## Translocation of Rhinos within Assam : A successful last phase of translocations under Indian Rhino Vision (IRV) 2020

Utpal Bora<sup>1</sup> and Amit Sharma<sup>2</sup>

The Indian Rhino Vision (IRV) 2020 program designed by the Rhino Task Force in Assam had a vision 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 to establish new rhino population in potential Protected Areas of the state. Manas NP, a World Heritage Site was selected as the first site for translocation of rhinos under this program. Till date eighteen rhinos have been already translocated to the park in batches since 2008 and the present population is more than 40 rhinos which also includes 27 calves born there after the translocation. The rhino rehabilitation program has also contributed to the total rhino population in the park. The "Translocation Core Committee (TCC)" constituted by the Rhino Task Force is responsible to execute the operations and to co-ordinate all activities related to the translocations and monitoring of the rhinos under Indian Rhino Vision 2020.

The present translocation is the last or 5th phase under IRV2020, and with this we completed the translocation of 22 rhinos to Manas NP. Of the total of 22 rhinos, 10 from Kaziranga NP and 12 individuals from Pobitora WLS has been translocated gradually in eight batches (Table 1). The seventh was conducted during Feb-March 2020 and even though the last 2 was also considered during 2020, it could not be executed due to the effects of COVID19. The translocation of the first 2 rhinos took place during 2008, it took a long time to complete the translocation of the 22 rhinos as the security conditions in Manas was fluctuating that did not support arriving at a decision to translocate rhinos regularly. The poaching of 10 rhinos in Manas NP post the translocations was also a warning sign and periodic security assessments were carried out to address the gaps identified and take action to improve the security. The rhinos often moved long distances from the central part of Manas NP to the adjoining forest divisions and human dominated areas and all these called for further strengthening of the monitoring and security measures before translocating additional rhinos. The present security conditions were found to be conducive and the last round of the rhino translocations were conducted during 11th to 13th April 2021 where two rhinos, one male and one female were captured in Pobitora WLS and translocated to Manas NP.

The translocation was carried out as per the Rhino Translocation Protocol for Assam and the TCC formed the sub teams to execute various activities identified to be necessary for the conduct of the rhino translocation. Young officers from the forest departments were identified to be part of the various sub teams of the TCC to take part in the conduct of the translocation and gather experiences and learnings from the experienced members during this phase. Opportunity was also provided to a few forest staff from the Assam State Zoo, Orang NP, Manas NP and Pobitora WLS to be oriented to the basic techniques of a rhino translocation and also give them the experience that would be helpful in the future to handle similar rhino operations. Prior to the day of a capture orientation for support staff and team members was organized at the zoo premises and at Pobitora WLS whereby experience sharing and training was done by the experienced persons in terms of the translocation procedure. On the day preceding the actual day of capture, the team from Guwahati and other out-station areas including the equipment's and logistics support reached Pobitora WLS in the afternoon of 11th April 2021. A pre-capture feasibility assessment for capture of rhinos

was also done by a team under the leadership of DFO Guwahati WL Division on the day prior to the actual capture and couple of suitable areas were selected. All preparations for the capture including the veterinary part was completed the day before the capture at Pobitora WLS.

SI No	Translocation batch	No. of rhino translocated /sex	Place of capture/Date	Date of release in Manas
1	1 <sup>st</sup> Batch	2 sub adult male	Pobitora WLS 11/04/2008	12/4/2008
2	2 <sup>nd</sup> Batch	1 adult female, 1 sub adult female	Pobitora WLS, 27/12/ 2010	28/12/2010
3	3 <sup>rd</sup> Batch	2 adult female, 1adult male,1 sub adult male	Pobitora WLS 17/01/ 2011	18/01/2011
4	4 <sup>th</sup> Batch	1 adult female and 1 sub adult female	Pobitora WLS 8/1/2012	9/01/2012
5	5 <sup>th</sup> Batch	2 adult female , 1 female calf and 1 male calf	Kaziranga NP 19/2/2012	20/2/2012
6	6 <sup>th</sup> Batch	2 adult female, 2 male calf	Kaziranga NP 11/3/2012	12/3/2012
7	7 <sup>th</sup> Batch	1 adult female & 1 female calf	Kaziranga NP 29/2/2020	1/3/2020
8	8 <sup>th</sup> Batch	1 adult female and 1 adult male	Pobitora 12/4/2021	13/4/2021

Table 1 – Details of rhinos translocated to Manas NP under IRV2020

The capture operation went off as planned, the operations started on day break around 5.30am from the base camp at Haticamp. The locator team could immediately find a few suitable rhinos in the Pipolati area. The morning weather was cool and bright quite conducive for the operations. A few male rhinos suiting the plans could be found and the lead veterinarian selected the one that looked best to be picked up. The male had to be darted couple of times before it got tranquilized around 8.00am. Once the rhino got darted, necessary veterinary procedures including health parameter checking was conducted before it was secured in a crate. The team completed the process by loading the crate onto one of the truck brought for the purpose and the entire operation got completed around 10am. The team thereafter took a break of around 30 minutes for breakfast and to prepare for the next capture. In the meantime the locators moved out to find suitable rhinos for the second capture. Once the information came in about suitable female rhinos in the Tamulidova area, the capture team after the preparations went for the operations on elephant back. The second rhino, an adult female was selected by the team in the Tamulidova area and was darted around 10.40am in a grassland area. Chemical immobilization technique was used to tranquilize the rhinos, and a single dart was enough for the second individual. The second rhino was also similarly crated and loaded on to a truck and the operation could be completed around 12 noon. Both the rhinos were ear notching as per the IUCN guideline as numbers 21 and 22 and necessary samples were collected as per the veterinary procedures for necessary testing and DNA profiling.

