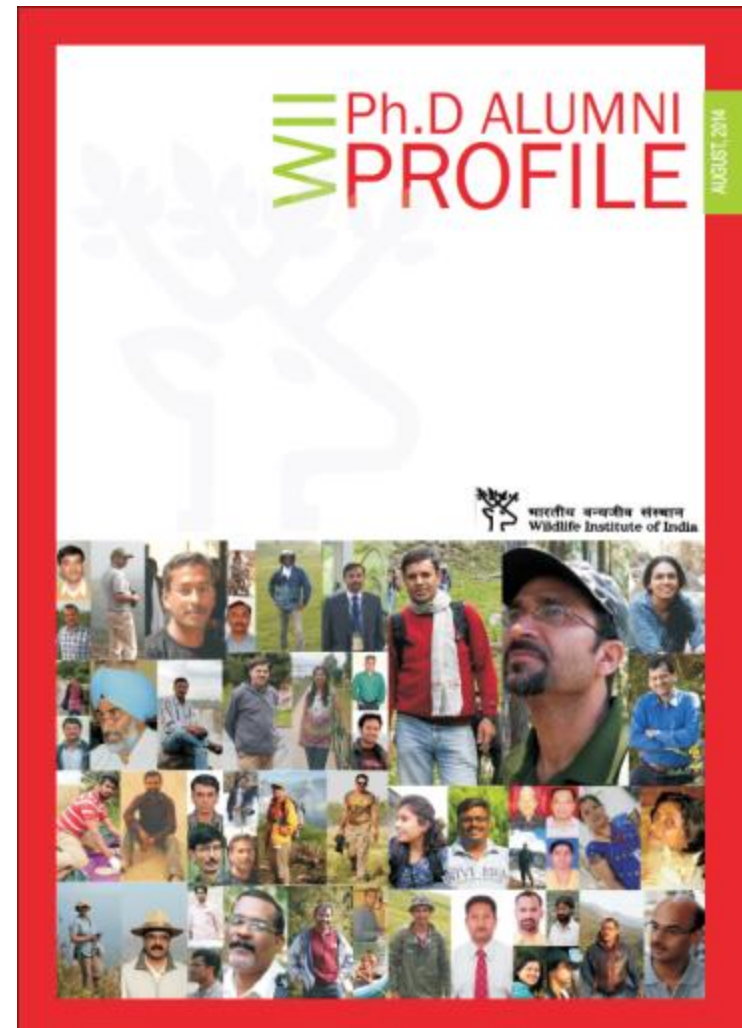
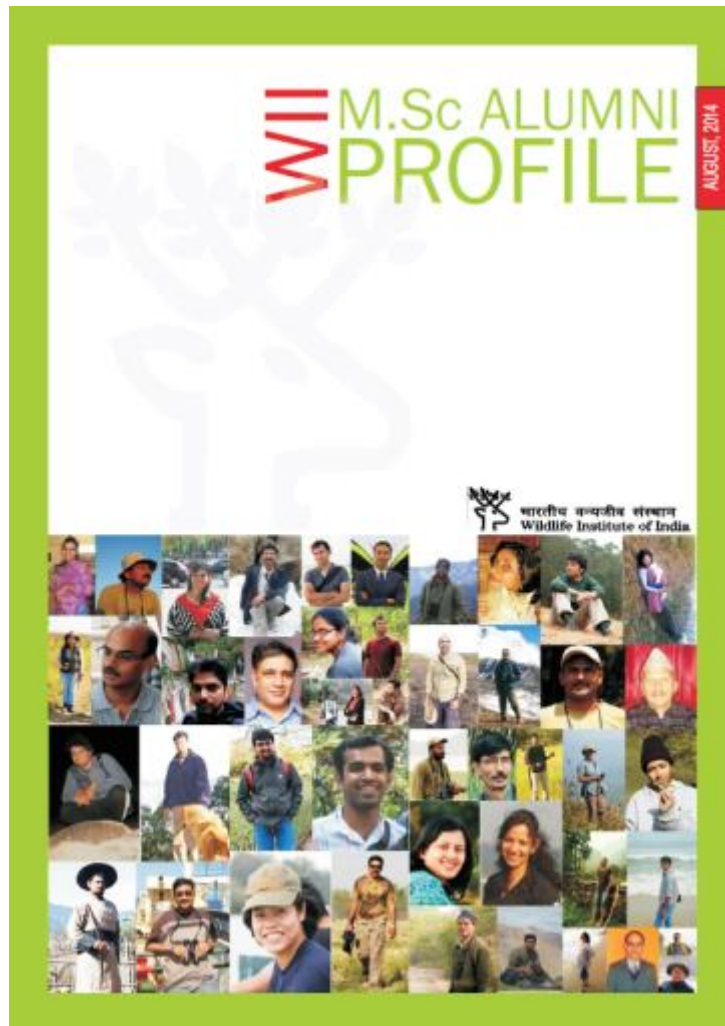
Sri Lanka

Capacity Building for Wildlife Conservation through Research...

- ☀ **220 Research Projects completed
(1986 – January, 2020)**
- ☀ **81 On-going Research Projects**
- ☀ **124 Ph.D. thesis awarded**
- ☀ **10 Ph.D. thesis submitted**
- ☀ **59 Ph.D. registered students**



Institute's Alumni...

