COUNTING TIGERS

THE TIGER ESTIMATION PROCEDURE (2008)

INFORMATION SHEET

NOVEMBER 2010

Ministry of Environment and Forests
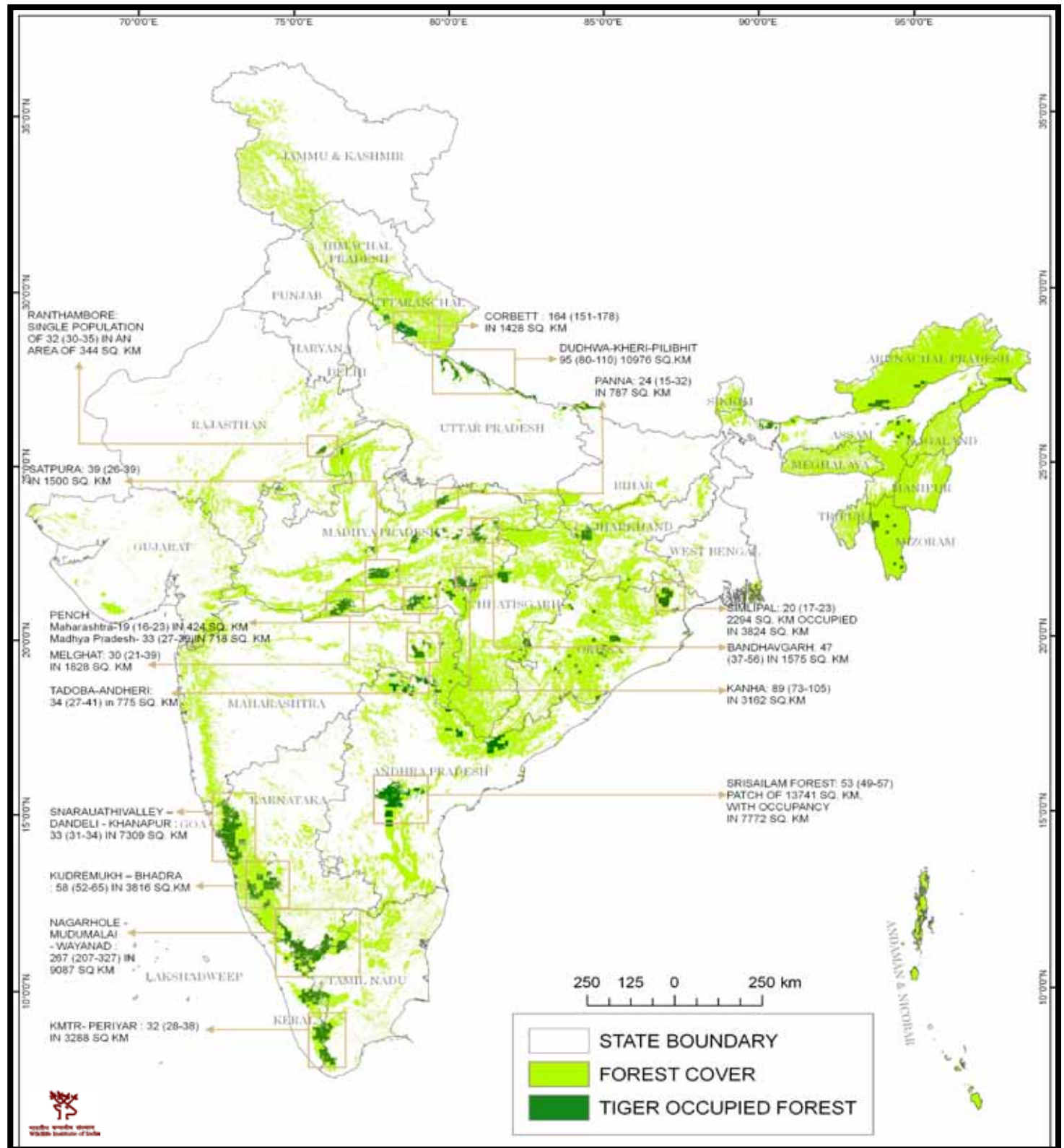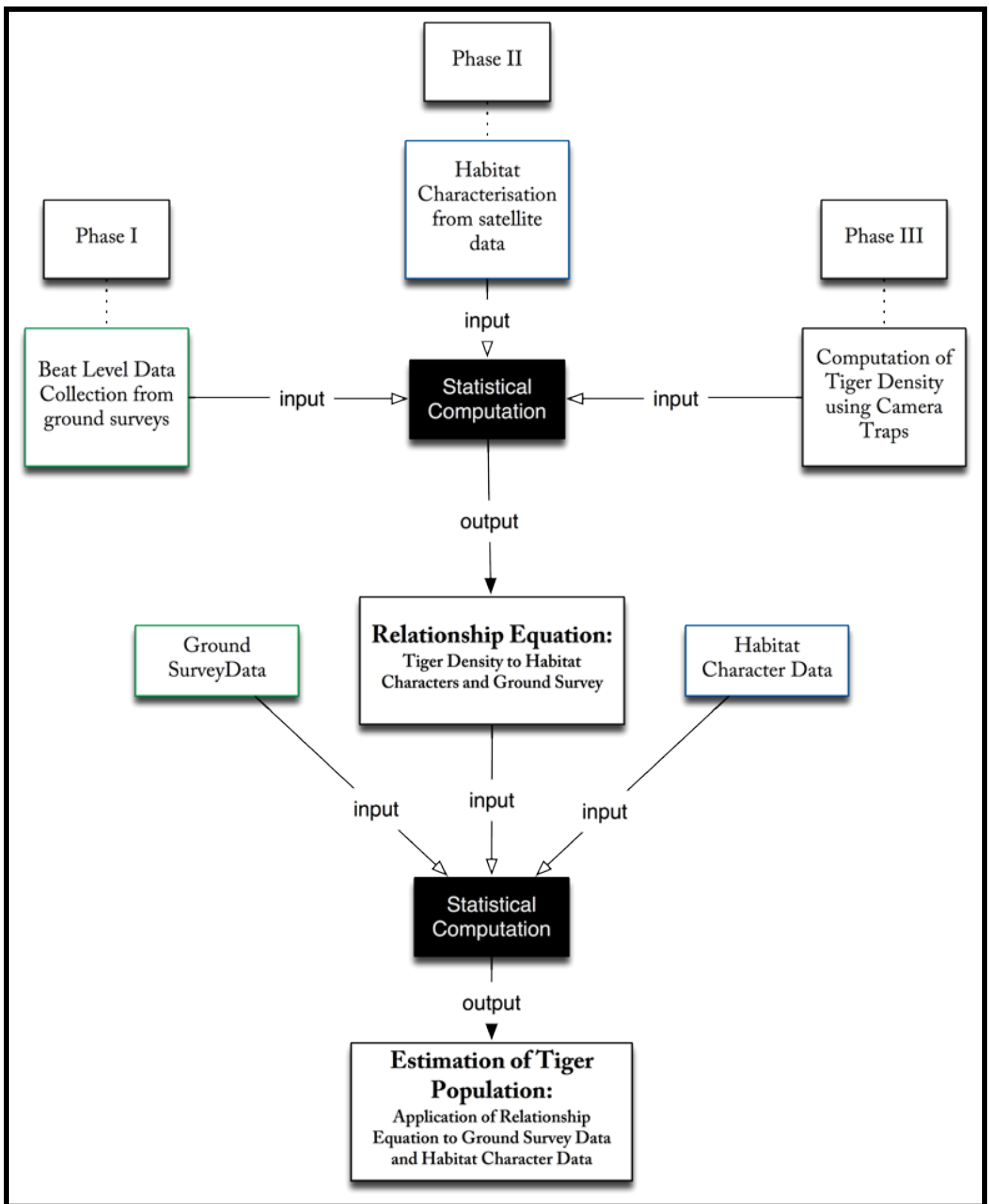GOVERNMENT OF INDIA

