

TIGER~MEETR

MEASURING THE MANAGEMENT EFFECTIVENESS OF TIGER RESERVES IN INDIA



JULY 2011

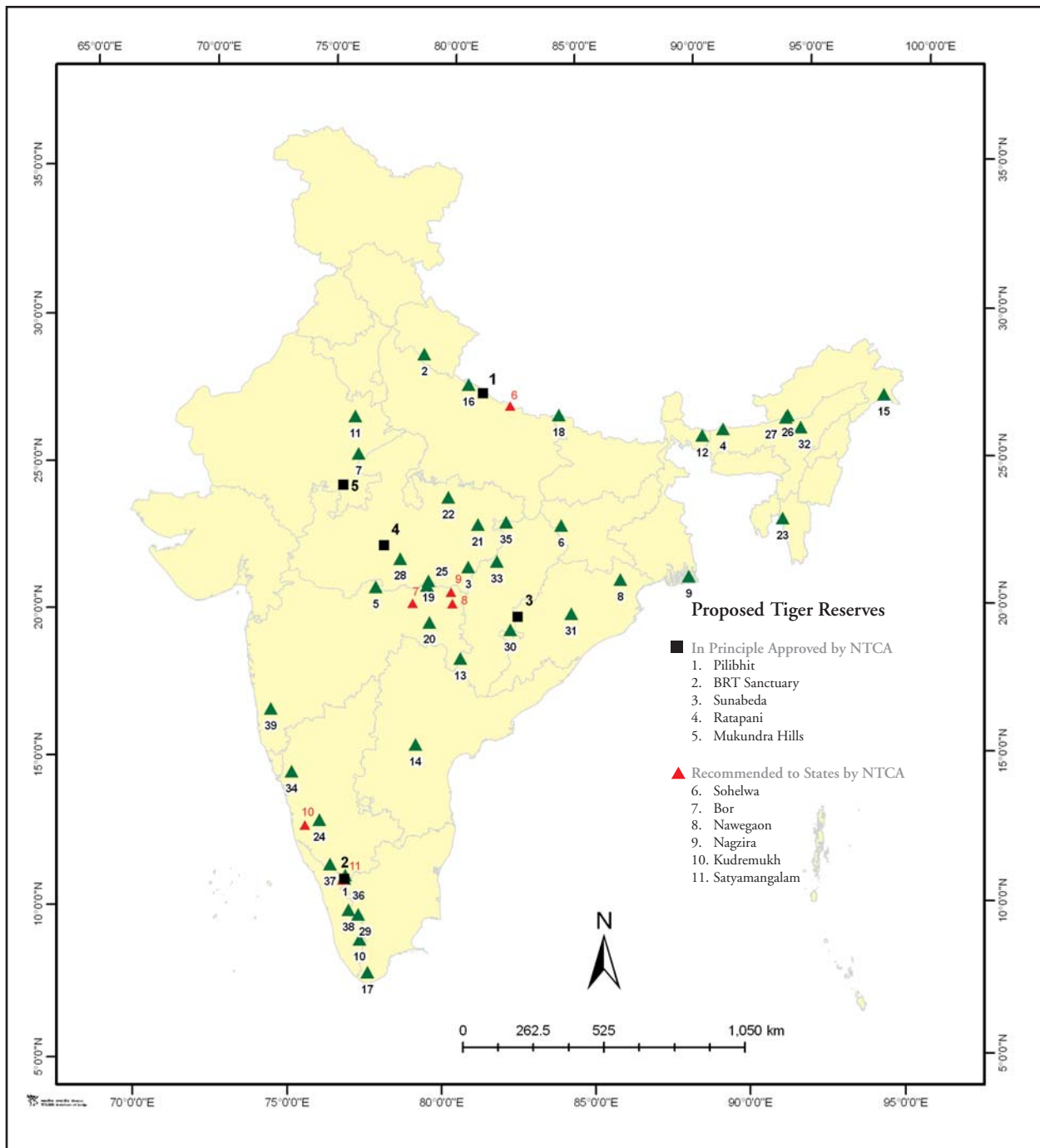


Ministry of Environment and Forests
GOVERNMENT OF INDIA



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

TIGER RESERVES IN INDIA



▲ Existing Tiger Reserves

1 Bandipur 2 Corbett 3 Kanha 4 Manas 5 Melghat 6 Palamau 7 Ranthambore 8 Simlipal 9 Sunderban 10 Periyar 11 Sariska 12 Buxa 13 Indravati 14 Nagarjuna Sagar 15 Namdapha 16 Dudhwa 17 Kalakkad-Mundanthurai 18 Valmiki 19 Pench-MP 20 Tadoba Andheri 21 Bandhavgarh 22 Panna 23 Dampa 24 Bhadra 25 Pench-MH 26 Pakke 27 Nameri 28 Satpura 29 Anamalai (Indira Gandhi) 30 Udanti-Sitanadi 31 Satkosia 32 Kaziranga 33 Achanakmar 34 Dandeli-Anshi 35 Sanjay Dubri 36 Mudumalai 37 Nagarhole (Rajiv Gandhi) 38 Parambikulam 39 Sahyadri

CONTENTS

FOREWORD

I.	INTRODUCTION	-	3
II.	SALIENT FEATURES	-	4
III.	THE FRAMEWORK	-	4
IV.	RESULTS	-	6
V.	COMPARISON WITH 2005-06 EVALUATION	-	8
VI.	NEW FINDINGS OF ASSESSMENT	-	9
VII.	THE WAY AHEAD	-	9

जयंती नटराजन
Jayanthi Natarajan



राज्य मंत्री (स्वतंत्र प्रभार)
पर्यावरण एवं वन मंत्रालय
भारत सरकार
नई दिल्ली-110 003
MINISTER OF STATE (INDEPENDENT CHARGE)
ENVIRONMENT & FORESTS
GOVERNMENT OF INDIA
NEW DELHI-110 003

22th July, 2011

FOREWORD

The Management Effectiveness Evaluation (MEE) process is a global framework to evaluate the performance of protected areas. I am happy to note, that India is among the select countries in the world that has institutionalized the MEE process for its network of protected areas. India has not only independently assessed the effectiveness of 28 tiger reserves in 2005-2006, but has taken