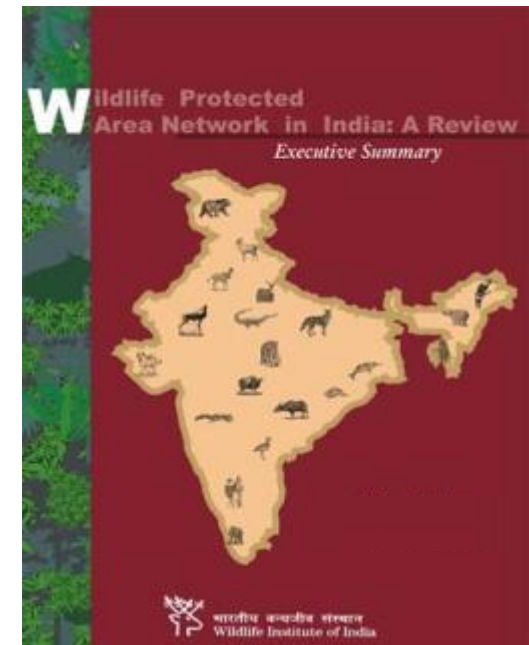
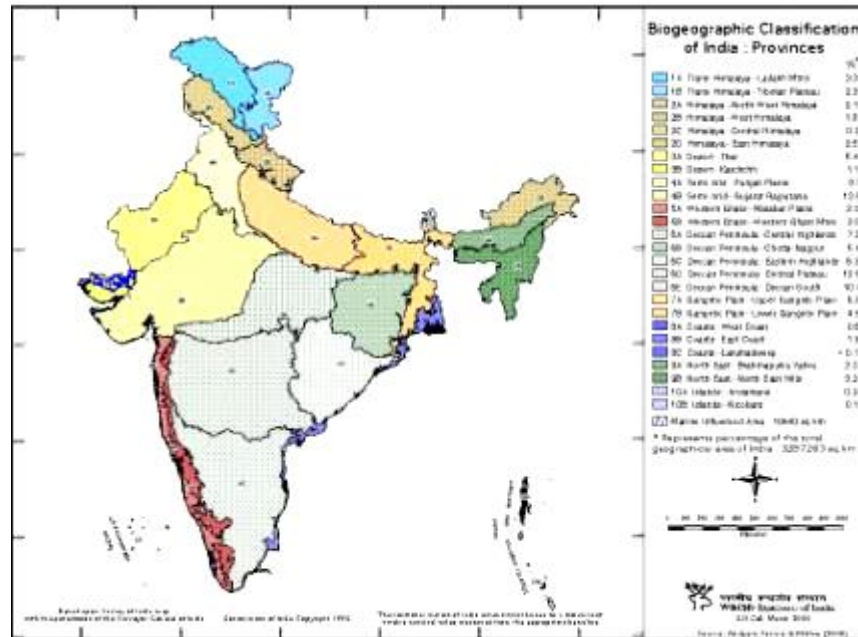


Women Researchers in WII....

Researchers	250+
Faculty Members	5
M.Sc. (Wildlife Science)	10
M.Sc. (Heritage Cons. & Mgmt)	04
Diploma Officer Trainees	3
Certificate Officer Trainees	5
Office staff	17
Project staff	15

**Major contributions in the field
of capacity building through
training, research and
conservation by Wildlife
Institute of India**

Ecological Gap Analysis...



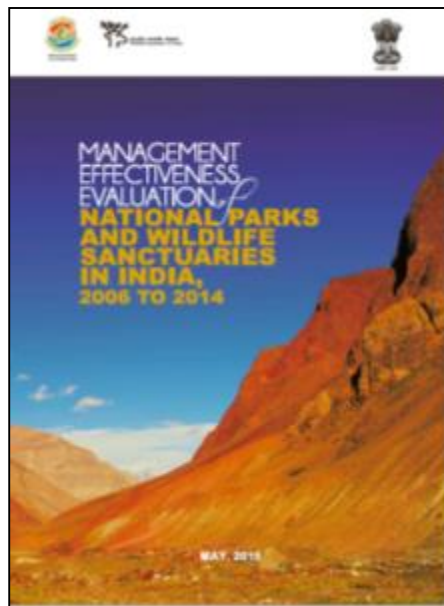
Category	1988			2019 (November, 2019)		
	Nos.	Area (km ²)	%	Nos.	Area (km ²)	%
National Parks	54	21,003	0.64	101*	40564.04	1.23
Wildlife Sanctuaries	372	88,649	2.70	551	119775.80	3.64
Community Reserve	-	-	-	127	525.22	0.02
Conservation Reserve	-	-	-	88	4356.49	0.13
Protected Areas	426	109,652	3.34	867	165221.55	5.02

**Three Button Islands National Parks (North Button Island, Middle Button Island & South Button Island) of Andaman & Nicobar Islands have been merged with Rani Jhansi Marine National Park.*

Management Effectiveness Evaluation of PAs (2018-2019)

How secure are Protected Areas...?

Total No. of Protected Areas Evaluated	Overall MEE Score (%)	Evaluation Category			
125	61 (Good)	Very Good	Good	Satisfactory	Poor
		18 (14%)	42 (34%)	62 (50%)	03 (02%)



Conservation of Species



Flagship,
Rare,
Endangered
and
Endemic

Major Contributions...

- ◆ All India Monitoring of Tiger Co predators, Prey and Habitat; Mapping of Corridors/ Connectivity in 17 Tiger Range States (2005-06, 2009-10, 2013-14, 2018-19)



- ◆ Technical Support for Reintroduction Programmes (e.g. Tiger in Sariska and Panna TR, Indian Gaur in Bandhavgarh)



Management of Large Carnivores: Lion

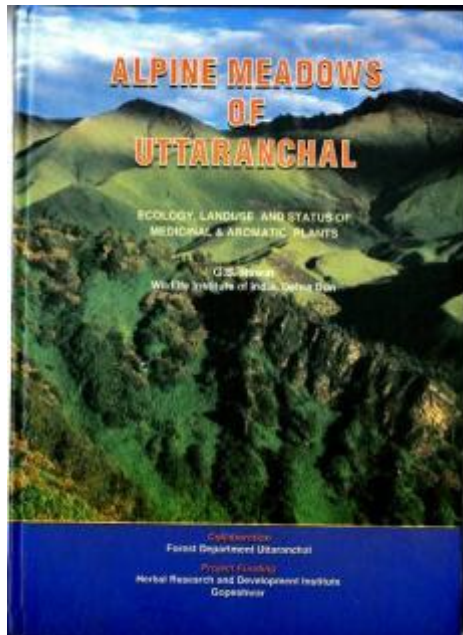
- ◆ Ecological monitoring, conservation breeding, wildlife health, interpretation and public engagement to support ongoing Gir Lion conservation efforts.



