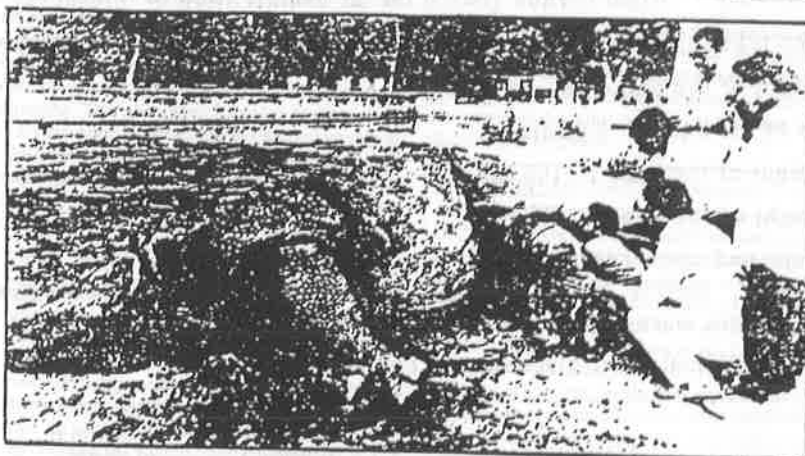

MANUAL DELIVERY OF A CAPTIVE INDIAN RHINOCEROS CALF
(*RHINOCEROS UNICORNIS*) AT SANJAY GANDHI BIOLOGICAL PARK, PATNA
P.C. Mishra'



Assisted feeding of newborn calf by proud staff

A female rhinoceros "Hartali" (ISB # 159) , was born in our park on 8 July 1988 (father Raju ISB # 157, mother Kanchi ISB # 155 both of wild origin from Assam). The animal came to oestrus for the first time on 28 August 1991, just after completing three years. She was not allowed to mate straightaway because of her extreme youth. It was also feared that her strength would not be sufficient to interact with the powerful males in the park. Therefore mating was avoided until the following year.

On 16 June 1992, the male "Kanchha" (ISB # 156), a male of wild origin (ISB # 156) was allowed to enter the enclosure of Hartali. Hartali was receptive but Kanchha did not sustain a complete erection and, as a result, could not copulate. They were left together the entire day without result. At the next oestrus period, (18 October 1992), Kanchha was kept in Hartali's enclosure again for 24 hours with nil result.

On the next oestrus, (14 January 1993), Kanchha was released into Hartali's enclosure for three hours but when the same failure was observed, Kanchha was removed and the father of Hartali, Raju, was introduced. Copulation took place in the early morning of the following day at 0100 hrs. Later it was confirmed that Hartali was pregnant.

On 26 July 1994 Hartali exhibited signs of impending parturition at 1000-hrs. Chhetki, her younger sibling, who occupies the same enclosure, was removed from the enclosure on the 24 July.

Close attention was desirable as it was the first delivery for Hartali. The Director, Veterinary Officer and keepers kept watch from 11 a.m. of that day. Labor pains gradually increased and at 1215 hrs the amniotic sac appeared. At 1218 hrs, the hoofs of the hind legs could be observed along with the amniotic sac. At 1222 hrs the hind knee joint was visible. The animal was producing grunting sounds presumably due to excessive labour pain. She layed down and got up alternatively at intervals of about four minutes for about one hour. Whenever the animal exerted pressure while in sternal and lateral recumbencies, the hind legs of the calf were visible but retracted when Hartali relaxed.

At this stage it was decided to assist Hartali manually manipulating the calf. The animal had been extremely adverse to any human being entering her enclosure just before delivery. The value of the animals had to be weighed against the lives of zoo personnel and we decided to take the risk, scaling the chain mesh to enter so as to avoid sound of the gate. First, the Director and one keeper approached the rhino

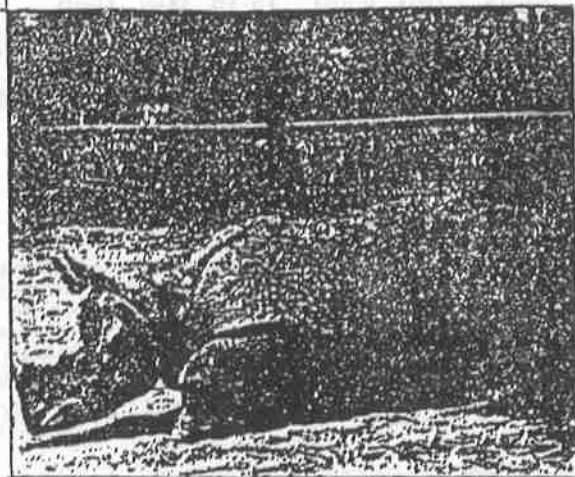
from behind and touched the calf's feet experimentally. The mother fortunately did not react. When two persons tried to remove the calf, their efforts were not sufficient. The Director then requested the other two zookeepers to assist and they tugged at the calf with full force four times in a down-ward direction.

The mother got up immediately after delivery and turned towards the zoo persons who moved hastily away. After three minutes, the calf raised its head. The mother left the calf and went to one corner of the enclosure. After some time the zoo staff persons approached the calf and lifted it, thereby subtly luring the mother to come to it which she did after about 20 minutes. The calf attempted to stand after about 30 minutes. There was apprehension about the condition of the hind legs since strong pressure had been applied to them to remove the calf.

After 70 minutes the calf stood up and collapsed several times before standing successfully. The mother, lying laterally, lifted her leg so that the calf could reach her teats. The keepers squeezed the teats and forcibly put the calf at the teat. A small amount of honey was also put into the calf's mouth. The calf began to suckle by itself after about three hours and is in good condition after one month.

After delivery, the mother was given warm liquid of flour (2 kg), gruel (3 kg), and lumenc powder (2 kg.) to drink. Zoo veterinary officer prescribed Ostacalcium 500 ml. daily and Vimeral 20 ml. daily to the mother. For proper milk secretion Leptaden tablet (20 tabs twice daily) and Vitablend A,D3 (25 gm daily) were given with gramflour and gruel for 20 days. The calf, which is a female, was named "Rani". The number of rhinos in the Sanjay Gandhi Biological Park is now 2.4.

I. F.S., Director
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Mother straining in delivery pain; amniotic sac out



Amniotic sac has burst and feet of calf have emerged

