



A community-based approach integrating conservation, livelihoods, and health care in Indonesian Borneo

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See Online for appendix

Human health is dependent on healthy ecosystems, yet often our quest for health drives environmental degradation. This issue is crucial for people living around Borneo's Gunung Palung National Park (GPNP), who in 2007, were still rampantly logging to pay for health care. Health In Harmony's pilot programme, Alam Sehat Lestari (ASRI), which was initiated in 2007, offers a disruptive model that combines access to affordable and high-quality health care, opportunities for alternative livelihoods and entrepreneurship, and conservation programmes to restore the severely degraded park.

GPNP, a 108 000 hectare protected area in Indonesian Borneo, is well known for its biodiversity and covers a vital watershed that supports more than 60 000 people living in 44 villages (appendix). Unfortunately, more than 70% of the lowland forests within the park's 10 km buffer zone around the outer perimeter of GPNP were deforested between 1988 and 2002.¹ In 2007, Health In Harmony initiated a process of radical listening to identify the drivers of deforestation and to help communities design and implement solutions. After more than 400 h of community meetings, villages unanimously agreed they could stop logging if they had access to high-quality, affordable health care and training in alternative livelihoods.

Before the work began in 2007, the communities bordering GPNP were extremely poor, with an average annual income of 3.7 million Indonesian rupiah (US\$1.21 per day) in 2003.² Health-care services were either unavailable or of extremely low quality, and the nearest hospital was 2–12 h away. Poverty and a lack of access to affordable health care left local people with few choices of livelihoods, and many turned to logging.

Health In Harmony's pilot programme, ASRI, uses an integrated approach that includes monitoring logging activity through community meetings, satellite imagery, and surveys; providing health care in ASRI's hospital, which offers non-cash payment options and progressive discounts to villages as they reduce rates of logging; making alternative livelihood opportunities available through training and assistance to people who want to stop logging; implementing conservation education programmes for all ages; and planting native rainforest trees in the park to restore crucial habitats for orangutans and other species.

Quantitative results of ASRI have shown a positive impact, with an estimated 1350 logging households at baseline in 2007 decreasing to 450 households in 2012 and 150 in 2017 (an 89% decline from baseline; appendix). Geographic Information Systems data also show a

stabilisation in primary forest loss and an increase in secondary forest growth (appendix). Additionally, the 2012 survey found 52% of previous loggers switched to farming. Survey results have also shown substantial improvements in health indicators. From 2007 to 2012, infant mortality declined from 3.4 to 1.1 deaths per 100 households. To date, ASRI has treated nearly 70 000 patients, maintained a patient dropout rate of less than 1% for tuberculosis treatment, distributed more than 1000 eyeglasses and 4000 mosquito nets, done monthly mobile clinic visits, and initiated maternity services at its hospital.

ASRI has improved the health of people and the forest in the GPNP region in Borneo. This comprehensive approach to conservation and health care empowers individuals to improve their wellbeing and protect the natural ecosystems we all depend on.

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Contributors

KW contributed to study design and data collection, analysis, and interpretation. JJ and DM contributed to data analysis and interpretation, and writing of the Case Report.

Declaration of interests

We declare no competing interests.

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