Management of Large Carnivores: Snow Leopard

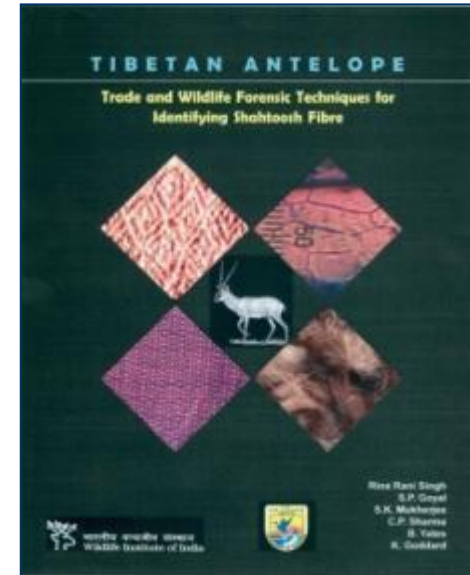
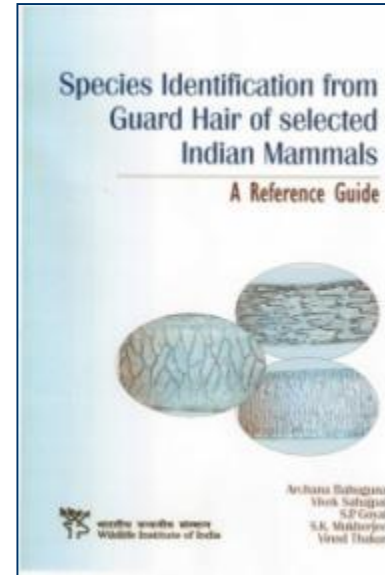


Ecology & Management of Alpine Habitats

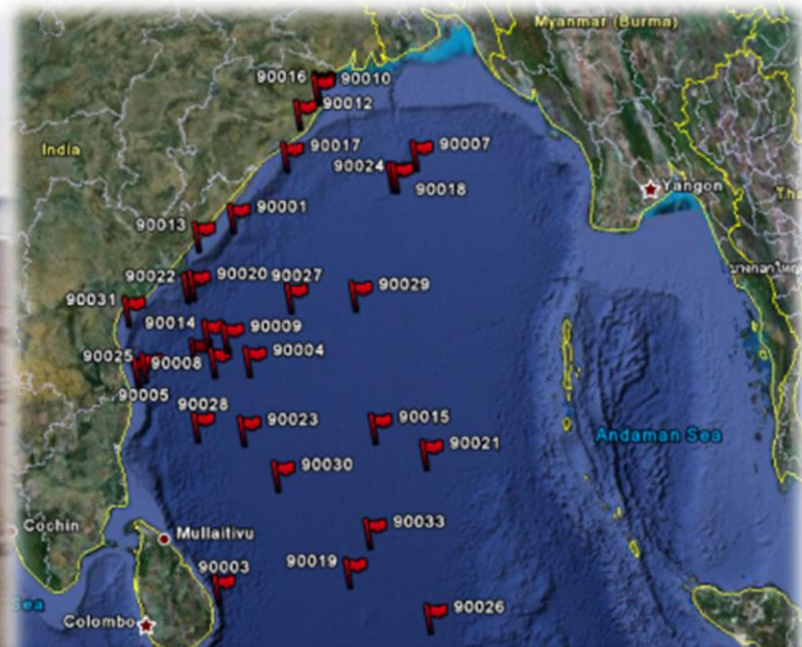


Development of Wildlife Forensics Capability

- ◆ **Species identification on morphological attributes**
- ◆ **DNA sequence profile of 65 Indian wild animal species have been prepared for use in species identification**

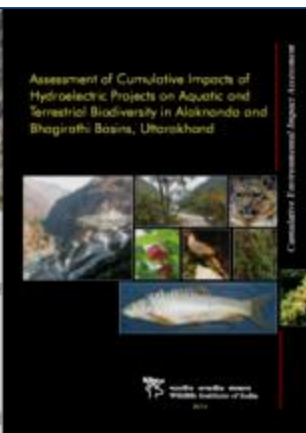
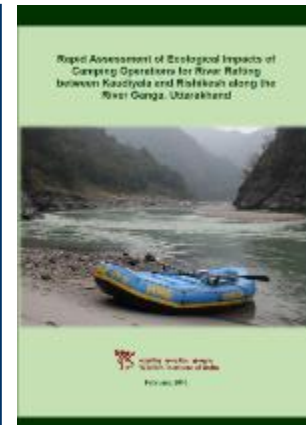
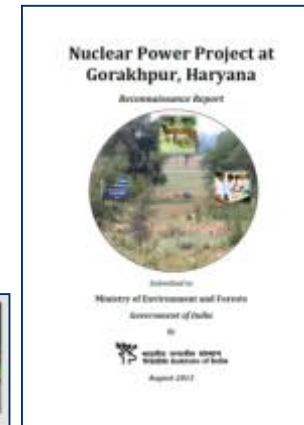
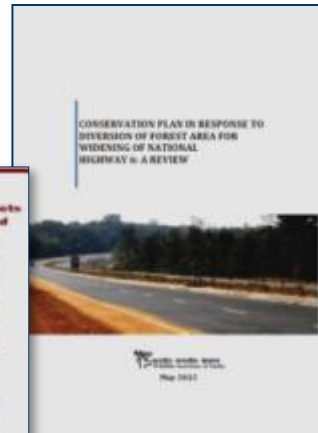
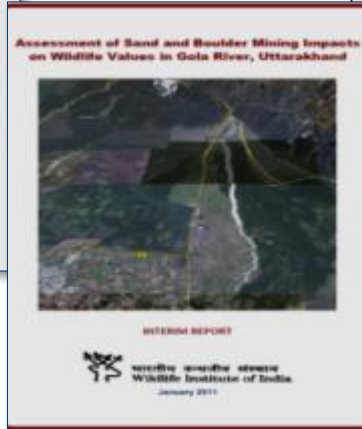