this process forward, by extending this evaluation in 2010-11 to all 39 tiger reserves. The outcomes of this assessment are encouraging and despite all odds, our park managers and front-line staff are putting up a valiant effort to conserve our natural heritage. I understand that better protection is required for the five tiger reserves, located in the 'Red Corridor'. This is a daunting task, and I urge all sections of society to cooperate with us and support our forest and field staff.

I hope that field managers, across all parks closely monitor the performance of the 30 'headline indicators' tailored around the conservation needs of India, to ensure the long-term conservation of our magnificent tigers and the biological diversity that tiger reserves harbour.

I take this opportunity to compliment the National Tiger Conservation Authority (NTCA), Wildlife Institute of India (WII), Chief Wildlife Wardens of all Tiger Range States and above all the park managers and the front-line staff for their valuable contribution in securing the conservation of our national animal.

Jayanthi Natarajan
(Jayanthi Natarajan)



I. INTRODUCTION

Management Effectiveness Evaluation (MEE) is the assessment of how well protected areas such as national parks, wildlife sanctuaries, conservation reserves, community reserves and tiger reserves are being managed and their effectiveness in conserving target flora and fauna.

From June, 2010 to July, 2011 the National Tiger Conservation Authority (NTCA) in partnership with the Wildlife Institute of India (WII) undertook an independent Management Effectiveness Evaluation of all 39 tiger reserves in the country.



