Translocation of Rhinos within Assam : A successful second round of the second phase of translocations under Indian Rhino Vision (IRV) 2020

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Introduction

The conservation of the Great Indian One horned Rhino (*rhinoceros unicornis)* is being regarded as the epitome of conservation movement in the country and Assam in particular. Assam is also regarded as the last stronghold of the Indian Rhino with more then 2000 rhinos in the wild. Planned initiative in terms of rhino conservation in Assam by the Department of Forest with the help and support of many agencies including local populace made it possible to build up the population of rhinos to 2048 in Kaziranga National Park, 64 in Orang National Park, 84 in Pobitora Wildlife Sanctuary (Census, 2009) and 5 rhinos are also found in Manas NP of which two were introduced through wild to wild translocations and three were introduced under the rehabilitation program. While the successes in conservation of rhino was achieved in the above mentioned three protected areas, loss and subsequent extermination of rhino by poachers were witnessed in the other rhino bearing areas like Laokhowa-Burachapori Wildlife Sanctuary during the social unrest in early 1980's and in Manas National Park during the social unrest in 1990's failing all attempts made by the concerned department to protect those.

The conservation of rhinos specifically in Assam and India in general has been a great success looking into the population figures and trends. However the population is confined to only limited areas and more than 90% of the population is found in Kaziranga NP alone which is not quite healthy. For long term conservation of the species, the Indian Rhino Vision 2020 (IRV2020) has been designed which is a joint program of the Department of Environment and Forests, Government of Assam, World Wide Fund for Nature – India (WWF-India) and the International Rhino Foundation (IRF). The US Fish and Wildlife Service (USFWS), the Bodoland Territorial Council and a host of other organizations from different parts of the globe are extending support to the program that aims to increase the rhino population in Assam from about 2000 (in 2005) to 3000 by the year 2020 distributed over seven Protected Areas (PAs) of the state.

Range expansion through wild to wild translocations is one of the prime components of the IRV2020 program and four rhinos from Pobitora WLS have been already successfully translocated to Manas NP in April 2008 and December 2010.

To execute the translocation operations and to co-ordinate all activities related to translocation the Task Force for Translocation of Rhinos within Assam re-constituted a "**Translocation Core Committee (TCC)"** on 1st January 2010, headed by Mr. D.M. Singh as the Chief Operations Officer (COO) and Mr. Amit Sharma (WWF) as the Deputy COO . The other members in the committee are Dr. Bibhab Talukdar (Aaranyak), FDTP Manas, Director Kaziranga NP and DFO Guwahati WL Division.

The Translocation Operation

The process of translocation can be divided into three distinct stages depending on the type of activities to be accomplished and each very crucial, viz., - the preparatory stage; the implementation stage and the post-release stage.

A. **PREPARATORY STAGE**: All the preparatory works were almost done before the successful conduct of the first round of translocation of the present phase undertaken during December 2010. After the successful completion of the first round, the TCC and its sub-teams assessed the gaps and the needs and planned accordingly. A few items like crates, sledges, ramps, etc that got damaged during operation were either replaced or repaired and strengthened as found necessary. The other important aspect that was identified was to have a rescue kit for rhinos in case it enters the water which was learnt through the experience in the first round and also to have adequate manpower and logistics arrangements so that two capture operations could be conducted simultaneously in case of a mother and a calf. All things were in place and the teams were ready within the stipulated time frame.

B. IMPLEMENTATION STAGE: This stage includes locating the rhinos of suitable age and sex, capturing, transporting and then releasing the rhinos in the destination.

The second round of translocations under the second phase was fixed to be conducted during 16th to 18th January 2011. As most of the members / workers involved including the drivers and support staff were briefed and had practical experience of the operation during the last round conducted during December 2010 it was decided that the team would meet directly at Pobitora WLS on the day before the capture for finalizing the strategies. After the last round of translocations, the crates, sledges and other equipments were maintained and kept ready at the Assam State Zoo, on 16th January 2011, all the necessary were loaded onto the trucks under the supervision of the logistics team and dispatched to reach Pobitora by about 5.00PM. Briefing and strategies were discussed in the evening and all preparations were given a final touch. The trucks with crates, cranes, excavators, etc all reached the capture site by the evening and as per the strategy devised they were positioned in two different parts of the sanctuary. One set with two trucks and crates was positioned at Kukari camp which is near to one of the capture location and the other with two more trucks and crates were positioned at Haduk which was closer to the second probable capture site, Tamulidoba.

