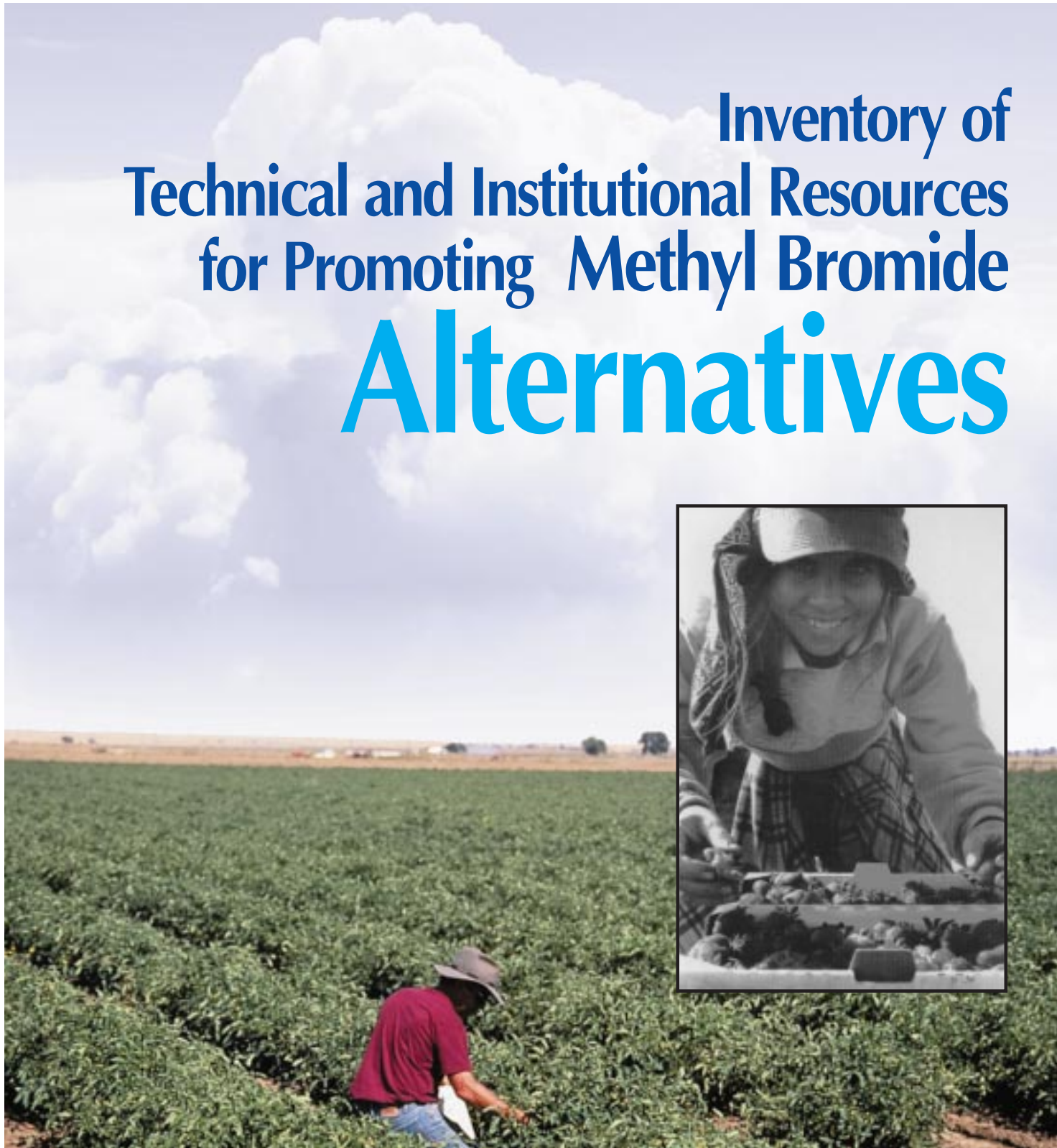


Inventory of Technical and Institutional Resources for Promoting Methyl Bromide Alternatives



Inventory of Technical and Institutional Resources for Promoting Methyl Bromide Alternatives



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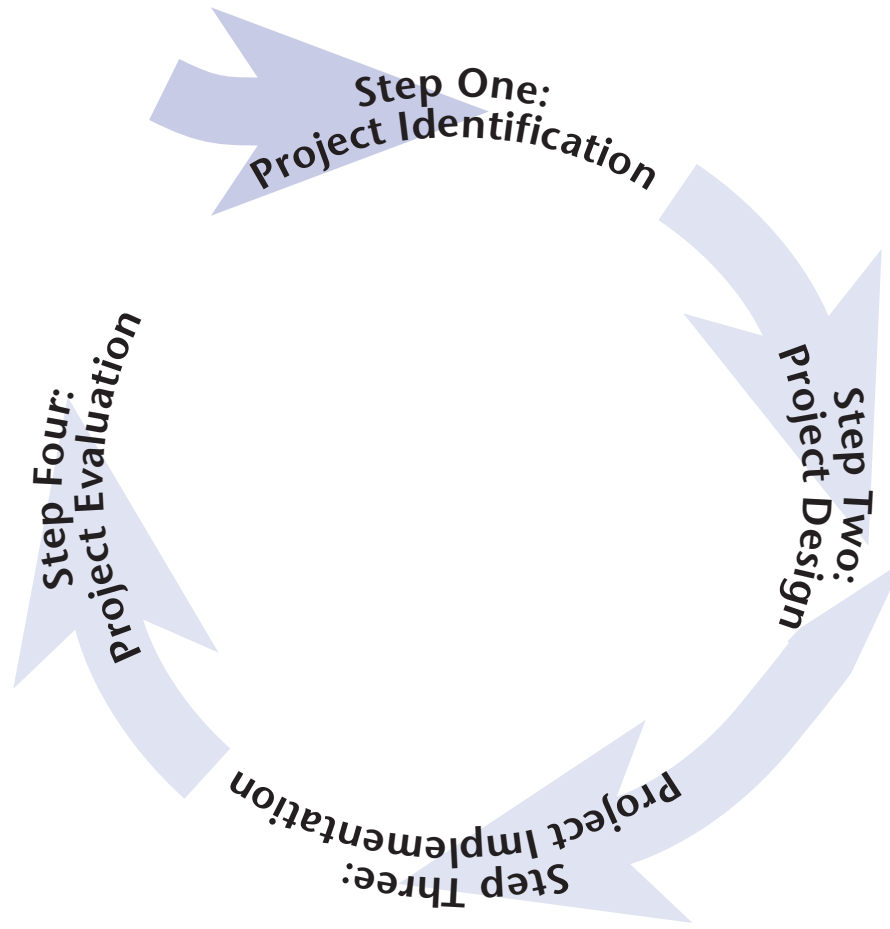
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Inventory of
Technical and Institutional Resources
for Promoting Methyl Bromide
Alternatives

June, 1999

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1. Introduction

1. Introduction

1-1. Purpose of the Inventory

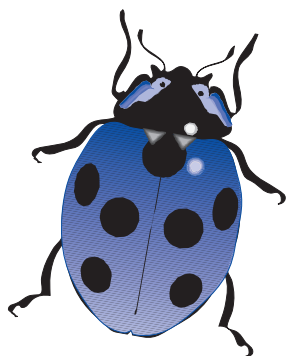
The Multilateral Fund of the Montreal Protocol is providing technical and financial assistance to developing countries to phase out methyl bromide — an ozone-depleting substance. Methyl bromide is mainly used as a pesticide in agriculture.

There are already a number of institutes and programmes working to promote effective and environmentally sustainable agricultural practices. Utilizing their expertise will help to enhance the effectiveness of the methyl bromide phase-out activities under the Multilateral Fund. **This document, therefore, is designed primarily for use by international and national institutions involved in the development of projects under the Multilateral Fund to assist developing countries in phasing out methyl bromide and adopting alternatives.**

1-2. Type of Institution

The institutions included in this document are primarily those with agricultural experience relevant to use of methyl bromide as a soil fumigant, which constitutes the vast majority of methyl bromide use in developing countries. Other United Nations Environment Programme (UNEP) documents focus more specifically on individual experts with specific experience in development and implementation of methyl bromide alternatives for all uses (see Section 1-3, p. 6).

1-3. How the Inventory was Compiled



Some of the institutions included in the Inventory are directly involved in promoting alternatives to methyl bromide. Others have expertise in promotion of agricultural techniques which may be useful in the replacement of methyl bromide - although that is not the primary focus of their work. Still others have specific expertise in collaborative project design or agricultural policy analysis, which is relevant to the development of effective methyl bromide alternatives projects and phase-out programmes. These various types of organizations are included as resources to broaden the pool of experience that is utilized in the international effort to develop and promote methyl bromide alternatives.

A combination of research methods were employed in compiling the Inventory, including: (1) literature searches of existing directories and other resource materials; (2) consultation via phone, fax and email with a wide range of individuals and organizations (e.g., government officials, UN agency representatives, university professionals, and nongovernmental organizations [NGOs]); and (3) searches of relevant websites and other electronic resources.

1-4. Dynamic Nature of the Inventory

This document is not a comprehensive listing and is designed to be updated frequently as methyl bromide project development moves forward and more field-level information is collected. The Inventory will be most effective if the Multilateral Fund's implementing agencies (see box, p. 2) and the national institutions involved in methyl bromide alternatives projects report regularly to UNEP regarding potential

METHYL BROMIDE IN DEVELOPING COUNTRIES AND THE MULTILATERAL FUND

Methyl bromide is an ozone depleting pesticide that is used worldwide to fumigate soil before planting a number of crops, for post-harvest treatments, and for structural fumigation. Methyl bromide use in developing countries makes up roughly 25 percent of global consumption, with roughly 70 percent of that use for soil fumigation. Major crops using methyl bromide in developing regions include cut flowers, tobacco, cucurbits, tomatoes and strawberries.

Under the Montreal Protocol agreement, the international ozone protection treaty, use of methyl bromide in developing countries will be frozen in 2002 (based on average 1995-1998 consumption), reduced by 20% in 2005, and phased out in 2015. Many developing countries have committed to earlier phase-out schedules.

The international community established the Multilateral Fund in 1990 to provide financial support to developing countries phasing out ozone depleting substances. The Fund is supported by contributions from industrialized countries, and projects are coordinated by four implementing agencies: the UN Environment Programme (UNEP), UN Development Programme (UNDP), UN Industrial Development Organization (UNIDO), and the World Bank. Methyl bromide alternatives projects became eligible for support from the Fund in 1995, when the 2002 freeze was established. To date, more than 60 methyl bromide alternatives projects have been approved by the Fund; the majority of these are in the project preparation phase.

1-5. How to Use the Inventory

The resources listed in the Inventory are organized according to the type of services and/or information they can provide to the user, and are grouped into four main sections:

- ☛ **Section 2** — Institutions and networks that can assist the user in identifying “Potential Project Partners”;
- ☛ **Section 3** — Institutions and individuals with “Expertise in Project Design”;
- ☛ **Section 4** — Institutions offering “Agricultural Policy Resources,” including programmes and expertise in policy development and analysis; and
- ☛ **Section 5** — Additional networking opportunities and sources of information.

include a listing of every country involved in the network, so it is important to read the network descriptions carefully.

The types of institutions listed in **Section 2** include:

1. Regional and international networks of NGOs focused on agricultural issues;
2. Multilateral and bilateral government agency programmes with agricultural expertise;
3. International networks of agricultural research institutions, including national/university and international research institutions; and
4. International NGOs with agricultural expertise.

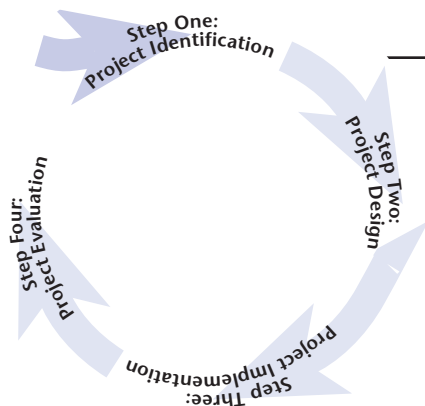
Section 3 (Expertise in Project Design) and **Section 4** (Policy Development) include listings of organizations and individuals with specific expertise in agricultural project design and agricultural policy development and analysis. Some of these organizations may be potential partners in the design and implementation of methyl bromide alternatives projects, while others may be resource groups that can play an advisory role or identify local partner organizations.

Section 5 (Additional Resources) includes examples of conferences and other meetings of agricultural interests. Such gatherings offer further opportunities to identify potential partners for work on methyl bromide alternatives and/or present information to the agricultural community on the status of the methyl bromide phase out. Also included are online resources, a listing of NGO directories, and selected bibliographies including a specific section on methyl bromide alternatives, listings on project design methods, and listings on pesticide use reduction strategies and experiences.

How to Use the Inventory

Step 1

Project Identification



A. Profile methyl bromide use in country

- Use levels
- Crops/other uses
- Characteristics of user groups
- Alternatives already in use
- Policies affecting methyl bromide

B. Identify potential project partners

- Government agencies (regulatory, extension)
- National universities/research institutions
- Farmers'/users' groups
- NGOs (local, national and international)
- Bilateral agricultural programmes
- International research institutions/projects

How the Inventory can help:

Section 2 - to help identify potential project partners.

Section 2.1 - to help identify active local NGOs and farmers' associations in the project country through NGO networks. In cooperation with government agencies, these local groups may be able to assist in collecting the information for Part A of the project identification process.

Section 5 - highlights opportunities for ongoing networking and research, contributing to successful project identification and design.

Appendix A (Country Index) - to identify international NGOs, bilateral agricultural programmes and international research institutions/projects active in the project country.

Step 2

Project Design

A. Stakeholder workshop

- Identify user needs and constraints
- Identify potential alternatives
- Identify project roles of various stakeholders
- Develop implementation and evaluation plan

B. Policy analysis

- Identify barriers to adoption of alternatives
- Identify potential incentives to promote methyl bromide phase out
- Develop policy measures

How the Inventory can help:

Section 4 - organizations with experience in agricultural policy analysis to assist in

Step 3 Project Implementation

A. Demonstration projects

- Identify appropriate farmers for demonstration
- Continued local stakeholder involvement
- Share/scale up results nationally
- Share information internationally

B. Investment projects

- Work closely with national-level partners (government, university, NGO, etc.)
- Develop collaborative national training and technical support programmes
- Integrate alternatives promotion with ongoing extension
- Integrate alternatives promotion with policy measures

C. National phase-out programmes

- Identify and implement policies supporting adoption of alternatives
- Remove policy barriers to phase out
- Work with national extension systems/NGOs to promote alternatives nationwide

How the Inventory can help:

- Some project partners identified in Step 1 will be directly involved in local implementation, while others may be more appropriate for the national scale “investment projects” (e.g., international NGO programmes), or may play an advisory role throughout the project (e.g., international research institution).
- Organizations listed in **Section 4** may identify local partners to assist with policy analysis and development.

Step 4 Project Evaluation

Stakeholder evaluation of the project maintains their commitment to the project goals, and can help ensure long lasting project impacts (e.g. high and continued adoption rates, continued support from extension service).

1-6. Complementary Resources

UNEP Industry and Environment's OzonAction Programme is producing a series of publications to support the phase out of methyl bromide and the transition to alternatives. Each of these publications is described briefly below.

1-3-1. Methyl Bromide Information Kit

The purpose of the information kit is to create and enhance awareness among national policy makers and other stakeholders of methyl bromide use, alternatives and phase-out deadlines, and encourage the shift to alternatives and the development of policies to support a rapid transition from methyl bromide. The kit includes (1) a brochure describing the methyl bromide issue and the importance and benefits of ratifying the Copenhagen Amendment (*Methyl Bromide: Getting Ready for the Phase Out*, available in English, French and Spanish); (2) television public service announcements that can be aired and shown in national television; and (3) a poster depicting aspects of the methyl bromide issue.

1-3-2. Twenty Case Studies of Alternatives to Methyl Bromide

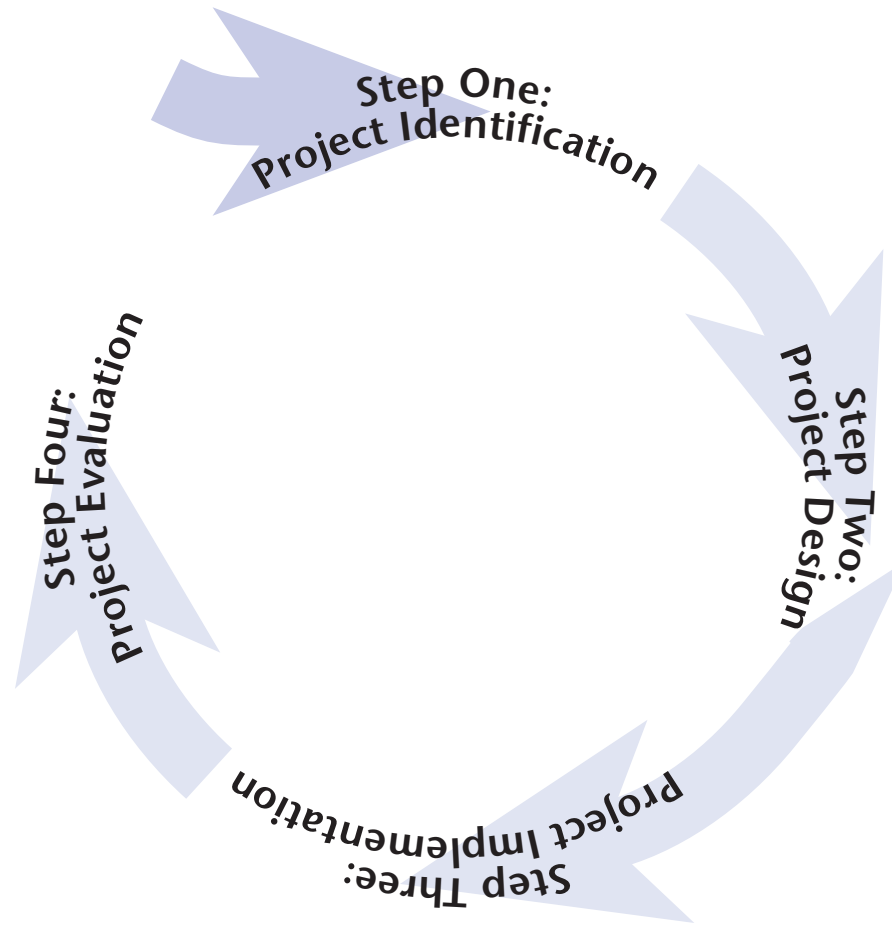
The case study compilation provides methyl bromide users with information that will assist them in selecting commercially available, low impact (i.e., environmentally friendly) alternatives, including information on performance, yields and farmer satisfaction. The document (available in early 1999) focuses on crops/uses where such alternatives have already been successfully implemented. Each case study provides cost-benefit information, costs of conversion and supplier information for alternative inputs identified.

