



Position Statement on the Threat from Industrial Oil Palm Expansion to Equatorial Forests in Africa¹

Background to the Problem

Forests² and their biodiversity are an inextricable part of Earth's life support systems. They provide irreplaceable ecosystem services ranging from clean air, water purification, to wildlife habitat, and pollination services, and they help support resilience to climate change (WCFSD, 1999; Lindenmayer and Franklin, 2002; MEA, 2005). The importance of forests to the world was significantly highlighted when the United Nations General Assembly (2007) proclaimed 2011 the International Year of Forests to "raise awareness at all levels to strengthen the sustainable management, conservation and sustainable development of all types of forests for the benefit of current and future generations." Even with efforts to stem forest loss, deforestation still continues unabated, although it has slowed from a long-term perspective (DellaSala et al. 2011). The global deforestation rate for 2000-2010 averaged 13 million hectares annually, which is less than previous decades though still substantial (FAO, 2010).

Africa contains about 675 million hectares of forests, corresponding to 17 percent of the world total (FRA, 2010). These forests support an estimated 1.5 million plant and animal

¹ This statement was authored by the SCB Africa Section and is endorsed by the SCB global organization. SCB is an international professional organization whose mission is to advance the science and practice of conserving the Earth's biological diversity, support dissemination of conservation science, and increase the application of science to management and policy. The Society's 5,000 members include resource managers, educators, students, government and private conservation workers in over 140 countries.

² Plantations are not the same as native forest cover. Native forest cover supports significantly higher levels of biodiversity often including endemic species, ecosystem services upon which people rely, and often providing as much if not more economic returns than plantation forests. These services from native forest cover include eco-tourism, pollination, seed dispersal, medicinal plants, maintenance of soil fertility and hydrology, and erosion control, among others. They cannot be replaced by monocultures of agroforestry tree species and should be valued along with agroforestry plantations.



species that in turn support local communities in terms of food, shelter, clothing, and medicinal needs (NEPAD, 2003). However, it is estimated that Africa lost 3.4 million hectares of forests between 2000 and 2010 of which 572,000 hectares was primary forest (FRA, 2010). The decline has resulted mainly from the rising demand for agricultural lands, commercial harvesting of timber, urbanization, and industrialization (Chidumayo et al. 2011).

Wich et al. (2014) report that recent significant investments in African agriculture in the oil palm (*Elaeis guineensis*) industry are likely to lead to biodiversity losses similar to those in Southeast Asia. Indonesia is projected to lose most of its natural rainforest by 2022 (Rainforest Rescue, undated). Oil palm production not only drives natural forest cover loss, but can also lead to direct mortality of endangered species, such as orangutans (Rainforest Rescue, undated). Oil palm has become one of the most rapidly expanding equatorial crops in the world (Koh and Wilcove, 2008). The global extent of oil palm cultivation increased from 3.6 million ha in 1961 to 13.2 million ha in 2006 (FAO, 2007). Although the oil palm is a native species in Africa where it is mixed with other subsistence crops, new frontiers for its cultivation are opening up in West Africa and the Congo Basin (Rival and Levang, 2014). Given the implications of this expansion, the IUCN/SSC Primate Specialist Group's Section on Great Apes have written a policy statement on industrial oil palm expansion in great ape habitat in Africa (IUCN, 2014). Moreover, delegates to the Great Apes Summit (September 2013; Wyoming, USA) committed to the conservation of apes and their habitats and articulated a six-action point statement on oil palm expansion (GRASP, 2013).

The purpose of this SCB position statement is to build on these efforts and highlight the rapid and unsustainable destruction of forests due to industrial oil palm expansion in West and Central Africa, and the role of oil palm expansion in the attrition of biodiversity including flagship species such as apes, as well as associated human health and economic implications. This is a call on African governments, policy makers and societies to formulate effective policies that support ecological sustainability of African equatorial forests.



Implications for Biodiversity, Human Health and Economic Development

Many threatened and endangered species will be affected by oil palm expansion in Africa. Africa's apes, which include the gorilla and its sub-species, the common chimpanzee and its sub-species, and the bonobo will be affected. Current great ape distribution in Africa substantially overlaps with current oil palm concessions (by 58.7%) and areas suitable for oil palm production (by 42.3%); 39.9% of the distribution of great apes species on protected lands overlaps with suitable oil palm areas (Wich et al. 2014). Further, where great ape species predominantly inhabit rainforests, a large proportion of land containing sustainable environmental conditions (SEC) for great ape species overlaps with suitable oil palm areas (Wich et al. 2014). This is the case for Sierra Leone (48.8%), Liberia (81.7%), Cote d'Ivoire (59.6%), and Ghana (87.9%) in West Africa, and for all Central African countries containing great apes (49.5%) (Wich et al. 2014). Other studies reveal that most International Union for the Conservation of Nature (IUCN) Redlisted bird species do not persist within oil palm plantations (Aratrakorn, et al. 2006; Edwards et al. 2010). A 2003 study in south Cameroon revealed that large mammals, particularly gorillas and chimpanzees, face the most pressure from forest fragmentation, degradation or conversion (Yanggen, et al. 2010). The threat to these species is compounded by their life history, including low reproductive rates; females give birth when they are at least 12 years old and only have one infant every 5 or 6 years (Kormos, et al. 2003).

