

Resource Guide on

URBAN AGRICULTURE



prepared for the
Technical Centre for Agricultural and Rural Cooperation
(ACP-EU) (CTA)
by ETC Ecoculture

Resource Guide on Urban Agriculture

July 1998

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ACKNOWLEDGEMENTS

This Resource Guide could not have been made without the collaboration of a number of institutions that assisted ETC in identifying resource persons and organisations and their addresses. In particular, we would like to thank:

- The International Development Research Centre (IDRC), Toronto, Canada
- The Urban Agriculture Network (TUAN), Washington, USA
- Tree City, Illertissen, Germany
- WASTE, Gouda, The Netherlands

The study, the publication and the Website version were financed by the Technical Centre for Agricultural and Rural Co-operation (CTA).

Technical Centre for Agricultural and Rural Cooperation (ACP-EU)

The Technical Centre for Agricultural and Rural Cooperation (CTA) was established in 1983 under the Lomé Convention between the African, Caribbean and Pacific (ACP) States and the European Union Member States.

CTA's tasks are to develop and provide services that improve access to information for agricultural and rural development, and to strengthen the capacity of ACP countries to produce, acquire, exchange and utilise information in these areas. CTA's programmes are organised around three principal themes: strengthening facilities at ACP information centres, promoting contact and exchange of experience among CTA's partners and providing information on demand.

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ETC Ecoculture

ETC Ecoculture is a member of the ETC International Group, an independent, not-for-profit but market-oriented organisation, which executes programmes and projects, implements studies, gives policy advice and organises training.

ETC operates offices in the Netherlands, UK, India, East Africa (Kenya, Tanzania, Uganda), India, the Andes (Peru, Bolivia), Sri Lanka and Zimbabwe.

ETC's main objectives have been to encourage and support local initiatives aimed at sustainable development, to strengthen local institutions and the participation of local stakeholders in the formulation and implementation of adequate policies and programmes for sustainable rural and urban development.

ETC Ecoculture has a strong record in natural resource management, low external input agriculture, sustainable energy, and integrated land use systems (both in rural and urban environments).

ETC Ecoculture, PO Box 64, 3830 AB Leusden, The Netherlands

FOREWORD

Food production in cities has a long tradition in many countries and the UNDP has estimated that urban agriculture produces between 15 and 20 % of world's food. Urban planners commonly consider gardening and livestock keeping as merely 'hang-overs' of rural habits - as a marginal activity of little economic importance, or as a health risk and a source of pollution that has to be curtailed. Such biases, sustained by the limited exposure of policy makers and planners to information on urban agriculture, have resulted in important legal restrictions on urban agriculture. These are often among the major constraints on its development.

Among the many problems confronting cities are growing urban malnutrition and related ill-health for low-income citizens, and the remorseless expansion in the quantities of waste produced. Such issues force us to re-examine present approaches to urban food security and sustainable urban development, and to consider again the opportunities for integrating agricultural production functions in urban land use planning.

One of the bottlenecks for the development of urban agriculture is the lack of access of local practitioners to relevant information and expertise on the various aspects of urban agriculture. This is the reason why CTA and ETC have produced this *Resource Guide* on urban agriculture.

The potential of urban agriculture

Various international development agencies have developed initiatives to support the implementation of urban and peri-urban agricultural projects and the integration of urban agriculture into the policies of national and local governments. These organisations have concluded that there are many arguments for promoting peri-urban and urban agricultural production and that urban agriculture has the potential to make a substantial contribution to solving persistent urban problems:

Urban food security: improved nutrition and health

Analysis of trends regarding urban food systems reveals that urban food security strategies can and should aim at maintaining and enhancing a certain degree of local production of food. This local production of food, and associated local markets increase the food security of the poor by making food locally available, and at lower prices, and by improving the nutritional balance of the family diet. Creation of better conditions for peri-urban and urban families to produce and market vegetables, fruits, livestock products and fish, can positively affect the nutrition and health of vulnerable urban groups, especially in situations where women gain control over the destination of the produce and revenues from sales.