On the day of actual capture i.e. – 17 December 2011 at Pobitora WLS, the area was cordoned off and full security cover was provided by the personnel's of the Assam Police department. The preparatory works that also included the search for the rhinos started at about 6.45AM when visibility was good from Tuplung camp. On receiving information of rhinos in the Pagladoba area the veterinarians along with rhino identifiers started the move on the back of the departmental elephants at about 7.15AM. The aim was to capture four sub-adult rhinos preferably females as two males and females were already released in Manas and the target sex ratio was 1:2 or 1:3 for providing a good growth possibility for the founder population. After a bit of effort in the Pagladoba area, two rhinos could be zeroed upon and were assumed to be a mother and calf combination. The bigger rhino was first attempted with plans of capturing the smaller one next. The first rhino could be darted at about 7.40AM near Tuplung and at that moment the smaller one ran off to some distance. The rhino got fully immobilized and collapsed to the ground at about 7.50AM and was confirmed to be a male of about 10 years of age. The other rhino that ran away was probably a female or the younger brother of the one tranquilized, the lesson learnt was that two rhinos sticking together even in

human presence may not be always a mother and her calf. After the regular post-veterinary protocols, fitting of the radio collar and ear notching the rhino the logistics team moved in with excavators, labors, trucks and crates for the following operations. The sledge was placed appropriately adjoining the rhino after digging the ground as per the necessary specifications. The rhino was then rolled on to the sledge with the help of ropes and then it was pulled towards the open doors of the crate. After aligning the sledge with the crate, it was pulled inside over the ramp with the help of an excavator steered by experienced persons taking all care not to injure anyone during the tricky operations. After the sledge with the rhino was put inside the crate the doors of the crate was pulled down using the innovative chain-pulley mechanism. One side was fully closed and the other side was open at minimum levels for the application of the reversal. On the application of the reversal, the rhino was up in its feet in about a minute's time and the sledge was pulled out and simultaneously the door was fully closed and reinforced with the iron bar locking systems. The move to crate the rhino was over by about 8.45AM and then was loaded onto the truck by about 9.10AM. The team was quite up-beat at this early success and thereafter took a break at the base camp Tuplung for breakfast and discussed the next plan of action. After strategizing the moves a small team with the veterinarians, rhino identifiers and a few support staff moved to the second location Tamulidoba where a second set of trained elephants were kept ready for the operation. A few probable rhinos were quickly sighted and the capture moves were initiated around 10.15AM. In the meantime the rest of the team along with the logistics team also followed slowly to nearest base station, Haduk camp so that on any information support can be provided in the shortest possible time. After a number of efforts, one rhino an adult female (probably more than 10 years of age) with a calf (~3 years) was successfully darted around 10.45AM and the rhino was fully immobilized after a long duration of about 20 minutes. Thereafter post-darting activities were carried out by the veterinarians following the standard protocol, a VHF radio collar was fitted and ear notching was done numbering six and thereafter the logistics team moved in for the rest of the process to crate it that was completed by about 12 noon. In the meantime the calf was also darted after a gap of about 10 minutes of darting the mother and the processes were carried out almost simultaneously. From the experience of the previous round, the team was ready for a simultaneous exercise of capture and crating. The process to crate the calf was completed by about 12.20PM. As the team was eager to go the distance and with weather supporting the veterinary team immediately made the necessary arrangements to make a fourth attempt as the whole team was very motivated by the presence of the Chief Wildlife Warden of the State as also the team from West Bengal forest department who have come to learn and experience the translocation operation. Again the small team set out on the mission to a nearby area where a couple of appropriate rhinos were sighted and the locator could very promptly identify a female. In the meantime the logistics team completed the crating process of the earlier two rhinos and waiting for the next signals to move in. The veterinary team on elephants approached the rhino and tried to dart around 1.10PM, multiple attempts had to be made as the rhino was successful in evading the approaching darters for quite some time. A last effort was made at about 1.35PM and the dart found its target and the rhino after running around for quite some time giving anxious moments to the team ultimately got immobilsed at about 1.55PM. The standard procedures were followed and this rhino was numbered 8, a female probably around 10 years of age. This rhino had some minor injuries and necessary medical care was administered before crating. The process of loading was completed by around 3.00PM and the team returned for lunch to the base camp, Haduk very happy as for the very first time four rhinos could be captured within a day's operation as planned in the drawing tables The crates were specially designed with agro-nets on the top side to provide shade to the rhinos and even the trucks with the crated rhinos were parked in shaded areas for optimum comfort and the rhinos were

monitored by the veterinarians. As the temperature was very comfortable not much watering was required which was done at regular intervals as advised by the lead veterinarian.

The movement of the rhinos in convoy started from Pobitora WLS at about 6.00PM in the evening to Manas NP under the supervision of a dedicated team. A Police escort vehicle with flashing lights led the convoy with the rhinos, and the traffic of cities and towns was regulated throughout the journey by the police to make way for the convoy to pass by. The transportation route followed was the same as the earlier ones via Chandrapur-Narangi-VIP road-Khanapara and NH-37. En-route weighing of the trucks with the empty crates as well as the fully loaded truck was done in the same station to obtain the weight of the respective rhinos. The rhinos weighed 1320 kgs, 1550 kgs, 760 kgs and 1720 kgs. respectively. The distance of 240 kms from Pobitora WLS to Manas NP was covered in about twelve hours due to slow movement of vehicles in the interest of comfort and safety of the rhinos. The veterinary team kept monitoring the rhinos at regular intervals and water was poured over them periodically. Not much watering was done as the temperature during the night time was quite low. The vehicles in the convoy kept in contact with each other through walkie-talkies. The convoy of vehicles carrying the stopped at pre-arranged areas for food and rest and ultimately reached Basbari, Manas NP at about 6.00AM.

