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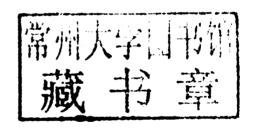
Guide to implementation of phytosanitary standards in forestry





# Guide to implementation of phytosanitary standards in forestry

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### **Foreword**

New threats to forest health from insects, pathogens and other non-indigenous pests are emerging due to growing global trade and the exploitation of new market opportunities. Habitat modification and increased international pest movements associated with the trade of plants, plant products and other articles such as containers, soil, industrial equipment and personal baggage have all contributed to the spread of pests both within and between countries. Management of pests and preventing their spread plays a key role in helping ensure forests remain healthy, meeting sustainable forestry objectives.

National plant protection organizations (NPPOs), designated under the International Plant Protection Convention (IPPC), have historically dealt mostly with agricultural crops. In recent years, however, forest pests have become a more prominent concern and increased communication between forest sector personnel and the NPPOs is needed. All sectors in forestry need to understand what the IPPC is, and how NPPOs work so that the forest sector can play its part in implementing International Standards for Phytosanitary Measures (ISPMs) and help preserve forest health. Understanding the content of ISPMs, which target phytosanitary experts, is not always easy for foresters and differences in phytosanitary and forestry terminology often needs explanation.

FAO therefore initiated a multistakeholder activity to prepare this guide to provide the forest sector with clear and concise guidance on forest health practices, including plain language descriptions of the ISPMs and suggestions for their improved national implementation. The guide has been prepared through a consultative process involving an international group of scientists, phytosanitary authorities and forest sector representatives and is supported by the IPPC Secretariat at FAO.

Understanding and implementing the ISPMs is vital in maintaining forest health and vitality, particularly with expanded global trade increasing the risk of new pest introductions and factors such as local climatic change increasing the possibility of establishment of pests in new areas. This guide will help develop this understanding and assist policy-makers, planners and managers to improve communication between agencies at a national level and apply these standards in the forest sector.

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## **Acknowledgements**

FAO has produced this publication with financial support from the FAO-Finland Forestry Programme "Sustainable forest management in a changing climate" and in collaboration with an international group of scientists, phytosanitary authorities and forest sector representatives, and extends sincere thanks to all the group's members and their organizations for their dedication and time.

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- Brian Zak, Phytosanitary and Market Access Specialist, Canada Wood Group, Canada

Thanks also to members of the IPPC Secretariat, in particular, Brent Larson, Standards Officer, and Ana Peralta, Implementation Officer.

Thanks are extended to the USDA Foreign Agricultural Service Office of Scientific and Technical Affairs/Plant Division and to the European Plant Protection Organization (EPPO) for translation of this guide into Arabic and Russian, respectively.

Many thanks are extended to those who assisted with the preparation or review of the publication including:

Albania: Kristaq Nicaj, Ministry of Agriculture, Food and Consumer Protection Argentina: Juan C. Corley, INTA EEA Bariloche; Vicky Paula Klasmer, Instituto Nacional de Tecnologia Agropecuaria (INTA); Raúl Villaverde, Secretaría de Agricultura, Ganadería, Pesca y Alimentos (SAGPyA)

Australia: Cheryl Grgurinovic, Biosecurity Australia; Simon Lawson, Queensland Department of Primary Industries; Glynn Maynard, Department of Agriculture, Fisheries, Forestry

Belgium: Marc Michielsen, CHEP

Bhutan: Dhan B. Dhital, Ministry of Agriculture and Forests

Bosnia and Herzegovina: Sabaheta Cutuk, BiH Ministry of Foreign Trade and Economic Relations; Tarik Trestic, University of Sarajevo

Brazil: Leonardo Rodrigues Barbosa, Camilla Fediuk de Castro and Susete do Rocio Chiarello Penteado, Empresa Brasileira de Pesquisa Agropecuária (Embrapa); Carlos José Mendes, Parana State Association of Forestry Companies Canada: Pierre Bernier, Roxanne Comeau and Jacques Régnière, Natural Resources Canada; Colette Breuil, University of British Columbia; John Huey, Sundance Forest Industries

Chile: Aida Baldini Urrutia, Corporacion Nacional Forestal (CONAF)

China: Xu Fuyuan, Forestry Academy of Jiangsu Province; Luo Youqing, Beijing Forestry University; Wang Yuejin, Chinese Academy of Inspection and Quarantine Science

Colombia: Olga Patricia Pinzon F., Universidad Distrital Francisco Jose de Caldas Denmark: Hans Peter Ravn, University of Copenhagen

Fiji: Viliami Fakava, Secretariat of the Pacific Community

Germany: Thomas Schroeder, Julius Kühn-Institute, Federal Research Centre for Cultivated Plants

India: Nitin Kulkarni, Tropical Forest Research Institute

Indonesia: Sri Rahayu, Gadjah Mada University

Italy: Davide Paradiso, Consorzio Servizi Legno-Sughero

Japan: Kazuyoshi Futai, Kyoto University; Yuji Kitahara and Motoi Sakamura, Ministry of Agriculture, Forestry and Fisheries (MAFF); Hayato Masuya and Takeshi Toma, Forestry and Forest Products Research Institute; Yuichi Yamaoka, University of Tsukuba