1-3-3. Towards Methyl Bromide Phase Out: A Handbook for National Ozone Units

This user-friendly handbook presents options and ideas to facilitate the transition to methyl bromide alternatives. It is designed to assist developing countries to design and implement strategies to phase out methyl bromide and promote adoption of alternatives. The handbook provides examples of activities and programmes implemented by governments to replace methyl bromide and highlights options and actions through diagrams, decision trees, illustrations and checklists. This document is available in English, French and Spanish.

1-3-4. Methyl Bromide Alternatives Sourcebook

The Methyl Bromide Alternatives Sourcebook is part of a series of ozone protection technology sourcebooks. This publication (available in 1999) presents existing technical options to replace methyl bromide based on the findings of the UNEP Methyl Bromide Technical Options Committee. The Sourcebook provides guidance on how to select an appropriate option, and provide sources of commercially available technologies, equipment, chemicals and/or expertise to assist with the transition away from methyl bromide. The primary audience for this publication is methyl bromide users, companies that purchase products that are grown or treated with methyl bromide, and agricultural advisors.



2. Potential Project Partners

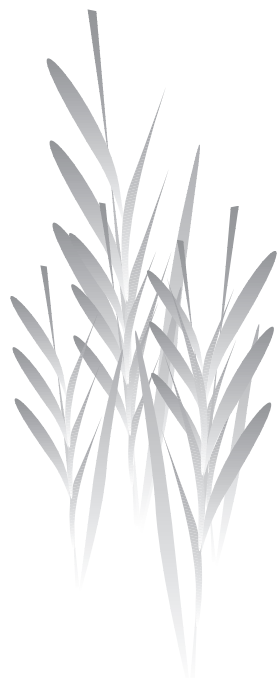
2. Potential Project Partners

The Fund's methyl bromide project guidelines call for a transparent process of project development with broad representation from all interested and affected sectors. The most effective partners in this process are often groups with direct field experience collaborating with farming communities in a particular region. Such groups can help identify appropriate farmers to work with, the best training approaches, and other potential project partners (e.g., local universities, community leaders, etc.).

In the early stages of project development, implementing agencies and government officials can use the Inventory to identify potential local partners. The organizations included in Section 2 have various types of expertise to offer. NGO networks can identify community-based groups and farmers' associations with capacity and interest to work on Fund projects. Agricultural research networks can identify programmes or individual researchers with relevant expertise. And international NGOs and bilateral programmes offer both international agricultural professionals and experience working with local groups to promote agricultural change.

Local project partners can not only contribute to project design, but may also be effective partners in project implementation. While the administration of collaborative projects with several partner organizations can appear cumbersome, if projects are carefully designed and roles of participating organizations clearly defined, the ultimate effectiveness of the project (e.g., long term adoption rates of alternatives introduced) will often be significantly enhanced. This approach also reduces reliance on international consultants, which can reduce project costs.

The listings in this section are not comprehensive, and additional institutions will be listed in future editions of the Inventory. Each listing includes a brief description of the network or organization and their agricultural programmes (with specific country projects listed whenever possible), available publications, and full contact information. To identify active projects in a particular country, consult the **Country Index** (Appendix A, p. 80). The institutions are listed alphabetically within each category. The **Organizational Index** (Appendix B, p. 89) can also be used to find a particular organization.



2-1. Agricultural NGO Networks

The organizations included in this section can provide links to local community-based groups, NGOs and farmers' associations with field-level agricultural expertise. While it is impractical to include a full listing of such local groups, networks can often provide information about which NGOs are active, what type of expertise they offer, and which have experience collaborating with national and international partners. Some of the organizations listed here also serve a clearinghouse function for information about agricultural techniques and practices. Publications listed can be found through

Publications: *Natural Crop Protection* (journal), many directories.

Contact: **AGROECOL**
Irene Täuber
Schwergistrasse 12
CH-4438 Langenbruck, Switzerland
Tel: 41-62-390-1420
Fax: 41-62-390-1640

**2-1-2. Agroecological
Movement of Latin
America and the
Caribbean (MAELA)**

MAELA, a coalition of a range of agricultural interests including NGOs, farmers' organizations and universities, was established to promote agroecological practices with active grassroots participation. The coalition works together to unify and promote agroecological concepts, facilitates information exchange through a data centre and through publications presenting field experiences and research, identifies potential areas for commercialization of agroecological harvests in each region of Latin America, and supports the establishment of certification and commercialization policies.

Publications: Various, including the journal *Hoja a Hoja del MAELA: Revista del Movimiento Agroecológico de América Latina y el Caribe*.

Contact: **Movimiento Agro-Ecológico de Latino-America y el Caribe**
André Wehrle, Coordinator
Casilla de Correos 1730
Asunción, Paraguay
Tel/fax: 595-21-201512
Email: cectec@sce.cnc.una.py

**2-1-3. Asian NGO
Coalition for Agrarian
Reform and Rural
Development
(ANGOC)**

ANGOC is a regional NGO network coordinating 25 national/regional networks and institutions in ten countries in Asia, with an overall constituency of some 3,000 NGOs in the region. The coalition focuses on sustainable agriculture, rural development and agrarian reform issues. The food security program includes technical training for NGOs and farmers in sustainable agriculture techniques, as well as information networking and tracking relevant policy issues.

*Agricultural Project
Countries:* Bangladesh, Cambodia, India, Indonesia, Laos, Malaysia, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand.

Publications: Various, including workshop/conference reports, issue briefs, study tour reports, and newsletter.

Contact: **Asian NGO Coalition for Agrarian Reform and Rural Development**

**2-1-4. Centre for
Research and
Information on Low
External Input and
Sustainable Agriculture
(ILEIA)**

ILEIA specializes in exchange of information on methods and techniques of sustainable agriculture in the tropics. ILEIA holds international workshops on low external input agriculture to facilitate exchange between practitioners and organizations, and documents experiences for inclusion in their library and clearinghouse. The Centre coordinates research on the assessment of sustainable agriculture field studies in Ghana, India, Peru and the Philippines. The Agriculture Man and Ecology (AME) programme, an independent project working in cooperation with ILEIA, offers training in ecological agriculture in developing countries, with a focus on India and Africa.

*Agricultural Project
Countries:*

Ghana, India, Peru, the Philippines.

Publications:

Low External Input and Sustainable Agriculture (LEISA) Newsletter (quarterly), various workshop proceedings, readers, bibliographies, guides to sources of information.

Contact:

**Centre for Research and Information on Low External Input
and Sustainable Agriculture (ILEIA)**

Coen Reijntjes

P.O. Box 64

3830 AB Leusden

The Netherlands

Tel: 31-33-4943086

Fax: 31-33-4940791

Email: ileia@ileia.nl

Website: www.oneworld.org/ileia, www.bib.wau.nl/ileia

**2-1-5. Friends of
the Earth**

Friends of the Earth (FoE) is an international network of national organizations working on a variety of environmental issues, including ozone protection and sustainable agriculture. FoE International is the central coordinating office for the network. At least 21 FoE offices in developing countries have some type of agricultural programme (those listed below have most direct agricultural expertise). FoE Canada, FoE-USA and FoE Chile are also actively involved in efforts to identify methyl bromide alternatives and coordinate international work on this issue. FoE groups often work collaboratively with other NGOs and with universities and other government institutions.

Publications:

The Technical and Economic Feasibility of Replacing Methyl Bromide in Developing Countries: Case Studies in Zimbabwe, Thailand and Chile (1996), *Reaping Havoc: The True Cost of Using Methyl Bromide on Florida's Tomatoes* (1998), various newsletters and bulletins.

Contact:

Friends of the Earth International

Ann Doherty

P.O. Box 19199

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Friends of the Earth-Bangladesh

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Email: gbs@dhaka.agni.com

Friends of the Earth-Benin

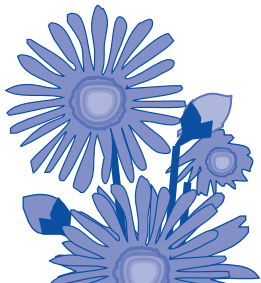
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**2-1-6. International
Federation of
Agricultural Producers
(IFAP-FIPA)**

IFAP was founded in 1946 as an international organization of the world's farmers. The group acts as a forum in which farm leaders can exchange views in order to make constructive contributions to the search for solutions to challenges on the farm. The Federation maintains close contacts with major intergovernmental organizations active in the field of agriculture and rural development, where it acts as a spokesperson for farmers. IFAP encourages the formation and support of independent farmers' organizations around the world, and seeks to maintain a broad-based membership to represent the diverse opinions of agricultural producers.

Publications: Contact IFAP for current publications.

Contact:

IFAP-FIPA

60 Rue St. Lazare

75009 Paris, France

Tel: 33-1-45-26-0553

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Email: info@ifap.org

Website: www.ifap.org

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tions with developing
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OCIA- International

Organic Crop Improvement Agency
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**2-1-8. Latin American
Consortium on
Agroecology and
Sustainable
Development
(CLADES)**

CLADES is a collaborative effort of Latin American NGOs to transform small-scale agriculture into a more sustainable and productive enterprise. Activities include local, on-farm research; training for farmers, farmers associations and member NGOs; and information exchange throughout the region. Subject areas include soil and water conservation, plant protection, cropping systems management and agroforestry. CLADES has also been engaged in a collaborative programme to strengthen the training capabilities of selected Latin American universities in agroecology and sustainable rural development. Working with these universities, CLADES established the International Faculty of Agroecology and Development, and has an agreement with eleven agricultural colleges in the region to develop an agroecology curriculum.

Publications: Contact CLADES for current publications.

**2-1-9. PAN/FoE
“Regional NGO
Contact Groups”**

The Pesticide Action Network (see Section 2-1-10) and Friends of the Earth recently established a network of Regional NGO Contact Groups specifically to collect information about NGO agricultural capacity and facilitate the participation of NGOs in the design, implementation and evaluation of methyl bromide alternatives projects under the Multilateral Fund. Through the Contact Groups, local NGOs offer field-based technical expertise in implementing methyl bromide alternatives, links between the farming community and agricultural research institutions, and assistance with policy analysis. The Contact Groups link implementing agencies to local NGOs in methyl bromide-using countries in each region.

Publications: n/a

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**2-1-10. Pesticide
Action Network**

PAN was founded in 1982 by pesticide activists and experts from 17 countries, and remains a flexible network whose work is facilitated by autonomous regional centres in Africa, Asia and the Pacific, Europe, Latin America and North America. Each PAN Regional Centre links participating subregional, national and local NGOs, now numbering over 600 groups in more than 60 countries. Member organizations work on a variety of issues, including sustainable agriculture, pesticide policy, environmental and farmworker health and safety issues. Each Regional Centre produces and distributes current research and policy analyses, publishes a journal or newsletter, and maintains a library and lists of experts in ecologically sound pest management and related subjects. The Centres also organize workshops, trainings and/or conferences, engage in national and international policy advocacy, and develop and implement programmes based on participatory models. Since 1992, PAN has been involved in efforts to phase out methyl bromide and accelerate adoption of safer, ecologically-based alternatives to its many uses.

Publications: *Funding a Better Ban: Smart Spending on Methyl Bromide Alternatives in Developing Countries* (1997), *Under African Skies: Methyl Bromide Use and Alternatives in Sub-Saharan Africa* (1995), various newsletters (each regional centre) and fact sheets.

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Eurolink Business Centre, 49 Effra Road
London, SW2 1BZ, England
Tel: 44-171-274-8895
Fax: 44-171-274-9084
Email: pesttrust@gn.apc.org
Website: www.gn.apc.org/pesticidetrust



PAN North America

Kristin Schafer or Anne Schonfield
Programme Coordinators
40 Powell Street, Suite 500
San Francisco, CA 94102, USA
Tel: 1-415-981-1771
Fax: 1-415-981-1991
Email: kristins@panna.org, annes@panna.org
Website: www.panna.org/panna

2-1-11. Sustainable Agriculture Networking and Extension (SANE)

SANE is a UNDP-sponsored programme established to build capacity in the area of sustainable agriculture through agroecological training, participatory research, policy advocacy and information sharing among NGOs and other national/international organizations in Africa, Asia and Latin America. SANE's goal is to train technicians and farmers, develop and disseminate agroecological concepts and technologies, implement a series of sustainable agriculture demonstration modules and strengthen institutional capacity. Nine countries participate in the programme, which relies in part on a "lighthouse" system of tapping successful farmers as models for neighboring farmers and communities.

Agricultural Project Countries:

Cameroon, Cuba, El Salvador, Laos, Mali, Peru, the Philippines, Senegal, Uganda.

Publications:

Agroecological Lighthouses Around the World - Activities and Impacts, SANE: Sustainable Agricultural Networking and Extension, Farmers, NGOs and Lighthouses: Learning from three years of training, networking and field activities (1998), Building North-South and South-South Bridges: Creating Opportunities for Sustainable Agriculture Networking Among NGOs, Universities, CGIAR Centres, Government and Farmers.

Contact:

Sustainable Agriculture Networking and Extension

Miguel Altieri, Coordinator
Division of Insect Biology
University of California, Berkeley
201 Wellman Hall
Berkeley, CA 94720, USA
Tel: 1-510-642-9802
Fax: 1-510-642-7428
Email: agroeco3@nature.berkeley.edu
Website: nature.berkeley.edu/~agroeco3

2-2. Intergovern- mental and Bilateral

The institutions included in this section include bilateral and multilateral organizations with agricultural programmes in developing countries. The description of GTZ is the only listing specifically focused on methyl bromide alternatives; other institutions have

undertaken with the goals of meeting basic human needs, promoting private sector development, and protecting the environment.

Agricultural Project Countries: Bangladesh, Burkina Faso, Cambodia, Cameroon, China, Congo, Cote d'Ivoire, Egypt, Ethiopia, Ghana, Guatemala, Haiti, Honduras, India, Jamaica, Kenya, Malawi, Mali, Nicaragua, the Philippines, Senegal, Sri Lanka.

Publications: Variety of technical and policy reports.

Contact: **Canadian International Development Agency/Agence Canadienne de Développement International**
200 Promenade du Portage
Hull, Quebec
K1A 0G4, Canada
Tel: 1-819-997-5006
Fax: 1-819-953-6088
Email: info@acdi-cida.gc.ca
Website: www.acdi-cida.gc.ca/

2-2-2. Danish International Development Agency (DANIDA)
DANIDA's agricultural projects focus on extension and training activities, natural resource management, agricultural research, rural finance, and institutional and organizational support. Some programmes also have irrigation, improved seed, and live-stock components. DANIDA's experts work in partnership with local government officials and local NGOs whenever possible. National projects are coordinated through the embassy offices.

Agricultural Project Countries: Bangladesh, Benin, Bolivia, Burkina Faso, Eritrea, Malawi, Mozambique, Nepal, Nicaragua, Tanzania, Uganda, Vietnam, Zimbabwe.

Publications: Contact DANIDA for current publications.

Contact: **Danish International Development Agency (DANIDA)**
Vibeke Østergaard
Ministry of Foreign Affairs
2, Asiatisk Plads
1448 Copenhagen K, Denmark
Tel: 45-33-920000
Fax: 45-31-54-533
Website: www.um.dk/english/udenrigspolitik/udviklingspolitik

DANIDA field contacts c/o Danish Embassies, fax and email addresses:

Bangladesh: dandhaka@mail.citechco.net

Tanzania: 255-51-11-6433

Uganda: 256-41-25-4979, denmark@imul.com

Vietnam: 84-4-823-1999, ambadane@netnam.org.vn

Zimbabwe: 263-4-75-8189, denmark@mail.pci.co.zw

**2-2-3. Deutsche
Gesellschaft für
Technische
Zusammenarbeit
(GTZ)**

In addition to its general agricultural programmes, GTZ has developed a number of projects specifically designed to support the phase out of methyl bromide in developing countries. These projects focus on soil disinfestation, treatment of durable commodities, development of economic instruments to promote methyl bromide phase out and disposal of obsolete stocks of methyl bromide. GTZ has established several bilateral and regional projects to test methyl bromide alternatives in the field. GTZ's methyl bromide phase-out projects are coordinated by the Environmental Protection and Conservation of Natural Resources Section (PROKLIMA Project) and the Plant Protection and Post-harvest Section of GTZ.

*Methyl Bromide
Alternatives Project
Countries:*

Egypt, Jordan, Morocco, Syria; new regional projects in Southern and Eastern Africa, the Middle East and Central America.

Publications:

Methyl Bromide Substitution in Agriculture: Objectives and Activities of the Federal Republic of Germany Concerning the Support to Article 5 Countries of the Montreal Protocol (1998).

Contact:

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

PROKLIMA Project

Peter Stormer, Head Proklima/Ozone Fund

GmbH, OE 4405

P.O. Box 5180

D-65726 Eschborn/Federal Republic of Germany

Tel: 49-61-9679-2178

Fax: 49-61-9679-6318

Email: proklima@gtz.de

Website: www.gtz.de/proklima

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

Post-harvest Project

Albert Bell, Project Coordinator

GmbH, OE 4541

P.O. Box 5180

D-65726 Eschborn/Federal Republic of Germany

Email: albert.bell@gtz.de

Website: www.gtz.de/post_harvest



PROJECT PARTNERS IN JORDAN

GTZ has been working with horticultural producers in Jordan for several years, promoting IPM practices and a national certification and labeling programme. UNIDO is building on this experience by working closely with the GTZ programme in the implementation of a demonstration project under the Multilateral Fund promoting IPM alternatives to methyl bromide in cucumber and tomato production.

2-2-4. FAO Intercountry IPM Programme

IPM implementation in Asia is supported through the UN Food and Agriculture Organization (FAO) Intercountry IPM Programme for pest control. This Programme, started in 1982, has helped a number of Asian countries develop IPM strategies and policies, and has been instrumental in developing the Farmers' Field School approach (see Section 3-1-1). The Programme's foundation was the establishment of the Farmers' Field Schools in rice in Indonesia, an approach which has subsequently been reproduced in other national programmes. Recent results from 1,300 villages in Vietnam, where 155,000 farmers have been trained since 1993, showed that pesticide applications in rice production were substantially decreased following IPM training. In many national programmes in Asia, IPM implementation is expanding to cotton, vegetables, legumes and maize. FAO assists with the transfer of the IPM approach to other regions and crops through the exchange of trainers and arrangement of visits to successful programmes. A Dutch-funded regional IPM programme on vegetables was recently initiated in five Asian countries and a similar programme on cotton is planned.

