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SANCTUARY

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56 ARKLESS IN KAZIRANGA: The animals of Kaziranga found no escape from the devastating floods that ravaged their habitat for the third time this year. This special *Sanctuary* report is based on daily despatches sent to us by *Manju Barua* and *Ranjit Barthakur* in September 1998.

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Editor: Bittu Sahgal
Assistant Editors:
Shyla Boga, Madhu Sikri,
Lakshmy Raman
Design: Phagun Dhakka,
Abhijit Naik-Desai,
P. Bhaskar
Photo Credits:
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'SANCTUARY ASIA', 602, MAKER CHAMBER V, NARIMAN POINT, BOMBAY 400 021.
TEL:(022)2830061/2830081. FAX:(022)2874380.

E-MAIL: <admin@ecologist.ilbom.ernet.in>

The Great Flood

ark-less in Kaziranga



A SANCTUARY REPORT

RHINOS ARE POWERFUL SWIMMERS, capable of swimming across the mighty Brahmaputra. For a flood to drown them, the fury of the waters must have been devastating indeed. Manju Barua

a member of the Indian Board for Wildlife based in Kaziranga and Guwahati, together with Ranjit Barthakur of Wildlife Afforestation and Nature Trust (WANT) kept *Sanctuary* informed of the

flood situation on a day to day basis. The Brahmaputra river inundated most of the park area in September, killing more than 40 rhinos and hundreds of other animals. Their accounts communicated

over phone and fax are the basis of the following special report, which should help *Sanctuary* readers understand the gravity of the Kaziranga situation. While floods are an intrinsic part of the

ecosystem, (See *Sanctuary* Vol. XII, No. 4, August 1997) the devastation caused by the worst flooding in four decades has wreaked havoc on the habitat of *Rhinoceros unicornis*.

CLEARLY, THE PERILS OF deforesting India are coming home to roost. A total of 21 of Assam's 23 districts have been shattered by the impact of flooding in the Brahmaputra valley. According to the Central Water Commission that monitors floods through its 157 forecasting stations, Arunachal Pradesh has received 25 per cent above normal rains this year. Some suggest that global climate change is at work. July for instance was the warmest year ever recorded in the last 120 years. There can be no denying, however, that mismanagement of land and water resources in the northeast is at the root of the cycle of devastation. Over-silted rivers, occupation of floodplains, faulty embankment construction and ill-advised reclamation of thousands of small *jheels* and wetlands in the name of development have combined to lay waste almost every northeastern state. Barren hill slopes in the Brahmaputra and Barak valleys can no longer staunch even normal rains. And when a flood comes, as this report reveals, the results are ruinous.



B. S. Bonal

The September flood was the third inundation this year and it left almost no high ground available to rhinos and other wildlife.

SEPTEMBER 3, 1998: The skies over Kaziranga are grey and ominous. The rain has been falling non-stop in the upper catchment areas and floodwaters are rising. I worry about the impact on the rhino and other wildlife because the extensions that we have been asking for have still not been added to the park area and animals that will be forced to wander out of the protected area will be vulnerable again. Past floods have taken a terrible toll of wildlife and the swamp and hog deer populations have still not recovered. I hate to think of the outcome of yet another disaster. On August 29, 1998 news came in of a poaching incident at Kukrakatta on the fringe of the first addition of the park. Yesterday a rhino was poached near Chenga in the Barpeta district more than 300 km. away, indicating just how powerful the force of the flood was.

times they must walk between two and 28 km. just to get their rations because their posts are not all connected by road. When the floods come, speed boats can at best reach 30 per cent of the camps and country boats must therefore be pressed into service to reach supplies to the deep interiors. If the nation truly values Kaziranga, it must support these hard working individuals. The very least we must do is to ensure that each post is equipped with a country boat! The tiny platforms that constitute camps are home to guards for 30 days and nights. They cook here, sleep here and shelter here from the elements with the barest of survival aids. With most of the 800 km. of patrolling roads out of service, I am extremely worried about the condition of these men upon whom the fate of the rhino and all of Kaziranga's other wildlife is dependent.