Mainstreaming marine biodiversity conservation into production sectors in India

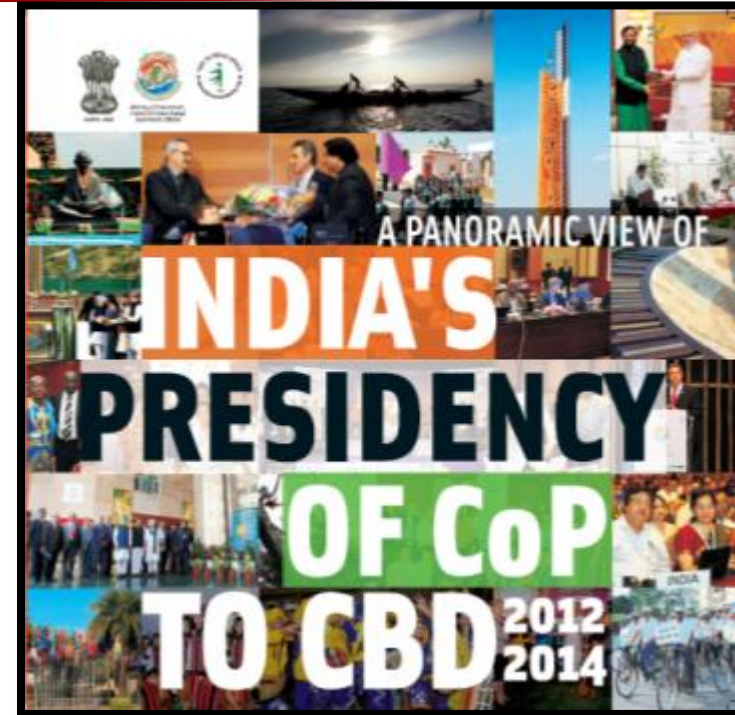
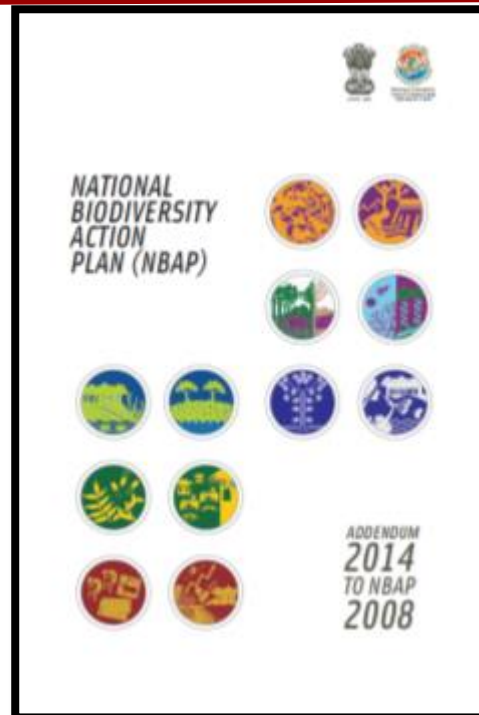
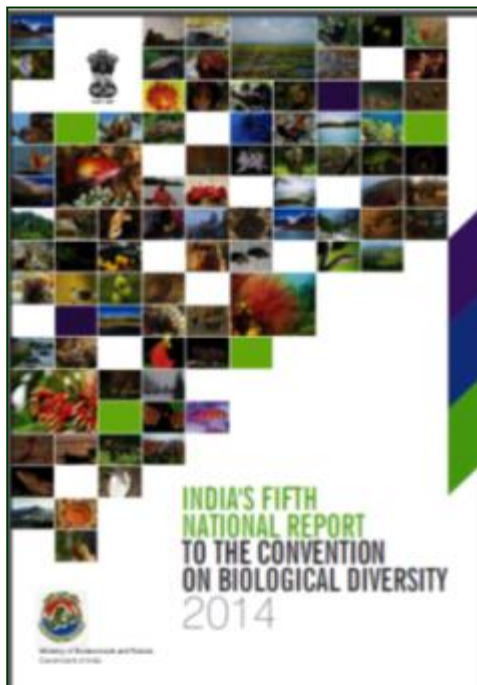


Impact Assessment Studies...