Urban environmental management; waste as a resource; energy conservation; public health

Urban agriculture can contribute to improving the urban environment (or city ecology) by using urban organic solid wastes and waste water as a productive resource. In 1992, it was estimated that at least one tenth of the world's population consumed food produced on waste water. Increasing water scarcity forces people to make optimal use of available water and to enhance re-cycling and re-use, while attempting to limit the health risks. Urban forestry and agriculture also contribute to the greening of the city, improving the micro-climate and the air quality, while preventing erosion and flooding by the planting of bare lands and steep slopes. Urban agriculture conserves energy by shortening the distance between the points of production and consumption of food; reduces storage and transport losses; and leads to urban production of fuelwood, thus substituting other energy sources and reducing the pressure on forests.

Income and employment creation for the urban poor

Urban production of food reduces food costs in view of the savings in transport, and storage, and because less middlemen and marketing costs may be involved. This improves the accessibility of food for poor urban families. Since the largest component of household expenditure is spent on food (low-income households usually spend over 50-60 % of their income on basic food and drink), any savings on food expenditure translates into a significant portion of the family income becoming available for other, non-food expenditure. If urban agriculture results in surpluses that are sold, the resulting addition to the income can be sizeable. Urban farming provides a source of employment not only for urban farmers themselves, but also for people operating in linked micro-enterprises: input and output industries and services like herding, collection and selling of manure, vermiculture and the production of compost, processing of agricultural produce, and street vending of food.

Risks of urban agriculture

The risks that may be associated with the promotion of urban agriculture must be recognised. Food produced in or near cities may be detrimental to human health if soils or irrigation water are contaminated by industries (heavy metals), if untreated urban waste water is used for irrigation of food crops or fresh solid organic wastes are used as fertiliser, or if hygiene is lacking in the processing and marketing of food. Traffic may have a direct polluting effect on urban crops (lead contamination). Cultivated areas and livestock in cities may attract or provide breeding grounds for rodents and flies and thus can contribute to the spread of diseases they may carry if proper precautions are not taken. Urban agriculture may contaminate local water sources if high input levels of fertilisers and pesticides are used. Neighbours may complain of the dust, smell and noise created by urban farms.

However, such risks can be prevented and managed by appropriate urban policies, including the provision of adequate extension services to urban farmers. Experience has indicated that urban farming does not stop because city policies prohibit such activities. Hence, it would better to shift from prohibitive regulations to policies oriented towards managing the risks involved and creating the right conditions for safe food production in urban and peri-urban areas.

Often the question is raised as to whether urban food production competes with rural food production. Experience suggests that this is rarely the case since segmented markets and product and price differentiation move against such an adverse rural-urban competition. However, more research into this question would be useful.

Resource guide on urban agriculture

CTA and ETC have produced this *Resource Guide* in order to respond to the present lack of access of local practitioners to relevant information and expertise on urban agriculture. This guide provides information on a large number of organisations and resource persons with expertise of relevance to local stakeholders intending to formulate and implement policies and action programmes on urban and peri-urban agriculture.

I hope that this publication will sharpen thinking on these issues and accelerate the integration of urban agriculture into national food security strategies and urban regulations, policies and plans.

Dr R.D. Cooke
Director, CTA

INTRODUCTION

This Resource Guide contains a selection of information about persons and organisations with expertise that is relevant for the formulation and implementation of policies, plans and projects on Urban Agriculture. In addition, it contains a section with descriptions of useful newsletters and web sites.

The urban agriculture referred to in this Guide is food and fuel grown within the city and in peri-urban areas including:

- Crop production: open field horticulture, roof top gardens, community gardens, backyard gardens, hydroponics, school and prison gardens
- Urban animal production in backyards, on roadsides and along railroads, on roof tops (poultry, pigs, goats, rabbits, cattle)
- Aquaculture in tanks, ponds and rivers
- Urban forestry: trees for fruits, fuel, shade in backyards along streets, on steep slopes and along rivers
- The reuse of urban organic solid wastes (composting, vermiculture) and waste water (for irrigation and nutrients).

The guide is subdivided in three sections: Organisations; Persons; Journals and Web Sites. The index helps to identify persons and organisations according to their fields of expertise, regional focus and organisational type. In the current set-up there is some overlap in information between the different sections of the Guide. Although such redundancy is less desirable from the point of database management, this set-up was chosen in order to realise greater user-friendliness.