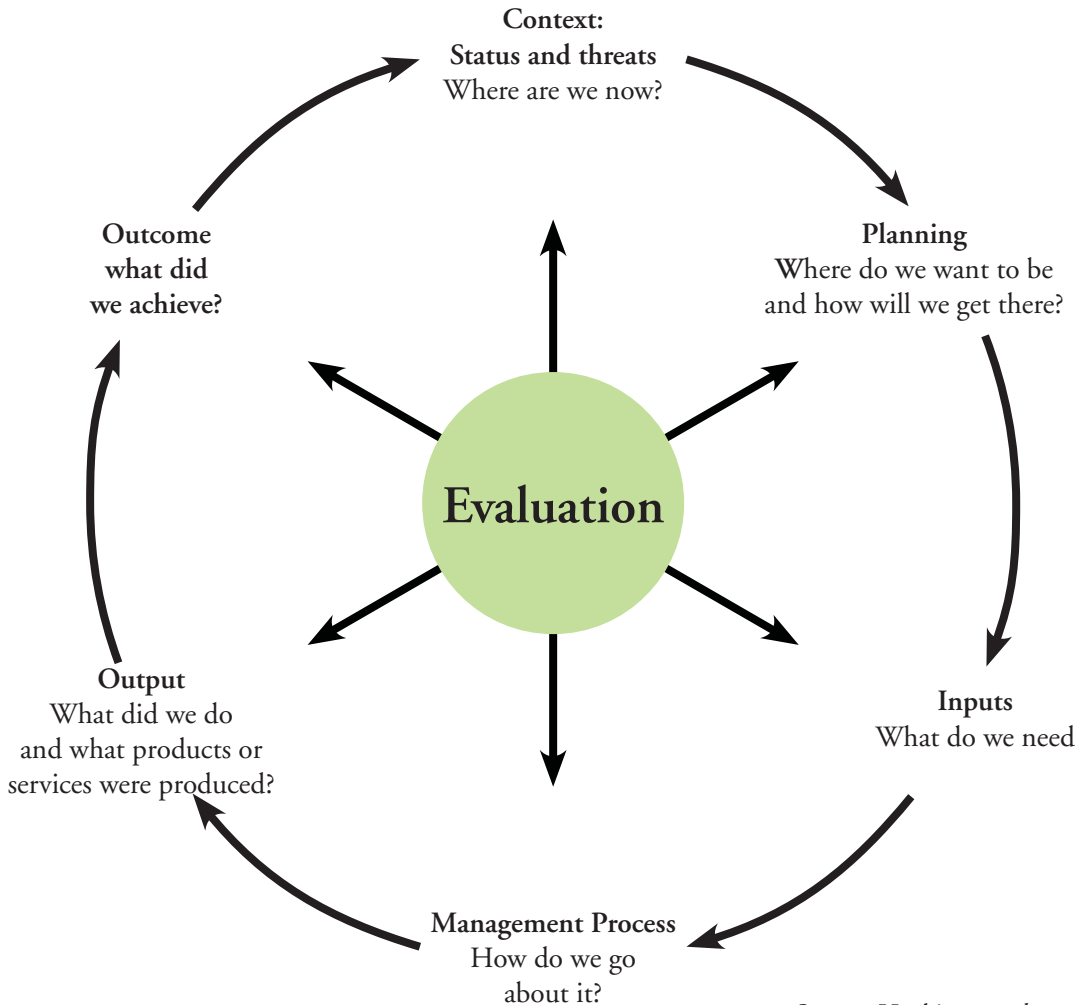
II. SALIENT FEATURES

- ❖ Evaluation was done by adapting a globally used framework that is used in over 140 countries in the world
- ❖ All 39 tiger reserves evaluated including the five in ‘Red Corridor’
- ❖ Five independent teams conducted the evaluation.
- ❖ Thirty headline indicators, developed especially for India

III. THE FRAMEWORK

The Framework consists of six elements *viz.* Context, Planning, Inputs, Process, Outputs and Outcomes; each of them has a precise focus of evaluation. This Framework assesses the importance of each tiger reserve for conservation in the face of current threats to the species.

The Framework for Assessing Management Effectiveness



Source: Hockings *et al*, 2006

For this, the resources used for the successful implementation of programmes that meet management objectives are evaluated for measurable results of their effectiveness and relevance.

The various criteria within the major elements of the evaluation framework include parameters such as:

- ❖ vulnerability of tiger populations within
- ❖ protected area design,
- ❖ management planning
- ❖ suitability of these plans in the context of the major threats



IV. RESULTS

LANDSCAPE RESULTS

The 39 tiger reserves in 17 States were grouped into the same Landscape Clusters as the tiger estimation exercise, with the addition of the category 'Red Corridor'. The five clusters had an overall MEE of 65%.