Kyrgyzstan: Almaz Orozumbekov, Kyrgyz National Agrarian University Lithuania: Vaclovas Kucinskas, State Plant Protection Service of Lithuania

Malaysia: Laurence G. Kirton, Forest Research Institute Malaysia (FRIM)

Netherlands: Nico M. Horn, Ministry of Agriculture, Nature and Food Quality New Zealand: Eckehard Brockerhoff and Lindsay Bulman, Scion; Bill Dyck, Bill Dyck Ltd; Gordon Hosking, Hosking Forestry Ltd; Allanah Irvine and Shane Olsen, Ministry of Agriculture and Forestry

Philippines: Marcial C. Amaro, Jr., Ecosystems Research and Development Bureau

Russian Federation: Oleg Kulinich, All-Russian Center of Plant Quarantine Seychelles: Samuel Brutus, Ministry of Environment and Natural Resources Slovenia: Jošt Jakša, Slovenia Forest Service; Dusan Jurc, Slovenian Forestry Institute

South Africa: Solomon Gebeyehu, USDA-Foreign Agricultural Service; Michael J. Wingfield, University of Pretoria

Spain: Gerardo Sanchez, Direccion General del Medio Natural y Politica Forestal

Sri Lanka: Upul Subasinghe, University of Sri Jayewardenepura

Sudan: Nafisa H. Baldo, Agricultural Research Corporation

Switzerland: Daniel Rigling, Swiss Federal Research Institute WSL

The Former Yugoslav Republic of Macedonia: Kiril Sotirovski, University "Sv. Kiril i Metodij"

Timor-Leste: Manuel da Silva, Ministry of Agriculture

Trinidad and Tobago: Mario Fortune, Ministry of Agriculture, Land and Marine Resources

Uganda: James Epila-Otara and Peter Kiwuso, National Agricultural Research Organisation

Ukraine: Valentyna Meshkova, Ukrainian Research Institute of Forestry and Forest Melioration

United Kingdom: Andrew Gaunt, Food and Environment Research Agency; Andy Gordon, European Forest Nursery Association; Andrew Leslie, University of Cumbria; Ian Wright, National Trust

United Republic of Tanzania: Ismail K. Aloo, Forest and Beekeeping Division United States of America: Fred Ascherl, Rio Tinto Minerals; Marilyn Buford, Phil Cannon, Robert A. Haack, Andrew M. Liebhold, Michael L. McManus, Carlos Rodriguez-Franco, Noel F. Schneeberger, Borys M. Tkacz and Shira Yoffe, USDA-Forest Service; Bruce Britton, University of Georgia; Faith Campbell, The Nature Conservancy; William Ciesla, Forest Health Management International; Edgar Deomano, National Wooden Pallet and Container Association (NWPCA); Peyton Ferrier, USDA-Economics Research Service; Deborah Fravel, USDA-Agricultural Research Service

Uruguay: Ines Ares, Ministry of Livestock Agriculture and Fisheries (MGAP); Nora Telechea, Consultant

CABI: Matthew Cock and Marc Kenis, CABI Europe, Switzerland; Roger Day, CABI Africa, Kenya

European Commission: Robert Baayen and Ana Suarez Meyer, Belgium; Lars Christoffersen and Bernd Winkler, Ireland

International Institute of Tropical Agriculture (IITA): Danny Coyne, United Republic of Tanzania

FAO: Khaled Alrouechdi, Graciela Andrade, Jim Carle, Roberto Cenciarelli, Arvydas Lebedys, Joachim Lorbach, Felice Padovani, Andrea Perlis and Maria Ruiz-Villar, Rome; Jorge Meza, FAO Representation, Paraguay; Alemayehu Refera, Subregional Office for Eastern Africa, Ethiopia; Mohamed Saket, Regional Office for the Near East, Egypt

## **Acronyms**

CBD Convention on Biological DiversityCPM Commission on Phytosanitary Measures

CITES Convention on International Trade in Endangered Species of Wild

Fauna and Flora

IFQRG International Forestry Quarantine Research Group

**IPM** integrated pest management

IPPC International Plant Protection Convention

ISPMs International Standards for Phytosanitary Measures
IUFRO International Union of Forest Research Organizations

NPPO national plant protection organization

**PFA** pest free area

PFPP pest free place of production

PRA pest risk analysis

RPPO regional plant protection organization

SPS WTO Agreement on the Application of Sanitary and Phytosanitary

Measures

**TPFQ** Technical Panel on Forest Quarantine

WPM wood packaging materials
WTO World Trade Organization

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Global Forest Resources Assessment 2010 - Main

Guide to implementation of phytosanitary standards

2010 (E)

report, 2010 (Ar C E F R S)

in forestry, 2011 (E)

163

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Availability: February 2011

Ar – Arabic Multil – Multilingual C – Chinese \* – Out of print

E - English

I – Italian

F – French

P - Portuguese

S - Spanish

R – Russian

The FAO Technical Papers are available through the authorized FAO Sales Agents or directly from Sales and Marketing Group, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy.