IPM Project Countries: Bangladesh, Cambodia, China, Indonesia, Laos, the Philippines, South Korea, Vietnam.

Publications: Contact the Intercountry IPM Programme for current publications.

Contact: **UN Food and Agriculture Organization**

Intercountry IPM Programme

Russ Diltz, Director

Jl. Jati Padan Raya #38

Jati Padang, Pasar Minggu

Jakarta 12540, Indonesia

Tel: 62-21-789-0288, 62-21-780-0265

Fax: 62-21-780-0265

Email: communityipm@ibm.net, rdilts@ibm.net

Website: www.fao.org/waicent/faoinfo/agricult/agp/agpp/ipm/welcome.htm

2-2-5. Global IPM Facility

The Global IPM Facility draws on local, national and international expertise, knowledge and resources to facilitate the design and implementation of IPM projects. This collaborative approach provides a rapid and effective response to the needs of farming communities and national IPM programmes, and greater efficiency of resource use by national governments and development agencies. Project crops range from maize, beans and rice to coffee, vegetables and citrus. The Facility is co-sponsored by FAO, UNDP, UNEP and the World Bank, with the Secretariat housed at FAO in Rome.

Agricultural Project Countries:

Brazil, Burkina Faso, Cote d'Ivoire, Cuba, Egypt, Ghana, Iran, Jordan, Kenya, Malawi, Mali, Mozambique, Paraguay, Peru, Sudan, Tanzania, Uganda, Yemen, Zambia, Zimbabwe.

Publications:

Global IPM Facility Programme Document (1997), various informal case studies.

Contact:

UN Food and Agriculture Organization

Peter Kenmore, Coordinator
Global IPM Facility Secretariat
Viale delle Terme di Caracalla
00100 Rome, Italy
Tel: 39-6-5225-6269
Fax: 39-6-5225-6347 (attn: room B757)
Email: global-ipm@fao.org

GLOBAL FACILITY PROMOTES IPM IN GHANA

In 1993, the Director of the Ghanaian Plant Protection Services participated in a Global IPM meeting in Ghana organized by the Global IPM Facility and its partners. Following the meeting, a pilot IPM programme was developed in Ghana, and executed with the assistance of experienced Farmers' Field School trainers from the Philippines. The programme demonstrated that the Farmers' Field School IPM approach could be successfully adapted to the situation in Ghana for the production of rice and horticultural crops. The Government of Ghana was very pleased with the results and re-allocated World Bank funds which had been earmarked for conventional Training and Visitation (T&V) extension programmes to support more Farmers' Field Schools during subsequent seasons.

2-2-6. International Development Research Centre (IDRC)

IDRC is a public corporation created by the parliament of Canada to support developing country researchers and communities find solutions to social, economic, and envi-

Publications: *IDRC Reports* (weekly online magazine), variety of books and reports on development issues, database on appropriate technologies.

Contact: **International Development Research Centre (IDRC)**

P.O. Box 8500
Ottawa, ON
Canada K1G 3H9
Tel: 1-613-236-6163
Fax: 1-613-238-7230
Email: arichero@idrc.ca
Website: www.idrc.ca/index_e.html

Asia Regional Office

Tanglin PO Box 101
Singapore 912404, Republic of Singapore
Tel: 65-235-1344, 235-1576, 235-1865
Fax: 65-235-1849
Email: rspence@idrc.org.sg
Website: www.idrc.org.sg

Street address:
RELC Building, 7th storey
30 Orange Grove Road
Singapore 258352, Republic of Singapore

South Asia Office (SARO)

17 Jor Bagh
New Delhi 110003, India
Tel: 91-11-461-9411/12/13
Fax: 91-11-462-2707
Email: postpe10@idrc.ca
Website: www.idrc.ca/saro

Regional Office for Latin America and the Caribbean

Casilla de Correo 6379
Montevideo, Uruguay
Tel: 598-2-902-2031 to 902-2034; 598-2-902-2037 to 902-2043
Fax: 598-2-902-0223
E-mail: arichero@idrc.ca
Website: www.idrc.ca/lacro/

Street address:
Pza. Cagancha 1335, Piso 9
11100 Montevideo, Uruguay

Regional Office for Eastern and Southern Africa

Regional Office for the Middle East and North Africa

PO Box 14 Orman

Giza, Cairo, Egypt

Tel: 20-2-336-7051/52/53/54/57

Fax: 20-2-336-7056

E-mail: ckameel@idrc.ca

Website: www.idrc.ca/cairo/index_e.html

Street address:

3 Amman Square, 5th floor

Dokki, Cairo, Egypt

Regional Office for Southern Africa

PO Box 477

WITS 2050, South Africa

Tel: 27-11-403-3952

Fax: 27-11-403-1417

E-mail: mpillay@idrc.ca

Website: www.idrc.org.za

Street address:

Braamfontein Centre, 9th floor

23 Jorissen Street, Braamfontein

Johannesburg 2001, South Africa

Regional Office for West and Central Africa

BP 11007, CD Annexe

Dakar, Senegal

Tel: 221-8-244231, 240920

Fax: 221-8-253255

E-mail: kndiaye@idrc.ca

Website : www.idrc.ca/braco/index_e.html

Street address:

Avenue Cheikh Anta Diop,

Angle Boulevard de l'Est

Dakar, Senegal

**2-2-7. International
Fund for Agricultural
Development (IFAD)**

IFAD is a specialized agency of the United Nations, established in 1977 to mobilize additional resources for concessional lending to finance projects to improve food production systems. The Fund's resources come from the contribution of member countries, non-member contributions, and other sources. The majority of Fund-supported projects focus on agricultural research and training.

Fax: 39-6-5043463
Email: ifad@ifad.org
Website: www.ifad.org

**2-2-8. New Zealand
Official Development
Aid (NZODA)**

NZODA is managed by the Development Cooperation Division of the New Zealand Ministry of Foreign Affairs and Trade, in coordination with diplomatic posts in partner countries. NZODA's agricultural projects emphasize technical training and human resource development, drawing on expertise from both the private and public sectors in New Zealand and partner countries.

*Agricultural Project
Countries (partial list):*

Many countries throughout Pacific Island region, Cambodia, China, Indonesia, Laos, Mongolia, the Philippines, Thailand, Vietnam.

Publications:

Various policy and technical reports, *Development Cooperation* newsletter, *Development Business* newsletter.

Contact:

New Zealand Official Development Aid (NZODA)

Development Cooperation Division
Ministry of Foreign Affairs and Trade
Private Bag 18901
Wellington, New Zealand
Tel: 64-4-494-8500
Fax: 64-4-494-8514
Website: www.mft.govt.nz/dev/index.htm

**2-2-9. Regional Plant
Protection
Organizations (RPPOs)**

The RPPOs serve as coordinating bodies in different regions to further the goals of the International Plant Protection Convention (IPPC) and to gather and disseminate information. The IPPC is a multilateral treaty designed to prevent the spread and introduction of pests internationally, and to promote appropriate measures for their control. RPPOs produce regional plant protection standards in collaboration with each other and with FAO. In particular, they work together to develop and use standards on pest control measures for controlling quarantine pests and preventing their introduction and spread. Each RPPO has its own independent secretariat and conducts its own regional cooperation programme involving government representatives (from both regulatory and research institutions).

Publications:

Contact the regional PPOs for current publications.

Contact:

Asia and Pacific Plant Protection Commission (APPPC)

Professor Shen Chong-Yao, Technical Secretary
FAO Regional Office for Asia and the Pacific
Maliwan Mansion

P.O. Box 631-C
Bridgetown, Barbados
Tel: 246-426-7110
Fax: 246-427-6075
Email: gene.pollard@field.fao.org

Comité Regional de Sanidad Vegetal del Cono Sur (COSAVE)

R. Sgrillo, Technical Secretary
Edificio de la Direccion de Extension Araria
Ruta Martiscal Estrigarribia, 1 piso - bloque B
San Lorenzo, Paraguay
Tel/fax: 595-21-574-343

Comunidad Andida (CAN)

C.A. Wandenberg, Secretariat
Casilla Postal 18-1177
Lima 18, Peru
Tel: 51-221-2222
Fax: 51-221-3329
Email: Sanidad@junda.org.pe

European and Mediterranean Plant Protection Organization (OEPP/EPPO)

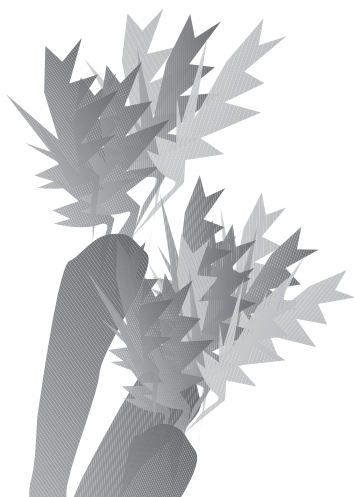
I.M. Smith, Director General
1, rue le Notre
F-75016, Paris, France
Tel: 33-1-4520-7794
Fax: 33-1-4224-8943
Email: hq@epo.fr
Website: www.eppo.org

Interafrican Phytosanitary Council (IAPSC)

N. Nkouka, Scientific Secretary
P.O. Box 4170
Yaoundé, Cameroon
Tel: 237-222-528
Fax: 237-224-754

North American Plant Protection Organization (NAPPO)

I.McDonnell, Executive Secretary
Agriculture and Agrifood Canada
59 Camelot Drive
NEPEAN
Ontario K1A 0Y9, Canada
Tel: 1-613-952-8000



Organismo Internacional Regional de Sanidad Agropecuaria (OIRSA)

C. Humberto-Barreto, Executive Secretary

Calle Ramon Belloso

Col. Escalon

San Salvador, El Salvador

Tel: 503-223-2391

Fax: 503-298-2119

Email: oirsa@nsl.oirsa.org.sv

Website: www.nsl.oirsa.org.sv

Pacific Plant Protection Organization (PPPO)

R. Ikin, Chairman

Department of Primary Industries and Energy

GPO Box 858

Canberra, Act 2601, Australia

Tel: 61-6-272-5250

Fax: 61-6-272-3399

Email: rikin@mailhost.dpie.gov.au

**2-2-10. Swedish
International
Development Agency
(SIDA)**

SIDA's Natural Resources and Environment sector includes programmes in the areas of agriculture and forestry, soil conservation, fresh water, the marine environment and rural development. SIDA supports the adoption of new farm methods in many project countries. Innovative dryland farming techniques in Tanzania, for example, have resulted in a 200-300% increase in the yield of food crops. In Kenya, soil conservation measures were implemented on 34,000 small-scale farms, and education and training programmes reached 76,000 small-scale farmers. The Swedish embassies in each project country are responsible for distribution of project funds and oversight of project implementation.

*Agricultural Project
Countries:*

Angola, Bangladesh, Bolivia, Cambodia, China, Ethiopia, Guinea-Bissau, India, Kenya, Laos, Mozambique, Tanzania, Vietnam.

Publications:

Contact SIDA for current publications.

Contact:

Swedish International Development Agency (SIDA)

Johan Holmberg, Director

Natural Resources and the Environment

Sveavägen 20

Stockholm, Sweden

Tel: 46-8-698-5000

Fax: 46-8-20-8864

Email: info@sida.org

Website: www.sida.org

Ethiopia: Mats Svensson, 251-1-515830, dco-ethiopia@sida.se
Guinea-Bissau: Ulla Andrén, 245-201068, ulla.andren@side.se
India: Christer Holtsbert, 91-11-688-5540, sara.goransson@sida.se
Kenya: Anders Karlsson, 254-2-220863, asa.wiklund@sida.se, cajsa.werner@sida.se
Laos: Olof Milton, 856-21-315001, maria.fastlund@sida.se
Mozambique: Carl-Gustaf Svensson, 258-1-492374, eva-lena.bornefelt@sida.se
Tanzania: Chistine McNab, 255-51-113420, ylva.bondesson@sida.se
Vietnam: Bengt Ekman, 84-4-823-2195

**2-2-11. US Agency for
International
Development (USAID)**

In Asia and the Near East, USAID supports agricultural research, training, private enterprise development and policy reform throughout the regions. Examples include introduction of new technologies for production of melons, strawberries, garlic, peaches, green beans and dates in Egypt, and IPM training in the Philippines for farmers producing onions, eggplant and other vegetables. USAID also has two cooperative programmes with Israel providing technical assistance on agricultural production to a number of countries in the Middle East and Northern Africa. Projects in Sub-Saharan Africa focus on production of both food crops and agro-exports, including horticultural crops. In the Newly Independent States (NIS), USAID is working with growers, commodity groups and government officials to promote agribusiness development, partnerships with US companies and agricultural policy reform.

*Agricultural Project
Countries:*

Bangladesh, Egypt, Eritrea, Ethiopia, Georgia, Ghana, Guinea, India, Indonesia, Jordan, Kenya, Lebanon, Madagascar, Malawi, Mali, Moldova, Mongolia, Morocco, Mozambique, Nepal, the Philippines, Russia, Rwanda, Sri Lanka, Tanzania, West Bank/Gaza, Uganda, Ukraine, Zambia.

Publications:

Contact USAID for current publications.

Contact:

Africa

USAID Africa Bureau

David Atwood

AFR/SD/ANRE

1300 Pennsylvania Ave., NW 4.06-111

Washington, DC 20523-4600, USA

Tel: 1-202-712-5768

Fax: 1-202-216-3373

Email: datwood@usaid.gov

USAID/AFR/SD/PSGE

Walter Knausenberger

Environmental Protection Unit

Washington, DC 2-523-0089, USA

Tel: 1-202-712-5567
Fax: 1-202-216-3595
Email: rcummings@usaid.gov

IPM Collaborative Research Support Programme

Bob Hedland, Entomologist
G/AGED/AFS/ST
1300 Pennsylvania Ave., NW 2.11-90
Tel: 1-202-712-0484
Fax: 1-202-216-3010
Email: bhedland@usaid.gov

Middle East/North Africa

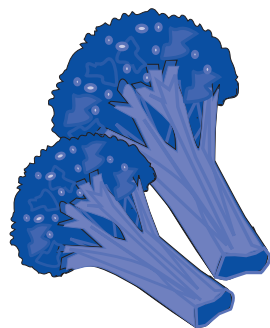
USAID, Department of State

Donnie Harrington
Office of Agriculture and Food Security
Washington, DC 20523-5701, USA
Tel: 1-202-712-0494
Fax: 1-202-216-3595
Email: dharrington@usaid.gov

NIS Region

USAID, Ronald Reagan Building

Charles Uphaus
ENI/ED/Ag, Department of State
Washington, DC 20523-5701, USA
Tel: 1-202-712-1172
Fax: 1-202-216-3172
Email: cuphaus@usaid.gov



**2-3. International
Agricultural
Research Networks**

The agricultural research networks listed in this section include regional consortia of national research institutions, networks of international research organizations, and key research institutions with regional scope which have programmes of particular interest in the development of methyl bromide alternatives projects.

***2-3-1. CAB
International
Bioscience (CABI)***

CABI is an independent international research and training institution with programmes in three sectors: biodiversity and biosystematics, biological pest management, and environment. The biological pest management programme operates over 70 programmes with or on behalf of more than 30 industrialized and developing countries. Projects are undertaken by an experienced and multinational professional staff of about 150 from CABI Bioscience Centres in Europe, tropical America, Africa, South Asia and Southeast Asia. Specific programme areas include plant diseases and nematodes, IPM training and implementation, invertebrate pest biological control,

Village Market, Nairobi, Kenya
Tel: 254-2-521450
Fax: 254-2-522150
Email: bioscience.kenya@cabi.org

CABI Bioscience Centre, Malaysia
CA SE Asia Regional Centre
P.O. Box 210
43409 UPM Serdang
Selangor, Malaysia
Tel: 603-942-6489
Fax: 603-942-6490
Email: bioscience.malaysia@cabi.org

CABI Bioscience Centre, Pakistan
P.O. Box 8
Rawalpindi, Pakistan
Tel: 92-51-929032
Fax: 92-51-451147
Email: cabi-iibc-pakistan@cabi.org

CABI Bioscience Centre, Switzerland
1 Chemin des Grillons
CH-2800 Delemont, Switzerland
Tel: 41-32-422-1257
Fax: 41-32-422-4824
Email: bioscience.switzerland@cabi.org

CABI Bioscience Centre, Trinidad & Tobago
CABI Caribbean Regional Centre
Gordon Street
Curepe, Trinidad & Tobago
Tel: 1-868-662-4173
Fax: 1-868-663-2859
Email: bioscience.trinidad@cabi.org

CABI Bioscience UK Centre (Ascot)
Tony Little, Information Officer
Silwood Park, Buckhurst Road
Ascot, Berks
SL5 7TA, United Kingdom
Tel: 44-1344-872999
Fax: 44-1344-875007
Email: bioscience.ascot@cabi.org

Agricultural Project

Countries: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama.

Publications: Contact CATIE for current publications.

Contact: **Centro Agronomico Tropical de Investigación y Enseñanza (CATIE)**
Rubén Guevara, Director General
7170 Turrialba, Costa Rica
Tel: 506-556-1016, 556-6431
Fax: 506-556-0914, 556-1533
Email: cicmip@computo.catie.ac.cr
Website: www.catie.ac.cr

**2-3-3. Consortium for
International Crop
Protection (CICP)**

CICP is a non-profit organization established in 1978 by a group of U.S. universities. The organization's purpose is to encourage the adoption of sustainable techniques to reduce food crop losses caused by pests in developing countries. Specific goals include: (1) promotion of IPM systems appropriate to local economic, sociological and environmental needs; (2) promotion of existing and new biological, cultural and genetic pest control technologies; and (3) assessment of the environmental consequences of international projects in terms of impacts on pests, beneficial organisms, and long term sustainable pest management. CICP member institutions (twelve U.S. universities and the U.S. Department of Agriculture) offer expertise in plant pathology, entomology, weed science, nematology, plant breeding, agricultural economics and other related disciplines. The Consortium organizes workshops and conferences; provides information and communications services (including databases of IPM resources); promotes IPM research and implementation in developing countries; and provides training for national agricultural research and extension systems as well as NGOs.

Publications: Contact CICP for current publications.

