

Printed from

THE TIMES OF INDIA

Scorched Goa's biodiversity may take years to regenerate

TNN | Mar 11, 2023, 09:54 AM IST



PANAJI: Scorched and burnt, Goa's forests that have been ablaze for a week may have lost some of its biodiversity forever, while the evergreen Western Ghats may take years to regenerate.

"Nothing can be done now for restoration of the forest patches that have been burnt down. Nature has to be left on its own to take over," said Padma Shri awardee A J T Johnsingh, conservationist and former dean of the Dehradun-based Wildlife Institute of India.

Former Goa range forest officer Prakash Salelkar said though larger animals run to safer places and return when the forest is

restored, smaller flora and fauna, which is burnt, is lost forever.

Experts said in such cases of forest fires, once the damage is done, there are little or no effective restorative measures that can be implemented. It will take a minimum of five years, if not longer, for the natural restoration to take place, provided there is no repeat of the fires in the summers over the next few years.

Manoj Borkar, who has been researching Goa's faunal taxa for three decades, said that even five years is an optimistic estimate of the time it will take for the burnt forests to be restored to their pre-blaze state.

“Once the ground is scorched and denuded, the entire ecosystem destabilizes. The present forests and hills that we have are the result of a cumulative process that has taken place over centuries or at least 50-60 years. We have to understand, these are natural forests. Restoring them to pre-blaze status is difficult and even an estimate of five years is on a positive note,” Borkar said.

Salelkar said since there is no census of smaller flora and fauna, one will have to wait for the ecology to restore itself. He reckoned that automatic restoration will take place, but it will take at least five years, that too provided there is no repeat of fires.

“Lesser fauna like chameleons can’t even climb to the top of a tree to save themselves. Frogs, snakes, chameleons, spiders, millipedes, centipedes will be lost in the fire. You cannot reintroduce a millipede, for instance,” Salelkar said.

Borkar said the critical processes that determine the health of the forest have been damaged.

“It will disrupt food chains. It will badly affect creatures like spiders, for instance, which have limited distribution. We have to also consider that the wood ash, soot which has gone up into the air will create a zone of impact. Animals will have difficulty in navigating through smokescreens. Many insects that rely on chemosensory ability will lose that ability with smoke,” he said.

The fire has also impacted the affected areas’ carbon sequestration capacity, Borkar said.

“Are we even attempting to understand the loss of carbon sink function? Not only has the forests’ carbon sequestration ability been affected, additionally, the fire is letting out more carbon into the air because of the wood that is being burnt,” Borkar said, adding that though nature is resilient, any further recurrence of fire will be hugely detrimental to the ecosystem.

The first damage of the fires will be on the floral composition like trees, grass etc, said Sujeet Kumar Dongre of the Centre for Environment Education and an expert member of several state bodies.

“Smaller, ground dwelling animals like snakes, frogs will be impacted because it will be difficult for them to move in such a short time span. Larger animals like deers, tigers can move and then they can come back later. But, as patches have been burnt down, it will have an impact on migration of animals. Any migrating animals will find it difficult when they are moving and suddenly, they find a place in the corridor without floral composition,” said Dongre.

Lot of animals could be confined to smaller spaces for food and it could lead to conflicts, he said.

“However, as patches have been burnt down and not entire forests, if it is left to nature, the particular composition will come back. Though it will take more time for nature to recover by itself,” said Dongre.

Johnsingh felt that cool season burning should be taken up in future to avoid repeat of such fires. Cool season is during December when birds are not nesting and leaves and other litter accumulated on ground has to be burnt.

“If you don’t take up such controlled and systematic burning for two-three years, when there is a fire, you cannot do anything because there is so much accumulation on the ground. Even Red Indians used controlled fires extensively. Unfortunately, we think of the use of fire as a bad practice,” he said.