"Deforestation and forest degradation. Responses of the Italian forest-wood system"

ISPRA Report 97/2009

Executive summary

1. Global deforestation and forest degradation: extent, causes and effects

The UN Food and Agriculture Organization estimates that the global forest cover is 3,952 million hectares, corresponding to about 30% of the world's land area.

Between 2000 and 2005, deforestation – defined as human-induced conversion of forest to non-forest land uses - continued at an alarming rate of nearly 12.9 million hectares per year. This is mainly as a result of converting forests to agricultural land, but also due to expansion of settlements, infrastructure, and unsustainable logging practices. Recent studies confirm that the trend is far to be alleviated.

The global gross deforestation figure is partly compensated by new planted forests (both plantation forests and planted semi-natural forests) and natural expansion of forests on abandoned agricultural lands (especially in boreal and continental countries): the most recent estimate of net loss of forest is 7.3 million hectares per year.

The largest annual net deforestation rates are in South America (4.3 million hectares), Africa (4.3 million hectares), and Southeast Asia (2.8 million hectares).

Moreover, other forest lands—about 2.4 million hectares per year in the 1990s —are subjected to degradation, through unsustainable harvest or land-use practices or selective logging, fire and other anthropogenic disturbances, leading to substantial reduction of forest biomass, species composition and structure. Monitoring forest degradation and its effects—which can be more severe than those caused by deforestation—is more technically challenging than monitoring deforestation.

The root direct and indirect causes of deforestation and forest degradation are quite diverse and complex. They are for the most part inter-related, changing from region to region and from nation to nation.

Main direct causes of deforestation are: clear-cutting for logging and pulpwood, forest conversion to permanent agriculture (especially industrial agriculture plantations such as palm oil and soybean), large-scale shifting cultivation (i.e. slash-and-burn), forest conversion for permanent pasture, open pit mining and large-scale mining operations, clear-cutting for charcoal making, large roads and infrastructure plans, wildfires, dam construction, volcanic eruptions, chemical defoliants, urban and settlement expansion. Main direct causes of forest degradation are: unsustainable logging for timber harvesting, especially "selective logging", small-scale shifting cultivation (i.e. slash-and-burn), over-grazing, small scale mining and associated pollution, over-harvesting for fuel wood, fragmentation from small roads, wildfires that burn leaf litter and small plants but leave canopy trees intact, over-harvesting of non-wood forest products (medicinal plants, foods, fibres), over-hunting, invasive species, oil pollution, storm damage, extreme drought, air pollution and acid rain. Globalization is often viewed as another root cause of deforestation, though there are cases in which the impacts of globalization, in terms of new employment, flow of capital, commodities, and know-how, have produced positive impacts on the forest sector and forests.

Indirect causes of deforestation and forest degradation are: the government regulations that introduce distortions in market which prevents economic agents from freely establishing a clearing price for forest products; implausible rural development policies that force populations to abandon rural areas and to relocate to urban areas; the insecurity of land property rights of indigenous communities and of many forest-dependent peoples, which is often a major source of conflict between a national government, corporate logging interests and forest peoples;

incorrect or illegal management of forest resources and defective administrative practices by government departments, forest authorities and other governmental bodies.

Both direct and indirect causes of deforestation and forest degradation are interconnected: for example, deforestation caused by the realisation of a new settlement or infrastructure, or mining operations or timber logging, are related to illegal logging of timber by large harvesting companies and by the secondary small-scale cutting activities by local communities, and—of course—illegal hunting (poaching).

Typically, in developing countries, deforestation and forest degradation are linked to poverty, population growth and overpopulation, stagnating economy, and urbanization. Governments of developing countries, with the aim to solve national debt, normally rely on the use of their natural resources, like forest ones. The role of population dynamics in a local setting may be decisive in driving deforestation and forest degradation. Local populations cause deforestation and forest degradation when they collect wood for fuel, or to search out land for farming. Deforestation and forest degradation are linked to corruption of government institutions, to the inequitable distribution of wealth and power.

Whereas most gains from this destruction of natural capital are modest and short-lived, deforestation and forest degradation cause severe consequences on landscape, soil, biodiversity, public health, society and weather (humidity, rainfall, surface temperature) patterns, as well on global climate. As forest *bioma* store massive amounts of carbon, deforestation and forest degradation play a major role into the accumulation of green-house gases into the atmosphere. The Fourth Assessment Report of the Intergovernmental Panel on Climate Change, released in 2007, estimated emissions from land-use change (mostly deforestation) in the 1990s to be 5.8 billion tonnes of CO₂ per year, accounting for roughly 18% of global greenhouse gas emissions added to the atmosphere by human activities). In fact, in current climate change negotiations reducing deforestation and forest degradation is one of the most important mitigation option, with a large and immediate carbon stock impact in the short term per hectare and per year globally, because large carbon stocks (about 350-900 tCO₂ per hectare) are not emitted when deforestation is prevented.