Contact: **Consortium for International Crop Protection**
George Schaefers, Executive Director
N.Y.S. Agricultural Experiment Station
Geneva, New York 14456-0462, USA
Tel: 1-315-787-2252
Fax: 1-315-787-2418
Email: CICP@cornell.edu
Website: www.IPMnet.org/brochure.html

2-3-4. Consortium for

CONDESAN is a multidisciplinary research consortium focusing on sustainable agricul-

Project Countries: Bolivia, Colombia, Ecuador, Peru.

Publications: Various technical and policy reports, booklets, newsletters and training materials.

Contact: **Consorcio para el Desarrollo Sostenible de la Ecoregión Andina (CONDESAN)**

Jose Luis Rueda, Coordinator
c/o International Potato Centre
Av. La Universidad 795, La Molina
P.O. Box 1558, Lima 12, Peru
Tel: 51-1-349-6017
Fax: 51-1-349-5638
Email: infoandina@cip.msm.cgnet.com
Website: www.condesan.org/index.htm

**2-3-5. Consultative
Group for
International
Agricultural Research
(CGIAR)**

The CGIAR is an informal association of 57 public and private sector members that support a network of sixteen international agricultural research centres. The mission of the CGIAR's research programmes is to promote sustainable agriculture for food security in developing countries. Some CGIAR research centres are commodity specific (International Rice Research Institute, International Potato Centre) while others focus on agricultural research for a particular environment (International Centre for Agricultural Research in the Dry Areas). The CGIAR research centres have established a System-wide Programme on IPM to coordinate work at the various centres promoting IPM.

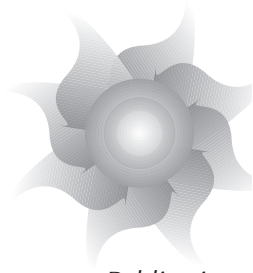
CGIAR Centres are in the following countries: Colombia, Cote d'Ivoire, India, Indonesia, Kenya, Mexico, Nigeria, Peru, the Philippines, Sri Lanka, Syrian Arab Republic.

Publications: Contact CGIAR for current publications.

Contact: **CGIAR Secretariat**
701 18th Street, NW
Room J-4073
Washington, DC 20433, USA
Tel: 1-202-473-8951
Fax: 1-202-473-8110
Email: cgjar@cgnet.com
Website: www.cgiar.org

System-wide Programme on IPM

Email: ipm-centre@cgnet.com, abellotti@cgnet.com
Website: www.cgiar.org/spipm/



knowledge; (2) foster cost-effective, collaborative partnerships among stakeholders in agricultural research and sustainable development; (3) enhance the capacity of NARS to generate and transfer technology that responds to users' needs; (4) facilitate participation of all stakeholders in formulating a global framework for development-oriented agricultural research; and (5) enhance awareness among policymakers and donors of the need for long term investment in agricultural research.

Publications: Contact Global Forum for current publications.

Contact: **Steering Committee of the Global Forum for Agricultural Research**
Alain Derevier, Executive Secretary
c/o World Bank
1818 H Street, NW
Washington, DC 20433, USA
Tel: 1-202-458-7914
Fax: 1-202-452-3246
Email: aderevier@worldbank.org

**2-3-7. Integrated Pest
Management
Collaborative Research
and Support
Programme (IPM
CRSP)**

The IPM CRSP coordinates research among more than 20 institutions in several countries. The primary disciplines that interact in the IPM CRSP are entomology, plant pathology, weed science, agronomy, horticulture, economics, and sociology. Current IPM CRSP research focuses on reducing pesticide residues in high-value export crops such as broccoli, cauliflower, snow peas, blackberries, raspberries, tomatoes, sweet potatoes, cut flowers and vanilla. Seminars and workshops are held to disseminate techniques and research results. The IPM CRSP also works to develop and reinforce institutional IPM capacity and networks in developing countries.

*Collaborative IPM
Projects:* Albania, Bangladesh, Ecuador, Guatemala, Jamaica, Mali, the Philippines, Uganda.

Publications: *IPM CRSP Update* (quarterly newsletter), various technical reports.

Contact: **IPM Collaborative Research Support Programme**
Brhane Gebrekidan, Programme Director
Office of International Research and Development
Outreach Division, Office of the University Provost
1060 Litton Reaves Hall
Virginia Tech
Blacksburg, VA, USA 24061-0334
Tel: 1-540-231-3513
Fax: 1-540-231-3519
Email: brhane@vt.edu
Website: www.cals.vt.edu/ipmcrsp/index.html

Publications: Contact ICIPE for current publications.

Contact: **International Centre of Insect Physiology and Ecology**

Hans R. Herren, Director General

P.O. Box 30722 Nairobi, Kenya

Tel: 254-2-861680, 802501

Fax: 254-2-860110, 803360

Email: icipe@cgnet.com or icipe@africaonline.co.ke

**2-3-9. Natural
Resources Institute
(NRI)**

NRI's Pest Management Department is staffed with international experts in insect pest ecology, detection and identification of plant pathogens, microbial agents for pest control, pheromones and other behavior modifying chemicals for pest monitoring and control, implementation of IPM programmes using a systems approach, and agricultural legislation and policy. The Department conducts research on the biology, identification, detection and characterization of pests and their vectors, develops and implements environmentally and socially sustainable technologies for pest management, and provides consultancy services in pest management including institutional, legislative and policy support, teaching and training. NRI also has expertise in participatory project design methods (see Section 3-1-5). NRI coordinates the IPM Forum, an international network designed to strengthen NGO capacity to promote and implement effective IPM programmes.

Publications: Contact NRI for current publications.

Contact: **Natural Resources Institute**

Malcolm Iles, IPM Forum Coordinator

Chatham Maritime

Kent ME4 4TB, UK

Tel: 44-634-880088

Fax: 44-634-883377

Email: nri@ukc.ac.uk

Website: www.nri.org/IPMForum/index.htm

**2-3-10. Postharvest
Collaborative
Agribusiness Support
Programme (CASP)**

CASP is a coalition of U.S. universities that works with bilateral and intergovernmental agencies to provide training, development services and technical support through multidisciplinary task forces. CASP teams focus on post-harvest agribusiness extension and technology transfer, with a particular emphasis on cost-effective methods and technologies for producing a high-quality, least-cost product. The programme also provides training on food storage and marketing, food management processes, and provides access to information databases on all aspects of postharvest technologies.

CASP Project Afghanistan, Bangladesh, Belize, Bolivia, Botswana, Brazil, Cameroon, Cape Verde

Contact: **Postharvest Collaborative Agribusiness Support Programme**

Mississippi State University
Sherman F. Pasely, Programme Director
Office of International Programmes
11-13 Morgan Street
Box 9733
Mississippi State, MS 39762, USA
Tel: 1-601-325-1231
Fax: 1-601-324-4561
Email: pasely@cvm.msstate.edu
Website: www.msstate.edu/archives/casp/casp.html

US Agency for International Development

Donnie Harrington
G/EG/AFS AEMD, 2.11-411, RRB
Washington, DC 20523-2110, USA
Tel: 1-202-712-0494
Fax: 1-202-216-3010
Email: dharrington@usaid.gov

**2-3-11. Special
Programme for African
Agricultural Research
(SPAAR)**

SPAAR is a regional forum established to enhance the quality and relevance of agricultural technology development in Sub-Saharan Africa (SSA), to improve collaboration among agricultural researchers in the region, and to facilitate the exchange of information on research activities. SPAAR works to improve the capacity of African agricultural research institutions, programming and funding in individual African countries, research-extension-farmer linkages, and regional collaboration in agricultural research. Members include all SSA national agricultural research systems, and 23 bilateral and multilateral donors.

Publications: Regular newsletter, various reports.

Contact: **Special Programme for African Agricultural Research**

Moctar Tore, Executive Secretary
1818 H Street, NW
Washington, DC 20433, USA
Tel: 1-202-473-9008
Fax: 1-202-473-8231
Email: mtore@worldbank.org
Website: www.worldbank.org/html/aftsr/index.htm

2-3-12. Zamorano

Zamorano, or the PanAmerican Agricultural College, provides training in agribusiness, sustainable agriculture and natural resource management to professionals throughout

Contact: **PanAmerican Agricultural College (Zamorano)**

Allan J. Hruska, Director

Department of Plant Protection

P.O. Box 93

Tegucigalpa, MDC, Honduras

Tel: 504-776-6140

Fax: 504-776-6242

Email: allan@eapdpv.sdnhon.org.hn

2-4. International NGO Agricultural Programmes

The organizations listed in this section are international NGOs with development programmes that include significant agricultural expertise. While some of the organizations work primarily with small-scale farmers, all have expertise in IPM and other sustainable practices useful to export-oriented farmers who are reliant on methyl bromide. Many also have significant experience designing projects to effectively meet farmers' needs, and often work collaboratively with government and research institutions (see also Section 3 on project design). Whenever possible, information on specific crops involved in agricultural projects is included in the descriptions.

The countries in which the organizations have agricultural projects are listed alphabetically. To find which organizations are working in a particular region or country, refer to the Country Index (see Appendix A, p. 80). Regional offices are included wherever information is available. All field offices are not listed for every organization; however, this information is often available on an organization's website. A specific contact person is listed for each organization whenever possible, and publications listed can be found through the organizational contact.

2-4-1. ACDI/VOCA

ACDI/VOCA, a U.S.-based nonprofit organization, provides technical assistance in all aspects of agricultural production, food processing and marketing, and conservation of natural resources. This international development organization provides expertise from both volunteers and professional staff at the request of agribusiness, cooperatives and private and government agencies. Projects range from a focus on subsistence crops to livestock management to technical assistance with production of major agricultural exports. ACDI/VOCA has 33 offices in Latin America, Africa, Asia, Central and Eastern Europe and the New Independent States (contact the central office for a list of field office contacts).

*Agricultural project
countries:*

Armenia, Bolivia, Brazil, Bulgaria, Colombia, Croatia, Egypt, Ethiopia, Georgia, Honduras, Malawi, Moldova, Nepal, Peru, Poland, Russia, Uganda, Ukraine.

Publications:

Quarterly newsletter, recruitment brochure, volunteer newsletter.

Contact: **ACDI/VOCA**

2-4-2. ACTIONAID	ACTIONAID, one of the UK's largest development organizations, implements a long-term development strategy with individual projects often lasting 8-10 years. The group focuses on community-based development with stakeholder participation in project design. Agricultural project activities include soil and water conservation, training in IPM and biological controls, and small-scale lending and marketing programs.
<i>Agricultural project countries:</i>	Ethiopia, Gambia, Ghana, Guatemala, Haiti, India, Kenya, Malawi, Mozambique, Nepal, Pakistan, Sierra Leone, Somalia, Uganda, Vietnam.
<i>Publications:</i>	Various reports and briefing papers.
<i>Contact:</i>	ACTIONAID Chataway House Leach Road, Chard, Somerset TA20 1RF, UK Tel: 44-0-1460-62972 Fax: 44-0-1460-67191 Email: mail@actionaid.org.uk Website: www.oneworld.org/actionaid/
2-4-3. AfriCare	AfriCare currently supports 260 programmes in 27 African countries. Agricultural programmes focus on production of grain, vegetables, fruit and livestock. Field expertise includes irrigation systems, soil conservation, agroforestry and other components of environmentally sustainable food production and natural resource management, as well as storage, post-harvest handling and crop processing, and agribusiness development. Contact the U.S. office for listing of 24 field offices.
<i>Agricultural project countries:</i>	Central African Republic, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Malawi, Mali, Mozambique, Niger, Senegal, Zambia, Zimbabwe.
<i>Publications:</i>	Fact sheets and newsletters.
<i>Contact:</i>	AfriCare 440 R Street, NW Washington, DC 20001, USA Tel: 1-202-462-3614 Fax: 1-202-387-1034 Email: afriicare@f1104.n109.z1.fidonet.org Website: www.afriicare.org/
2-4-4. CARE	CARE is the largest non-profit, independent relief and development organization in

Agricultural project countries: Bangladesh, Bolivia, Ecuador, Egypt, El Salvador, Ethiopia, Georgia, Guatemala, Haiti, Honduras, Indonesia, Madagascar, Mali, Mozambique, Nepal, Nicaragua, Niger, Peru, the Philippines, Rwanda, Sri Lanka, Sudan, Thailand, Togo, Uganda.

Publications: CARE World Report, various newsletters and publications.

Contact: **CARE**
Carlos Perez, Agricultural Programmes
151 Ellis Street, NE
Atlanta, GA 30303-2439, USA
Tel: 1-404-681-2552
Fax: 1-404-577-5977
Email: info@care.org
Website: www.care.org

CARE IN NICARAGUA

CARE's Sustainable Agriculture Project in Nicaragua works with 18,000 inhabitants of the Chinandega and Matagalpa regions to promote sustainable agricultural systems. The project provides technical training through community organizations and emphasizes a "farmer to farmer" extension methodology. Farmers learn by practicing techniques in soil and water conservation, reforestation, improved grain storage, IPM, and crop diversification. The project is also promoting an in-kind credit system of plant materials for promoting new crops, and working with farmers to develop more effective community-managed marketing systems.

2-4-5. Catholic Relief Services (CRS) Catholic Relief Services is the official overseas relief and development agency of the Catholic Church in the United States. As part of the CRS food security programme, staff work with extension agency counterparts and farmers to promote new appropriate technologies to increase agricultural output. Projects vary by country and region, but include work with basic grains (rice, corn, beans, wheat, potatoes, millet, sorghum and cassava) as well as horticultural crops for marketing and cooperative export (broccoli, tomatoes, onions). Techniques promoted include soil and water conservation, composting, agroforestry, IPM, plant extracts (neem and garlic solutions) and biological controls. CRS agricultural staff conduct training workshops for extension agency counterparts and farmers, develop training modules, and provide on-farm technical support.

Islamabad, Pakistan
Tel: 92-51-245336
Fax: 92-51-262507
Email: crspak@isb.compol.com

Catholic Relief Services, Kenya

Tom Remington, Africa Regional Technical Advisor, Agriculture/Environment
P.O. Box 49675
Westlands, Nairobi, Kenya
Tel: 254-2-741-355
Fax: 254-2-741356
Email: agric-ea@form-net.com

Catholic Relief Services, Latin America

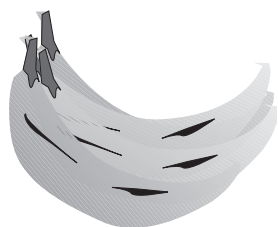
Edward Walters, Regional Technical Advisor, Agriculture/Environment
Apartado Postal 739
Guatemala City, 01901, Guatemala
Tel: 502-331-0682
Fax: 502-332-0107
Email: ewalters@emailgua.com

Catholic Relief Services

Frank Brockman, Senior Technical Advisor, Agriculture/Environment
209 West Fayette Street
Baltimore, MD 21201-3443, USA
Tel: 1-410-625-2220
Fax: 1-410-685-1635
Email: fbrockman@catholicrelief.org
Website: www.catholicrelief.org

Catholic Relief Services

Gaye Burpee, Senior Technical Advisor, Agriculture/Environment
209 West Fayette Street
Baltimore, MD 21201-3443, USA
Tel: 1-410-625-2220
Fax: 1-410-685-1635
Email: gburpee@catholicrelief.org
Website: www.catholicrelief.org



**2-4-6. Church World
Service**

Church World Service works in partnership with local organizations worldwide to promote food production and other development programmes. Field experience in agriculture includes training in the use of safe and inexpensive fertilizers, farm schools, extension programmes, demonstration projects, and food industry development.

Contact: **Church World Service**
Dr. Winston Carroo, Director of Agricultural Programmes
475 Riverside Drive, Room 678
New York, NY 10115-0050, USA
Tel: 1-212-870-2554
Fax: 1-212-870-3523
Email: dorisr@nccusa.org
Website: www.nccusa.org/cws

**2-4-7. Intermediate
Technology
Development Group
(ITDG)**

ITDG is an international development agency that works directly with project participants to design and implement projects that contribute to the sustainable development of their communities. ITDG offers expertise in all aspects of small-scale production, from project identification and planning, through research and development, to demonstration, implementation, promotion and dissemination. The Group's "Technical Enquiry Service" draws on expertise of programme and country staff to support local development initiatives through the supply of high quality technical information and professional advice on its use. The free service is available to individuals and institutions worldwide. Through its Technology Consultants programme, ITDG also offers professional advice, assistance, and training to NGOs, governments, and international agencies working in agricultural development worldwide.

*Agricultural project
countries:*

Bangladesh, Kenya, Nepal, Peru, Sri Lanka, Sudan, Zimbabwe.

Publications:

Wide range of practical handbooks, directories, manuals, case studies, bibliographies and three quarterly journals.

Contact: **Intermediate Technology Development Group Ltd.**
The Schumacher Centre for Technology and Development
Bourton Hall, Bouton on Dunsmore
Rugby, Warwickshire CV23 0QZ, UK
Tel: 44-0-1788-661100
Fax: 44-0-1788-661101
Email: itdg@itdg.org.uk, infoserve@itdg.org.uk, enquiries@itdg.org.uk
Website: www.oneworld.org/itdg/

**2-4-8. International
Institute of Rural
Reconstruction (IIRR)**

IIRR's Environment, Natural Resources and Agriculture programme (ENRA) conducts field-based research and training in regenerative agriculture, agroforestry, soil and water conservation, and pesticide safety. The ENRA programme has 12 full-time technical staff with international experience, and produces information, education and communication materials for other organizations to use in participatory agricultural training. IIRR has trained more than 7 000 rural development practitioners from 84

Contact: **IIRR World Center/Asia**
Julian Gonsalves
Y.C. James Yen Centre
Silang, Cavite 4118, Philippines
Tel: 63-046-4142417
Fax: 63-046-4142420
Email: iirr@phil.gn.apc.org

IIRR Africa
Isaac Bekalo
P.O. Box 66873
Westlands, Nairobi, Kenya
Tel: 254-2-442610, 446522
Fax: 254-2-448148
Email: iirraro@form-net.com

IIRR Latin America
Daniel Selener
Pasaje Muirriagui Donoso 4451 y Av. America
Apartado Postal 17-08-8494
Quito, Ecuador
Tel/fax: 593-2-443-763
Email: daniel@iirr.ecuanex.net.ec

IIRR US Headquarters
475 Riverside Drive
Room 1035
New York, NY 10115, USA
Tel: 1-212-870-2992
Fax: 1-212-870-2981
Email: iirr@nyxfer.blythe.org

IIRR IN ASIA

In the Philippines, thousands of families on the island of Negros received IIRR training in sustainable horticultural production to meet their income generation needs following the collapse of the island's sugar industry. In India, villagers in the Karnataka state of Southwest India reduced soil erosion on their hillside farms by 50-75 percent through practices adopted following IIRR soil conservation training.