Plate1 – Rhino capture in progress

Plate2 – Part of the Pobitora Capture team

On the convoy reaching Manas the release team under the leadership of FDTP Manas took over charge and made all the necessary arrangements for the release. Two ramps were prepared for parking the trucks for the release near Buraburijhar camp. It was decided that the female rhino8 that had minor injuries will be released separately in the electric fence enclosure. After day break with proper visibility conditions the rhino8 was released in the enclosure near Rhino Camp by placing the truck in the ramp. The door was opened at about 8.00AM and the rhino immediately rushed out and broke the electric fence to walk out to the grasslands in a southerly direction. The next three trucks with the rhinos were taken inside for release in the interior area near Buraburijhar camp where the rhinos were released during the previous rounds. Here two ramps were prepared for parking the trucks for the release of two rhinos simultaneously. It was decided to release the male rhino next and the truck was placed accordingly. The rhinos were transported with their face towards the front and so at the time of release the crates were usually re-oriented for the rhino to come out easily. In this case it was decided to experiment and see whether the rhino would come out of the crate in the reverse order. The crate door was opened at about 8.55AM and even after making multiple efforts to guide the rhino to step back and come out the experiment did not succeed. As the team was quite tired and was not in the mood to experiment it was decided after about 15

minutes to close the door of the crate for the proper orientation. The crate was brought down to the surface with the help of a crane and the door towards the face of the rhino was then opened, this time the rhino took very little time to come out and walked out in the southern direction at about 9.30AM. The mother and the male calf was released at the last, the crate of both the rhinos were positioned close to each other so that the rhinos get the best opportunity to re-unite post-release. The door of both the crates was opened together at about 10.10AM so that the rhinos get the chance to come out simultaneously. The calf came out first at about 10.15AM and moved towards the crate housing the mother and she also came out. Both the rhinos came very close, sniffed at each other, explored the immediate surroundings, attacked the truck and crane standing close-by and then moved northwards towards the grasslands in separate directions. The actions were pretty fast and within a couple of minutes both the rhinos were roaming freely in the wilderness of Manas National Park in different directions. In the case of almost all the releases it has been observed that the rhinos attack by biting at the body and tyres of the trucks standing near the crates at the time of release There-after the released rhino were monitored closely by the monitoring team.

Plate3 – Rhinos getting released Plate4 – Part of the Manas Release team

C. POST-RELEASE STAGE: This stage involves regular monitoring, patrolling and protection of the released rhinos in Manas NP. The field monitoring team at present comprises of foresters, forest Guards staff assisted by home guards and volunteers, technically supported by a team from WWF-India works under the experienced leadership of FDTP Manas. The staff is now well experienced and trained in the various post-release activities.

Plate5 & 6 – Rhino monitoring conducted by the Manas Monitoring team

All the four rhinos post-release were observed to have settled down by the evening after the initial excitement during the release. This is probably as they could sense the presence of rhinos in the vicinity as the area is highly used by the rhinos released earlier. Rhino8 though initially moved towards the southern boundary turned eastwards and settled down in an area north of Kahibari camp close to the southern boundary. The other three rhinos released in Buraburijhar area all moved southwards and were spending time close to the Rhino Camp area and Rhino 6 even came very close to the 2nd Gate camp i.e.- to the park entrance. Post-three days of the release the rhinos are generally seen to be exploring the areas under Basbari range. Unlike the first two rhinos released in Manas the present set of rhinos did not run around for a long distance and the average distance covered during the first twenty-four hours is about 3kms. from the release site.

Conclusion

For the very first time in the history of Assam, four rhinos were captured and released successfully through a continuous operation. The success achieved in the first round of the second phase of the translocation and the present round has boosted the confidence of all the team members and the people associated with the process directly or indirectly. Four more rhinos have joined the earlier four rhinos translocated to Manas NP from Pobitora WLS under IRV2020. The team is up-beat and all are looking forward to translocate the next batch of rhinos from Kaziranga NP by the next month. The rhinos released in Manas NP are doing well and it is expected that all these efforts will go a long way in taking forward the conservation measures in the park and in the revival of its glory.

The Translocation Core Committee headed by Mr. D.M. Singh as Chief Operation Officer takes the opportunity to thank and acknowledge the help offered by all including the local community and the media who have directly or indirectly contributing to the success of the second round of the second phase of the translocations under the IRV 2020 Program.

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