© EIA

This orphaned baby rhino, named Laharani (Queen of the Waves) has been adopted by the staff of Kaziranga.

SEPTEMBER 5, 1998: There is no respite in the rain. The floodwaters have risen very high. It has become difficult to reach the men in the anti-poaching camps in Kaziranga. The guards are going through sheer hell. At the best of

SEPTEMBER 8, 1998: My worst fears have come true. In all my life I have never seen Kaziranga so completely devastated. The whole area is like a sea. In 1988 when over 48 rhinos drowned I thought it was a national tragedy. I fear this time

the toll may be higher. Infant mortality is going to be particularly high. Though efforts have been made to regulate traffic along Highway 37 running along the southern boundary of the park, many animals including an elephant have been hit by vehicles. Reports from neighbouring areas confirm that many villagers have been helping save wild animals, which they see as part of their heritage, but some have actually joined poachers in killing them. Sadly, deer meat is clandestinely being sold to those insensitive enough to buy it from such villagers. The wildlife staff and officers of Kaziranga have always risen to the occasion and they are doing everything humanly possible to save Kaziranga right now. But in the face of the kind of flood that has hit Kaziranga this time nobody can predict the impact on this wilderness area.

SEPTEMBER 10, 1998: Mr. B.S. Bonal, Director of the Kaziranga National Park confirms what all of us know... that the wild animals had not even fully recovered from the trauma of the floods that hit the park in May and June. Normally the floods recede in three to seven days, but this year perhaps on account of the severe deforestation upstream, compounded by overall climatic aberrations, the water did not recede for weeks on end. As a result serious damage has been caused to the habitat, thus affecting the food sources of animals such as rhinos, elephants, deer and wild pigs. The crops of the neighbouring villages have been destroyed by flood waters. Wild animals have been forced to move away from the protected area of Kaziranga and are now in human habitations. Hundreds of deer and wild pig have drowned and a large number that escaped drowning are being slaughtered by poachers.

SEPTEMBER 15, 1998: The floods have been ravaging us for several days now and there is little we can do other than to protect the few animals that have escaped to high ground and wait for the waters to recede. Virtually the entire habitat is underwater. Rhinos, elephants, wild buffalo and hog deer have been forced to move to human habitation and can be seen in cow sheds, crop fields and tea estates. Kaziranga has seen three flood incidents this year already. Many poaching gangs are operating and in this situation the animals seem to have no chance at all. Floods are normal for Kaziranga and they actually help keep the habitat productive but not at this scale. The Government of Assam simply does not have the infrastructure to deal with a crisis of this proportion. We have recorded 21 rhinos as having drowned to date and poachers have killed five more. What meagre facilities the government possesses have been understandably diverted to human communities. This leaves the wildlife of Kaziranga in a precarious position.

SEPTEMBER 16, 1998: The body count of rhinos is bound to rise as the vast majority of the park is still inaccessible and comprehensive surveys are not yet possible. As the rhinos come down from high ground they must negotiate their way back to the park area through unprotected territory. Last evening the DFO and other park officials were involved in an exchange of fire with poachers. Such gangs must be neutralised or the death toll of rhinos will be much higher. Prey species of the tiger and leopard such as deer and pigs are being slaughtered at an even greater pace. Though carnivores such as tigers and leopards will probably come through better than other wild animals, the long term effect