We do not pretend that this first edition of the Resource Guide on urban agriculture is complete, far from it: urban agriculture is a rapidly expanding field and we most probably have overlooked many valuable resources. Therefore, the Resource Guide will be updated and expanded periodically. To allow easy access and to facilitate a quick expansion and continuous actualisation, the Resource Guide will also be made available on the Internet.

We feel it is too early to attach more than a superficial quantitative importance to the findings in this guide with regard to main areas of work, expertise, regional focus of the work and organisational type.

Therefore, just a few, very general, observations:

- National and local governmental organisations are few in this guide, whereas University Departments, professional development organisations and NGOs are strongly represented.
- North America is strongly represented, with Europe coming on second. A number of experts from developing countries are present in the database, but few Southern organisations have indicated to have developed special expertise in this field.
- 'Information and Communication' as well as 'Policy and Planning' figure more frequently in this Guide than 'Project Implementation' and 'Technical Advice'. Maybe we should interpret this as an indication of how new the field still is: much is being studied and documented, but only a few larger scale action programmes and projects on urban agriculture are presently formulated and implemented.

We feel confident that the Resource Guide on urban agriculture will be an effective tool to facilitate communication and exchange among practitioners and will allow newcomers in this field to quickly identify resource persons and other sources of information on the subject.

We kindly request users of the Resource Guide to update the information, by pointing out mistakes and informing us about important sources of expertise on urban agriculture.

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I. RESOURCE ORGANISATIONS



Urban agriculture has become very popular in Dar es Salaam, Tanzania. Photo: Ulrich Sabel-Koschella

Abalimi Bezekhaya - The Cape Flats Tree Project

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Visiting Address:

97 Lower Maw Rd, Observatory
Cape Town, South Africa

Training Offered:

- Four-day basic introduction into vegetable production on the Cape Flats
- Follow-up action learning in the field

Publications:

- 1998. *How to start a garden with only a few cents*
- *Friends Newsletter* (quarterly). The Aug./Nov. 1997 issue specifically dealt with urban agriculture.

Organisational Type

Non-Governmental Development Organisation

Main Areas of Work:

- Education / Training
- Project Implementation
- Urban Farmer

Specific Expertise:

- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening
- Peri-Urban Crop Production

Regions:

Southern Africa

Recent Activities:

- Community participation, ownership process and organisation development with grassroots women urban food growers' associations
- Resource support to approx. 7,000 individual vegetable gardeners per annum in the Cape Flats townships
- 1997-98: Establishment of community allotment garden associations amongst the poor

Agricultura Urbana Investigaciones Latino Americana (AGUILA)

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Visiting Address:

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Sopocachi, La Paz, Bolivia*

Organisational Type:

Non-Governmental Development
Organisation

Main Area of Work:

- Research
- Information / Communication

Specific Expertise:

- Urban Animal Production
- Urban Waste Management: Waste
Water Management
- Urban Waste Management: Solid
Waste Management
- Urban Crop Production: Hydroponics

Regions:

- Central America
- South America

Recent Activities:

AGUILA, the Red Agricultura Urbana Latino America (the Latin American Urban Agriculture Research Network) was created in 1994 during a Latin American seminar on urban agriculture. AGUILA currently groups nearly 40 institutions from Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Mexico, Nicaragua, Paraguay and Peru.

AGUILA aims to improve conditions for urban agriculture with the objective of securing and sustainably diversifying nutrition and well-being of low-income population groups. Its main activities comprise: network development and coordination, research, documentation and dissemination, training, promotion of policy uptake and facilitation of funding. AGUILA distributes a quarterly News Bulletin on urban agriculture and has published an interesting book on experiences with urban agriculture in various Latin American countries (see also its web site).

Training Offered:

On demand; fields: hydroponics, horticulture, urban animal production; waste water management; solid waste management

Web Site:

http://www.idrc.ca/cfp/aguila_e.html

Web Site Description:

AGUILA's homepage offers information on the mandate, members and activities of AGUILA. As far as we know, the only source of information available in Spanish.

AGUILA also runs a list server. Subscriptions are handled by Jeff Pelletier, IDRC <JPelletier@idrc.ca>.