At the 13th Conference of Parties in Bali in December 2007, Parties to the United Nations Framework Convention on Climate Change (UNFCCC) included in their Bali Action Plan the reduction of emissions from deforestation and forest degradation in developing countries, conservation, sustainable forest management and enhancement of forest carbon stocks in developing countries. A decision for both Annex I and Annex II countries on whether and how forests will be dealt with in the post 2012 climate arrangement is expected to be taken at the XV session of the UNFCCC Conference of Parties, scheduled for early December 2009 in Copenhagen, Denmark...

Regarding illegal logging, the Organization for Economic Co-operation and Development (OECD) estimates that 5-10% of global industrial round wood trade is illegally harvested. In many tropical countries, illegally logged timber equals in volume the one legally logged. The World Bank estimates than in Indonesia more than 50% of timber and timber products are illegally sourced, for a economic value of about 400 million US\$ per year. Reliable studies estimate the extent of illegal logging in "high-risk" countries to range between 20% - 90% of production, with the median being around 40%. The proportion can be greater in some high risk countries, where it accounts up to 90% of timber production.

The World Bank evaluates approximately illegal logging costs the global market more than US\$10 billion a year. Illegal logging is responsible for a loss of public assets in developing countries in excess of US\$10 billion annually to which must be added an additional US\$5 billion annually in lost taxes and royalties.

2. Responsibilities and the role of Italy to conserve forests and increase sustainable forest management

Italy is the Europe's second and world's sixth largest importer country of wood products. In 2006, the import of roundwood and semi-finished wood products (such as sawnwood, woodpulp, chipboard, hardboard, medium-density fibreboard, oriented strand board) climbed to 19

million tonnes, a total worth of 9.2 billion Euros. In the last decade, figures on import of wood products show an increasing tendency for all wood categories, except for roundwood.

In particular, Italy is the world's largest importer of wood for fuel; the fifth importer of roundwood of broadleaved timber; the second of plywood and veneer sheets (the world's first when we refer to tropical wood); the fourth importer of sawn timber, of wood and paper pulp; the fifth importer of paper. This flow of imports supplies an industrial sector of strategic economic importance for the country: up to 2004 Italy has been for long time the first exporter of wooden furniture (now world's second after China) and currently in a position of international leadership in different segments of the wood, furniture and paper industries.

Italy is the most important commercial partner for the import of wood products from countries like Cameroon, Ivory Coast, Bosnia, Romania, Albania, Serbia, and maintain strong commercial links with several countries of the southern hemisphere, known to be very much affected by deforestation and forest degradation and illegal practices in forestry.

Furthermore, it must be said that in recent times several Italian wood industries, especially veneer and wooden furniture manufacturers, have delocalised their production in other countries, especially in Balkan countries.

In spite of this framework, we must reveal an inertia in terms of decisive policies and effective actions to conserve forests and increase investment in sustainable forest management, both at international and domestic level.

Evidence of it is the delay in taking on and operating measures and European Commission's initiatives and regulation –such as European Union Action Plan for Forest Law Enforcement Governance and Trade (FLEGT) and a subsequent Regulation adopted by The Council of the European Union (EU) in December 2005, allowing for the control of the entry of timber to the EU from countries entering into bilateral FLEGT Voluntary Partnership Agreements (VPA)—and to seek increased cooperation and support for efforts to combat deforestation and forest degradation through intergovernmental bodies and regional forums, such as the United Nations Forum on Forests (UNFF) and the International Tropical Timber Organization, designed to assist countries with the globally-agreed policy framework for achieving sustainable forest management.

Furthermore, there is still a deficit in terms of informational and networking instruments and initiatives to raise public awareness on problems linked to global deforestation and forest degradation and the adoption adopting green public procurement policies requiring timber and timber products to be from legal and sustainable sources. These policies are expected to have an important influence on the EU market – in many of them FLEGT licenses will be accepted as reliable proof of legality.

In contrast, we observe a series of interesting initiatives and programmes of the civil society and private enterprises—even though they may be negatively affected in terms of competitiveness by the search for legality of wood supply and responsible purchasing policies for wood materials. Examples are the Codes of Good Practices by which Assocarta (the Italy's trade association for the paper industry representing pulp, paper and board manufacturing companies) associates voluntary commit themselves to promote the use of legal timber and best practices) or the cooperation agreements signed by Federlegno-Arredo (the Federation of Wood Furniture, Cork and Furnishing Italian Industries) with Greenpeace and World Wildlife Fund to inform and promote the use of legal timber and to publicise the problems linked to the use of illegal timber to Federlegno-Arredo associates.

3. Governance principles and possible areas of action

Halting global deforestation and forest degradation asks for better governance, coordination and integration of initiatives taken up by stakeholders, both at national and international scale.