There is a growing appreciation of the links between ecosystem alteration and human health (Redford et al. 2014). A critical example is a model of infectious disease demonstrating that recent epidemics – AIDS, Ebola, West Nile, SARS, Lyme disease and others – are due to alteration of ecosystems (Robbins, 2012). Sixty per cent of emerging infectious diseases that affect humans are zoonotic (from animals) and more than two-thirds of those originate in wildlife (Robbins, 2012). According to a recent study by the World Bank, there is a potential economic drain of as much as \$32.6 billion by the end of 2015 if the recent Ebola epidemic spreads into neighbouring countries beyond Liberia, Guinea and Sierra Leone (Sorkin, 2014).



Finally, officially reported monetary contributions of forests to the economics of the developing world exceed \$US 250 billion – easily more than double the flow of total development assistance and more than the annual global output of gold and silver combined (Agrawal et al. 2013). In Ghana for instance, forest resources play a large role in income generation and household food security with forestry products providing sustenance and revenue for about 2.5 million people in the country (Boafo, 2013). Forest biodiversity, including the great apes, are of great economic importance given their contribution through tourism, education and scientific research.

Position statement

Based on the above implications, associated problems and consequences of deforestation in equatorial Africa due to oil palm expansion, the urgent mandate of the Convention on Biological Diversity in the UN Decade for Biodiversity (2011-2020), the mission and strategic priorities of the SCB, the Africa Section of the SCB takes the following positions:

- Industrial oil palm expansion at unregulated and unsustainable rates is a threat to forests and biodiversity in equatorial Africa. Governments and societies must put into place robust policies and laws to protect the remaining forests in the region.
- Africans are custodians of their forest ecosystems and biodiversity, and irrespective of the short term economic gains provided by the oil palm industry, economic and ecological sustainability should guide decision making by African governments and society. Africa cannot afford the forest losses similar to what Southeast Asia has incurred due to oil palm expansion.
- Responsibility for our forests as Africans is based on the consciousness that we are in control and can determine our own environmental outcomes as a contribution to global efforts for a sustainable world. We believe Africans have the wherewithal to develop the legal instruments, policies and land use planning to secure forests in perpetuity.



Recommendations

The SCB Africa Section cites specific recommendations as documented by scientific research published in the peer-reviewed literature:

1. Government should play a proactive role by granting concessions only to companies that are part of the Roundtable on Sustainable Palm Oil (RSPO) (Wich et al. 2014). However, before this, the allocation of new industrial oil palm concessions should be halted until environmentally and socially responsible policies are put in place (Linder, 2013). Given the different socioeconomic and environmental contexts in Africa as compared to Southeast Asia, it is important to develop region and country specific management guidelines for African palm oil producers (Wich et al. 2014). Scientists should guide government in the entire process by providing empirical data and information.
2. Government could stimulate the development of oil palm plantations on degraded lands by providing incentives (e.g. tax breaks) to make this option more attractive to companies (Wich et al. 2014). The RSPO, government and civil society should clarify the concept of “degraded land³,” including its definition and accepted methods of identification (Linder, 2013). Degraded land may be located in great ape ranges. Under such conditions, biodiversity conservation should be mainstreamed in designing and implementing oil palm concessions. Governmental and nongovernmental organisations can work to develop national strategies for land allocation that integrate maps of conservation priorities and agricultural suitability (Fitzherbert et al. 2008).
3. Producers must be given access to information that will help them to locate new plantations in areas where they will cause the least ecological damage (Fitzherbert et al. 2008). Therefore it is critical that each African country invest in developing high-resolution updated maps of great ape distribution for instance, oil palm suitable areas, and degraded lands (Wich et al. 2014).

³ Land with low conservation value due to degradation of habitat but still valuable for other activities such as agriculture.



4. To achieve higher production of crude palm oil in a less environmentally damaging way, an investment in high-yield oil palm plantations, through better seed quality and best management practices could be investigated first, before expanding plantations over primary forests (Wich et al. 2014).
5. Financial institutions, buyers and consumers can assist by continuing to demand detailed evidence that producers are doing all they can to minimise the negative impacts of palm oil production, and by denying finance and markets to those that are not (Fitzherbert et al. 2008).