Publications:

- 1997. *Memoria del Seminario Latinoamericano de Agricultura Urbana*
- *Noticias AGUILA: Boletín Informativo Interno* (7 issues until present) (can be found on AGUILA's web site). A small Spanish news bulletin on planned activities and related contacts and coming events.
- *Revista Cuatrimestral de Agricultura Urbana de AGUILA* (in preparation)

Agricultural Economics Research Institute (LEI-DLO)

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Visiting Address:

Burgemeester Patijnlaan 19, The Hague, The Netherlands

Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development and Advice
- Project Implementation
- Research

Regions:

- West Europe
- West Africa
- Southeast Asia

Recent Activities:

In the Netherlands, the DLO Agricultural Economics Research Institute (LEI-DLO) is the central organisation for socio-economic research in agriculture, horticulture, fisheries, forestry and rural areas. LEI-DLO focuses on the increasing connection of agriculture and agribusiness with the social surroundings. Consequently, the institute deals with issues on competition, management of production chains, spatial planning, environmental protection, and revision of the European agricultural policy and liberalisation of world trade.

LEI-DLO is concerned with urban agriculture in the context of urban-rural interactions.

Together with other DLO-institutes, LEI-DLO is involved in a 'City-Countryside research programme' in the Netherlands

that aims to:

- describe and analyse the changing relationships between urban and rural areas, influenced by present urbanisation
- identify different (policy) options for the future development of the urban-rural areas, taking into account economic, ecological, social and environmental aspects
- analyse and propose the role different governmental and public actors should play in this development and the strategies and instruments they could use.

Research results will be shared through the DLO web site (presently only in Dutch) and through publication, presentations and seminars. LEI-DLO will organise a seminar 'Plurality and rurality: the changing role of the countryside in urbanized regions', that will be held in the Netherlands, November 11-14, 1998.

LEI-DLO also has an peri-urban research group, which has formulated a number of internationally oriented project proposals:

- Development of a project proposal on waste recycling and peri-urban development in West Africa
- Development of a project proposal and organisation of a workshop on peri-urban agribusiness in Indonesia and The Philippines

Web Site:

<http://www.lei.dlo.nl>

AGROMISA

Postal Address:

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Fax: +31 317 419178
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Visiting Address:

Generaal Foulkesweg 55
6703 BM Wageningen, The Netherlands

Organisational Type:

Development Organisation

Main Areas of Work:

- Education / Training
- Information / Communication

Recent Activities:

The Agromisa Foundation is a Dutch NGO aiming at strengthening the socio-economic position of the underprivileged population in developing countries. To achieve its objectives, the Agromisa Foundation is actively promoting small-scale sustainable agriculture making optimal use of local resources and raising public awareness of development issues in the Netherlands.

Agromisa runs a Question & Answer Service, publishes small manuals (Agrodoks) and organises various training workshops for Dutch students and development workers.

Web Site:

<http://www.users.toolnet/~agromisa>

Publications:

AGRODOK Series
Agromisa regularly publishes simple and small manuals on small-scale agricultural practices in the tropics. Agrodoks are published in cooperation with the Technical Centre for Agricultural and Rural Cooperation (CTA) which subsidises translation into English and French. The Agrodoks are

also available in Tamil and Sinhala.

Agrodok manuals of interest to urban agriculture practitioners include:

- *Preservation of foods*
- *Small-scale poultry production*
- *Preparation and use of compost*
- *Vegetable gardens in the tropics*
- *Backyard rabbit farming*
- *Beekeeping in the tropics*
- *Small-scale preparation of dairy products*
- *How to grow tomatoes and peppers*
- Agrodok No. 4 by Jeroen Boland (ed.) (forthcoming) will be an issue entirely on urban agriculture. It will be published in English and French.

Agrodoks can be ordered for NLG 7.50 at: Agromisa, P.O. Box 41, 6700 AA Wageningen, The Netherlands

Members of ACP countries (Africa, Caribbean and Pacific states) can apply for free copies at: CTA, P.O. Box 380, 6700 AJ Wageningen, The Netherlands

Alternative Farming Systems Information Centre (AFSIC) National Agricultural Library

Postal Address:

National Agricultural Library, ARRS
USDA
10301 Baltimore Ave., Room 304
20705-2351 Beltsville, MD, USA
Phone: +1 301 504 6559
Fax: +1 301 504 6409
E-mail: afsic@nal.usda.gov

Main Areas of Work:

Information / Communication

Recent Activities:

AFSIC is one of the several information centres at the National Agricultural Library (NAL) providing databases on specific subjects relating to food and agricultural sciences. AFSIC focuses specifically on alternative or sustainable farming systems. AFSIC is supported by the US Department of Agriculture, the Agriculture Research and Education Program of the Cooperative State Research, Education and Extension Service.