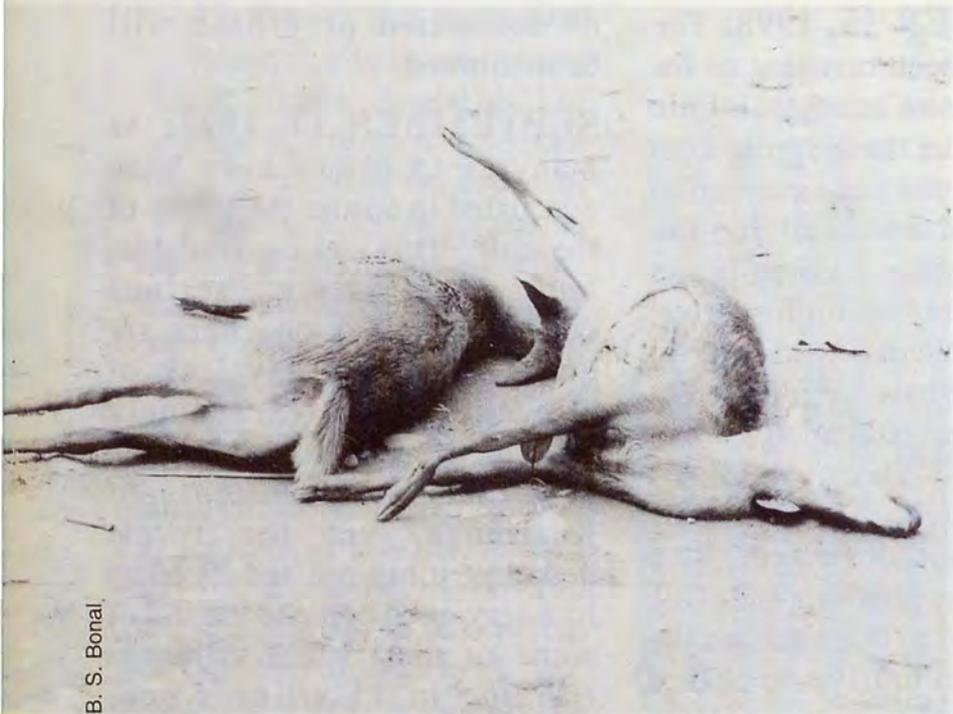
of decimated prey base will be monitored.

SEPTEMBER 17, 1998: As many as 15 camps have been evacuated to ensure the safety of the staff. This was unavoidable, but could have serious consequences as poachers are quick to exploit any lack of protection. It is exceedingly difficult to even look after the most basic requirements of Kaziranga, yet the forest department has pressed its boats into service to come to the aid of some of the 65,000 villagers residing in 45 villages near Kaziranga. Food and medicines are being transported for their benefit by the park authorities who realise the dimensions of the human tragedy as well. Hopefully this will encourage and sensitise the community to the problems of the park and its

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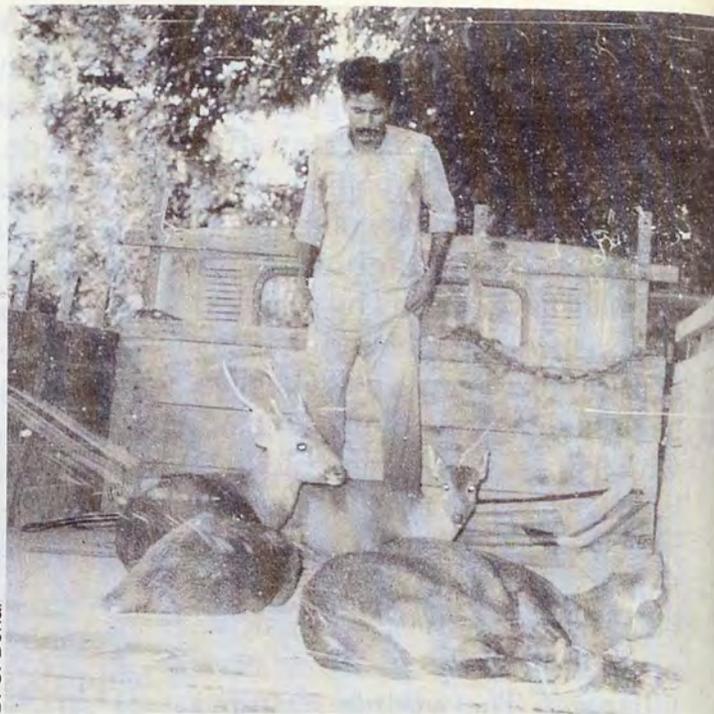
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wildlife. A sum of Rs. 100 was offered to villagers who saved marooned wild animals.