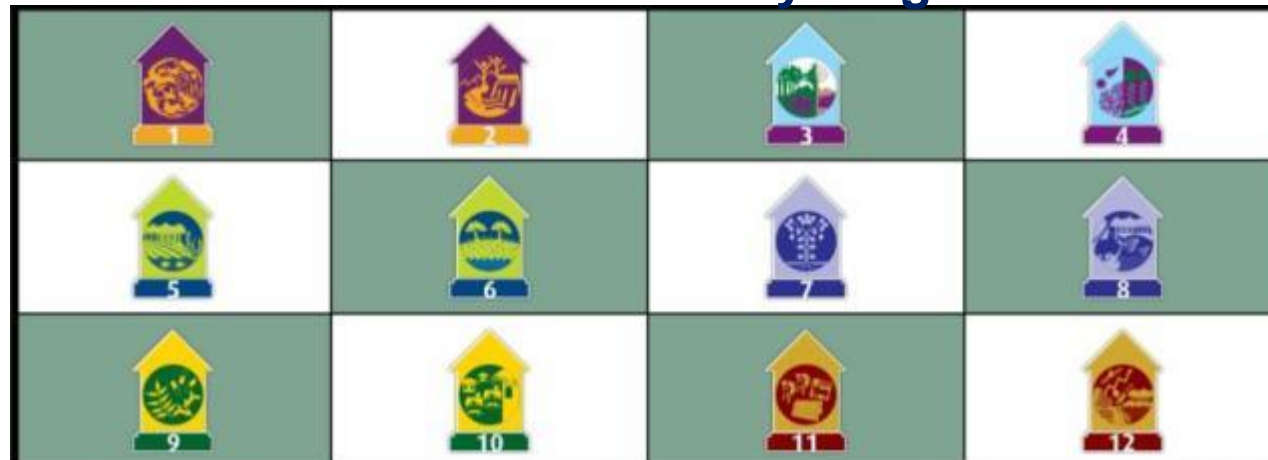
- ◆ EIA Studies - MoEF/ Supreme Court/ NGT Directed (e.g. Cumulative Assessment of Impact of HEP on Alaknanda and Bhagirathi Rivers; Minimum Water Flow in Chambal River; Impact of sand and boulder mining ,Uttarakhand; Road Ecology, Madhya Pradesh and Maharashtra; Nuclear Power Project, Haryana



Contribution to Convention on Biological Diversity



National Biodiversity Targets



On-going and *New Initiatives*
in Wildlife Conservation and
Management at WII

National Mission on Sustaining Himalayan Ecosystem (NMSHE) (2014-2019)

National Action Plan on Climate Change (NAPCC)

Prime Minister's Council on Climate Change (PMCCC)

Assessment and Monitoring of Climate Change Effects on Wildlife Species and Ecosystems for Developing Adaptation and Mitigation Strategies in the Indian Himalayan Region – DST sponsored



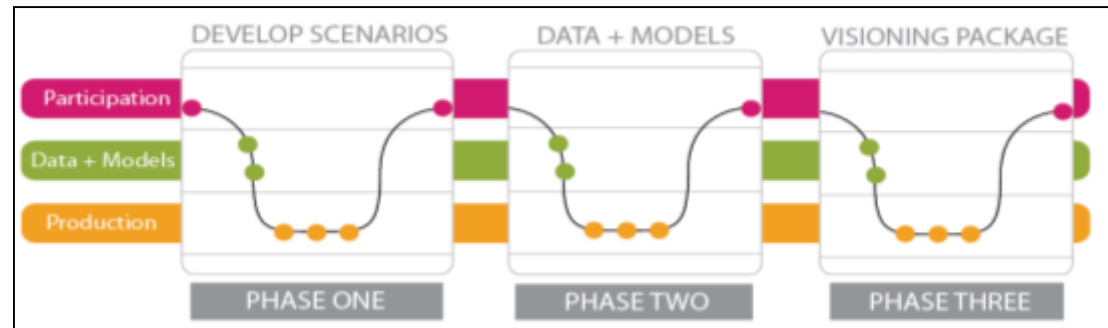
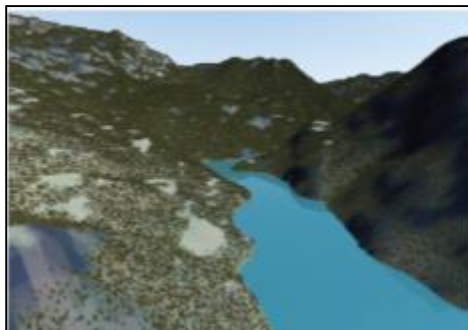
State of the Himalayan Ecosystem: Fauna and Micro Flora

Methur, V.B., Sathyakumar, S., Bhattacharya, T., Gupta, N., Upgupta, S., Bhardwaj, M., Kumar, D., Rawat, G.S., Das, A., Ramesh, K., Sivakumar, K., Rajvarshi, A., Uniyal, V.P., Johnson, J.A., Singh, P., Badois, R., Talukdar, G.H., Arunkumar, A., Arya, S., Bhattacharya, K., Bhattacharya, P., Chaudhuri, S., Gaur, T., Kashyap, P., Pal, R., Paul, N., Priyadarshini, S., Raut, S., Sharma, A. and Shukla, A.

- Overview, importance and relevance of Fauna of the IHR
- Relevance of climate change analyses for wildlife populations
- State-of-the-art knowledge on the thematic area with reference to climate change – current status and impact
- Status of the ongoing research to address climate change issues in Himalaya
- Issues that need immediate attention in the context of impact on Himalayan ecosystem, communities and livelihoods
- References

Submitted to

Government of India
Ministry of Science & Technology
Department of Science & Technology
Climate Change Programme (CCP)
Technology Bhavan, New Mehrauli Road
New Delhi-110 016



Capacity Building in Integrated Management of Coastal and Marine Biodiversity in India (2014-2019)

GlZ assisted



◆ Three Certificate Courses

- ◆ *Target Group: Range Forest Officers*
- ◆ *One Month Duration*
- ◆ *Training includes the monitoring of biodiversity under water (scuba diving)*