Agricultural project

countries: Bolivia, Cambodia, Ethiopia, Laos, Palestine, South Africa, Thailand, Vietnam.

Publications: Training manuals, project descriptions, brochure.

Contact: **Japan International Volunteer Centre (JVC)**

Michiya Kumaoka, President
8F Maruko Bldg
1-20-6 Higashiroeno Taito-ku
Tokyo 110, Japan
Tel: 03-3834-2388
Fax: 03-3835-0519
Email: jvc-pr2@jca.ax.apc.org
Website: www.jca.ax.apc.org/jvc

2-4-10. Oxfam

Oxfam consists of nine autonomous, independent Oxfam organizations around the world, with an Oxfam International coordinating office in the United Kingdom. Agricultural programmes of each Oxfam organization vary, but most focus on technical assistance and training for improved production techniques and lending for agricultural inputs.

*Agricultural project
countries (partial list):*

Bangladesh, Bolivia, Burkina Faso, El Salvador, Gambia, Haiti, India, Nicaragua, the Philippines, Senegal, Sudan, Vietnam, Zimbabwe.

Publications: *Viewpoint* (magazine).

Contact: **Community Aid Abroad (Oxfam in Australia)**

156 George Street
Fitzroy, Victoria
3065 Australia
Tel: 61-3-9289-9444
Fax: 61-3-9419-5318
Email: enquiry@caa.org.au
Website: www.caa.org.au/

Intermon - Oxfam Spain

Roger de Llúria, 15
08010 Barcelona, Spain
Tel: 34-3-482-0700
Fax: 34-3-482-0707
Email: intermon@asertel.es
Website: www.intermon.org

**Oxfam America**

26 West Street
Boston, MA 02111, USA
Tel: 1-617-482-1211
Fax: 1-617-728-2594
Email: oxfamusa@igc.apc.org
Website: www.oxfamamerica.org/

Oxfam Canada

National Office
294 Albert Street, Suite 300
Ottawa, Ontario
Canada K1P 6E6
Tel: 1-613-237-5236
Fax: 1-613-237-0524
Email: enquire@oxfam.ca
Website: www.oxfam.ca/

Oxfam Great Britain

Supporters Information Team
Oxfam House
274 Banbury Road
Oxford, Ox2 7DZ
Tel: 44-0-1865-313600
Email: oxfam@oxfam.org.uk
Website: www.oneworld.org/oxfam/

Oxfam Hong Kong

9/F Breakthrough Centre
191 Woosung Street Jordan
Kowloon, Hong Kong
Tel: 852-2520-2525
Fax: 852-2527-6307
Email: info@oxfam.org.hk
Website: user.hk.linkage.net/~oxfamhk/

Oxfam New Zealand

First Floor
203 Karangahape Road
Auckland, New Zealand
Tel: 64-9-358-1490
Fax: 64-9-358-1481
Email: oxfam@oxfam.org.nz
Website: www.caa.org.au/oxfam/nz/index.html

Email: info@oxfam.qc.ca
Website: www.oxfam.qc.ca

Oxfam-Solidarity in Belgium

Raadstraat 39
Rue du Conseil 39
Brussels, Belgium
Tel: 32-2-512-9990
Fax: 32-2-514-2813
Email: oxfamsol@ngonet.be
Website: www.oxfam.sol.ngonet.be/

2-4-11. Partners of the Americas (POA) - Farmer to Farmer Programme

POA's Farmer to Farmer Programme brings together agricultural professionals and practitioners from the U.S. and Latin America. Projects begin with a dialogue between participating farmers, farm organizations and agro-industries in Latin America to identify problems and alternative courses of action. Farmer to Farmer project leaders then provide technical recommendations and locate agricultural professionals and practitioners with the expertise and skills for the project. Projects are carried out in collaboration with agricultural ministries and universities.

Agricultural project countries:

Bolivia, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Nicaragua.

Publications:

Newsletter, general information video, *Partners Tools for Training*.

Contact:

Partners of the Americas
Anabella E. Bruch, Director
Farmer to Farmer Programme
1424 K Street, NW 7th Floor
Washington, DC 20005, USA
Tel: 1-202-628-3300
Fax: 1-202-628-3306
Email: KB@partners.poa.com
Website: www.partners.net

2-4-12. Rodale Institute

Rodale Institute is a non-profit, NGO that promotes regenerative agriculture techniques through applied research, training and education, communication media, and participation in policy planning and implementation. Popular regenerative technologies include the use of soil-improving legumes, composting, biological and IPM approaches, and integrated livestock and cropping systems. The Institute provides technical assistance to organizations and individuals interested in these approaches, relying on an international staff with multidisciplinary expertise. Rodale's international programme consists of Regenerative Agriculture Resource Centres (RARCs) in four

Contact: **Rodale Institute**
Amadou Diop, Director International Programmes
611 Siegfriedale Road
Kutztown, PA 19530-9749, USA
Tel: 1-610-683-1400
Fax: 1-610-683-8548
Email: adiop@rodaleinst.org

Guatemala Centre
Carlos Collado
Tel/fax: 502-926-0525 or 502-926-0716
Email: cmayaagricola@guate.net
Website: www.guate.net/centro_maya

Russia Centre
Alex Makeev
Tel: 7-095-932-9207
Fax: 7-095-932-9195
Email: admin@fadr.msu.ru
Website: www.fadr.msu.ru

Senegal Centre
Vore Seck
Tel: 221-951-1028
Fax: 221-951-1670
Email: rodale@sonatel.senet.net

RODALE SENEGAL

One of the programmes of Rodale Senegal's Regenerative Agricultural Resource Centre (RARC) is a collaborative effort to promote sustainable horticultural production in the community of Gad Khaye. The programme involves cooperation between the community farmers' association, researchers from the Senegalese Institute for Agricultural Research (ISRA), the Senegalese Horticulture Development Centre (CDH) and the Senegal RARC.

The applied pest management research includes a variety of biological pest control treatments on compost-grown tomatoes cultivated for market and home consumption. In ancillary trials, tomato seedlings are grown under screens to observe the frequency, severity and type of pest damage and yields.

After two years, soil-fertility management using regenerative techniques and

**2-4-13. Winrock
International**

Winrock's On-Farm Agricultural Resources Management (ONFARM) programme works with local NGOs to involve farmers and farmers' groups in the introduction of new agricultural technologies, varieties and practices. Careful analysis of needs and constraints lead to targeted interventions to improve farm productivity in ways that are economically and ecologically sustainable at the farm level. Projects include work with both grain and vegetable crops, including cassava, rice, bean, tomato, pepper, okra and eggplant.

*Agricultural project
countries:*

Albania, Bangladesh, China, Cote d'Ivoire, Ethiopia, the Gambia, Indonesia, Kenya, Malawi, Nepal, Nigeria, Senegal, Turkey, Vietnam, Uganda.

Publications:

SEEDS Newsletter, materials on a variety of topics.

Contact:

Winrock International

Mr. Hank Kipscheer, Director of Agriculture
38 Winrock Drive
Morrilton, AR 72110-9370, USA
Tel: 1-501-727-5435
Fax: 1-501-727-5242
Email: receptionist@winrock.org
Website: www.winrock.org

Field Offices:

Winrock Cote d'Ivoire

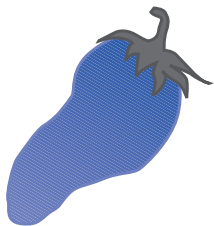
08 BP 1603
Abidjan 08, Cote d'Ivoire
Tel: 225-449414
Fax: 225-449411
Email: winrock-abidjan@cgnet.com

Winrock India

Post Office Box 8808
7 Poorvi Marg, Vasant Vihar
New Delhi 110057, India
Tel: 91-11-605099 or 673527
Fax: 91-11-687-6004
Email: winrock-delhi@cgnet.com

Winrock Kenya

State House Avenue
Post Office Box 45233
Nairobi, Kenya
Tel: 254-2-711590



Tel: 63-2-632-1233
Fax: 63-2-631-2809
Email: winrock@mnl.sequel.net

**2-4-14. World
Concern Development
Organization (WCDO)**

WCDO is a nonprofit organization founded as a division of CRISTA ministries in 1981. WCDO's agriculture and food production projects work directly with farmers and farmer groups to introduce new crops, cash crops, and improved seed demonstration projects. They also coordinate agricultural training programmes on improved production methods and soil conservation.

*Agricultural project
countries:*

Afghanistan, Bangladesh, Bolivia, Bosnia, Cambodia, Ethiopia, Haiti, Kenya, Laos, Mongolia, Nepal, Peru, Rwanda, Tanzania, Thailand, Uganda, Uzbekistan, Vietnam.

Publications:

Contact WDCO for current publications.

Contact:

World Concern Development Organization

Rick Denler
19303 Fremont Ave. North
Seattle, WA 98133, USA
Tel: 1-206-546-7201
Fax: 1-206-546-7317
Email: tdl@crista.org
Website: www.worldconcern.org

**2-4-15. World
Neighbors**

World Neighbors is a "people to people" non-profit organization working on sustainable food production and other development issues throughout Asia, Africa and Latin America. Expert staff work with farmers to experiment with improved crop varieties and techniques suited to risk-prone environments. Projects include assistance with horticultural production, cover crops and green manure, IPM, dryland farming, and farmer-led trials of new varieties and production techniques (see Section 3 for more on project design).

*Agricultural project
countries:*

Bolivia, Burkina Faso, Ecuador, Haiti, Honduras, India, Indonesia, Kenya, Mali, Mexico, Nepal, Peru, the Philippines, Tanzania, Togo, Uganda, and Vietnam.

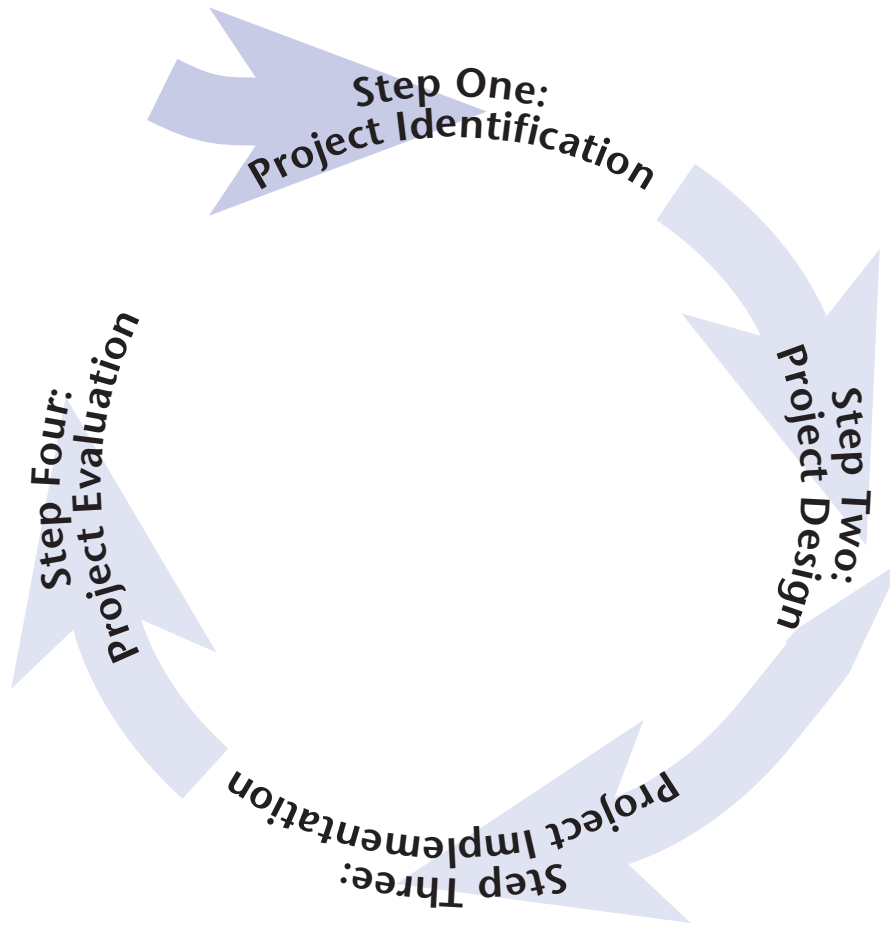
Publications:

Neighbors Newsletter, World Neighbors in Action, various reports.

Contact:

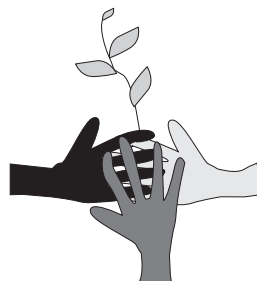
World Neighbors

Jethro Pettit, Director International Programmes
Jose Quinorez, Associate Director International Programmes
4127 NW 122nd Street
Oklahoma City, OK 73120-8869, USA



3. Project Design Expertise

3. Project Design Expertise



Agricultural project design is a well established field of study, and methyl bromide alternatives projects should benefit from this existing experience. An extensive literature exists and years of organizational expertise can be found regarding how to design projects to most effectively meet the needs of farmers. As described above, the first step in tapping this experience is to contact organizations with active agricultural programmes who are already working with farmers in the project country. Often they will have specific experience with effective approaches for working with the communities involved in the project, as well as the national institutions which will be appropriate partners.

Project officers in implementing agencies and national governments may also benefit from a review of agricultural project design literature from institutions specializing in this field. Some of these organizations may also be willing to provide training for Fund project coordinators at either the national or international level, and others may contract (either as individuals or organizations) to work directly on project design. Many institutes also have expertise in designing educational materials for agricultural extension.

A brief description of each organization is provided below, along with a listing of available publications and appropriate contact information. Contact information is also provided for leading practitioners.

3-1. Organizations/ Programmes

The organizations in this section have expertise in various methods of agricultural project design. Some have specific experience with projects involving extensive collaboration among several institutions, while others specialize in farmer training methods. Several offer field-focused training materials and other publications.

3-1-1. FAO's Intercountry IPM Programme

FAO's Intercountry IPM Programme has trained thousands of farmers in Asia through the participatory Farmers' Field School (FFS) approach. IPM FFS are forums for community action where farmers and trainers discuss observations. The results of the meetings are farm management decisions. IPM implementation offers a dynamic process that is practiced and controlled by farmers, rather than a passively adopted product or technology. The FFS approach has been adopted by national extension services in many countries in Asia (for a full description and regional contacts for the Intercountry Programme, see Section 2-2-4).

Publications: Contact the Intercountry IPM Programme for current publications.

Contact: **UN Food and Agriculture Organization**
Intercountry IPM Programme

THE FARMERS' FIELD SCHOOL APPROACH

A Farmers' Field School (FFS) is a group of about 25 farmers who agree to meet weekly for an entire cropping season. This is a commitment of 12 to 16 half to full day meetings throughout the year. The farmers break into five small field teams and spend an hour or two in the field making observations, counting population densities of various species, assessing crop physiological conditions and recording observations. Each team then reassembles outside the field and discusses, analyzes and interprets its data. The interpreted data are then summarized, often in a drawing of the agro-ecosystem, and presented to the whole field school.

The farmers' understanding is further increased through experimentation, such as studies of the effects of pesticides on natural enemies and the artificial simulation of insect damage to show that a plant can sustain some insect damage without a yield decrease.

A total of 670,000 farmers have been trained through the FFS system in Asia. In recent years, a number of countries have adopted the FFS model for their national extension programmes (see Section 2-2-4).

3-1-2. Institute of Development Studies (IDS)

IDS is a national centre for research and training on development issues. Academic research and training are combined with operational work advising governments, aid agencies and NGOs on all aspects of development. The Institute's research programmes have a strong inter-disciplinary flavor, and focus particularly on Africa and South and East Asia. The Participation Programme conducts research and training and maintains bibliographies of relevant literature and a directory of organizations and individuals with field experience applying participatory methods.

Publications: IDS Participatory Rural Appraisal Bibliography, Participation Programme newsletter, directory of organizations and individuals applying participatory methods. IDS also houses the British Library for Development Studies with an extensive collection of reports, books and articles on various development issues including agriculture; also provides Devline, an online information service of development organizations and publications.

Contact: **Institute of Development Studies**
John Gaventa, Coordinator
Participation Programme

**3-1-3. International
Institute of Rural
Reconstruction (IIRR)**

IIRR conducts action research and training in regenerative agriculture, agroforestry, soil and water conservation, and pesticide safety. IIRR's expert staff specializes in both the technical aspects of agricultural production and methods of participatory agricultural training. IIRR has five international centres (see Section 2.4.8 for full description and contacts).

Publications: Various information kits, technical and training manuals.

Contact: **IIRR World Centre/Asia**
Dr. Julian Gonsalves
Y.C. James Yen Centre
Silang, Cavite 4118, Philippines
Tel: 63-046-4142417
Fax: 63-046-4142420
Email: iirr@phil.gn.apc.org

**3-1-4. International
Institute for
Environment and
Development (IIED)**

IIED is a policy research institution with both academic and field-based expertise in a wide range of development issues, including agricultural development. The IIED Sustainable Agriculture Programme specializes in the development, documentation and analysis of participatory learning and action methodologies. Participatory approaches in agriculture include participatory rural appraisal, farmer participatory research, rapid rural appraisal and agroecosystem analysis. These approaches involve a wide range of disciplines, and many specific training methods have been developed in their implementation. IIED publishes a regular series of case studies and analyses of the implementation of participatory approaches, and provides training and support for practitioners.

Publications: *Participatory Learning and Action (PLA) Notes (series), Participatory Methodology Series Training Materials*, others.

Contact: **International Institute for Environment and Development**
Sustainable Agriculture Programme
John Thompson or Irene Guijt
3 Endsleigh Street
London WC1H 0DD, UK
Tel: 071-388-2117
Fax: 071-388-2826
Website: www.iied.org/

**3-1-5. Natural
Resources Institute
(NRI)**

NRI supports people's participation in natural resources development by providing services such as participatory needs assessment, participatory project planning, farmer participatory research methods, participatory development of crop protection and

Contact: **Natural Resources Institute**
Adrienne Martin
Social Sciences Department
Central Avenue, Chatham Maritime
Kent ME4 4TB, UK
Tel: 44-1634-883055
Fax: 44-1634-880066/880077
Email: A.M.Martin@greenwhich.ac.uk
Website: www.nri.org/

3-1-6. World Neighbors World Neighbors is a nonprofit organization that specializes in involving farmers and community members in the design, implementation and evaluation of research and training projects (see also Section 2-4-15). World Neighbors offers manuals, videos and other educational materials, as well as discussion papers on innovative project design methods based on field experiences with implementation of these methods.

