Factors predicting the outcome of targeted conservation interventions

Case study number:

Scientific name:

Common name(s):

RESPONSE VARIABLES
Overview of recovery programme and species status:

Population trend – has the population increased/decreased/stabilised from its lowest point at the beginning of the recovery programme?

1. Extinct □
2. Population decline continuing □
3. Population decline halted □
4. Population recovery □
5. Unknown □

OR

1. Declining/Extinct □
2. Stable/Increasing □
3. Unknown □

Conservation reliance
1. Captive managed □
2. Intensively managed □
3. Lightly managed □
4. Conservation dependent □
5. Self-sustaining □
PREDICTOR VARIABLES

Biology/ecology

1. Order:

2. Body Mass:

3. Litter size:

4. Interbirth Interval:

5. Habitat type:
   - Forest ☐ Savanna ☐ Shrubland ☐ Grassland ☐ Wetlands (inland) ☐ Rocky areas (cliffs/peaks) ☐ Caves and subterranean habitats ☐ Desert ☐ Marine Neritic ☐ Marine oceanic ☐ Marine deep ocean floor ☐ Marine intertidal ☐ Marine coastal/supratidal ☐ Artificial – terrestrial ☐ Artificial – aquatic ☐ Introduced vegetation ☐ Other ☐ Unknown ☐

   Other info:

Geo-political environment

6. WWF biogeographic realm:
   - Nearctic ☐ Palearctic ☐ Afrotropic ☐ Indomalaya ☐ Australasia ☐ Neotropic ☐ Oceania ☐ Antarctic ☐
7. Human development index:

……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………

8. Human footprint:

……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………

9. Corruption index:

……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………

**Threats**

10. What are the primary threats to the species?:

    Residential & commercial development ☐
    Agriculture & aquaculture ☐
    Energy production & mining ☐
    Transportation and service corridors ☐
    Biological resource use ☐
    Human intrusions & disturbance ☐
    Natural system modifications ☐
    Invasive & other problematic species, genes & diseases ☐
    Pollution ☐
    Geological events ☐
    Climate change & severe weather ☐
    Other options ☐

    Other info:

    ……………………………………………………………………………………………………………………………………….
    ……………………………………………………………………………………………………………………………………….
    ……………………………………………………………………………………………………………………………………….

11. Do the ultimate threats originate from within or outside the species’ range?

    Closed system (within) ☐
    Open system (outside) ☐
12. Have the primary threats been substantially reduced or reversed?

   All ☐   Most ☐   Some ☐   None ☐

   ……………………………………………………………………………………………………………………………………….
   ……………………………………………………………………………………………………………………………………….

13. Have any of the primary threats escalated during the course of the recovery programme?

   Substantial escalation ☐   Moderate escalation ☐   No escalation ☐

   ……………………………………………………………………………………………………………………………………….
   ……………………………………………………………………………………………………………………………………….

14. Have novel threats emerged or has the nature of the primary threat changed during the course of the recovery programme?

   Yes ☐   No ☐

   ……………………………………………………………………………………………………………………………………….
   ……………………………………………………………………………………………………………………………………….

15. Is the lack of good quality suitable habitat/range a known limitation to recovery?

   Yes ☐   No ☐

16. Is small population size/inbreeding a known or probable limitation to recovery?

   Yes ☐   No ☐   Unknown ☐

17. Level of legal protection the species has within range states?

   Full protection ☐
   Partial protection ☐
   No protection ☐

   ……………………………………………………………………………………………………………………………………….
   ……………………………………………………………………………………………………………………………………….

18. Level of legal protection of the species’ habitat across range states?
Full protection □
Partial protection □
No protection □

………………………………………………………………………………………………………………………………….….
…………………………………………………………………………………………………………………………………….