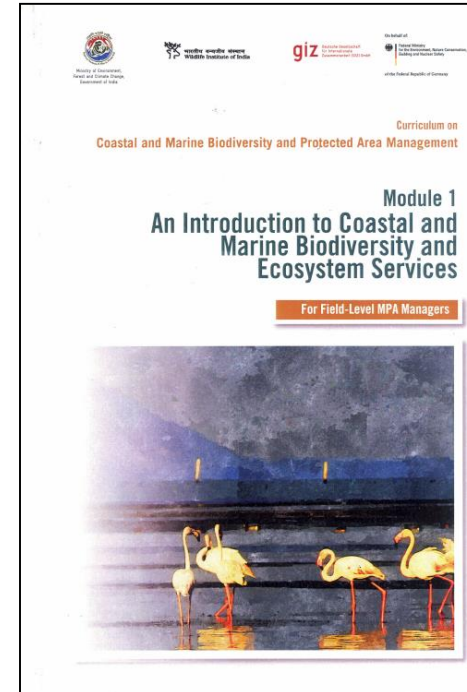
◆ Three Refresher Courses

- ◆ *Target Groups: Indian Forest Service Officers*
- ◆ *One week duration*

◆ Three Training of Trainers Courses

- ◆ *Target Groups: Training Institutes*
- ◆ *Three days duration*

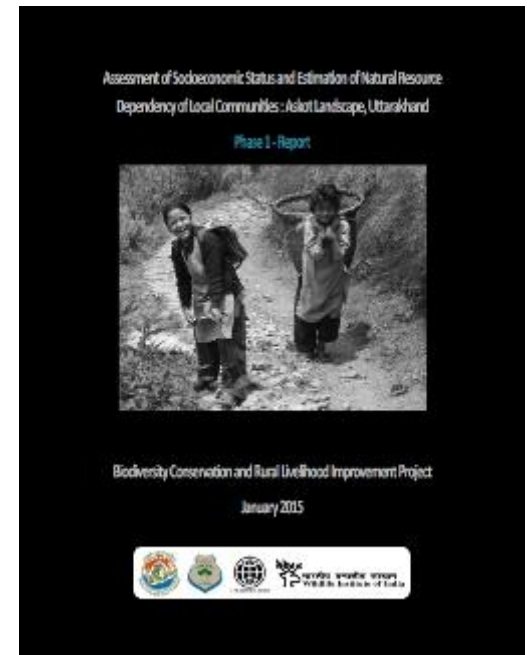
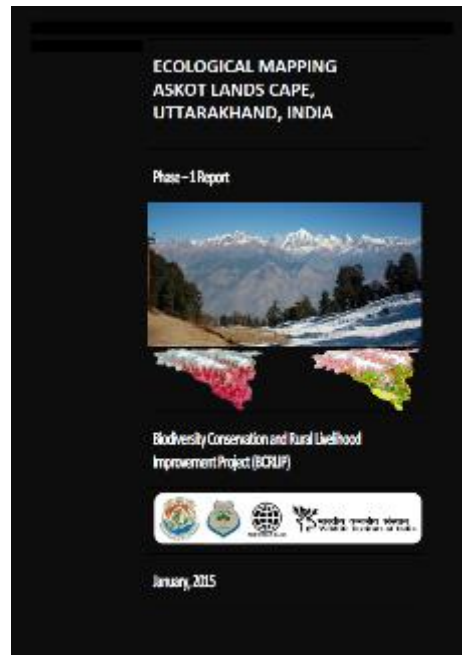
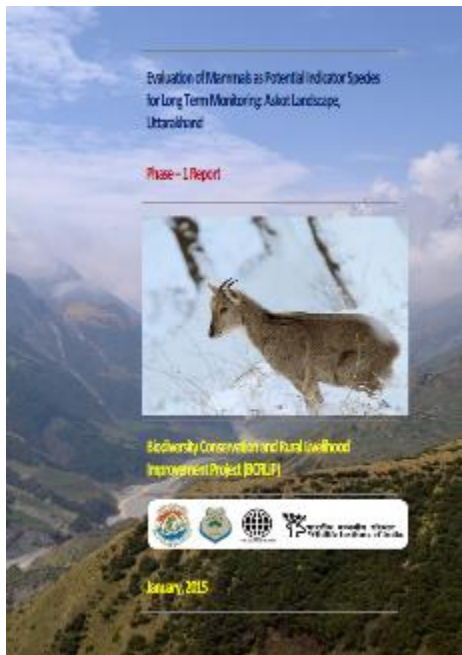
◆ Three Years Program with support of GlZ



Biodiversity Conservation and Rural Livelihood Improvement Project – World Bank Assisted (2014-18)

Objective

Develop and promote new models of conservation at the landscape scale through enhanced capacity and institution building for mainstreaming biodiversity conservation outcomes



Satellite tracking of Amur Falcon (2015-2019)...

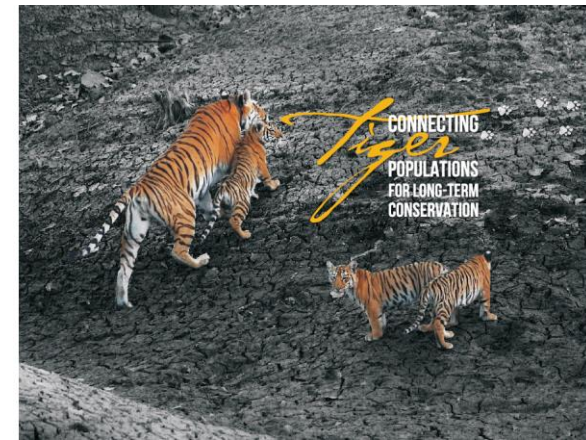


Google

Map data ©2014 Google, INEGI Imagery ©2014 NASA TerraMetrics 1000 km

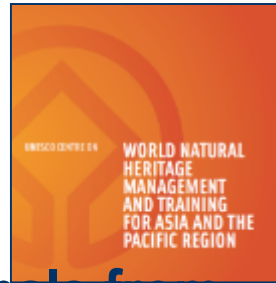
Collaborative Activities with National Tiger Conservation Authority (2005-2019)