SEPTEMBER 18, 1998: The Chief Minister of Assam Mr Prafulla Kumar Mahanta has completed a two-day visit to Kaziranga to make a first hand assessment of the grim situation in the park. Mahanta travelled inside the park to the points that were accessible and was shaken by the



B. S. Bonal

Hundreds of deer drowned... and many that escaped the flood died at the hands of poachers.



B. S. Bonal

The ones that got away.... scheduled for release by forest officials into the forest.



Sanctuary Photolibrary

B. S. Bonal

Range Officer Talukdar guarding Kaziranga in happier times and (inset) a scene of the devastation after the floods.



Scavengers, including tigers will probably be able to feast for weeks on carcasses such as this buffalo.



Vultures doing what vultures do best. The real impact of the flood on Kaziranga may never be fully documented.



Kaziranga has for years been the home of the one-horned rhino. Are these floods a death-knell for this already threatened species?

Other animals that lost their lives included 20 wild buffalo, nine porcupines, ten sambar, 401 hog deer, three swamp deer, and a sloth bear.

destruction. He was informed that 544 animal carcasses have been reported, which included 31 rhinos that drowned and six that were poached. Other animals that lost their lives included 20 wild buffalo, nine porcupines, ten sambar, 401 hog deer, three swamp deer, and a sloth bear. At a follow up review meeting held at Kohora he directed the State Forest Dept. to prepare an action plan to save the park from future floods. Yesterday at a meeting held at Kohora he announced the release of Rs. 50 lakhs for road repairs, anti-poaching camps and other maintenance costs. He promised park officials that he would personally see to it that the park gets the resources it needs in future. He has asked the Rural Development Commissioner to focus funding in the area so that the park personnel and villagers living in the immediate vicinity benefit.

Recognising the vital importance of maintaining a network of raised platforms where guards can base themselves to patrol Kaziranga, he asked that the existing 68 platforms/camps be repaired/strengthened and that more be added. Mahanta went further and requested the Ministry of Environment at the Centre to take over the protection of Kaziranga totally. Wildlife is a state subject and normally the Centre funds only 50 per cent of the annual expenditure. With the Centre meeting the entire cost, it is also likely to play a more direct role in the protection of the one-horned rhino. The Chief Minister also made an appeal to all NGOs to send funds and resources to the park for its speedy restoration.

SEPTEMBER 25, 1998: Bulldozers are in the park repairing roads. The full extent of damage will only be known when full patrolling is restored to this World Heritage Site. Clearly, our first priority right now must be the restoration of the anti-poaching camps. Only when this is done will the staff be able to return to their duties. Apart from weapons, wireless and country boats, the camps, which are manned by three to four persons at a time, must at least have safe drinking water

through tube wells and a stock of medicines (dysentery is rampant). Minor repair work on the wooden structures, cleaning and clearing the immediate surroundings and repairing of the entire network of connecting roads is imperative. For the 68 existing camps this will probably cost no less than Rs. 34 lakhs. Roads and bridge repair will need another Rs. 47 lakhs and the creation of highlands, to minimise future flood-related deaths will be Rs. 24 lakhs. This is only the bare minimum. The cost of restoring some semblance of order to one of the world's most valuable and difficult-to-protect wildernesses is going to be stupendous and hopefully