Authors: Stephen M. Awoyemi*, Martin Nganje, Beth A. Kaplin and Dhaval Vyas
(January 2015). *Corresponding author: sawoyemi@gmail.com



REFERENCES

- Agawal, A. Cashore, B., Hardin, R., Shepherd, G., Benson, C., and Miller, D. 2013. Economic Contributions of Forests. United Nations Forum on Forests. http://www.un.org/esa/forests/pdf/session_documents/unff10/EcoContrForests.pdf
- Aratrakorn, S., Thunhikorn, S. and Donald, P. F. 2006. Changes in bird communities following conversion of lowland forest to oil palm and rubber plantations in southern Thailand. *Bird Conservation International* 16:71-82
- Bafo, J. 2013. The Impact of Deforestation on Forest Livelihoods in Ghana. Available at: www.africaportal.org/articles/2013/01/16/impact-deforestation-forest-livelihoods-ghana
- Chidumayo, E., Okali, D., Kowero, G. and Larwanou, M. (Eds.). 2011. Climate change and African forest and wildlife resources. African Forest Forum (AFF), Nairobi, Kenya.
- DellaSala, D.A., Fitzgerald, J.M., Jonsson, B., McNeely, J.A., Dovie, B.D., Dieterich, M., Majluf, P., Nemtzov, S.C., Nevin, O.T., Parsons, C.M. and Wattson, J.E.M. 2011. Priority Actions for Sustainable Forest Management in the International Year of Forests. *Conservation Biology* 3: 572-575.
- Edwards, D.P., Hodgson, J.A., Hamer, K.C., Mitchell, S.L., Ahmad, A.H., Cornell, S.J., and Wilcove, D.S. 2010. Wildlife-friendly oil palm plantations fail to protect biodiversity effectively. *Conservation Letters* 3:236-242.
- FAO. 2007. FAOSTAT Online Statistical Service. United Nations Food and Agriculture Organization (FAO), Rome. Available at: <http://faostat.fao.org>
- FAO / FRA (2010). Evaluation des ressources forestières mondiales, 2010. Rapport principal.



- Fitzherbert, E.B., Struebig, M.J., Morel, A., Danielsen, F., Bruhl, C.A., Donald, P.F., and Phalan, B. 2008. How Will Oil Palm Expansion Affect Biodiversity? *Trends in Ecology and Evolution* 23: 538–545.
- Food and Agriculture Organization (FAO). 2010. Global Forest Assessment. 2010. FAO, Rome. <http://www.fao.org/docrep/013/i1757e/i1757e.pdf>
- GRASP. 2013. Great Apes Summit Delegates Issue Statement on Palm Oil. <http://tinyurl.com/pbmvwbe>
- IUCN. 2014. Industrial Oil Palm Expansion in Great Ape Habitat in Africa. http://www.primate-sg.org/storage/pdf/Statement_on_oil_palm_in_Africa.pdf
- Koh, L.P. and Wilcove, D.S. 2008. Is Oil Palm Agriculture Really Destroying Tropical Biodiversity? *Conservation Letters* 1: 60-64.
- Kormos, R., Boesch, C., Bakarr, M.I. and Butynski, T. (Eds.). (2003). West African Chimpanzees: Status Survey and Conservation Action Plan. IUCN/SSC Primate Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.
- Lindenmayer, D.B., and J.F. Franklin. 2002. Forest biodiversity. Island Press: Washington, D.C. DellaSala, D.A. 2011. Temperate and boreal rainforests of the world: ecology and conservation. Island Press: Washington, D.C.
- Linder, J.M, 2013. African Primate Diversity Threatened by “New Wave” of Industrial Oil Palm Expansion. *African Primates* 8: 25-38.
- Millennium Ecosystem Assessment. 2005. Washington DC: World Resources Institute.
- New Partnership for Africa's Development (NEPAD). 2003. Action Plan for the Environment Initiative. South Africa.
- Rainforest Rescue. Undated. Facts about Palm Oil and Rainforests. <https://www.rainforest-rescue.org/topics/palm-oil>
- Redford, K.H., Myers, S.S., Ricketts, T.H., and Osofsky, S.A. 2014. Human Health as a Judicious Conservation Opportunity. *Conservation Biology* 28:627-629.



Rival A. and Levang P. 2014. Palms of controversies: Oil palm and development challenges. Bogor, Indonesia: CIFOR.

Robbins, J. 2012. The Ecology of Disease. Available at: http://www.nytimes.com/2012/07/15/sunday-review/the-ecology-of-disease.html?pagewanted=all&_r=0

Sorkin, A.R. 2014. Calculating the Grim Economic Costs of Ebola Outbreak. Available at: <http://www.cnbc.com/id/102085002#>.

UN General Assembly. 2007. International Year of Forests, 2011. Resolution, 61/193, 61st session. UN General Assembly, New York.

http://www.dgvn.de/fileadmin/user_upload/DOKUMENTE/UNDokumente_zB_Resolutionen/GV_Res61-193_Int_Jahr_Waelder.pdf

WCFSD (World Commission on Forests and Sustainable Development). 1999. Our forests, our future. Cambridge University Press, Cambridge, United Kingdom.

Wich, S.A., Garcia-Ulloa, J., Kühl, H.S., Humle, T., Lee, J.S.H., and Koh, P.L. 2014. Will Oil Palm's Home Coming Spell Doom for Africa's Great Apes? Current Biology 24:1659-1663.

Yanggen, D., Angu, K., Tchamou, N. (Eds) (2010). Landscape-Scale Conservation in the Congo Basin; Lessons Learned from the Central African Regional Program for the Environment (CARPE). IUCN, Gland, Switzerland