Mongabay Series: Asian Rhinos

Keeping stray rhinos safe is a challenge on fringes of Nepal park

by Abhaya Raj Joshi on 26 June 2019

- *Since 2018, two rhinos have fallen into septic tanks in settlements near Nepal's Chitwan National Park, one of which died.*
- *These incidents highlight the difficulties in keeping wandering rhinos safe amid a building boom in the park's buffer zones.*
- *Park authorities and municipal officials have traded blame over who should be responsible for developing and enforcing wildlife-friendly building codes.*
- *Adding to the problem, many residents lack the resources to plan buildings according to existing codes, much less the more stringent standards of wildlife-friendly codes, and enforcement is already a challenge*

SAURAHA, Nepal — Barbecue smoke and soft reggae music fill the air as tourists lounge on the banks of the Rapti River in Sauraha, the eastern gateway to Nepal's Chitwan National Park. Suddenly the music stops, replaced by an announcement: "Please exercise caution, a rhino is heading this way." As a greater-one horned rhino (*Rhinoceros unicornis*) ambles out of the water, tourists either scramble for safer seating or reach for their smartphones in hopes of a selfie.

Local residents, however, take the visit into stride. "It is not uncommon for rhinos to stroll through human settlements on the banks of the river. They come, enter people's settlements sometimes, but the people don't do any harm to the animal as they know they are protected by law," says Sagar Giri, who runs a hotel in Sauraha. While these promenades delight tourists, they present a potential hazard for the rhinos, even though people don't seek to harm them.

It was during one of these walks that a rhino fell into a septic tank at a home in Sauraha in February 2018. (Sewage pits are the norm in town, since there's no local sewage treatment plant, and draining waste into the river is prohibited). According to reports, the lid of the tank collapsed under the animal's weight. An army team had to be called in to rescue the rhino, which survived the ordeal.

Immediately after the incident, Chitwan National Park authorities issued a warning letter to community forest user groups, hotels, guides and jeep safari operators. The park urged everyone to "either fill the pits or manage them well." The letter said that

in the event of a "sad incident," the individual or organization concerned would be held responsible.

But the letter seems to have changed the situation little. "It is easy for the park to issue a warning to local residents and businesses. The contents of the letter are very broad and do not provide clear guidelines," says the head of a committee tasked with management of the buffer zone around the park. "It seems that park officials issued the letter just to have the upper hand if an animal fell into a pit yet again," he said.

Demand for new residences and new hotels and other tourism-related businesses is driving a building boom in Sauraha, the eastern gateway to Chitwan National Park. Image by Abhaya Raj Joshi for Mongabay.

There are currently no clear guidelines on how to build wildlife-friendly structures. But while officials in the park's buffer zones look to the national park for guidance on the matter, conservation authorities are passing the buck back to municipalities and villages. Former park warden Narendra Man Singh Pradhan says the park issued the letter to make people aware of what was going on. "The park cannot determine the specific engineering requirement for infrastructure such as septic tanks, it is up to the municipality engineers to do so."

Chitwan National Park's chief warden, Bed Kumar Dhakal, agrees. He says that while big hotels and industries need permission from the park to operate, it's up to local governments to enforce building codes. "Local governments are responsible for issuing building codes and monitoring their enforcement," Dhakal says.

But it's not easy for local governments, which were only formed in 2017, to take up the challenge.

Prem Shankar Mardhaniya Tharu, deputy mayor of Kawasoti municipality, part of which falls in the buffer zone, says local authorities have neither the resources nor the experience to enforce and monitor wildlife-friendly building codes. "We have not made separate rules for houses in the buffer zone area," he says. He adds that municipal officials are already having a tough time enforcing existing guidelines, and that it wouldn't be easy for them to frame separate guidelines for areas within the buffer zone.

A greater one-horned rhinoceros takes stroll on the banks of the Rapti in Sauraha. Image by Sagar Giri.

Just over a year after that incident, in March 2019, another rhino fell into a septic tank. This time it was a female, around 25 years old, at the Tiger Land Hotel in Jagatpur. And it wasn't as lucky as its predecessor: the rhino drowned in sewage. In accordance with the prevailing wildlife protection laws, six staffers of the hotel were arrested and charges were pressed against them for negligence.

But even the threat of prosecution has little actual effect on residents, many of whom barely have the resources to build at all.

"We don't dare go to the municipality to get our building plan approved," says Krishna Mahato outside a partially built house in Sauraha. "It will cost a lot of money and we can't afford to do that." Mahato, a mason who builds others' houses, is in the

process of building a home of his own. "I used to live in this hut with my wife and my son," he says, pointing at a single-room structure made from traditional building materials. "I don't know how much the whole thing will cost. I will complete whatever is possible with the loan I have taken," he says.

Mahato is one of thousands of people living in the buffer zone of Chitwan National Park, designated by the government in the 1990s. The idea was to provide the benefits of conservation to the locals and increase their ownership of the park. But with the end of the Maoist rebellion in 2006, new resorts and hotels are popping up around the area, and locals who traditionally lived in huts are switching to concrete houses because it's no longer easy to get wood and other traditional materials from the forest.

New homes in villages like Sauraha are often built piece by piece, with residents saving up for each new stage of the process. Image by Abhaya Raj Joshi for Mongabay.

"If you walk the alleys of Sauraha, you'll see that there are many people who build their houses in 'phases,' and it takes years to complete. First they lay the foundation, and later build the columns when they have money. They then save up or get a loan to build the walls," says Ramshran Mahato, another resident of Sauraha, standing next to the newly built columns of his house.

In these circumstances, the problem of keeping animals safe has no simple solution. But better coordination between the park and the municipalities could be a step in the right direction, says former warden Pradhan. "What we could do is have the municipalities prepare guidelines in collaboration with the park and implement them." But that alone won't solve the problem, he warns. "What about communities that may not have the money to build houses according to the guidelines? There are poor communities around the park that do not even cover their septic tanks." Pradhan suggests that the new guidelines should address the concerns of the poor as well, but says he's not sure what the new guidelines should incorporate. "It is up to the park and the municipality engineers to decide what is needed."

Meanwhile, back on the banks of the Narayani, the rhino crosses the river and disappears into the jungle after its stroll. It's riding its luck.

Clarification: this story was updated to use the name Rapti River, which refers to the section of the river in Sauraha, rather than Narayani River, which refers to the broader river system.

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