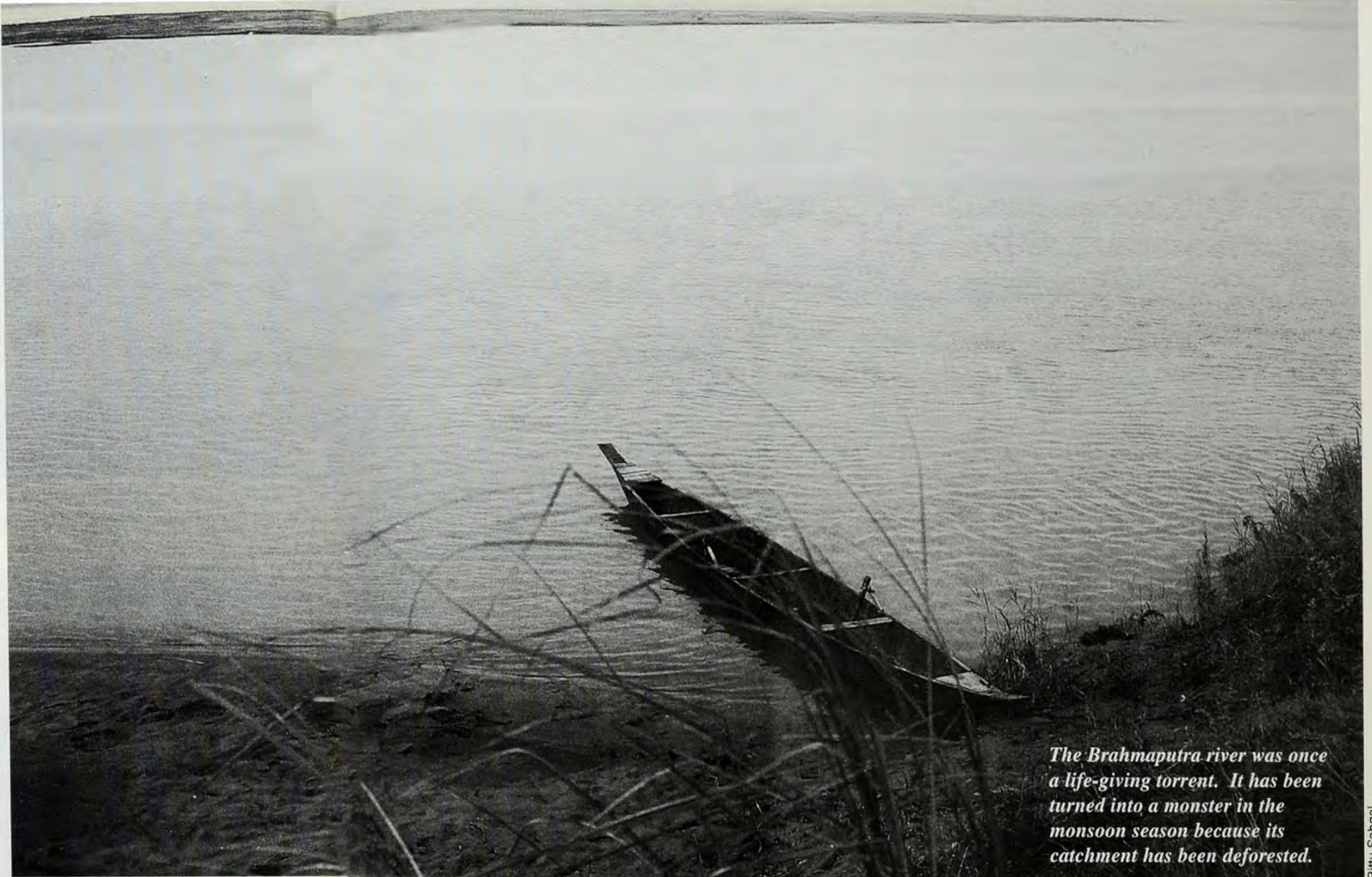
the whole world will come to the aid of the rhinos and their fragile home.

SEPTEMBER 29, 1998: We have lost 37 rhinos to the flood and six to poachers, bringing the tragic toll to 43... so far. The process of combing the silt-laden park to search for carcasses has begun, but this may take as long as one more month to complete. The staff of Kaziranga is largely back at their posts and to prevent poachers from getting at rhino horns they have had to hack them off the animals themselves. The poachers know that Kaziranga is at its weakest right now. Manning all anti-poaching posts in the park is an immediate

priority. At short notice at least eight to ten men from different posts must be enabled to converge on any spot where poachers are spotted. For this the wireless system, roads, boats, vehicles and weapons must all be in battle-ready condition. A failure on our part to ensure this will cause a still higher death toll of Kaziranga's beleaguered wildlife.