Publications: *Neighbors* newsletter, *World Neighbors in Action*.

Contact: **World Neighbors**
Jethro Pettit, Director International Programmes
Jose Quinorez, Associate Director International Programmes
4127 NW 122 Street
Oklahoma City, OK 73120-8869, USA
Tel: 1-405-752-9700
Fax: 1-405-752-9393
Email: jethro@wn.org, jose@wn.org
Website: www.wn.org

3-1-7. World Resources Institute (WRI) WRI is an independent centre for policy research and technical assistance on global environmental and development issues. WRI's Sustainable Agriculture programme works with partner organizations around the world to address the concerns and constraints of developing country farmers. Part of this effort involves the promotion of participatory project design through workshops, training, and educational materials. WRI's "From the Ground Up" programme documents the effectiveness of participatory methodologies in natural resource management through a series of published case studies.

Publications: Various case studies and training manuals, including *From the Ground Up* (series), *Participatory Rural Appraisal Manual* (English and Spanish), *Planemiento Andino Comunitario*, and *Toward Common Ground: Gender and Natural Resource Management in Africa*.

Email: ann@wri.org
Website: www.wri.org/sustag/

3-2. Consultants/ Individual Experts

Individuals in local organizations and training and extension programmes around the world often have significant field expertise in effective project design methods. Although it is impossible to capture that expertise at the local level, the listing below represents many of the leading international experts in participatory design methodologies. While not a comprehensive list, these individuals are all practitioners, with field experience in project design. Many may be able to recommend local experts who may be more familiar with effective project design approaches in a particular country or region.

David Andow

Department of Entomology
University of Minnesota, 219 Hodson Hall
1980 Folwell Ave.
St. Paul, MN 55108, USA
Tel: 1-612-625-5323
Fax: 1-612-625-5229
dandow@maroon.tu.umn.edu

Jaqueline Ashby

Centro Internacional de Agricultura Tropical (CIAT)
A.A. 6713
Cali, Colombia
Tel: 57-2-445-0000
Fax: 57-2-445-0273

Charles Benbrook

Benbrook Consulting Services
5085 Upper Pack River Road
Sandpoint, ID 83864
Tel: 1-208-263-5236
Email: benbrook@hillnet.com

Maria Fernandez

Centro Internacional de Agricultura Tropical (CIAT)
A.A. 6713
Cali, Colombia
Tel: 57-2-445-0000
Fax: 57-2-445-0273

Julian Gonsalves

Irene Guijt

Sustainable Agriculture Programme
International Institute for Environment and Development
3 Endsleigh Street
London WC1H 0DD, UK
Tel: 071-388-2117
Fax: 071-388-2826

Michael Hansen

Consumer Policy Institute
101 Truman Ave.
Yonkers, NY 10703, USA
Tel: 1-914-378-2452
Fax: 1-914-378-2928
Email: hansmi@consumer.org

Peter Kenmore

Global IPM Facility
Food and Agriculture Organization of the United Nations
Viale delle Terme di Cracalla
00100 Rome, Italy
Tel: 39-6-5225-6269
Fax: 39-6-5225-6347 (attn: room B757)
Email: global-ipm@fao.org

Douglas L. Murray

Colorado State University
127 North Loomis
Fort Collins, CO 8052, USA
Tel: 1-970-491-6492
Fax: 1-970-491-2191
Email: dmurray@vines.colostate.edu

David Pimentel

Department of Entomology
Cornell University
Ithaca, NY 14853, USA
Fax: 607-255-0939

Peter Rosset

Institute for Food and Development Policy (Food First)
398 60th Street
Oakland, CA 94618, USA
Tel: 1-510-654-4400



John Thompson

Sustainable Agriculture Programme
International Institute for Environment and Development
3 Endsleigh Street
London WC1H 0DD, UK
Tel: 071-388-2117
Fax: 071-388-2826

Lori Ann Thrupp

Sustainable Agriculture Programme
World Resources Institute
200 Wellman Hall
UC Berkeley
Berkeley, CA 94720, USA
Tel: 1-510-643-0541
Fax: 1-510-642-7428
Email: ann@wri.org

John Vandermer (University of Michigan)

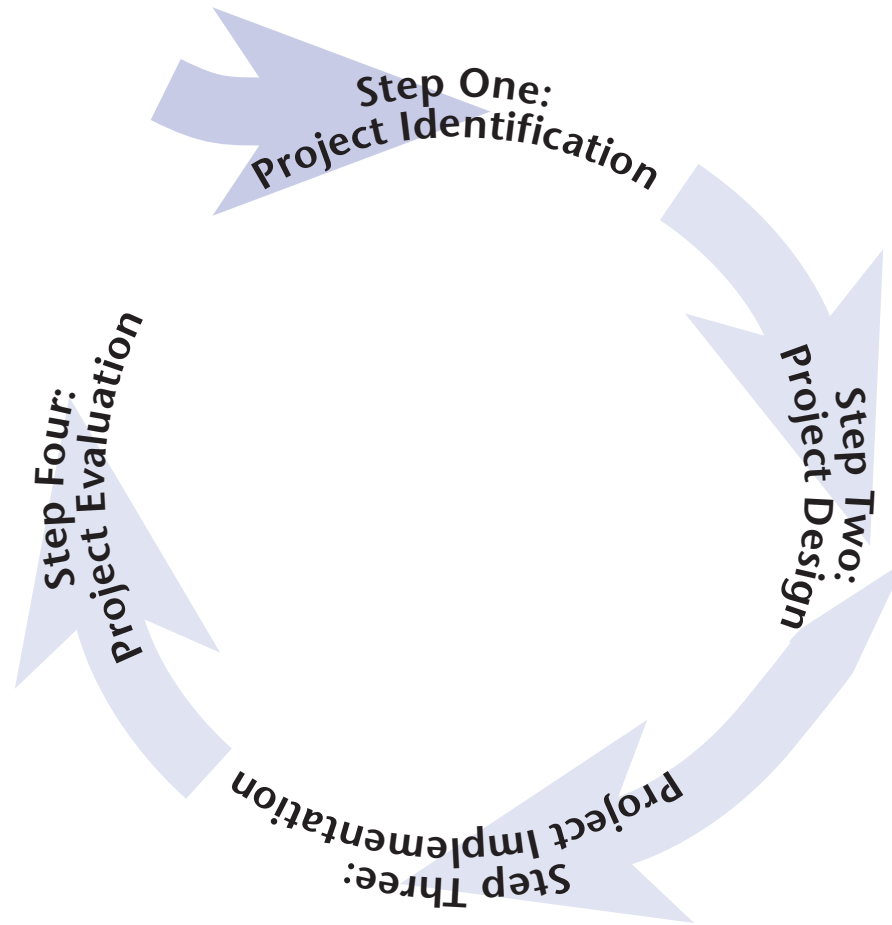
Department of Biology
University of Michigan
Ann Arbor, MI 48109, USA
Tel: 1-313-764-1446
Email: jvander@mich.edu

Jean Marc van der Weid

Projeto Tecnologias Alternativas (AS-PTA)
Rua da Candelária 9
60 Andar - Centro, 20091-020
Rio de Janeiro, Brazil
Tel: 55-21-253-8317
Fax: 55-21-233-8363
Email: aspta@ax.apc.org

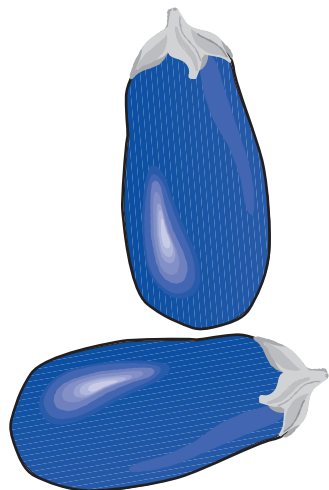
Andrey Yurjevic

Consocio Latinoamericano sobre Agroecologia y Desarrollo (CLADES)
Casilla 97 Correo 9
Santiago, Chile
Tel: 56-2-234-1141, 56-2-233-7092
Fax: 56-2-233-8918
Email: adm@clades.mic.cl



4. Agricultural Policy Resources

4. Agricultural Policy Resources



Multilateral Fund projects to promote methyl bromide alternatives are developed and implemented in the context of specific national policy environments. The long-term effectiveness of a project depends in part on the commitment of the government to an early phase out, the establishment of policy measures and incentives provided to end-users to make a rapid transition. Although each country faces a unique set of circumstances, the experiences of countries which have developed national phase-out plans and are moving ahead with the transition to alternatives can provide useful lessons.

Reviewing the brief descriptions included in Section 4-1 provides some insight into various possible policy approaches. A more comprehensive overview of policies affecting methyl bromide use is currently in development, and will be distributed by UNEP early in 1999. More in-depth information is currently available through the websites of many government agencies, and a review of educational materials and other publications developed to promote the transition to alternatives in various countries may also be useful. Finally, direct contact among government officials to share experiences with the phase-out process can be very helpful to countries currently developing phase-out strategies. Information regarding which approaches have proven most effective, which had limitations, and what could be improved upon can help government officials build on the experiences of others to develop effective national phase-out plans.

The resource groups listed in Section 4-2 can also provide valuable inputs as national phase-out plans are developed. These institutions offer experience in the development and analysis of agricultural policies worldwide, and may have existing relationships with government officials in countries now considering methyl bromide phase-out strategies. Analysts from these resource groups can contribute to the development of phase-out strategies in several ways, including participation in early discussions of specific projects and how they fit into the national policy context; participation in national or regional workshops on the methyl bromide phase out organized under the Fund; and individual consultation with either implementing agency representatives or government officials as policy planning moves forward.

The listings in this section include organizational and programme descriptions, a listing of relevant publications, and appropriate contact information.

4-1. National Methyl Bromide Phase-Out Programmes

Information is included in this section about national efforts to support the phase out of methyl bromide in both industrialized (Article 2) countries and developing (Article 5) countries. The Fund's resources are directed specifically toward assisting Article 5 countries to develop and implement alternatives projects and phase-out programmes.

bromide alternatives, and includes a national communication programme, national grower trial programme for alternatives, and a project investigating improvements in application of alternatives and barriers to their commercialization. Because growers have been directly involved in the development of the phase-out strategy, they have been eager to experiment with and adopt alternatives, and additional incentives have not been required. Fruit and vegetable growers in one region of Australia approved a voluntary levy on methyl bromide imports in 1995 to support the development of alternatives. The levy has since been expanded nationally, and the rate per kilogram voluntarily doubled. The tax raises more than US\$90,000 annually, which is matched by funds from the Federal Government's Horticultural Research and Development Corporation. Additional funding for special initiatives is provided by Environment Australia.

Publications: Several, including *National Methyl Bromide Update* (twice yearly newsletter for the Australian Horticultural Industry), *IPM Strategies: Reducing the Need for Methyl Bromide* (1997), *Methyl Bromide: Facing the Phase Out* (1997), *National Methyl Bromide Response Strategy, Part I, Horticultural Uses* (1998).

Contact: **Institute for Horticultural Development**
Ian Porter, Team Leader - IPM
Agriculture Victoria, Private Bag 15
SE Mail Centre, 3176
Tel: 61-3-9210-9217
Fax: 61-3-9800-3521
Email: Ian.J.Porter@nre.vic.gov.au

4-1-2. Canada Canada is phasing out use of methyl bromide by 2001 under its Ozone-Depleting Substances Regulations. Imports of methyl bromide will be reduced by 25% relative to 1991 use levels by the end of 1998. The government agency Environment Canada is controlling the use of methyl bromide through a permit system and a transferable allowance system. Users qualify for permits if they used methyl bromide in 1991, 1992 or 1993, and are issued an allowance for methyl bromide use each year. The allowances are transferable; all or part of unexpended allowances can be transferred to other companies or suppliers. Agriculture and Agri-Food Canada, another government agency, also supports the phase out of methyl bromide through research programmes, a "Matching Investment Initiative" which matches private investment in alternatives research with government dollars, and by coordinating a government-industry methyl bromide phase out working group with Environment Canada. The working group meets three times a year and includes five government Departments, methyl bromide users, and sellers and suppliers of methyl bromide alternatives.

Publications: Various technical reports on alternatives, including: *Corrosive Effects of Phosphine, Carbon Dioxide, Heat, and Humidity on Electronic Equipment* (1998), *Improving Food and*

930 Carling Ave., Room 367
Ottawa, Canada K1A 0C5
Tel: 1-613-759-7300
Fax: 1-613-759-7238
Email: jonessh@em.agr.ca

Environment Canada

Josée Portugais
Acting Head
Ozone Protection and Evaluation Programs Section
Commercial Chemicals Branch, Environment Canada
351 St. Joseph Blvd., 14th floor
Hull, Quebec, Canada K1A 0H3
Tel: 1-819-997-7935
Fax: 1-819-953-4936
Email: josee.portugais@ec.gc.ca

4-1-3. Colombia

Cut flower cultivators began using methyl bromide in the early 1990s, and after several years discontinued its use voluntarily due to perceived health risks and the chemical's impact on the soil. Isolated use continued until 1996, when the Ministry of Health prohibited the importation, production or use of methyl bromide, with the exception of quarantine uses in sealed containers with a vapor recovery system (Resolution 2152 and Resolution 00138). Colombian cut flower producers have developed, adopted, and documented a variety of systems-based pest control approaches. Unauthorized use of methyl bromide was detected among banana growers in 1997, and the Colombian government has developed an alternatives demonstration project with UNIDO and requested assistance from the Multilateral Fund to meet the pest control needs of these growers. The use restrictions continue and no methyl bromide was imported to Colombia in 1997.

Publications: Contact the Ozone Technical Unit for current publications.

Contact: **Ministry of Environment**
Marco Pinzon, National Coordinator
Ozone Technical Unit
Calle 37 # 8-40 Ed. Anexo Piso-B
Santafe de Bogota D.C., Colombia
Apartado Aereo No. 241752
Tel: 57-1-338-3900, Ext. 376
Tel/fax: 57-1-3406215
Email: utrozono@columsat.net.co, marcopinzon@hotmail.com,
mpinzon@minambiente.gov.co

ASOCOLFLORES (Flower Growers' Association)

Carrera 19 No. 85-65 Piso 2
Santafe de Bogota, Colombia
Tel: 57-1-621-8108 or 610-4368
Fax: 57-1-617-0730
Email: hortitec@openway.com.co

RAPALMIRA (NGO)

Elsa Nivia, Executive Director
Calle 6A No. 61-109, Apto. 103E
Apartado aereo 23922
Cali, Colombia
Tel: 57-2-552-5889, 339-4671
Fax: 57-2-275-5252
Email: enivia@reymoreno.net.co

4-1-4. Italy

National methyl bromide restrictions were established by the Italian Ministry of Health in 1994. Under these controls, methyl bromide can only be used every other year in a particular field, treated soil must remain covered for at least seven days, and the maximum allowed application rate is reduced. The Ministry of Environment collaborates with several institutions to research methyl bromide alternatives. Italy also has several regional programmes to encourage the transition to methyl bromide alternatives including subsidies for steam equipment and fuel, purchase of new agricultural equipment, plastic for solarization, and machinery to lay plastic for open-field solarization.

Publications: Contact the Ministry of Environment for current publications.

Contact:

Ministry of Environment

Andrea Camponagara
Directorate General for Air and Noise Pollution and Industrial Risk
Via della Ferratella in Laterano, 33
00154 - Rome, Italy
Tel: 0039-6-70362409
Fax: 0039-6-77257016
Email: siar@pelagus.it, plagrotta@pelagus.it

4-1-5. United States

Two government agencies, the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA), jointly coordinate the U.S. methyl bromide phase-out programme under the federal Clean Air Act. The Clean Air Act was amended in 1998 to match the Montreal Protocol phase-out schedule. EPA's methyl bromide phase-out programme has three components: a small grants programme to support on-farm trials of methyl bromide alternatives by nonprofit growers' groups; a series of case study publications distributed to methyl bromide users; and an annual methyl

accessed either through the USDA website, the Current Research Information System website, or the regional web servers of the National IPM Network.

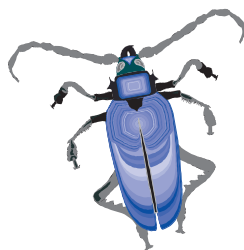
Publications: *Alternatives to Methyl Bromide - Ten Case Studies (Vol 1-1995, Vol 2-1996, Vol 3-1997), USDA Methyl Bromide Alternatives* (quarterly newsletter), Proceedings from Annual International Research Conference on Methyl Bromide Alternatives.

Contact: **U.S. Environmental Protection Agency**
Bill Thomas, Methyl Bromide Programme Director
401 M Street, SW - 6205J
Washington, DC 20460, USA
Tel: 1-202-564-9179
Fax: 1-202-565-2156
Email: thomas.bill@epa.gov
Website: www.epa.gov/spdpublic/mbr/mbrqa.html

U.S. Department of Agriculture
Ken Vick, USDA Methyl Bromide Research Coordinator
Agricultural Research Service, National Programme Staff
Building 005, Room 237
BARC-West, 10300 Baltimore Ave.
Beltsville, MD 20705, USA
Tel: 1-301-504-5321
Fax: 1-301-504-5987
Email: kwv@ars.usda.gov
Website: www.ars.usda.gov/is/np/mba/, www.ars.usda.gov/is/mb/mebrweb.htm

U.S. Department of Agriculture
Theodore Bauer, CRIS Director
Cooperative State Research, Education and Extension Service
Science and Education Resources Development
Current Research Information System
National Agricultural Library Building, 5th Floor
10301 Baltimore Avenue
Beltsville, MD 20705, USA
Tel: 1-301-504-6846
Fax: 1-301-504-6272
Email: crisadm@cris.nal.usda.gov
Website: cristel.nal.usda.gov:8080/

National IPM Network
Website: www.reeusda.gov/nipmn/



conferences. The Agriculture and the Rural Environment programme is one of six areas of expertise. CES works closely with a wide range of public and private development agencies and organizations. The programme offers policy research analysis as well as training in a variety of participatory methodologies.

Publications: Contact CES for current publications.

Contact: **Centre for Environment and Society**
Jules Pretty, Director
John Tabor Labs
University of Essex
Wivenhoe Park
Colchester CO4 3SQ, UK
Tel: 44-0-1206-873323
Fax: 44-0-1206-873416
Email: jpretty@essex.ac.uk
Website: www.essex.ac.uk/bcs/ces/

**4-2-2. Institute for
Agriculture and Trade
Policy**

IATP is a U.S.-based research and education organization, established in 1986 to promote sound agriculture and trade policy. The Institute analyzes the economic and environmental implications of agricultural policies, and prepares educational and outreach materials based on their findings. IATP also provides training in policy analysis, consulting and technical assistance through seminars, staff and leadership training, and on-site consultations.