- ◆ All India Monitoring of Tiger Co predators, Prey and Habitat (4 cycles) (2005-06, 2009-10, 2013-14, 2018-19)
- ◆ Mapping of Corridors/ Connectivity in 17 Tiger Range States
- ◆ Technical Support for Reintroduction Programmes (e.g. Tiger in Sariska and Panna TR)
- ◆ M-STrIPES Planning and Roll out
- ◆ Modern Technology Applications ~ Radio/ Satellite Collaring; UAVs, Molecular characterization
- ◆ Spatial database on tiger for decision-making on developmental projects.
- ◆ Management Effectiveness Evaluation of Tiger Reserves (4 cycles)



Establishment of UNESCO Centre on Natural World Heritage Management and Training for the Asia-Pacific Region, 2014

- ◆ In recognition of India's capacity in the thematic area of Natural World Heritage, UNESCO has established first centre on Natural Heritage at WII.
- ◆ Mandate of the Centre is to enhance capacity of professionals from 50 countries in the Asia-Pacific Region, presently having 67 Natural World Heritage Sites.
- ◆ Nomination Dossiers have been prepared for Khangchendzonga National Park (KNP), Bhitarkanika Conservation Area and are under preparation for Keibul Lamjao NP and Kailash Sacred Landscape.
- ◆ KNP, Sikkim has been recommended for inscription as World Heritage Site- India first '*mixed*' site
- ◆ Initiation of a new M.Sc. Course on Heritage Conservation and Management in July, 2019



Endangered Species Recovery Programme (2016-2021)

Funding under CAMPA/National CAMPA Advisory Council



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Wildlife Institute of India

Biodiversity Conservation and Ganga Rejuvenation (2016-2019)



Goddess Ganga riding the Makara,
Source: exotcindiaart.com



WII – NMCG Initiative

Ganga Darpan Interpretation Centre, Sarnath



Ganga Tarini (Mobile Museum), Varanasi



WII and UN-Intergovernmental Platform on Biodiversity & Ecosystem Services (UN-IPBES) Activities (2015-19)

- ◆ The IPBES has been established by 4 UN agencies viz. UNEP, UNDP, FAO and UNESCO with the mandate to strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.
- ◆ 21 experts from India have been selected to provide inputs in the Asia-Pacific Regional assessment of which 6 are from WII.
- ◆ Director, Wildlife Institute of India has been selected as the UN-IPBES Bureau Member (Asia-Pacific Region) for a 3-year term (2019-2022) and also as Co-Chair of the IPBES Task Force on Capacity Building and Policy Support and Tools.



Current International collaborations



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

1. Colorado State University
2. University of Chicago
3. University of British Columbia, Canada
4. United Nations University, Japan
5. North Carolina State University (NCSU)
6. International Bear Association
7. WWF-International
8. IUCN
9. World Bank Consortium
10. IAIA-CBBIA
11. UNESCO
12. GBIF
13. ICIMOD & LADHC
14. Smithsonian Institution
15. NINA, Norway
16. UNDP-GEF
17. The Mohamed bin Zayed Species Conservation Fund
18. Zoological Society of London (ZSL)
19. GIZ, Germany
20. INRA, France
21. National Geographic Society (NGS)

ZSL
LIVING CONSERVATION



Colorado
State
University

ICIMOD



UNITED NATIONS
FOUNDATION



IAIA



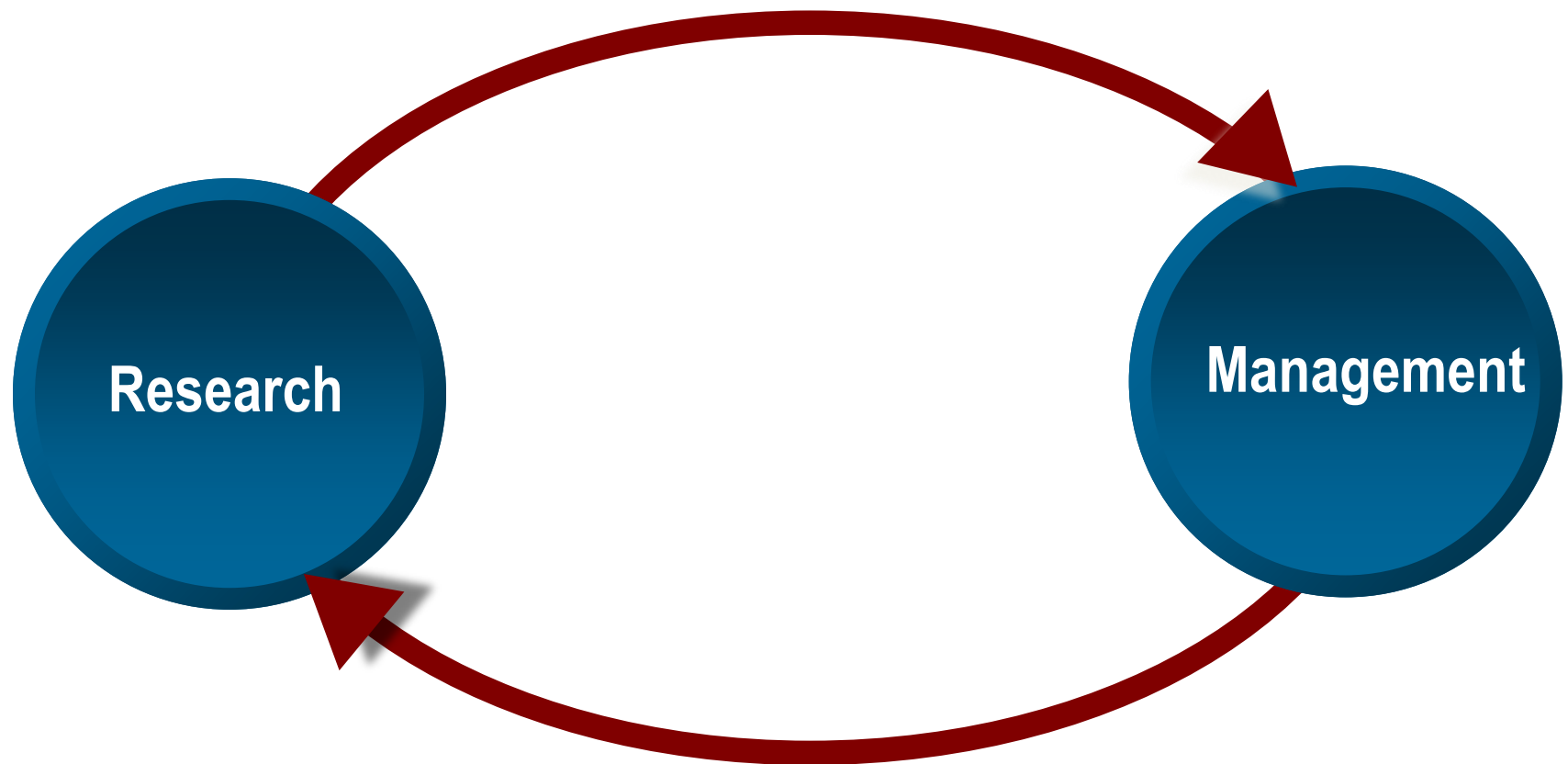
Conferment of the status of Institute of National Importance (INI) to WII by an Act of Parliament