The National Estimation of the Status of the Tiger is based on established scientific procedure to provide information on **tiger populations in India.**

RANTHAMBORE: SINGLE POPULATION OF 32 (30-35) IN AN AREA OF 344 SQ. KM

CORBETT : 164 (151-178) IN 1428 SQ. KM

DUDHWA-KHERI-PILIBHIT 95 (80-110) 10976 SQ.KM

PANNA: 24 (15-32) IN 787 SQ. KM

SATPURA: 39 (26-39) IN 1500 SQ. KM

PENCH Maharashtra-19 (16-23) IN 424 SQ. KM Madhya Pradesh- 33 (27-39) IN 718 SQ. KM

MELGHAT: 30 (21-39) IN 1828 SQ. KM

TADOBA-ANDHERI: 34 (27-41) in 775 SQ. KM

SIMLIPAL: 20 (17-23) 2294 SQ. KM OCCUPIED IN 3824 SQ. KM

BANDHAVGARH: 47 (37-56) IN 1575 SQ. KM

KANHA: 89 (73-105) IN 3162 SQ.KM

SRISAILAM FOREST: 53 (49-57) PATCH OF 13741 SQ. KM. WITH OCCUPANCY IN 7772 SQ. KM

SNARAUATHIVALLEY – DANDELI – KHANAPUR : GOA 33 (31-34) IN 7309 SQ. KM

KUDREMUKH – BHADRA : 58 (52-65) IN 3816 SQ.KM

NAGARHOLE – MUDUMALAI – WAYANAD : 297 (207-327) IN 9087 SQ KM

KMTR- PERIYAR : 32 (28-38) IN 3288 SQ. KM

250 125 0 250 km

STATE BOUNDARY
FOREST COVER
TIGER OCCUPIED FOREST

The population of the tiger was estimated in 17 Indian states. **The results from this procedure indicate that tiger populations are viable within Protected Areas but are under threat outside them.**

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Phase I                    Phase II                    Phase III

                      Habitat
                   Characterisation
                   from satellite
                        data

                         ↓ input

Beat Level Data  →input→  Statistical   ←input←  Computation of
Collection from           Computation            Tiger Density
ground surveys                                    using Camera
                                                  Traps

                         ↓ output

Ground                Relationship Equation:              Habitat
SurveyData            Tiger Density to Habitat            Character Data
                      Characters and Ground Survey

         input             input             input
                      Statistical
                      Computation

                         ↓ output

                   Estimation of Tiger
                       Population:
                   Application of Relationship
                   Equation to Ground Survey Data
                   and Habitat Character Data
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This procedure involves rigorous statistical analyses and is far more accurate than earlier methods. It is conducted in three phases and involves ground surveys, analyses of satellite data and camera traps.

The three phases of the Tiger Estimation Procedure

Phase I:

Ground survey data at the beat level was collected by field personnel in a standardised protocol after training.

Phase II:

Statistical and satellite data were analysed by the Wildlife Institute of India in collaboration with the National Tiger Conservation Authority.

Phase III:

The camera trapping procedure was conducted by research biologists

This data is a crucial component of Project Tiger and is used to:

a) Measure the present status of tiger populations across the 17 tiger States in the country.

b) Develop effective strategies to strengthen future tiger conservation programs.

Due to significant errors in the earlier pugmark counting method, its results are considered flawed, and cannot be compared with the results from this advanced procedure.

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