

### The Impacts of the Forest Fires on Flora and Fauna

When the forest fires were at their peak in Hutan Harapan in September 2019, the firefighting team found a number of wild animals that did not escape the flames. One of the fire fighters, Samsul found several reptiles that had burned to death in a pile of ash. "There is a sense of sadness when I see snakes and lizards that have been burned. Moreover, the forest fires in Hutan Harapan have been caused by people who want to open land to plant oil palm," Samsul said. These comments were echoed by Iwan, another Hutan Harapan staff person who witnessed small animals in a state of confusion because they did not know how to escape the fires. In the case of the elephants, they were forced outside of their home range due to the fires and smoke.

Hutan Harapan's rich flora was also damaged by the fires. Harapan's Research division divided the tree species damaged by the fires into two groups: pioneer species and climax species. This preliminary classification will be followed up with further assessment in the field to determine the best approach to restoring the forests. Fire damage ranged from very light to severe. In some cases the best treatment may be to increase forest protection efforts and let nature take its course; and in other cases replanting may be needed to assist the forest's recovery.

Protecting the forests from fires, according to Iwan, is everybody's responsibility since fires affect the sustainability of the ecosystem upon which humans are dependent. "Areas affected by forest and land fires must be immediately restored by forest protection along with tree planting where necessary," concluded Iwan. (HOS)



### Hutan Harapan: A Long Dry Season

The 2019 dry season was particularly severe due to the El Nino phenomenon that resulted in changes in rainfall patterns across the country, causing some areas to suffer from severe water shortage. By late July 2019 forest fires had become so severe the government declared an emergency in six provinces including South Sumatra and Jambi, the two provinces where Hutan Harapan is located. To support the firefighting efforts in the 6 provinces, the government deployed nearly 6,000 personnel from the military, police, and disaster mitigation agency. It is estimated that by the end of October 2019, 650,000 ha of degraded and idle land, and not forested land mainly in Kalimantan and Sumatra accounted for much of the burned area during this year's fire season, according to new findings.

In order to respond to all the forest fires in Hutan Harapan ERC, Hutan Harapan Management mobilized all the staff, but even this effort was not sufficient to bring the fires under control since they were being intentionally set. Hutan Harapan reported this situation to government and at the same time asked for help and direction to stop the fires. Of critical concern were the forest fires in the Sungai Jerat area in the south-west part of the concession which was being illegally burned by people coming in from other parts of Sumatra to plant palm oil. The government acted quickly, bearing in mind that central government declared a national emergency to address land and forest fires. On 20 September 2019, on behalf of the district's integrated firefighting team, the Police Chief of Batang Hari invited concerned government agencies and NGOs to obtain input on how to stop forest fires in the Hutan Harapan.

The meeting was attended by the Batang Hari district government, Batang Hari district police, Batang Hari District Attorney, KPHP (Production Forest Management Unit), SPORC (Rapid Reaction Forestry Police Unit), Manggala Agni, from the Batang Hari Fire Taskforce, Batang Hari Military District Command, Batang Hari Civil Service Police Unit. NGOs such as the Indonesian Conservation Community (KKI) -Warsi Jambi, the Jambi Indigenous Peoples Alliance (AMAN), the Environmental Legal Aid Foundation (YBHL), the Agrarian Reform Association (Prana) were in attendance along with Pinang Sebatang, an environmental activist and human rights activist, Musri Nauli. The participants agreed that law enforcement measures for forest fires would be implemented and there would be independent monitors to ensure human rights were respected.

Following up on the results of the meeting above, the Batanghari Integrated Team, led by Batanghari Police Head AKBP Moh. Santoso on September 21, 2019 immediately conducted a law enforcement operation in Hutan Harapan under the command of Jambi regional Police Head targeting those setting fires. Law enforcement was unavoidable given the urgency of putting out the forest fires.

Adam Aziz, Acting Director of Operations of PT REKI emphasized that the burned area is part of a customary lands belonging to the Batin Sembilan Indigenous People-Kandang Rebo Bawah Bedaro. He further noted that the instrumental role played by police and forest fire taskforce highlighted the strong commitment of the Indonesian government to combatting forest fires, preventing encroachment and protecting indigenous communities. Hutan Harapan looks forward to working with the government and supporting such efforts and are immensely grateful for their critical intervention. (MAS/TAW/AA/HOS)



## Repairing Habitats and Restoring Forests after Forest Fires

Repairing habitats and restoring forest structures and functions is central to Hutan Harapan's vision and mission. After the forest fires that occurred from July to late October 2019, the Hutan Harapan team set about assessing the damage using a combination of technologies; GIS, drones, cyber tracker and just plain old field observation. The data will assist in determining the types of rehabilitation and restoration techniques that will be used in fire damaged areas.

One of the areas most severely hit by the forest fires was the Sungai Jerat area that is in the south-east part of Hutan Harapan. Nearly 260 ha were heavily encroached and the forest was burned with the intention of planting palm oil. Then there were approximately 500 ha that have been affected by the fires in the area set aside strictly for conservation purposes, with the fire damage varying from severe to light.

Work is already underway to replant the 260 ha with a variety of multipurpose trees such as durian, agarwood, jelutung, (*Dyera costulata*), jengkol (*Archidendron pauciflorum*) and rubber. Natural wood trees such as bulian (*Eusideroxylon zwageri*) and meranti (*Shorea*) will be planted. A nursery has been established in the immediate area which will supply the seedlings for planting. The combination of trees will provide econo-

mic benefits to the Batin Sembilan indigenous peoples. For the area set aside for conservation purposes, restoration efforts will include both passive measures such as allowing nature to take its course and, replanting with native wood trees. (HOS)



## Fighting Forest Fires: No Retreat

Hutan Harapan's forest fire fighting team was at the front line of the forest fires during the long dry season beginning in July and ending in late October 2019. Hot weather, heavy smoke and of course, intense fires were part of their daily routine. They attacked the fires with rakes, shovels and water pumps. Multiple fires stretched resources with aging water pumps in particular needing frequent repairs. At night, in the thick smoke, there was the added danger of stumbling across wild animals such as tigers and sun bears or stepping on poisonous snakes. Not infrequently, the fire team was at the scene of a fire for ten hours to ensure that the fire was extinguished.

The daily routine of firefighting brought with it both physical and psychological fatigue. Rahman, the leader of the team, tried to relieve the stress of the long hours and the heat with humour, reminding the others that cool drinks and good food were on the way. For Rahman and one of his colleagues, Samsul, the forest is their home. "If the forest is gone, where else can we work?" asked Samsul. Despite the dangerous and exhausting conditions there was no question of quitting before the fires were put out.

This spirit was shared by the numerous volunteer fire fighters that were mobilized to assist the firefighting team. Most of the Hutan Harapan staff were mobilized to fight the fires along with the Batin Sembilan Indigenous Peoples, students from University of Bengkulu and University of Jambi, Muhammadiyah University, Palembang, Batanghari Task Force Team, Batanghari police and the military. What they lacked in experience was made up by their willingness to work long hours in dangerous conditions. They are Hutan Harapan's heroes. (HOS)