NEXT STEPS: On a long-term basis, we will need to create more (artificial) highlands. The topography of Kaziranga is bowl shaped in a north-south axis with the lowest points being in the middle. At the first sign of flooding animals tend to make for the higher ground to the north (MSL

72 metres) even though animals are largely concentrated in the south. If the flood is prolonged, animals must sometimes swim between 18 and 25 km. from their temporary refuges to reach the Karbi Hills, outside the protected area. If artificial highlands were available at more strategic points, Kaziranga's future would be better assured. The park authorities know precisely how, where and to what design these life-saving highlands need to be constructed, but they must be financially enabled to do so. Additionally the state administration and political leadership will have to guarantee that promised extensions to the park will actually be notified.

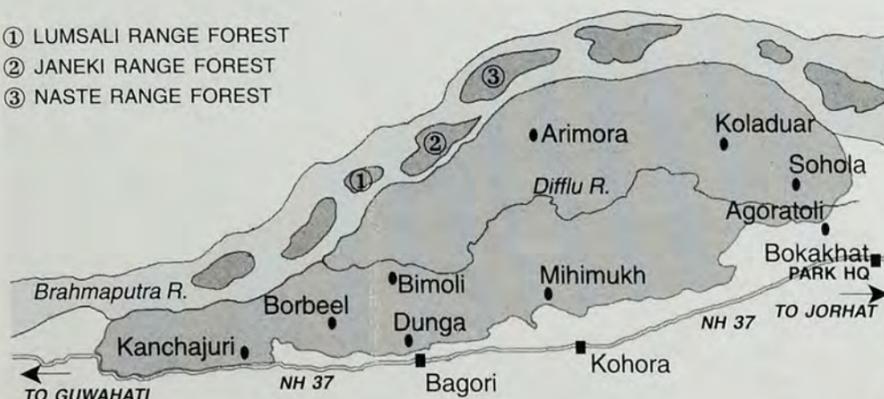


The Brahmaputra river was once a life-giving torrent. It has been turned into a monster in the monsoon season because its catchment has been deforested.

Bittu Sangal

KAZIRANGA NATIONAL PARK

- ① LUMSALI RANGE FOREST
- ② JANEKI RANGE FOREST
- ③ NASTE RANGE FOREST



Mihir Hills / Karbi Plateau

Map not to scale.

Map by Abhijit Naik-Desai (source: Anwaruddin Choudhury)



Apart from the harm caused to wild animals, the floods also damaged crops and homes of locals. The Kaziranga Park authorities came to the rescue of such communities as best they could given their own resource constraints.

Of course, it must be recognised that to save the animals of Kaziranga, the forest department must also be empowered to help the people who live in the area and are themselves vulnerable to the

vagaries of floods. Boats to reach food and medicine to marooned villagers would do wonders for the overall security of Kaziranga. If the forest department were able to help villagers to obtain winter

crops when floods damage their seasonal sowing, that too would be a great strength for the fabric of support for Kaziranga.

Help has already started pouring in for Kaziranga from all parts of India and around the world. Sanctuary readers who wish to contribute to the restoration of Kaziranga can send cheques or drafts to a trust specially set up by the government of Assam for wildlife. Payments should be made in the name of "The Wildlife Areas Development and Welfare Trust", Guwahati. The author has agreed to hand payments sent to his address over to the authorities.

Mr Manju Barua
Wild Grass, 107, M.C. Road,
Uzanbazaar, Guwahati 781 001,
Assam, INDIA
Tel: +91 0361 546827.
Fax: +91 0361 630465/610106. **S**



The forest department came to the rescue of villagers through medical relief camps such as this one in the Agoratali Range.