Arranged in descending percentages, the landscape MEE scores were:

- ❖ Central India-Eastern Ghats Landscape: 79
- ❖ Western Ghats Landscape: 75
- ❖ The North East Hills, Brahmaputra Flood Plain and Sundarbans: 66
- ❖ Sivalik Gangetic Plains and Eastern Ghats Landscape: 64
- ❖ 'Red Corridor': 42

OUTCOMES OF MEE PROCESS (2010-11)

Category-wise outcome of MEE Process

S. No.	Category	Name of Tiger Reserve
1	Very Good	Annamalai, Bandhavgarh, Bandipur Bhadra, Dandeli-Anshi, Kalakad-Mundanthurai, Kanha, Kaziranga, Mudumalai, Parambikulam, Pench (Madhya Pradesh), Periyar, Satpura, Sundarbans
2	Good	Buxa, Corbett, Dampa, Dudhwa, Manas, Melghat, Nagarhole, Pakke, Pench (Maharashtra), Ranthambhore, Tadoba-Andhari
3	Satisfactory	Achanakmar, Nameri, Namdapha, Sanjay, Sayadari, Valmiki
4	Poor	Satkosia

Category-wise outcome of MEE Process of Tiger Reserves falling in the 'Red Corridor'

S. No.	Category	Name of Tiger Reserve
1	Very Good	---
2	Good	Nagarjunsagar-Srisailem
3	Satisfactory	Simlipal
4	Poor	Indravati, Palamau, Udanti-Sitanadi

Category-wise outcome of MEE Process of Tiger Reserves, which had recently lost all tigers

S. No.	Category	Name of Tiger Reserve
1	Very Good	Panna
2	Good	---
3	Satisfactory	Sariska
4	Poor	---

Summary of MEE Process of Tiger Reserves

Rating	Number of Tiger Reserves	Percentage
Very Good	15	38
Good	12	31
Satisfactory	8	21
Poor	4	10



V. COMPARISON WITH 2005-06 EVALUATION

The MEE ratings of 2010-11 and 2005-06 have been compared for 28 tiger Reserves, which were also part of 2005-06 evaluation:

- ❖ Very good: Increased by 4%
- ❖ Good: Increased by 3%
- ❖ Satisfactory: Decreased by 7%
- ❖ Poor: Status quo

COMPARISON OF MEE RATING OF TIGER RESERVES IN 2005-06 AND 2010-11

Category	2005-06		2010-11	
	Number in each category	% in each category	Number in each category	% in each category
Very Good	09	32	10	36
Good	10	36	11	39
Satisfactory	07	25	05	18
Poor	02	07	02	07
Total	28		28	



VI. NEW FINDINGS OF ASSESSMENT

- ❖ Four percent increase in Very Good Category.
- ❖ Tiger Reserves such as Panna which lost all its tigers performing well.
- ❖ The MEE Assessment 2010-11 indicates most tiger reserves have complied with statutory requirements such as declaration of buffer zone, tiger conservation plans and have carried out a good assessment of their threats.
- ❖ Better trained manpower required to decrease biotic interferences in the core area.
- ❖ Better information dissemination of the public required.
- ❖ Better participation by stakeholders required.

VII. THE WAY AHEAD

The 2010-11 Management Effectiveness Evaluation indicates an improvement in the overall management of tiger reserves. The five tiger reserves in the 'Red Corridor' require special measures to deal with their current situation. The NTCA in collaboration with WII and Zoological Society of London (ZSL) has developed a "Monitoring System for Tigers – Intensive Patrolling and Ecological Status" ("M-STrIPES) for managers to assess the status of protection, ecological and biotic pressures and when adaptive management is necessary. The M-STrIPES would *inter-alia* provide quantitative data/information which could be used in MEE process. The M-STrIPES needs to be pilot tested and then implemented in all tiger reserves. The recommendations for all 39 tiger reserves contained in MEE Report 2011 will have to be speedily implemented. The Tiger Conservation Plans (TCPs) and Annual Plan of Operations (APOs) will have to factor in these results, to enhance the management effectiveness of tiger reserves.



Ministry of Environment and Forests
GOVERNMENT OF INDIA

For more information, contact:

Dr. Rajesh Gopal
Member Secretary,
National Tiger Conservation Authority, New Delhi
Email: rajeshgopal8155@gmail.com

Dr. Vinod B. Mathur
Dean, Wildlife Institute of India,
Chandrabani, Dehradun
Email: vbm@wii.gov.in