The transport convoy of the two rhinos left from the Pobitora WLS at about 3.00pm. The convoy as planned travelled at speeds of around 40 kms per hour stopping at intervals for checking the rhinos as well as for some tea and refreshments for the team, the convoy with the rhino reached Manas NP at about 10.30pm on 12/4/2021 completing the journey of around 180 kms in around seven and half hours. The convoy with the rhinos was accompanied by members of the different sub teams that also included veterinarians and was provided necessary security cover by the accompanying Assam Police personnel from Morigaon.

After reaching Basbari range headquarter of Manas NP, the transport team handed over the charge of the rhinos to the Manas team for the release after day break. The truck with the rhinos were parked near the main gate of Basbari range and was guarded by staff of the Manas NP and the other members accompanying the rhinos along with the support staff went to the designated places to freshen up and prepare to take part in the release procedures.

The release was done in the Buraburi area selected for the release operations of the rhinos translocated under IRV2020 to the park. The rhinos were observed by the veterinarians prior to their release and necessary medicines were applied. The release procedures started around 6.00 am and the trucks with the rhinos were taken to the release site in the interior of the park. Once the trucks reached the release site, the crates were offloaded to the ground and the rhinos inside were observed by the veterinarians and necessary medications were provided prior to the release.

The crates with the two rhino this time was placed at a distance from each other and were released at different times. The doors of the crate holding the female rhino was opened first and it came out almost immediately around 7.50am. The crate with the male rhino was next prepared and the door was opened around 8.04am and the rhino came out immediately. As observed during the earlier releases, both adult rhino came out slightly aggressively and attacked the crane and the trucks positioned near to the crates. Post release both the rhinos moved in a northerly direction.

These two rhinos were also not radio collared as it was found in the earlier translocation that that as there are sufficient rhinos in the area it facilitates the stabilization of the newly released rhinos without much exploration. After the release the rhinos could not be located and identified reliably for two days and but on the third day the monitoring team confirmed the rhinos to be occupying two different locations in an interior area of Basbari range and was behaving normally. The ranging location of the rhinos were less than 5kms from the release area.



Plate 1 – Orientation of forest staff at Pobitora prior to capture (Photo – Sudip Das)



Plate 2 – Assessment of the field conditions at Pobitora on the day before capture (Photo – Sudip Das)



 $Plate \ 3 \ \& \ 4 - Capture \ team \ members \ getting \ ready \ and \ start \ of \ proceedings \ (Photo-Pranjit \ Barua)$ 



Plate 5 & 6 – Post-tranquilization procedures (Photo – Pradip Das)



Plate 7 & 8 – Tranquilized rhinos undergoing capture procedures (Photo – Sunit Das)



Plate 9 & 10 – Logistics into the action and getting the crate ready (Photo – Amit Sharma)



Plate 11 & 12- Crating and loading of the captured rhino in progress (Photo – Pranjit Barua & Sunit Das)



Plate 13 – Part of the team during the capture operation (Photo – Pranjit Borah)



Plate 14 – Rhino convoy moving to Manas and en route checking (Photo – Sunit Das & Amit Sharma)



Plate 15 & 16 - Preparing to release the rhinos in Manas NP (Photo - Amit Sharma)



Plate 17 & 18 – The rhinos getting released in Manas NP (Photo – Pranjit Barua)



Plate 19 – Part of the team at the release site in Manas NP (Photo – Pranjit Barua)

## Conclusion

This was the eighth or last round of translocation to Manas NP under the IRV2020 program which helped complete the plans of setting up of a founder population of 22 rhinos. Twelve rhinos each were translocated from Pobitora WLS and ten from Kaziranga NP. The core translocation team of IRV2020 have been contributing very efficiently and successfully since the start of the program. This time an achievement of the program was to get a few new officers and forest staff trained and learn during this round with the hope to put in place a new team for taking ahead rhino translocations in Assam.

The Translocation Core Committee headed by Mr. Utpal Bora as the Chief Operation Officer would like to thank each team member who have contributed immensely for the success of the IRV2020 program and would like to thank all the officials and staff of the Assam Forest Department without whose contribution all these operations would not have been possible. We would also like to thank all the line departments like the Assam Police, A.H. & Vety. department, etc. who have provided all necessary support. Thanks to all the officials from different NGO's and organizations as well as the experts from College of Veterinary Sciences for their active participation and support. Special thanks to the people of Assam and the media for their support towards rhino conservation. Last but not the least our partners, contributors and donors especially IRF and WWF are highly acknowledged.

## References

- 1. Bonal B.S., Talukdar B.K. & Sharma A. (2008): Indian Rhino Vision (IRV) 2020 Training cum Translocation of Rhinos within Assam, the First Phase (https://forest.assam.gov.in/information-services/indian-rhino-vision-2020-0)
- 2. Bonal B.S., Talukdar B.K. & Sharma A. (2008): Translocation of Rhino in Assam, Tiger Paper, Vol. 36: No. 1 January-March 2009
- 3. IUCN (1995): Guidelines for Re-Introductions; prepared by the ICN/SSC Re-Introduction Specialist Group.

## Author details:

- Chief Operation Officer, Translocation Core Committee (presently CCF- HQ, Assam; email utpalboraifs@gmail.com
- Deputy Chief Operation Officer, Translocation Core Committee (WWF- India); email amitsharma.assam@gmail.com