Web Site:

<http://www.nal.usda.gov/afsic>

Publications:

In 1997, AFSIC produced a publication on Urban Agriculture: "*Urban Agriculture: an abbreviated list of references and resource guide*". The publication has a chapter on books, articles from periodicals and newsletters, research studies and project reports. There are many references to North America.

The publication is available as a hard copy or electronically, on computer diskette or via AFSIC's Internet site.

American Forests (AF)

Contact:

Gary Moll

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Washington, DC 20013, USA
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E-mail: gmoll@amfor.org

Organisational Type:

Development Organisation

Main Areas of Work:

- Project Implementation
- Research

Specific Expertise:

Urban Forestry

Regions:

North America

Recent Activities:

American Forests, a citizen conservation non-profit organisation, has been involved in urban forestry for over 15 years. In 1985, the association conducted the first of three surveys of urban forests in 20 US cities to obtain a better understanding of the condition of urban forests and their value to a city's community. The surveys provided a basis for some changes in urban policies and increased funding in several urban forestry programmes. From 1991 onwards, AF developed an Urban Ecological Analysis (UEA) method, which measures the ecological benefits of urban green, especially urban forests or trees.

An economic value is assigned to ecological benefits, based on the contribution urban trees / forests make in terms of conserving energy, reducing storm water run-off and peak flow, improving air quality and maintaining wildlife habitat. The economic values

show the effects of shade trees on reduction of home summer cooling costs, or savings in air pollution mitigation and cleaning equipment as a result of trees removing atmospheric dust or carbon. Also costs of storm water management or building of concrete water containment facilities can be compared to the value of tree cover reducing water forces and flows.

The UEA is conducted by a Geographic Information Systems software programme (Archview 2.1) called CITY Green. The programme is able to compare various development scenarios for changing environments, thus assisting decision in land-use planning processes. To see a demonstration of CITY Green and learn more about American Forests programs and services, see American Forests homepage.

Web Site:

<http://www.amfor.org>

Publications:

- *Proceedings from the Fifth and Sixth National Urban Forests Conferences* (USD 27.95)
- *Proceedings from the Seventh National Urban Forests Conference: inside Urban Ecosystems* (USD 29.95)
- *Growing greener cities*
A tree planting handbook (USD 7.95)
- *Growing greener cities*
An environmental education guide and video for teachers, which accompanies the book mentioned above (USD 35.00, teachers USD 18.00)
- *Knowing your trees*
Describes 182 species of trees through photographs and detailed text (USD 9.50)
- *Save our urban trees: citizen action guide*

A 10-step plan for community activists who want to begin, improve, or strengthen a community tree care program (USD 8.50)

- *Shading our cities*
This 317-page book offers a spirited account of how our environment is changing and the effect that change will have on our urban forests. (USD18.95)
- *Alliances for community trees*
Captures the mix of people involved in urban forestry and blends rich images of the Earth's beauty with the problems facing community trees and forests. Video. (USD 25.00)
- *Building greener neighborhoods: trees as part of the plan*
A book for builders, developers, city planners, landscape architects, and others who want to know how to save trees during the construction process. Co-written by American Forests and the National Association of Home Builders, the book also describes how builders and developers can receive recognition for their tree conservation efforts through the Global ReLeaf for New Communities program. (USD 12.00).

Annex Organics

Contact:

*Lauren Baker
Jonathan Woods
Tracey Loverock*

Training:

Courses on urban gardening and permaculture

Postal Address:

*200 Eastern Ave.
Toronto, ON M5A 1J1 Canada
Phone: +1 416 363 6441
Fax: +1 416 363 0474
E-mail: annexorganics@hotmail.com*

Organisational Type:

Commercial Enterprise

Main Areas of Work:

- Consultancy / Technical Assistance
- Project Implementation
- Research

Specific Expertise:

- Peri-Urban Crop Production
- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Urban Agriculture and Urban Ecology
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening
- Urban Crop Production: Greenhouses
- Urban Crop Production: Hydroponics
- Urban Crop Production: Roof Garden Technologies
- Urban Food Security and Nutrition
- Urban Waste Management: Solid Waste Management
- Waste Water - Fed Aquaculture

