Post forest fire management at tropical peat swamp forest: a review of Malaysian experience on rehabilitation and risk mitigation

ABSTRACT

Malaysian Peat swamp forests constitute a significant component with an estimated 1.54 million hectares remaining. More than 70% of these peat swamp forests are in Sarawak, less than 10% Sabah in and the remainder 20% in Peninsular Malaysia (UNDP, 2006). Peat swamp forest is the fragile unique forest ecosystem type that usually found in the lowland of tropical forest areas. Peat forest is exposed to the fire even especially during the dry season. The impact of forest fires at the peat swamp area not only destroys the aboveground biomass but also penetrates the underlying peat, resulting in undesirable environmental impacts, including high atmospheric emissions of carbon gases. Therefore, undertaking the rehabilitation and fire risk mitigation activities at burned peat land is very tough and challenges due to the massive destruction and changes in the ecosystem. This paper will emphasize more on restoration and rehabilitation as well as fire risk mitigation efforts on burn peat swamp forest in Malaysia. The issues and challenges encountered in order to restore the burn peat swamp forest area will also be addressed.