Publications: Various reports, policy briefs and educational materials.

Contact: **Institute for Agriculture and Trade Policy**
2105 1st Ave., South
Minneapolis, MN 55404, USA
Tel: 1-612-870-0453
Fax: 1-612-870-4846
Email: iatp-info@iatp.org
Website: www.iatp.org

**4-2-3. Institute for
Food and
Development Policy**

The Institute for Food and Development Policy (Food First) carries out policy research, analysis, advocacy and public education on agricultural policy for the Third World and for the United States. The Institute focuses on identifying common problems related to poverty, hunger, equity, land tenure, sustainability and the environment across many countries. Specialists analyze the root causes of these issues, while identifying, documenting, highlighting and publicizing promising alternative solutions. Current programme areas include problems with pesticides and the "green revolution" indus-

Contact: **Institute for Food and Development Policy (Food First)**
Peter Rosset, Executive Director
398 60th Street
Oakland, CA 94618, USA
Tel: 1-510-654-4400
Fax: 1-510-654-4551
Email: foodfirst@foodfirst.org
Website: www.foodfirst.org

4-2-4. International Food Policy Research Institute (IFPRI) IFPRI assists developing country governments to form effective agriculture and food policies, including those that encourage optimum use of new agricultural technologies. The Institute seeks to strengthen links between agricultural policy and other sectors of the economy, such as manufacturing and service industries. International professionals conduct workshops and training and publish analyses of agriculture and food policy issues. IFPRI operates as part of the CGIAR network (see Section 2-3-5).

Publications: Research reports and abstracts, lecture series, policy briefs, *IFPRI Report* newsletter, 2020 Vision resource materials.

Contact: **International Food Policy Research Institute**
Director General
2033 K Street, NW
Washington, DC 20006-1002, USA
Tel: 1-202-862-5600
Fax: 1-202-467-4439
Email: ifpri@cgiar.org
Website: www.cgiar.org/ifpri/

4-2-5. International Service for National Agricultural Research (ISNAR) ISNAR assists developing countries to strengthen their national agricultural research systems and organizations. It offers support to national institutions in the development and analysis of agricultural research policies, sustainable research institutions and research management strategies. ISNAR operates as part of the CGIAR network (see Section 2-3-5).

Publications: Contact ISNAR for current publications.

Contact: **International Service for National Agricultural Research (ISNAR)**
P.O. Box 93375
2509 AJ The Hague
The Netherlands
Tel: 31-70-349-6100
Fax: 31-70-381-9677

Publications: Various policy briefs, including *Links Between Environment and Agriculture in Africa* (1995) and *Participation and Development Assistance in Africa* (1996).

Contact: **World Resources Institute**
Chris Elias, PCG Secretariat
1709 New York Ave., NW
Washington, DC 20006, USA
Tel: 1-202-638-6300
Fax: 1-202-638-0036
Email: pcg@wri.org
Website: www.wri.org/pcg/

4-2-7. Pesticide Policy Project

The Pesticide Policy Project, based at the University of Hannover and supported by GTZ, conducts country case studies of agricultural policies and their impact on pesticide use. The objective of the project is to augment the use of economic instruments in pesticide policy, leading to increased agricultural productivity and ecologically benign pest management. The project publishes a series of publications reporting on the findings of case studies and other topics.

Publications: *Guidelines for Pesticide Policy Studies: A Framework for Analyzing Economic and Political Factors of Pesticide Use in Developing Countries; Pesticide Policy Project Publication Series.*

Contact: **Institut für Gartenbauökonomie**
H. Waibel
Universität Hannover
Herrenhauser Str.2
30419 Hannover
Federal Republic of Germany
Tel: 0-511-762-2666
Fax: 0-511-762-2667
Email: waibel@ifgb.uni-hannover.de

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)
T. Engelhardt
Abt. 423-4
Postfach 5180
65726 Eschborn, Federal Republic of Germany
Tel: 0-6196-791430
Fax: 0-6196-791115

5. Additional Resources

5. Additional Resources



Until 1997, Multilateral Fund projects focused on replacement of ozone depleting chemicals in industrial processes. Methyl bromide alternatives demonstrations are the first projects under the Fund in the agricultural arena. Utilizing existing resources in this field will be an ongoing process which will become more streamlined over time, particularly if implementing agencies pool information and experiences as projects move ahead. Familiarity with issues of concern to the agricultural community in developing countries will also strengthen the implementing agencies' ability to work effectively in this sector. Participation in international meetings and conferences of agricultural interests offers an opportunity to track these issues, as well as identify new project partners and disseminate information about the international methyl bromide phase-out schedule and alternatives.

The UNEP Methyl Bromide Technical Options Committee (MBTOC) provides an invaluable service to the Fund by cataloguing progress in the development and adoption of methyl bromide alternatives worldwide. Using the MBTOC reports and other resources listed below will help promote the rapid and widespread adoption of alternatives. The resources listed below will help implementing agencies and government officials monitor these developments and track the progress of scientists and farmers worldwide who are working to replace methyl bromide.

5-1. Annual Regional Meetings of Agricultural Interests

Annual meetings of agricultural interests provide a venue for identifying project partners for methyl bromide alternatives work, particularly in the academic arena. The meetings listed here include representatives from various sectors, and some offer opportunities for formal presentations as well as informal networking.

5-1-1. Consultative Group for International Agricultural Research (CGIAR)

The CGIAR holds two meetings each year to discuss the research programmes of the 16 CGIAR international agricultural research centres, collaborative work, and other related issues. The meetings are attended by the directors and other representatives from each of the international centres, non-CGIAR research centres, regional representatives from the national agricultural research systems, donors, and - in recent years - NGO representatives. The main annual meeting, International Centres Week, is held in late October in Washington, DC. The Midterm Meeting is held in the spring, usually in one of the developing countries hosting an international centre.

Contact:

CGIAR Secretariat
701 18th Street, NW
Room J-4073
Washington, DC 20433, USA
Tel: 1-202-473-8951
Fax: 1-202-473-8110

agriculture techniques, marketing challenges and opportunities, and policy issues. Stewards of Sustainable Agriculture awards are presented annually.

Contact: **Committee for Sustainable Agriculture**
406 Main Street, Suite 313
Watsonville, CA 95076, USA
Tel: 1-831-763-2111
Fax: 1-831-763-2112
Website: www.csa-efc.org

**5-1-3. International
IFOAM Scientific
Conference**

The International Federation of Organic Agricultural Movements holds regular conferences on issues relevant to its membership. The 1998 conference, "Credibility in Organic Agriculture for the 21st Century," was held in early November in Buenos Aires, Argentina. Conferences are attended by many of IFOAM's 700 member organizations (from more than 100 countries), as well as other interested nongovernmental organizations, agricultural experts, and government representatives.

Contact: **IFOAM Head Office**
c/o Ökozentrum Imsbach
D-66636 Tholey-Theley
Federal Republic of Germany
Tel: 49-6853-5190
Fax: 49-6853-30110
Email: IFOAM@t-online.de
Website: ecoweb.dk/ifoam

**5-1-4. International
Research Conference
on Methyl Bromide
Alternatives and
Emissions Reductions**

This annual conference is co-sponsored by the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, and the Crop Protection Coalition. It is attended by many of the U.S. university researchers working on methyl bromide alternatives, some international researchers, some NGOs, and some representatives from growers' groups. Proceedings are published with abstracts from presentations and posters.

Contact: **Methyl Bromide Alternatives Outreach**
144 W. Peace River Drive
Fresno, CA 93711-6953, USA
Tel: 1-209-447-2127
Fax: 1-209-436-0692
Email: gobenauf@concentric.net
Website: www.gov/ozone/mbr/altmet98.html

5-2. Examples of Regional and International Conferences

Regional and international conferences provide an opportunity to identify potential partners and share information about the methyl bromide phase out and alternatives. The meetings listed below are a small sample of the relevant conferences. Additional information for these listings and current listings of upcoming agricultural conferences can be found at the following websites:

- ☛ IPMnet News Calendar: www.ipmnet.org/IPMnet_NEWS/calendar.html
- ☛ CABInternational Calendar: pest.cabweb.org:81/member/cptcal.htm
- ☛ New Agriculturalist Online Magazine conference pages:
www.new-agri.co.uk/inconf.html

5-2-1. Sample 1999 Conferences

Workshop of the Sears/IOBC Working Group on Greenhouse/Protected Crops IPM, Natural Enemy to Biological Control Agent: Evaluating the Process

25-28 January, Sydney, Australia

The event is primarily for researchers and IPM practitioners concerned with protected crops.

S. Goodwin, Horticultural Research & Advisory Station, NSW Agriculture

PO Box 581, Gosford NSW 2250, Australia

Tel: 61-2-434-81929

Fax: 61-2-434-81910

Email: stephen.goodwin@agric.nsw.gov.au

Weed Science Society of America Annual Meeting

8-10 February, San Diego, CA, USA

WSSA, J. Breithaupt

PO Box 1897

Lawrence, KS 66044, USA

Tel: 1-913-843-1235

Fax: 1-913-843-1274

Email: jbreith@allenpress.com

2nd Asia-Pacific Crop Protection Conference

18-19 February, Juhu, Mumbai, India

P.P. Dave, PMFAI

B-4, Anand Co-op Housing Society

Sitladevi Temple Road, Mahim (W.)

Mumbai - 400016, India

Tel: 91-22-437-5279

Fax: 91-22-437-6856

International Conference, *Emerging Technologies in IPM: Concepts, Research, and Implementation*

8-10 March, Raleigh, NC, USA

Aim: to provide a forum for examining emerging technologies and discussing constraints to their development, implementation, and integration into IPM programmes.

T. Sutton, Dept. of Plant Pathology

Box 7616, NCSU

Raleigh, NC 27695, USA

Tel: 1-919-515-6823

Email: turner_sutton@ncsu.edu

Website: www.ncsu.edu/ipmconference

Symposium on Biological Control in the Tropics

18-19 March, Serdang, Selangor, Malaysia

Organized by the National Council for Biological Control Malaysia, in collaboration with CAB International.

Symposium Organizing Committee

MARDI, PO Box 12301

50774 Kuala Lumpur, Malaysia

Tel: 60-03-943-7432

Fax: 60-03-948-7639

Email: anwar@mardi.my

Website: www.mardi.my

28th International Course on Integrated Pest Management

21 March-3 July, Wageningen, The Netherlands

International Agricultural Centre

PO Box 88, 6700AB

Wageningen, The Netherlands

Tel: 31-317-490353

Fax: 31-317-418552

Website: www.iac-agro.nl

World Neem Conference (and Tradeshow)

19-21 May, Vancouver, Canada

M.B. Isman, Dept. of Plant Science

Univ. of British Columbia

Vancouver V6T 1Z4, Canada

Fax: 1-604-822-8640

Email: isman@unixg.ubc.ca

11th European Weed Research Society Symposium

10th Biological Control of Weeds International Symposium

5-9 July, Bozeman, Mt, USA

N.R. Spencer, USDA/ARS

1500 North Central

Sidney, MT 59270, USA

Tel: 1-406-482-9407

Fax: 1-406-482-5038

Email: nspencer@sidney.ars.usda.gov

Website: www.symposium.ars.usda.gov/

14th International Congress on Plant Protection

Theme: *Plant Protection Towards the Third Millennium - Where Chemistry Meets Ecology.*

25-30 July, Jerusalem, Israel

S. Barnett, Congress Coordinator

PO Box 50006

Tel Aviv 61500, Israel

Tel: 972-3-514-0014

Fax: 972-3-514-0077

Email: IPPC@kenes.com

Joint Meeting of the American and Canadian Phytopathological Societies

6-12 August, Montreal, Canada

APS

3340 Pilot Knob Road

St. Paul, MN 55121-2097, USA.

Tel: 1-612-454-7250

Fax: 1-612-454-0766

Email: aps@scisoc.org

12th Australian Weeds Conference

12-16 September, Hobart, Tasmania, Australia

Conference Design

PO Box 342

Sandy Bay, Tasmania

7006, AUSTRALIA

Fax: 61-03-6224-3774

Email: mail@cdesign.com.au

Brighton Crop Protection Conference

15-18 November, Brighton, UK

The Event Organization

8 Cotswold Mews

17th Asian-Pacific Weed Science Society Conference

November, Bangkok, Thailand

R. Suwanketnkorn

Dept. of Agronomy, Kasetsart Univ.

Bangkok 10903, THAILAND

5-3. Online Resources

In addition to the websites listed with specific organizations in Sections 2 through 4 above, the following agricultural websites may provide useful information and ideas to those working to promote methyl bromide alternatives. This is not a comprehensive list. Many of the websites included here have been selected because they provide extensive links to additional related sites.

5-3-1. Methyl Bromide Specific Websites

Environment Canada (www.ec.gc.ca/ozone/mbrfact.htm)

Outlines Canada's compliance guidelines for methyl bromide users, and strategies for reaching 2001 phase out.

Methyl Bromide Technical Options Committee

(www.teap.org/html/methyl_bromide.html)

Recent MBTOC reports and information on MBTOC members.

Southern European Alternatives Workshop

(www.ccma.csic.es/agroecol/mebr/mebr1.htm)

Proceedings from a 1997 workshop on methyl bromide alternatives in Southern European countries.

United Kingdom (www.csl.gov.uk)

Central Science Laboratory provided information on methyl bromide regulations in the UK and other industrialized countries, and includes a discussion of research priorities for methyl bromide alternatives.

USDA Research Home Page (www.ars.usda.gov/is/mb/mebrweb.htm)

Overview of USDA research on alternatives to methyl bromide, with specific research results and links to university sites.

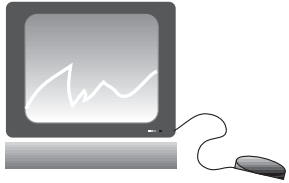
USDA Newsletter Homepage (www.ars.usda.gov/is/np/mba/mebrph.htm)

Online copies of recent issues of the Methyl Bromide Alternatives quarterly newsletter.

U.S. Environmental Protection Agency Methyl Bromide Home Page

(www.epa.gov/spdpublic/mbr/mbrqa.html)

Provides an overview of U.S. policy on the methyl bromide phase out, discussion of alternatives, "myths and facts" about the phase out, and numerous links to other methyl bromide related online resources, including civil society websites in the United States.



Maintained by USAID's Africa Bureau, this site provides brief descriptions of and links to dozens of sites, some specifically related to agriculture in Africa, the majority more general. Also provides information on some agricultural listservs (see below).

AgriSurf (www.agrisurf.com)

International site providing links to hundreds of other websites in various agricultural categories, including by crop, extension issues, markets and marketing, organic farming and organizations.

Alternative Farming Systems Information Centre (AFSIC)

(www.nal.usda.gov/afsic/)

One of the information centres of the USDA's National Agriculture Library, this site links to alternative agriculture-related sites and documents.

Consortium for International Earth Science Information Network (CIESIN)

(www.ciesin.org/)

CIESIN is a nonprofit NGO established to provide scientific information for scientists, decision makers and the public. The CIESIN website provides access to numerous databases, including agricultural databases, and links to many related sites.

Institute of Organic Agriculture (www.uni-bonn.de/iol/english.htm)

Information on the Institute's research including data from their experimental farm. Also includes publications and links to related websites. Available in English, German, French and Spanish.

National Agriculture Library (NAL) (www.nal.usda.gov/)

Provides access to several U.S. information centres, NAL publications and resources, additional agricultural publications and data, and other agriculture related gophers and networks.

National IPM Network (U.S.) (www.reeusda.gov/nipmn/)

A system of regional web servers for each agricultural region in the U.S. providing the latest research and field applications of IPM strategies for a wide range of crops. Also provides a directory of IPM specialists and information on conferences and workshops coordinated by the IPM Network.

Pest Management at the Crossroads (www.pmac.net/)

Discussion of pest management policies (mostly U.S. focused), with specific focus on IPM. Ideas on measuring progress in IPM adoption and specific field-based examples of IPM practices are discussed. Based on recent publication *Pest Management at the Crossroads* by Charles Benbrook.

Society for Research and Initiatives for Sustainable Technologies and Institutions

(**SRISTI**) (csf.colorado.edu/sristi/index.html)

Sustainable Agriculture Directory of Experts and Expertise

(ftp://amani.ces.ncsu.edu/pub/docs/ag/sust_ag_dir)

Provides more than 700 data-records for both individuals and organizations involved in sustainable agriculture who are willing to share their expertise. Each data-record gives a variety of information, including contact data and area of expertise. Maintained by the Centre for Appropriate Technology Transfer for Rural Areas and the Sustainable Agriculture Network.

World Wide Web Library: Agriculture (ipm-www.ncsu.edu/cernag.cern.html)

Offers extensive links to agriculture related sites around the world; among the sub-pages are pest management, agricultural market news and horticultural information.

5-3-3. Agricultural Listservs

Electronic mailing lists, or listservs, distribute messages to everyone who has subscribed to the list. Some listservs are “read only,” meaning that they distribute news and publications but do not permit subscribers to communicate directly with one another. The more common form of listserv is the discussion group, where subscribers are able to exchange information and ideas on a particular topic. The discussion group format allows each subscriber to send a message to a central server which distributes it to all members of the group.

Hundreds of agricultural listservs exist, each focusing on a particular topic. Most are free and open to the public. The following two websites provide extensive listings of agricultural listservs and information on how to subscribe:

www.info.usaid.gov/regions/afr/abic/ag/sites.htm

www.agpr.com/consulting/

5-4. NGO Directories

Many of the following publications are updated regularly with current information on their member organizations, including area of expertise, interests, and contact information. This list is not comprehensive, but includes most major NGO directories with a complete or partial emphasis on agricultural organizations.

Browne, Harry (ed.) *Cross Border Links, A Directory of Organizations in Canada, Mexico, and the United States* (Interhemispheric Resource Centre, Silver City, NM, USA) 1996.

Community Alliance With Family Farmers (ed.) *National Organic Directory* (U.S.) (Community Alliance With Family Farmers, Davis, CA, USA) 1997.

Environment Liaison Centre International (ELCI), *ELCI Members' Directory* (ELCI, Nairobi, Kenya) 1997.

Geoghagan, Tracy and Kristen Allen, *InterAction Member Profiles*, 1997-1998

International Federation of Organic Agriculture Movements (IFOAM), *Organic Agriculture Worldwide: Directory of the member organizations and associates of IFOAM, 1996/97* (IFOAM, Germany) 1996.

