

Hope for the Survival of Sumatran Rhino in Leuser

By Adhi Rachmat Hariyadi

Leuser ecosystem in Aceh has been long forgotten by most due to the heavy tsunami that struck in 2004, where all of the attentions had been directed towards the reconstruction of this province. Eight years later the reconstruction has been completed and the life returns to the normal pace, but how about the fate of the Sumatran rhinos?

Since Nico van Strien's study in 1985 in Mamas valley, within Gunung Leuser National Park in the southern side of the Leuser ecosystem, there has been very limited information regarding the distribution and the numbers of Sumatran rhinos in this location, let alone the information on the overall distribution of this species within Leuser ecosystem in Aceh.

Obtaining this information is an important step for conserving the Sumatran rhino population in Aceh; thus creating an important step for the global Sumatran rhino conservation efforts, as Indonesia hosts the remaining viable population of the Sumatran rhinoceros in the wild.

Leuser ecosystem is located next to the boundary between provinces of Aceh and North Sumatera, and with the size of 2.6 million hectares it is probably the biggest protected area in the province that hosts tremendous biodiversity.

The topography of Leuser ecosystem consists of mountain area with some plateaus and valleys in certain locations, and most of these areas are very remote with difficult access. The location of Leuser ecosystem is presented in Figure 1.

The initiative for developing a robust and more accurate methods for surveying the rhinoceros in such difficult terrains starts with a multi stakeholder process discussion to modify existing grid system –used for tiger surveys- to suit the needs for Sumatran rhino surveys. The step consists of modification of grid size from 17x17 km² into a smaller 8.5x8.5 km² knowing that rhinoceros has smaller home range size compared to the tiger.

The grid was divided into sub-grids with the size of 2x2 km² each, and occupancy survey is done to determine the presence of rhinoceros in each sub-grid. The presence of rhino is defined as the presence of rhino signs such as: foot prints, browse marks, active wallows, or even direct



Figure 1: The Leuser ecosystem of Aceh is displayed as the green area (source: marzuki.blogspot.com)

encounters. To evaluate the advantages and the disadvantages, the new method is tested in Bukit Barisan Selatan National Park with known rhino population. The test survey results in a more accurate identification of rhino 'hot spots' compared to the existing survey method.

This result shows that this method will be applicable in any areas with rhino population, and will provide initial information on the distribution and population density of the rhinos in a particular survey area. The method is ready for try out in Leuser Ecosystem in Aceh.

Sumatran rhino survey in Aceh is based on the multi-stakeholder collaboration between BPKEL (authority of Leuser ecosystem) with many conservation institutions and NGO including WWF Indonesia.

Two surveys have been carried out since October 2011. The initial findings are still far from conclusive, however, the indications of the presence of Sumatran rhinoceros in the Leuser

ecosystem provide hope for Sumatran rhino conservation. It is important to find out the status of this rhino population: are they isolated? How many are there? Are there males and females? Is the habitat threatened in any way? However, one thing is certain: the current habitat in the areas surveyed is still suitable for rhino inhabitation due to the presence of water, wallow holes, and food plant. Further study and investigation needs to be done in order to answer the above questions;

thus providing valid information for developing rhino conservation program in Leuser ecosystem.

The surveys also confirmed the presence of other charismatic species such as: tigers, elephants, orangutans, Thomas' Langur (*Prebytis thomasi*); thus strengthening the importance of Leuser ecosystem as a stronghold not only for plant biodiversity, but also for flagship species conservation.

Operation Javan Rhino

There are fewer than 44 Javan rhinos left on the planet. Unless we take action now to protect and expand the Javan rhino population, we could lose this species forever. The only population of Javan rhinos is confined to Indonesia's small Ujung Kulon National Park on the island of Java - and these animals are quite literally stuck between a rock and a hard place. With the species' entire viable population living in this one precarious location, Javan rhinos face a significant risk of extinction from a single natural disaster or introduced disease.



ARP is assisting to fund partners to create 4,000 hectares of expanded habitat for Javan rhinos in Ujung Kulon, which should encourage population growth. This will then allow us to eventually move some animals to establish a second "insurance" population at a separate site, further helping to expand the species' population and prevent its extinction.

We currently need \$311,000 for this ambitious effort and are asking for your help in raising these additional funds. Funds will be used to plant rhino food plants, create water sources and wallows, construct guard posts and patrol routes, and hire anti-poaching units to patrol the area.

Donations over \$2 are tax deductible.

To donate e-mail info@asianrhinos.org.au, call 0889760952. Donate online www.asianrhinos.org.au or Directly Deposit to Asian Rhino Conservation Fund BSB: 016 263 Account: 498419844.

Adopt-a-Rhino Fundraiser

Help us save the Critically Endangered Sumatran rhino by adopting one today.

All funds raised through the ARP's adopt-a-rhino program will be used to support the Sumatran Rhino Sanctuary in Way Kambas National Park, Indonesia.

Rhino Adoptions make a great gift for the person who "has it all" or is passionate about conservation. ARP has two new Adoption Packages on offer!

"Basic Package" AUD\$75.00 - Includes an Adoption Certificate and Asian rhino information folder.

"Deluxe Package" AUD\$95.00 - Includes an Adoption Certificate, Asian rhino information folder, six monthly update on the adopted rhino and either a t-shirt or soft toy. Tremendous package and great value!

More information on the rhinos and the program at www.asianrhinos.org.au.