

Reducing negative impacts of palm oil plantations

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Harmful environmental and social impacts of palm oil plantations in the developing world could be minimised by buffer zones around towns and villages; protection of areas with high ecosystem value and effective consultation with local communities.

So concludes a commissioned report by the University of Reading launched today (24th June) which focuses on the Bopolu district in Gbarpolu county Liberia. Bopolu district is a largely forested area which is globally recognised as a biodiversity hotspot and home to around 18,000 people. The 17,000 hectare study area is part of a 300,000 hectare concession of land leased, through a 63-year contract, to a [palm oil](#) producing company. Operations to develop palm oil plantations have not yet commenced in the 17,000 hectare study area.

Dr Geoff Griffiths, from the University of Reading and one of the authors of the report, says: "We carried out independent research in Liberia to investigate the potential environmental and social impacts of large-scale land acquisitions in the global South. Our research uncovered perceptions among the local communities that palm [oil development](#) could lead to loss of livelihoods, reduced food security and increase the risks of chronic poverty. In addition, eco-mapping revealed potential loss of [forest biodiversity](#) and carbon [storage capacity](#)."

"Our work suggests that buffer zones of 1 to 4 km around local settlements would help local people retain farmland and some access to [forest resources](#). Our innovative environmental assessment also

identifies key areas for biodiversity, carbon storage, water supply and livelihoods. Protecting such areas would help to reduce negative impacts."

"Of course this is just a small scale study, but it helps to highlight the potential risks of palm oil development and crucially how negative impacts might be reduced."

The research mapped current resource use, livelihoods and ecosystems services, in addition to analysis of community consultation and perceptions of the potential impacts of the proposed development.

While the proposed development of [palm oil plantations](#) in the region could bring benefits, such as jobs, improved roads and access to basic services. The conversion of land to palm oil plantation could cause irreversible loss of farming and other livelihood opportunities, such as fishing and hunting for bush meat. There is a risk of losing plant and animal species in a region that is globally recognised as a biodiversity hot spot, with particularly unique and endangered bird species, such as the small, olive-and-yellow Forest Greenbul.

Local people rely on the land and the region's forests for their livelihoods, for food and for their sense of belonging. One local woman who participated in the study said: "We depend on the forest for living. We live by hunting, we make farm, we use baskets to fish. Everything we do depends on the forest. Our living is in our forest."

The report identifies buffer zones of 1 to 4 km around the towns and villages studied for this research that would allow local people to continue to grow crops such as rice and cassava for food and rubber, cocoa and coffee for cash. Local people also use larger areas of the forest, for example men typically walk for 2 or 3 hours into the forest to set and collect from traps for bush meat, and [buffer zones](#) need to take

this into account.

Resistance to the proposed plantation development was found in workshops at two of the three communities involved in the research. Concerns were raised regarding loss of farmland and forest resources, potential loss of income from rubber and cocoa plantations that local people use as cash crops and reduced access to land held under customary tenure for future generations. It was felt by some that the development might offer job opportunities, particularly for young people in unskilled jobs such as weeding and people with carpentry/masonry skills, but older subsistence farmers could be disadvantaged.

As part of the rebuilding efforts following the long civil war, the Liberian government has renegotiated long-term contracts with international investors to exploit natural resources. Substantial areas of land have been handed out in large-scale concessions across Liberia during the last five years.

The University of Reading research report examines the potential socio-economic and environmental impacts of a proposed large-scale oil palm concession in Bopolu District, Gbarpolu County in Liberia.

In the research, participatory workshops were held with 48 people living in three local communities and 8 stakeholders were interviewed. The [environmental assessment](#) included field work, analysis of satellite and other data, and consultation meetings to map the importance of ecosystems within the Bopolu concession (such as forested land, swamps and farmland) in providing food, water and fuel, cultural resources, [carbon storage](#), flood regulation and water purification.

Although the small sample of community members and stakeholders used in the study limits the representativeness of the findings, the

research explored a diverse range of perspectives of men, women and young people in three differing locations.

Palm oil is an increasingly important international commodity used in a wide range of products such as margarine, cereals, crisps, sweets and baked goods, soaps, washing powders, cosmetics and as a bio-fuel.

More information: Evans, R. and Griffiths, G. (2013) 'Palm oil, land rights and ecosystems services in Gbarpolu county, Liberia', *Research Note 3*, Walker Institute for Climate System Research, University of Reading, June 2013 [www.walker-institute.ac.uk/pub ... WalkerInResNote3.pdf](http://www.walker-institute.ac.uk/pub...WalkerInResNote3.pdf)

Provided by University of Reading

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