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### 1. Introduction

It is very important to protect the world's forests from harm. The global forest area is just over 4 billion hectares, which represents 31 percent of the total land area (FAO, 2010a). Forests are important global resources that provide a wide range of environmental, economic and social benefits. They provide a variety of valuable products, such as timber, fuelwood, fibre and other wood and non-wood forest products, and contribute to the livelihoods of rural communities. They provide vital ecosystem services, such as combating desertification, protecting watersheds, regulating climate, and maintaining biodiversity, and play an important role in preserving social and cultural values.

Forests can also play a significant role in addressing global climate change concerns. For example, they absorb carbon from the atmosphere and store it in trees and forest products. Properly managed forests can also provide wood, a renewable alternative to fossil fuels. Conserving overall forest area, replanting harvested forests, and managing forests to maintain vigorous growth are all important ways to reduce carbon dioxide accumulation in the atmosphere.

#### 1.1 PEST THREATS TO THE WORLD'S FORESTS

The health and vitality of the world's forest ecosystems are affected by a range of natural disturbance agents including pests,<sup>1</sup> drought and fire. While disturbance is part of the natural succession processes in forests, it can often limit the ability to meet forest management objectives. A wide range of pests can have negative impacts on forests and the forest sector. Outbreaks of forest insects alone damage some 35 million hectares of forests annually, primarily in the temperate and boreal zones (FAO, 2010a).

Indigenous pest species may become a significant problem, particularly when they reach outbreak populations on introduced tree species. Sometimes even more damage is caused by non-indigenous or introduced pests, which have been accidentally introduced through trade in forest products, live plants and other commodities. Since non-indigenous pests did not evolve with the forests they are affecting, their impacts can sometimes be devastating. In such situations, introduced pests may not have natural enemies that normally keep populations in balance. The new host trees may have insufficient or no resistance to introduced pests. Climate change also appears to be influencing pest establishment in new locations, as well as increasing the severity of impacts of both indigenous and non-indigenous pests. Examples of major pest introductions and their impacts on forests can be found in Annex 1.

Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products (ISPM No. 05, 2010, Glossary of phytosanitary terms).

#### 1.2 PROTECTING THE WORLD'S FORESTS

Successful protection of the world's plants, including forest tree species, from pests requires coordinated international action. This coordination occurs through the International Plant Protection Convention (IPPC), which is an international agreement between countries to control pests and prevent their spread. The IPPC's governing body is the Commission on Phytosanitary Measures (CPM), which adopts International Standards for Phytosanitary Measures (ISPMs)<sup>2</sup> to prevent pest introduction and spread and facilitate trade. As of December 2010, 176 countries are contracting parties (members) to the Convention. Under the guidance of the IPPC, most governments have designated national organizations to protect natural resources, including forests, from pest entry and establishment. These are collectively referred to as national plant protection organizations (NPPOs)<sup>3</sup> although countries may call them plant health inspectorates, quarantine services or many other names. NPPOs frequently have to work with neighbouring countries to prevent pest entry and spread between countries. This collaboration may be through regional plant protection organizations (RPPOs).

NPPOs are the official national points of contact to the IPPC, and it is the NPPOs that work together to develop ISPMs. All member countries unanimously agree that ISPMs are effective in managing pest risks and allowing safer trade. NPPOs use the ISPMs as the basis for their national phytosanitary regulations. Because they will have an impact on trade, it is important for everyone involved in forest products trade to understand how these regulations can affect them. ISPMs developed by the IPPC are recognized by the World Trade Organization (WTO), which provides a dispute resolution process for trade issues.

#### 1.3 ABOUT THIS GUIDE

Many people associated with the forest sector can play a key role in preventing the spread of pests, including those involved in growing, planting, managing, harvesting, manufacturing, storing, trading and transporting forest products. This guide is intended to help reduce human-facilitated pest spread and its impacts. It provides easy-to-understand information on ISPMs and the role of forest management practices in implementing phytosanitary standards and facilitating safe trade. Specifically it explains:

- how the ISPMs and NPPO regulations affect the import and export of forest commodities (Chapter 2);
- how people in the forest sector can reduce the risks of spreading pests through effective management approaches (Chapter 3);
- how ISPMs can be used to prevent forest pest introduction and spread (Chapter 4);
- how forest sector personnel can work together with NPPOs to contribute to the development and implementation of ISPMs and national phytosanitary

The titles of all existing ISPMs, and a short summary, are given in Annex 3.

<sup>3</sup> The full list of NPPOs and their official contact persons can be found on the IPPC Web site: www.ippc.int.

regulations that help reduce pest movement while being as least restrictive to trade as possible (Chapter 5).

Each chapter has been prepared as a stand alone document allowing the reader to concentrate on the specific topics that are of interest. A glossary is also provided to further clarify the terminology used.

This guide will be of vital interest to all sectors in forestry and will also benefit forestry policy-makers, planners, managers and educators, particularly in developing countries.