

forestry

communicating international development research

How do forests influence human health?

Research shows that human health, in terms of physical, mental and spiritual well-being, is linked to forest use and forest management. What other factors influence this relationship?

Over one billion people live in, or close to, tropical forests. The health of these people is linked to forests. Furthermore, the medicines that all humans depend on, and the diseases we suffer, are also linked to forests. Research from the Centre for International Forestry Research, Indonesia, explores the relationship between forests and health in four key areas: forest foods and nutrition; diseases and other health problems; medicinal products; and human culture.

Forests have many positive impacts on human health; for example, forest plants are an important source of medicines and other health benefits for forest dwellers. Forests can also be important 'safety nets' and provide food when other sources are threatened by drought, floods or crop failure. However, some authors fear that dependency on forest resources can lead to a 'poverty trap' in which people never increase their incomes above a basic level.

Forests can also have negative impacts on human health, and logging and commercial forest activities can increase health risks. For example, in some places there is a link between deforestation and increases in malaria. Malaria infects over 300 million people every year and is a major cause of death in and near many forest areas. One link is that logging can produce standing water in which mosquitoes breed.

Some key findings include:

- Forest foods, which often provide important diversity in forest dwellers' diets, are generally low in nutritional

value. However, these foods are an important safety net during periods of food insecurity. Household distribution of forest foods can be unfair, though, with women and girls particularly at risk of not receiving a fair share.

- HIV/AIDS, vitamin deficiencies and exposure to toxic substances from industrial waste and fuel wood all threaten human health.
- Many forest species have medicinal uses that are important in traditional and western medical systems. Forest dwellers have considerable knowledge of medicinal plants, but do not usually benefit materially from this knowledge when commercial companies get involved.
- The extraction of plants for western medicines can have negative impacts on both the sustainability of the resources and on the health of forest dwellers. Tropical forests, and their uses, play a complex role in influencing the prevalence of many infectious diseases (including emerging diseases). To protect the health of forest dwellers, the researchers recommend that, among other things, policymakers should:
 - Evaluate the nutrient content of forest foods and change advice on nutrition accordingly.

- Learn more about health needs of forest dwellers by listening to, and working with, local people.
- Challenge traditional beliefs which disadvantage women



Adivasis tribal people in India have no contact with the modern world. They collect medicines from the forest and barter with neighbours for clothes and salt.

Karen Robinson / Panos Pictures

during vulnerable times, such as pregnancy and lactation.

- Offer education about the links between a woman's health and family health.
- Ensure that commercial activities do not threaten local people's subsistence needs.
- Enforce 'best practices' for logging companies, such as avoiding leaving pools of standing water, to ensure that their actions do not adversely affect local people.
- Establish facilities along transport routes which offer education for local people about HIV and family planning.

Carol J. Pierce Colfer, Douglas Sheil and Misa Kishi
 Carol J. Pierce Colfer, Centre for International Forestry Research, P.O. Box 6596, KPWB, Jakarta 10065, Indonesia
 T +62 251 622622 F +62 251 622100
cifor@cgiar.org

Forests and Human Health – Assessing the Evidence, produced by the Center for International Forestry Research, Occasional Paper No. 45, by Carol J. Pierce Colfer, Douglas Sheil and Misa Kishi, 2006 (PDF)
www.cifor.cgiar.org/publications/pdf_files/OccPapers/OP-45.pdf

Subscribe for free

id21 natural resources highlights are intended for people living in low and middle income countries. If you would like to subscribe for free, please send your contact details to the address below or send us an email:

id21
Institute of Development Studies
University of Sussex, Brighton, BN1 9RE, UK

T +44 (0) 1273 678787 F +44 (0) 1273 877335 email id21@ids.ac.uk

See id21's links for forestry and development:

www.id21.org/nr/links4.html

Enforcing the law in forests

Illegal logging is a major problem in many developing countries. However, current attempts to enforce forest laws do not always target the causes of illegal logging. Instead, they persecute poor rural people living in forest regions.

Illegal logging causes huge environmental damage and deprives governments of revenue. Research from the Centre for International Forestry Research in Indonesia warns that the current focus of law enforcement efforts is unfair. It focuses too greatly on poor and marginalised groups who depend on forest resources.

Forest Law Enforcement and Governance (FLEG) has emerged as an international policy framework to tackle illegal forestry and promote sustainable forest management. The aims of FLEG are:

- to confront illegal logging activities
- to act for justice and poverty alleviation
- to combat corruption and promote good governance in forest management.

The impact of FLEG law enforcement on forest communities has not been fully appreciated. In many countries, current

forest laws limit the rights of forest dependent communities. For example, they often face difficulties exercising their rights to the ownership, access and use of forest resources.

Key findings from the research include:

- The extent of forest livelihoods is often under-appreciated in forest laws. A lack of reliable information about forest-dependent communities illustrates how detached they can be from policy-making processes.
- Many forest laws are contradictory, which makes it difficult to determine what is illegal and what is not.
- Illegal forest use, including logging and collecting bushmeat, is often an important part of local economies. Local communities may be guilty of illegal activities when trying to collect food and resources for subsistence living.

