

Role of wildlife corridors in tiger conservation

Why in news?

Sahyadri-Konkan wildlife corridor will play a crucial role in translocating tigers from Tadoba-Andhari Tiger Reserve to Sahyadri Tiger Reserve in Maharashtra.

Why Maharashtra plans to translocate tigers to Sahyadri Tiger Reserve (STR)?

STR comprises of Chandoli National Park and Koyna Wildlife Sanctuary.

- **Historical challenges** Tiger population in Sahyadri region has faced many challenges such as poaching, habitat loss, and a depleted prey base, have led to a decline in tiger numbers.
- **Need of intervention** Despite the establishment of Sahyadri Tiger Reserve, the tiger population has not increased significantly.



- **Population stagnation** The reserve has struggled to attract breeding tigers, further exacerbating decline in population.
- **Occasional evidence** The reserve has limited evidence of tiger presence such as pugmarks indicates a small number of tigers moving within the reserve this

underscores the urgency of action to revitalize the tiger population within the reserve.

- **Improve genetic diversity** Translocation of tigers presents a strategic opportunity to infuse new genetic diversity into the population and potentially catalyse breeding efforts.
- **Sahyadri-Konkan wildlife corridor** The corridor must be secure enough and free from human disturbance to achieve the objective of translocation.

Sahyadri-Konkan wildlife corridor

• Coverage- Maharashtra, Goa and Karnataka

• **Crucial habitat**- It connects the Sahyadri Tiger Reserve in Maharashtra and Kali Tiger Reserve in Karnataka serving as a crucial habitat for *tigers, sloth bears and dholes*.

• Large carnivore occupancy- A study by Wildlife Conservation Trust shows an increase in tiger and dhole occupancy, while tiger and leopard numbers remain stable.

• This indicates improved landscape management since the Sahyadri Tiger Reserve's declaration since 2010.

What role do wildlife corridors play in conservation?

- Facilitate gene flow- It enable tigers to traverse human-dominated landscapes safely, minimizing the risk of human-wildlife conflicts and increasing their chances of successful dispersal and breeding.
- **Sustainable infrastructure-** Measures such as the construction of underpasses, wildlife crossings, and overpasses are increasingly implemented to safeguard tigers and other wildlife from the impacts of linear infrastructure projects that fragment habitats.
- **Preserve migratory routes** The construction of overpasses on NH-7 between Kanha and Pench Tiger Reserves, ensures the safe passage of tigers and other wildlife underneath the elevated stretches, preserving their migratory routes.
- **Mapping of corridors** <u>National Tiger Conservation Authority</u> and <u>Wildlife Institute of</u> <u>India's</u> mapping of 32 major tiger corridors is a significant step towards understanding and preserving these essential habitats.

What can be done for tiger recovery?

- **Habitat improvement** It involves restoring degraded habitats to enhance their quality and resilience in activities such as reforestation, soil conservation, water management, and invasive species control.
- **Prey base enhancement** Increasing the populations of natural prey species like deer and wild boar creates a healthier ecosystem.
- **Mitigate human-tiger conflict**-Increasing the natural prey would reduce the need for tigers to venture into human settlements for food, enhancing both human safety and the ecological integrity of the forest.
- **Corridor strengthening** Wildlife corridors are crucial for allowing tigers to move between habitat patches, which can aid in recolonization of areas where tigers have become locally extinct and help maintain genetic diversity.
- Anti-poaching measures- Implementing rigorous anti-poaching efforts such as increased patrolling, enforcement of wildlife protection laws and collaboration with law enforcement agencies to combat illegal hunting and trade of tigers and their prey species.

- **Community engagement** Engaging local communities in tiger conservation efforts through education, awareness programs, and livelihood support initiatives can foster greater support and participation in conservation activities.
- **Research** Conducting scientific research to better understand tiger ecology, behaviour, and population dynamics is essential for informing conservation strategies and monitoring the effectiveness of conservation efforts over time.
- **Project tiger** It is a flagship conservation program launched in 1973 aimed at conserving and increasing tiger population in India
- **International cooperation-** Collaborating with neighbouring countries and international organizations to address transboundary conservation challenges is crucial for ensuring the long-term survival of tigers.
- **Translocation** It should be considered as a last resort, it should be based on thorough scientific assessments and community consultations.

Successful translocation	Setbacks in translocation
• <u>Sariska Tiger Reserve</u> and <u>Panna Tiger</u>	• <u>Satkosia Tiger Reserve</u> , Odisha has faced
<u>Reserve</u> , have helped restore tiger	challenges and setbacks in tiger reserve
populations in areas where they had become	project.
locally extinct.	 Poor planning, inadequate community
• These projects have demonstrated that	engagement, and unforeseen conflicts with
translocation can be effective in replenishing	local residents can lead to failure of
tiger populations and restoring ecological	translocation initiatives, causing harm to
balance in suitable habitats.	both humans and tigers.

References

- 1. Indian Express- Maharashtra to translocate tigers
- 2. <u>WWF- Urgent need to increase prey augmentation</u>