19. Level of law enforcement for protection of species and/or its habitat:
   Effective enforcement across its range □
   Effective enforcement in PAs only □
   Partial enforcement across range □
   Partial enforcement in PAs only □
   Ineffective/weak enforcement across its range □

Baseline information and conservation planning

Information on population over time (temporal and/or spatial depending on the number of sites):
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………

20. Population size at beginning of intervention:
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………

21. Magnitude/rate of decline at beginning of intervention:
……………………………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………………………

22. Level of confidence in available field data on status of the population prior to recovery programme?
High confidence ☐
Reasonable confidence ☐
Low confidence ☐
No confidence/status unknown ☐

23. Number of scientific publications available for the species:
   a) BEFORE start of recovery programme?
   b) AFTER start of recovery programme?

24. Is there an action/management plan for the species?
   Yes ☐  No ☐

25. What was the time between formal recognition of the need for a recovery programme and commencement of key management activities?

26. What are the conservation actions that form a core component of the recovery programme?

   Invasive action to target species
   Ex-situ captive breeding
   In situ population recovery
   Translocation
   Disease management
   
   Non-invasive action to target species
   Habitat protection/management/recovery
   Invasive species management
   Law enforcement/anti-poaching
   Community engagement/education/livelihoods
   Compensation payments
   Ecological research

27. Were there any analogous recovery programmes based on a similar species or using similar techniques to this recovery programme?
   Yes ☐  No ☐
### Stakeholders and Management

#### 28. Number of national level organisations with key role in project

<table>
<thead>
<tr>
<th>Organisation Type</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>National/federal government agency</td>
<td>☐</td>
</tr>
<tr>
<td>Regional/state administration agency</td>
<td>☐</td>
</tr>
<tr>
<td>NGO</td>
<td>☐</td>
</tr>
<tr>
<td>Zoo</td>
<td>☐</td>
</tr>
<tr>
<td>Academic institution</td>
<td>☐</td>
</tr>
<tr>
<td>Private company</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>☐</td>
</tr>
</tbody>
</table>

#### 29. Number of international level organisations with key role in project

<table>
<thead>
<tr>
<th>Organisation Type</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>National/federal government agency</td>
<td>☐</td>
</tr>
<tr>
<td>NGO</td>
<td>☐</td>
</tr>
<tr>
<td>Zoo</td>
<td>☐</td>
</tr>
<tr>
<td>Academic institution</td>
<td>☐</td>
</tr>
<tr>
<td>Private company</td>
<td>☐</td>
</tr>
<tr>
<td>Other</td>
<td>☐</td>
</tr>
</tbody>
</table>

#### 30. Maximum number of people employed on recovery project at any time during the project’s history?

- ………………………………………………………………………………………………………………………………………

#### 31. What is the overall management structure of the recovery programme?

- Formal recovery team led by e.g. government ☐
- Formal collaborative recovery team/working group with no leadership ☐
- Informal collaboration between stakeholders ☐
- Little/no collaboration between stakeholders ☐
32. Regularity of contact between primary stakeholders?
........................................................................................................................................................................
........................................................................................................................................................................

33. Level of agreement on key actions between primary stakeholders?
General agreement ☐ Partial agreement ☐ Weak agreement ☐

34. Level of political support for recovery programme across its range states?
Active endorsement ☐ Passive endorsement ☐ None ☐ Conflict ☐
Other info:
........................................................................................................................................................................
........................................................................................................................................................................

35. Level of community support for/engagement with the recovery programme?
General support ☐ Partial support ☐ Neutral attitude ☐ Intermittent conflict ☐ Persistent conflict ☐ NA ☐
Other info
........................................................................................................................................................................
........................................................................................................................................................................

**Funding**

36. Level of funding needed?
........................................................................................................................................................................
........................................................................................................................................................................
37. Continuity of major funding:
   - 1 year or less ☐
   - 1-3 years ☐
   - 3+ years ☐

38. Are key recovery plan actions ever delayed through lack of funds?
   - Rarely/Never ☐
   - Occasionally ☐
   - Regularly ☐
   - Always ☐

39. Are there any issues that you feel significantly contributed to the species’ recovery/decline that have not been captured in the questions so far?