

## **Community awareness & challenges in forest fire prevention: a case study at peat swamp forest, Klias forest reserve, Beaufort, Sabah, Malaysia**

### **ABSTRACT**

Malaysia is known as a tropical rainforest country which is one of the oldest and complex ecosystems in the world. Peat swamps are unique forest types that usually found in the lowland of tropical forest area. The risk of peat forest fires is high when the peat was exposed or when the water table has significantly reduced due to manmade canals. The implication of peat swamp forest fire is not only to flora and fauna but also brings negative impact to the human daily routine, health, safety and economic development. Peat swamp forest is an important indicator to having forest fire easily if the community are lack of awareness to controlling their lifestyle which is that can be a reason for fire at the peat swamp area. In Sabah, forest fire occurrence from 1983 to 1985, was reported involving an area of about one million hectares that caused by the El-Nino phenomenon. The peat swamps of Klias Forest Reserves is known to be a fragile environment. This research was conducted to determine the community level of awareness and challenges in forest fire prevention at Klias forest reserves, Beaufort, Sabah, Malaysia. Finding from this research shows that local community live surrounding the area are slightly lack awareness and knowledge on the prevention of forest fires in the peat swamp forest. This among other is because the community is less dependent on the peat swamp forest as a place to generate income. The less level of awareness could contribute to the occurrence of a forest fire in the area. However, the community gives a positive response of being involved in preventing and extinguish forest fire by co-operating with the relevant authority such as Sabah Forest Department. It was found that the awareness on forest fire prevention among the male gender is higher than female, but they have a similar perception of the techniques on forest fire prevention and firefighting. Extinguishing forest fire in peat swamp forest is a high risk and dangerous task that needs much preparation includes readiness of mental and physical ability. The intractability of villagers, the violating of rules and the unresponsive attitude that related to the prevention of encroachment for agricultures activities in peat swamp forest is posed as a challenge. Besides that, to engaged community live surrounding to have responsibility on preserving Klias Forest Reserves from pollutions & others environmental issues such as conservation of Flora and Fauna as well as their breeding population is also a challenges. As the outcome, the villagers nearby peat swamp forest, Klias Forest Reserves should involve in the "Forest Fire Prevention & Control" project, which applies the technical

approach in partnership with the authority to combat a forest fire in peat swamp area. Community development programs that integrates various party to promote forest fire awareness and prevention is suggested as one of the factors that able to contribute to the successful management of forest fire in peat swamp forest.