Laws tend to be applied selectively and favour large-scale forestry industries or those who can afford to pay bribes. FLEG targets small-scale forest users, which reinforces the exclusion of forest-dependent communities from policy processes. FLEG rarely challenges large businesses, chief executive officers or shareholders who benefit from illegal forest activities. This approach therefore does little to tackle the causes of large-scale illegal logging.

Key policy recommendations include:

- Target large-scale illegal loggers, not small-scale operators. This will have a greater impact on reducing illegal logging and reduce the unfair targeting of rural communities.
- Adopt a rights-based approach to forest governance, giving more attention to human rights and encouraging community access to justice.
- Encourage programmes to reform governance in ways that make forestry authorities accountable to the public for their actions and decisions about natural resource management.
- Use participatory reform to change forest-related laws. This will mean that the opinions of forest communities are represented.

Marcus Colchester
marcus@forestpeoples.org

Centre for International Forestry Research, Situ Gede, Sindang Barang, Bogor Barat 16680, Indonesia
T +62 251 622622 F +62 251 622100
cifor@cgiar.org

Justice in the Forest – Rural Livelihoods and Forest Law Enforcement, Forest Perspectives 3, Centre for International Forestry Research, by Marcus Colchester, 2006 (PDF)

www.cifor.cgiar.org/publications/pdf_files/Books/BColchester0601.pdf

Fighting corruption in forest product verification in Nepal

Commercial forestry in Nepal is poorly managed. This is largely because the system to verify the legality of forest products is corrupt. The experiences of the Commission to Investigate the Abuse of Authority, Nepal's main anti-corruption agency, provides valuable lessons on combating corruption.

Community forestry in Nepal's midhills receives international recognition, but commercial activities in the forests of the southern plains (the 'Terai') are less well known. Poor management means that about 8 percent of the total area is lost each year to illegal logging. This is possible because of the corruption in the verification system for forest products.

Research from VERIFOR studies forest verification in many countries, including Nepal. After reviewing the current verification system, the researchers examine options for forest product verification in Nepal and the potential role of Nepal's main anti-corruption agency, the Commission to Investigate the Abuse of Authority (CIAA).

The government in Nepal owns and manages most of the commercially valuable Terai forests. Most commercial timber activities produce Shorea robusta (Sal) timber for domestic use. The system for verifying the legality of this production involves three levels of control: a variety of permits for harvesting, transport and selling; an internal checking system run by the Forest Department; and external monitoring (for example by the

army, the police and customs officials). In practice, this verification system is driven by bribes at all levels: it is estimated that in the Terai districts in 2004, US\$7 million was paid to the government by the timber trade, while US\$21-28 million was paid in bribes.

Key strengths and weaknesses of the existing verification system include:

- Corruption is being widely debated in public, so there is a greater chance for the verification system to work as intended, especially with an improved legal framework since 2002.
- There is a lack of public participation in the present verification system, as well as a lack of independent monitoring agencies.
- The involvement of several different institutions can encourage greater participation and control, but in practice, this has led to over-regulation, confusion and increased bribes.

The CIAA could play a significant role in forest management. It also provides

valuable lessons for improving verification.

The researchers recommend:

- a detailed study to establish the level of forest-related corruption in Nepal and identify ways to improve and standardise verification systems
- creating an independent, authoritative system to oversee verification under a managing agency,

such as the CIAA

- establishing a comprehensive and consistent regulatory framework to ensure the verification system is enforced
- promoting public involvement in the verification process and encouraging community forestry and local forest-based industries to participate in monitoring the legality of forest products
- providing incentives for officials, contractors and forest users to act legally, along with the disincentive of punishment for taking part in corruption
- encouraging donors to support the registration and investigation of corruption.

Dinesh Paudel, Stephen J. Keeling and Dil Raj Khanal

Dinesh Paudel, Nepal Swiss Community Forestry Project, PO Box 113, Kathmandu, Nepal

T + 977 01 5551702 F + 977 01 5551701

d_paudel@nscfp.org.np

Forest Products Verification in Nepal and the work of the Commission to Investigate the Abuse of Authority, Country Case Study 10, VERIFOR, by Dinesh Paudel, Stephen J. Keeling and Dil Raj Khanal, 2006 (PDF)
www.verifor.org/case_studies/Nepal.pdf

id21
Institute of Development Studies
University of Sussex
Brighton, BN1 9RE UK
T +44 (0) 1273 678787
F +44 (0) 1273 877335
E id21@ids.ac.uk



id21 natural resources highlights are published twice a year by id21 on agriculture, conservation, fisheries, forestry, land, rural livelihoods and water. Please feel free to photocopy and distribute them to your colleagues. Visit the id21 website for the full range of over 3000 research highlights. These highlights are also available as PDF versions from: www.id21.org/publications/index.html#natural_resources

Keywords: corruption, commercial forestry, forest communities, Forest Law Enforcement and Governance, health, illegal logging, medicine, nutrition, verification