- ◆ Inter-ministerial consultations completed and concurrence on draft Cabinet Note and draft WII-INI Bill 2019 received from all 5 Ministries of Government of India including Niti Aayog
- ◆ Shri Prakash Javadekar, Hon'ble MEF&CC has granted final approval for sending the proposal for Union Cabinet's approval on 15 June, 2019

The Path Ahead...



भारतीय वन्यजीव संस्थान
Wildlife Institute of India



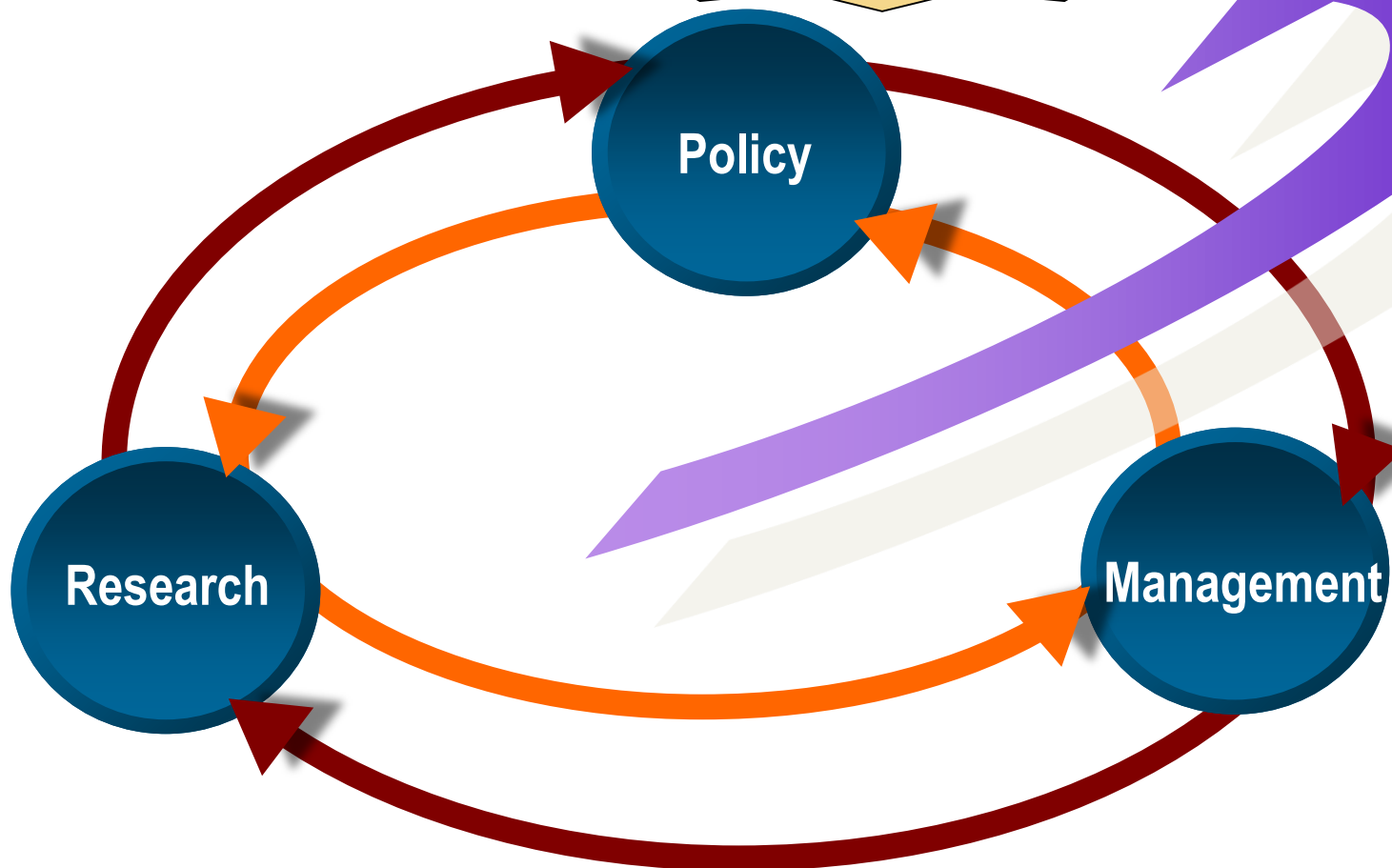
Cont'd...

The Path Ahead...



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

Effective Natural Resource Conservation



Nature Nurtures... Conserve Nature

Together we can build a frame work that
nourishes and not depletes our natural assets...

Thank You !
