

Guidelines for release of zoo animals into the wild

Release of genetically, biologically and behaviourally viable zoo bred animals in an objective and planned manner in accordance with a well conceived guidelines is an important tool for conservation of wildlife. However, unplanned release of zoo bred animals of unknown pedigree and genetic make up and poor health status often lead to disastrous consequences. In this background strict adherence to the guidelines while releasing any zoo bred/captive bred animals into the wild is crucial.

Objectives of release of zoo bred/ captive bred animals into the wild

1. Augmenting the depleting number of endangered species in any ecosystem.
2. Reintroducing the species in an area which was part of its historical range, from which the species has disappeared or become extinct due to various factors.
3. Introduction of the species in areas outside its recorded range of distribution, in the habitat that have the potential to hold and support the species on a sustained basis without becoming a vermin/ pest.
4. Experimental releases for developing expertise in rehabilitating the zoo bred/ captive bred animals in the wild and preparing detailed protocol for planned release of the species for any of above objectives.

Pre requisites for a successful release programme

1. Capacity of wildlife habitat at the release sight to accommodate and support the released animals and their progeny on a sustained basis, without adversely impacting the population of other species inhabiting the area.
2. Capacity of the animals that are being released to adopt itself in the wild and fend itself successfully.
3. Mitigation/ redressal of the factors that have been responsible for the decline in the size of the in-situ population of the species/ extinction of the species from the area.

4. Release of the animals not posing/ having a potential to pose any physical or health hazard to the local human population and their live- stock.
5. Acceptability of the release programme to the local population.
6. Availability of trained and dedicated man power to execute the preparatory phase, carrying out planned and successful release and conducting post release monitoring of the released animals.
7. Commitment of the Government to support the programme and provide finances and other resources on a sustained basis for various phases of the release programme.

Strategy for successful release of zoo bred/ captive bred animals in the wild

A. Preparatory phase

I. Biological

- (i) Assessment of taxonomic status of the animals earmarked for the release and ensuring that they pertain to the same species/ race that is naturally occurring/ occurred in the area.
- (ii) Assessment of the critical needs of the species to be released including habitat preferences, intra specific variations and adaptations to the local ecological conditions, social behaviour and group dynamics, home range shelter and food requirements, foraging and feeding behaviour, predators and diseases etc. Over all to have and analyse a firm knowledge of the natural history of the species to be released.
- (iii) Species if any, that has filled in the void created by the extinction of the species from the area and effect of the release on the status of the population of that species.
- (iv) Determining the optimal number of animals that can be released each year and most appropriate period for the release.
- (v) Evaluation of previous releases of the species and identification of the problems, mitigation of which is crucial, and priority areas which need to be attended for making the release successful.

- II. Choice of the release site
 - (i) The site of release should have an habitat that has all the biological attribute necessary for sustained survival of the released animals and their progeny and have adequate carrying capacity to accommodate the released animals and their progeny. As a rule no releases of zoo bred/ captive animals should be done in adequately stocked habitat.
 - (ii) The area of release should have assured long term protection against all the factors that can inhibit the future propagation and healthy growth of the population of species released.
- III. Suitability of the stock for release
 - (i) Animals for release in the wild should be drawn out from the planned conservation breeding programme being carried out under the supervision of the Central Zoo Authority.
 - (ii) Animals selected for the release should be thoroughly screened for their biological, behavioural and genetic health in accordance with protocol development by the National Referral Centre and LaCONES. No animal that is found lacking in any of the prescribed standards should be selected for release.

Release of the zoo bred/captive bred animals in the wild

The animals earmarked for the release should be initially shifted to facility specially created near the release site which has all the attributes of the wildlife habitat in which the animals are to be released to give them time and opportunity to acquire necessary information and skills to survive in the wild, through training, through experts if so required. They should be released in the wild when their behaviour becomes comparable with their wild counterpart.

Socio-economic-Legal Requirements

- (i) Socio-Economic studies should be made to assess the impacts, costs and benefits of the proposed release to the local population.
- (ii) Thorough assessment of the attitude of the local people to the proposed release project should be made and their apprehension if any, should be properly redressed. No release of animals in wild should be made in the wild against the wishes of the local people.

- (iii) Public awareness programme about the benefits of proposed release should be made both through print media and electronic media.

General

- (i) The execution of all the phases of the release programme should be carried out under the supervision of multi disciplinary team of experts.
- (ii) Long term and short term indicators for quantifying the success of the release programme should be identified.
- (iii) Detailed programme for all the phases of the release should be developed so that each stage can be meticulously implemented in planned and scientific manner.
- (iv) Necessary vaccinations against local endemic and epidemic diseases should be given to all the livestock that is likely to share the habitat with the released species.
- (v) Transport plan for the animals should be so prepared and executed that no mortalities take place during the transport.
- (vi) Appropriate orientation and training programmes should be organized for all the persons involved in the release programme.

Post release activities

- (i) Continued demographic, ecological and behavioural studies on released animals should be done both through direct (telemetry/ monitoring of movements) and indirect methods (information provided by local people).
- (ii) Status of adaptation of the animal in the wild should be regularly assessed and desired interventions should be made wherever necessary. Released animals should be retrieved and brought back to the captive facilities in case the intervention do not succeed despite all efforts.
- (iii) Habitat protection/restoration and enrichment should be done wherever necessary.
- (iv) Continued evaluation of the success of the programme with reference to identified parameters and results should be published in scientific journals/ popular literature.