Nimmo, Tomás L. (ed.) *Organic Resource Guide* (Canadian Organic Growers Inc., Ottawa, Canada) 1995.

OECD (ed.) *A Directory of Non-Governmental Environment and Development Organizations in OECD Member Countries* (OECD, Paris, France) 1991.

Sahabat Alam Malaysia (ed.) *Directory of Environmental NGOs in the Asia Pacific Region* (Sahabat Alam Malaysia, Penang, Malaysia) 1987.

Satis. *Satis Catalog '90, A world of information for sustainable world development* (Satis, Utrecht, Netherlands) 1990.

Sustainable Agriculture Network (SAN) (ed.) *Sustainable Agriculture Directory of Expertise* (Sustainable Action Network, Burlington, VT, USA) 1996.

Trzyna, Thaddeus C., et. al., (ed.) *World Directory of Environmental Organizations* (Earthscan Publications Ltd., London, UK) 1996.

5-5. Selected Bibliographies

The bibliographies below provide a sample of the extensive literature now available on methyl bromide alternatives, agricultural project design methods, and effective approaches to pesticide use reduction. Readers can access the following databases and search engines for more comprehensive listings.

- ☛ The Agricola Indexing Catalog (www.nal.usda.gov/ag98/). Option to search the journal or book database by keyword.
- ☛ Institute of Development Studies online search engine (www.ids.ac.uk/ids/).
- ☛ Iowa State Catalog (www.lib.iastate.edu/cgi-bin/zform.CGI?ICAT).
- ☛ University of California, Berkeley (www.lib.berkeley.edu). Under Library catalogs, choose UC system wide Melvyl (web version).
- ☛ U.S. National Agricultural Library (www.nal.usda.gov/afsic).

5-5-1. Methyl Bromide Alternatives

Allen, W., J.A. Baumgartner, K. Kreider, and S. Pollack. *Out of the Frying Pan, Avoiding the Fire: Ending the Use of Methyl Bromide* (Ozone Action, Washington, DC, USA) 1995.

Banks, H.J. (Editor) *Agricultural Production without Methyl Bromide - Four Case Studies* (CSIRO, Australia) 1995.

Bell, Albert et. al. *Methyl Bromide Substitution in Agriculture, Objectives and Activities of the Federal Republic of Germany Concerning Support to Article 5 Countries of the Montreal Protocol* Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) 1998.

Braun, Adolf L. and David M. Supkoff. *Options of Methyl Bromide for the Control of Soil-Borne Diseases and Pests in California with Reference to the Netherlands* (CalEPA-Department of Pesticide Regulation, San Francisco, California, USA) July 1994.

Colombo, A. *Control of Nematodes (Meloidogyne spp.) with Alternative Practices in Cold Greenhouse*. (Acta Horticulturae) 1994.

Gillfillan, Corinna. *Reaping Havoc: The True Cost of Using Methyl Bromide on Florida's Tomatoes* (Friends of the Earth, Washington, DC, USA) Aug. 1998.

Hartz, T. K. *Solarization is an Effective Soil Disinfestation Technique for Strawberry Production* HartScience, v. 228 Feb. 1993.

Methyl Bromide Technical Options Committee (MBTOC). *Report of the Methyl Bromide Technical Options Committee, 1995 Assessment* (United Nations Environment Programme) 1994.

Miller, Melanie. *The Technical and Economic Feasibility of Replacing Methyl Bromide in Developing Countries, Case Studies in Zimbabwe, Thailand, and Chile* (Friends of the Earth, Washington, DC, USA) Aug. 1996.

Muller, J.J.V. (Editor) *1st Brazilian Meeting on Alternatives to Methyl Bromide in Agriculture: Proceedings* (Florianopolis, Santa Catarina, Brazil) 1997.

National Centre for Agricultural Research and Technology Transfer (NCARTT). *Jordanian Experiences with Methyl Bromide Alternatives in Agriculture, Promotion of Sustainable Plant Protection Systems* (NCARTT) 1998.

Nordic Council of Ministers. *Alternatives to Methyl Bromide* (Oslo, Norway) 1995.

Porter, I., Merriman, P. and Stirling, G. *Alternatives to Methyl Bromide Fumigation for Soil Fumigation in Sub-tropical and Temperate Horticultural Crops. Report on Workshop at Institute for Horticultural Development* (Agriculture Victoria, Australia) 1994.

Quarles, William and Sheila Daar. *IPM Alternatives to Methyl Bromide, A compilation of articles from the IPM Practitioner* (Bio-Integral Resource Centre, California, USA) 1996.

U.S. Department of Agriculture (USDA). *Alternatives to Methyl Bromide: Assessment of Research Needs and Priorities, Proceeding from the USDA Workshop on Alternatives to Methyl Bromide* (USDA, Washington, DC, USA) 1993.

U.S. Department of Agriculture (USDA). *Methyl Bromide Alternatives* (Quarterly Bulletin, USDA, Washington, DC, USA).

U.S. Environmental Protection Agency (EPA). *Alternatives to Methyl Bromide, Vol. 1 - Ten Case Studies, Soil, Commodity, and Structural Use* (EPA, Washington, DC, USA) 1995.

U.S. Environmental Protection Agency (EPA). *Alternatives to Methyl Bromide, Vol. 2, Ten Case Studies, Soil, Commodity, and Structural Use.* (EPA, Washington, DC, USA) 1996.

U.S. Environmental Protection Agency (EPA). *Alternatives to Methyl Bromide, Vol. 3, Ten Case Studies, Soil, Commodity, and Structural Use.* (EPA, Washington, DC, USA) 1997.

Various abstracts in: *Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions/ International Research Conference on Methyl Bromide Alternatives and Emissions Reductions* (USDA, USEPA, CPC, Orlando, FL and San Diego, CA, USA) 1993-1997.

Wiseman, B., Shanks, A., Porter, I. and McGregor, G. *Soil Disinfestation for Temperate Strawberry Production: Proceedings 9th National Berryfruit Conference* (Ringwood, Victoria, Australia) 1997.

5-5-2. Project Design Methods

Bebbington, Anthony et. al. *NGOs and the State in Latin America, Rethinking Roles in Sustainable Agricultural Development* (Routledge, New York, NY) 1993.

Centre for Research and Information on Low External Input and Sustainable Agriculture. *Proceedings of the ILEIA Workshop on Operational Approaches for Participatory Technology Development in Sustainable Agriculture* (ILEIA, Leusden, Netherlands) 1989.

Chambers, Robert; Pacy, Arnold; Thrupp Lori Ann (eds.) *Farmer First: Farmer Innovation and Agricultural Research* (Intermediate Technology Publications. London, UK) 1989.

Chambers, Robert. *Whose Reality Counts? Putting the First Last* (Intermediate Technology Publications, London, UK) 1997.

Chitere, O. and R. Mutiso. *Working with Rural Communities: A Participatory Research Perspective in Kenya* (Nairobi University Press, Nairobi, Kenya) 1991.

Farrington, John et. al., *Non-Governmental Organizations and the State in Asia, Rethinking Roles in Sustainable Agricultural Development* (Routledge, New York, NY, USA) 1993.

Holt-Gimenez, Eric. *The Campesino a Campesino Movement: Farmer-Led, Sustainable Agriculture in Central America and Mexico* (Institute for Food and Development Policy, Oakland, CA, USA) 1996.

McTaggart, R. *Participatory Action Research: International Contexts and Consequences* (State University of New York Press, Albany, NY, USA) 1997.

Osteria, T. S. and J. Y. Okamura. *Participatory Approaches to Development: Experiences in the Philippines* (Research Centre, De La Salle University, Manila, the Philippines) 1986.

Rahman, M. A. *People's Self-development: Perspectives of Participatory Action Research: A Journey Through Experience* (Zed Books, University Press, Dhaka) 1993.

Scarborough, Vanessa et. al. (ed.) *Farmer-Led Extension, Concepts and Practices*. (Overseas Development Institute, London, UK) 1997.

Schafer, Kristin S. *Collaborative Projects on Integrated Pest Management: A Global Directory of Partnerships for Sustainable Agriculture* (World Resources Institute, Washington, DC, USA) 1997.

Scoones, Ian; Thompson John (eds.) *Beyond Farmer First: Rural People's Knowledge, Agricultural Research and Extension Practice* (Intermediate Technology Publications, London, UK) 1994.

Selener, Daniel et. al., *Documenting, Evaluating and Learning from our Development Projects, A Participatory Systematization Workbook* (International Institute of Rural Reconstruction, Quito, Ecuador) 1996.

Starkey, Paul. *Networking for Sustainable Agriculture: Lessons from Animal Traction Development* (Sustainable Agriculture Programme of the International Institute for Environment and Development, UK) 1996.

Thrupp, Lori Ann (ed.). *New Partnerships for Sustainable Agriculture*, (World Resources Institute, Washington, DC, USA) 1996.

Warren, Michael, et. al., *Indigenous Knowledge for Sustainable Agriculture and Rural Development* (IIED Sustainable Agriculture Programme, UK).

Wellard, Kate and James G. Copestake (ed.). *Non-Governmental Organizations and the State in Africa: Rethinking Roles in Sustainable Agricultural Development* (Routledge



Jaenicke, Edward C. *The Myths and Realities of Pesticide Reduction: A Reader's Guide to Understanding the Full Economic Impacts* (Henry A. Wallace Institute for Alternative Agriculture, Greenbelt, MD, USA) 1997.

Jungbluth, Frauke. *Crop Protection Policy in Thailand: Economic and Political Factors Influencing Pesticide Use* (Pesticide Policy Project, University of Hannover. Hannover, Germany) 1997.

Michalek, Jerzy, et. al. (ed.) *The Consequences of a Drastic Reduction in Pesticide Use in the EU: Revised papers of a workshop held in Tannenfelde* (Schleswig-Holstein) November 13-14, 1993.

National Agricultural Pesticide Impact Assessment Programme. *Pesticide Reduction: The Dutch Experiment* (National Agricultural Pesticide Impact Assessment Programme, USA) 1995.

Pesticide Action Network North America Regional Conference. *Pesticide Risk Reduction: The Swedish Example* (Pesticide Action Network North America, San Francisco, CA, USA) 1992.

Pimentel, David (ed.). *Techniques for Reducing Pesticide Use: Economic and Environmental Benefits* (John Wiley and Sons, New York, NY, USA) 1997.

Reus, J.A.W.A. *Towards a Future EC Pesticide Policy: An inventory of risks of pesticide use, possible solutions and policy instruments* (Centre for Agriculture and Environment. Utrecht, Netherlands) 1994.

Stabinsky, Doreen. *Pesticide Use Reduction in California: A Synthesis Report* (Pesticide Action Network North America, San Francisco, CA, USA) 1993.

Stabinsky, Doreen and L. Alenna Bolin. *Reducing the Use of Pesticides in Agriculture: A Farmer's Perspective* (California Action Network, Davis, CA, USA) 1990.

Sugarman, Quincy. *Doing More With Less: Reducing the Use of Pesticides in Oregon* (Oregon State Public Interest Research Group, Portland, OR, USA) 1992.

U.S. Environmental Protection Agency, Office of Water Programmes. Water Quality and Non-Point Source Control Division. *Patterns of Pesticide Use and Reduction in Use as Related to Social and Economic Factors* (Washington, DC, USA) 1972.

Watts, Meriel. *Reducing Reliance: A Review of Pesticide Reduction Initiatives* (Pesticide Action Network Asia and the Pacific, Penang, Malaysia) 1997.

World Wildlife Fund. *Reducing Reliance on Pesticides in Great Lakes Basin Agriculture*

6. Implementing Agencies

6. Implementing Agencies

6-1. The Multilateral Fund's Implementing Agencies

Four UN bodies act as "Implementing Agencies" under the Montreal Protocol's Multilateral Fund. These agencies are responsible for working with developing country government agencies to develop and implement projects and policies to phase out all ozone depleting substances controlled under the Protocol, including methyl bromide. The agencies are also responsible for coordinating their work with the other Implementing Agencies to ensure complementary projects. The responsibilities and approaches of each Implementing Agency are described briefly below, along with appropriate contact information.

United Nations Development Programme (UNDP)

UNDP assists developing country governments in investment project planning and preparation, development of country programmes (national plans for phasing out various ozone depleting substances), institutional strengthening, and training and demonstration projects.

Contact:

United Nations Development Programme

Frank J.P. Pinto, Principal Technical Advisor and Chief
Montreal Protocol Unit, EAP/SEED
304 East 45th Street, Room FF-9116
New York, NY 10017, USA
Tel: 1-212-906-5042/5004
Fax: 1-212-906-6947
Email: frank.pinto@undp.org
Website: www.undp.org/seed/eap/montreal

United Nations Environment Programme (UNEP)

The United Nations Environment Programme (UNEP), through the UNEP TIE OzonAction Programme, collects data, provides an information clearinghouse, assists low-volume consuming countries in the preparation of country programmes and institutional strengthening, and offers training and networking assistance (see Section 6.2, About the UNEP TIE OzonAction Programme).

Contact:

United Nations Environment Programme

Rajendra M. Shende, Chief, Energy and OzonAction Unit
UNEP Division of Technology, Industry and Economics
Tour Mirabeau
39-43, Quai André Citroën
75739 Paris Cedex 15, France
Tel: 33-1-4437-1450
Fax: 33-1-4437-1474
Email: rmshende@unep.fr

***United Nations
Industrial Development
Organization
(UNIDO)***

The United Nations Industrial Development Organization (UNIDO) runs small-to-medium-scale investment projects, assists in the development of country programmes, and offers technical assistance and training for individual facilities.

Contact: **United Nations Industrial Development Organization**
S.M. Si Ahmed, Acting Director Montreal Protocol Operations
Environment and Energy Branch
Industrial Sectors and Environment Division
Vienna International Centre, P.O. Box 400
A-1400 Vienna, Austria
Tel: 43-1-21131-3782, 3654
Fax: 43-1-21131-6804
Email: ssi-ahmed@unido.org

World Bank (IBRD)

The World Bank assists developing country governments in the development and implementation of large-scale investment projects and preparation of country programmes.

Contact: **World Bank**
Steve Gorman, Senior Environmental Affairs Officer
Montreal Protocol Operations Unit
Environment Department
1818 H Street, NW
Washington, DC 20433, USA
Tel: 1-202-473-5865
Fax: 1-202-522-3258
Email: sgorman@worldbank.org
Website: www-esd.worldbank.org/mp/

***The Multilateral Fund
Secretariat for the
Implementation of the
Montreal Protocol***

For further information about specific projects or the general operations of the Multilateral Fund, contact:

Contact: Dr. Omar El-Arini
Chief Officer, Secretariat of the Multilateral Fund of the Montreal Protocol
1800 McGill College Avenue
27th Floor
Montreal, Quebec, Canada H3A 3J6
Tel: 1-514-282-1122
Fax: 1-514-282-0068
Email: secretariat@unmfs.org

Since 1991, the UNEP TIE OzonAction Programme in Paris has been strengthening the capacity of governments (especially National Ozone Units) and industry in developing countries to make informed decisions on technology and policy options that will result in cost-effective ODS phase-out activities with minimal external intervention. The Programme accomplishes this by delivering a range of need-based services, including:

Information Exchange to enable decision makers to take informed decisions on policies and investments. Information and management tools provided for developing countries include the OzonAction Information Clearinghouse (OAIC) diskette and World Wide Web site, a quarterly newsletter, sector-specific technical publications for identifying and selecting alternative technologies, and policy guidelines.

Training and Networking provide platforms for exchanging experiences, developing skills, and tapping the expertise of peers and other experts in the global ozone protection community. Training and network workshops build skills for implementing and managing phase-out activities, and are conducted at the regional level (support is also extended to national activities). The Programme currently operates seven regional and sub-regional Networks of ODS Officers comprising more than 80 countries, which have resulted in member countries taking early steps to implement the Montreal Protocol.

Country Programmes and Institutional Strengthening support the development of national ODS phase-out strategies and programmes, especially for low-volume ODS-consuming countries. The Programme currently assists 74 countries in the development of their Country Programmes and implements Institutional-Strengthening projects for 50 countries.

6-3. About the UNEP Division of Technology, Industry and Economics

The mission of the UNEP Division of Technology, Industry and Economics is to help decision-makers in government, local authorities, and industry develop and adopt policies and practices that:

- ☛ are cleaner and safer;
- ☛ make efficient use of natural resources;
- ☛ ensure adequate management of chemicals;
- ☛ incorporate environmental costs;
- ☛ reduce pollution and risks for humans and the environment.

The UNEP Division of Technology, Industry and Economics (UNEP TIE) located in Paris, **is composed of one centre and four units:**

The International Environmental Technology Centre (Osaka), which promotes the adoption and use of environmentally sound technologies with a focus on the environ-

Chemicals (Geneva), which promotes sustainable development by catalysing global actions and building national capacities for the sound management of chemicals and the improvement of chemical safety world-wide, with a priority on Persistent Organic Pollutants (POPs) and Prior Informed Consent (PIC, jointly with FAO)

Energy and OzonAction (Paris), which supports the phase-out of ozone depleting substances in developing countries and countries with economies in transition, and promotes good management practices and use of energy, with a focus on atmospheric impacts. The UNEP/RISy Collaborating Centre on Energy and Environment supports the work of the Unit.

Economics and Trade (Geneva), which promotes the use and application of assessment and incentive tools for environmental policy and helps improve the understanding of linkages between trade and environment and the role of financial institutions in promoting sustainable development.

UNEP TIE activities focus on raising awareness, improving the transfer of information, building capacity, fostering technology cooperation, partnerships and transfer, improving understanding of environmental impacts of trade issues, promoting integration of environmental considerations into economic policies, and catalysing global chemical safety.


*For more information
contact:*

UNEP, Division of Technology, Industry and Economics
39-43, Quai André Citroën
75739 Paris Cedex 15, France
Tel: 33 1 44 37 14 50
Fax: 33 1 44 37 14 74
E-mail: unepie@unep.fr
Website: <http://www.unepie.org>

Appendix A.

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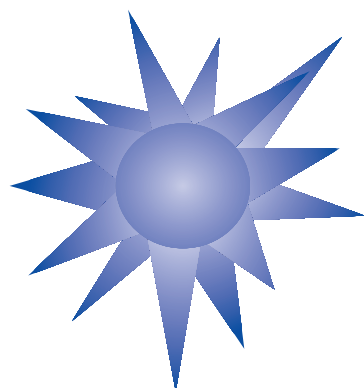
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