In this regard, three complementary priority areas of action can be identified in Italy:

1. Adopting and implementing international conventions and intergovernmental agreements on deforestation, forest degradation and related issues. Some of these conventions and agreements are regulatory and compulsory; some are based on «soft laws», since they do not commit signatory nations to specific and precise commitments

and do not comprise a compliance regime. Among these agreements, the most relevant is the EU Action Plan for Forest Law Enforcement Governance and Trade (FLEGT). The key element of the FLEGT Action Plan is a voluntary scheme to ensure that only legally harvested timber is imported into the EU from countries agreeing to take part in this scheme. Subsequently, the EU Council adopted the Regulation 2173 (December 2005) and Regulation 1024 (October 2008), allowing for the control of the import of timber to the EU from countries entering into bilateral FLEGT Voluntary Partnership Agreements (VPA) with the EU. Once agreed, the VPAs will include commitments and actions from both parties to halt illegal timber trade, notably with a license scheme to verify the legality of rough and semi-finished wood products. The agreements will also promote better enforcement of forest law and promote an inclusive approach involving civil society and the private sector. A recent proposal for a regulation of the European Parliament and of the EU Council ('Laying down the obligations of operators who place timber and timber products on the market') adopts a systems-based approach and requires operators to exercise due diligence to minimize the risk of placing illegally harvested timber and timber products on the market. In turn, it is envisaged that competent authorities in member states will carry out checks to verify if operators are complying with the provisions of the regulation. The list of initiatives at international level to halt deforestation and forest degradation comprehends decisions and activities developed by the G8, the FLEG process coordinated by the World Bank - and in particular the Europe and North Asia (ENA) ENA FLEG process - the UN-Forum on Forests (UNFF), the Ministerial Conference on the Protection of Forests in Europe (MCPFE), the International Tropical Timber Organization, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the UN-Convention against Corruption (UNCAC), the UN-Convention on Transnational Organized Crime (UNCTOC), the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, and others. Following the recent decision by the United States government (Lacey Act), Italy should support the approval at EU level of regulations banning the import, sale, or trade of all illegally harvested wood and forest products. Finally, full support should be given to the approval and rapid implementation of a EC regulation on the issue of "due diligence" in the sector.

- 2. Improving cross-sector policy co-ordination, integration and co-operation in support of deforestation and forest degradation avoidance. Integration and coordination of the diverse ministries (Ministry of Foreign Affairs, Ministry for the Environment, Territory and Sear, Ministry of Agricultural, Food and Forestry Policies, Ministry for the Economic Development), agencies and other State institutions with responsibility on global deforestation and forest degradation issues should be significantly improved. This is a key issue to gain effectiveness, consistency and synergy of governmental initiatives. In order to reach these objectives, we consider of strategic importance the institution of a high level technical coordination table, where all competent ministries, research and governmental agencies - such as the Institute for Environmental Protection and Research (ISPRA), the State Forest Service (CFS), the Agricultural Research Council (CRA), Custom Agency - could work with the objective of improving coordination, harmonizing initiatives, simplifying procedures of country-led responses to deforestation and forest degradation. This table should be enlarged to the active participation of representatives and civil society, like associations of industrial companies, non governmental organisations involved in international cooperation and on environmental protection programmes, agencies providing certification services for responsible managed forests, and others stakeholders.
- 3. Promoting public-private co-operation and partnerships. Raising awareness and information among the general public and civil society's representatives on problems linked to global deforestation and forest degradation should be the main objective of this third area of intervention. Among the main results, business enterprises should be more involved on voluntary schemes to promote sustainable forest management practices and tractability systems with the aim of ensuring that only legally sourced timber is imported and processed. Other tools of Corporate Social Responsibility (CSR),

like internal and external auditing procedures, reporting systems, compensation investments, should be supported with technical services, tax reductions and financial incentives, in order to ensure high ethical standards and top-level environmental and social performances by all the economic actors involved in the forestry and woodworking sector. More specifically, it is valuable to encourage practices like, inter alia: the certification of well-managed forests and the chain of custody under the Forest Stewardship Council (FSC) scheme or other internationally recognized and high performance schemes; the environmental and social reporting according to the procedures of the Global Reporting Initiative; the Independent Forest Monitoring (IFM), as implemented by organizations like the Global Witness and Resource Extraction Monitoring; the adoption of codes of Good Practices; the development of financial instruments such as ethical funds based on high social and environmental standards. The implementation of responsible public procurement policies requiring wood-based products to be only from legal and sustainable sources should be a priority concern for all public institutions. When dealing with problems connected with forest and rural development, international aid policy should focus on capacity building in forest protection and management techniques, on proper use of wood products for energy provision and development of commercial activities, on forest law enforcement, in order to provide the populations of the countries concerned equitably and long-lasting benefits from the sustainable use of their natural resource base.