Regions:

North America

Recent Activities:

- Educational workshops & courses
- Garden consultation
- "Living machines"
- Commercial roof top gardening, greenhouses, hydroponics

Asian Institute of Technology (AIT), Agricultural & Aquatic Systems Program

Contact:

Prof. Peter Edwards

Postal Address:

P.O. Box 4, Klongluang
12120 Pathumthani, Thailand
Phone: +66 2 524 5477
E-mail: Pedwards@ait.ac.th

Main Areas of Work:

Research

Regions:

Southeast Asia

Recent Activities

Strategic research on the design of various waste water-fed aquaculture systems, especially in South and Southeast Asia.

Publications:

- Edwards, P. 1980. *A review of recycling organic wastes into fish, with emphasis on the tropics*. In: Aquaculture Vol. 21 No. 3 p.261-279
- Edwards, P. 1980. *The production of microalgae on human wastes and their harvest by herbivorous fish*. In: Shelef, G. & C.J. Soeder (eds). *Algae biomass: production and use*. p. 191-203. Elsevier / North Holland Biomedical Press
- Edwards, P. & O. Sincumpasak. 1981. *The harvest of microalgae from the effluent of a sewage fed high rate stabilization pond by Tilapia nilotica. Part 1. Description of the system and the study of the high rate pond*. In: Aquaculture No. 23 p.83-105
Part 2. Studies of the fishponds. In: Aquaculture No. 23 p.107-147
Part 3. Maize cultivation experiment, bacteriological studies, and economic assessment. In: Aquaculture No. 23 p.149-170
- Edwards, P. 1985. *Aquaculture: a component of low cost sanitation technology*. World Bank Technical Paper No. 36. The World Bank, Washington, D.C., USA. 45 p.
- Wee, K.L., N. Kerdchuen & P. Edwards. 1986. *Use of waste grown tilapia silage as feed for Clarias batrachus L.*. In: J. Aqua. Trop. No. 1 p.127- 137
- Colman, J.A. & P. Edwards. 1987. *Feeding pathways and environmental constraints in waste water-fed aquaculture: balance and optimization*. In: D.J.W. Moriarty and R.S.V. Pullin (eds). *Detritus and microbial ecology in aquaculture*. ICLARM Conference Proceedings No. 14 p. 240-281
- Edwards, P. 1988. *Tilapia raised on septage as high protein animal feed*. In: Pullin, R.S.V., T. Bhukaswan, K. Tonguthal & J.L. Maclean (eds). *The Second International Symposium on Tilapia in Aquaculture*. ICLARM Conference Proceedings No. 15 p. 7-13
- Edwards, P. & R.S.V. Pullin (eds). 1990. *Wastewater-fed aquaculture*. Proceedings of the International Seminar on Wastewater Reclamation and Reuse of Aquaculture, Calcutta, India, 6-9 December, 1988. Environmental Sanitation Information Center, Asian Institute of Technology, Bangkok. 296 p.
- Edwards, P., C. Pacharaprakiti & M. Yomjinda. 1990. *Direct and indirect reuse of septage for culture of Nile tilapia Oreochromis niloticus*. In: Hirano, R. & I. Hanyu (eds). *The Second Asian Fisheries Forum* p.165-168. Asian Fisheries Society, Manila, Philippines

- Edwards, P., M.S. Hassan, C.H. Chao & C. Pracharaprakiti. 1992. *Cultivation of duckweeds in septage-loaded earthen ponds*. In: Bioresource Technology No. 40 p.109-117
- Hassan, M.S. & P. Edwards. 1992. *Evaluation of duckweed (*Lemna perpusilla* and *Spirodela polyrrhiza*) as feed for Nile tilapia (*Oreochromis niloticus*)*. In: Aquaculture No. 104 p.315-326
- Edwards, P. 1992. *Reuse of human wastes in aquaculture: a technical review*. Water and Sanitation Report No. 2. UNDP-World Bank Water and Sanitation Program, The World Bank, Washington, D.C. 350 p.
- Edwards, P. 1993. *Environmental issues in integrated agriculture-aquaculture and waste water-fed fish culture systems*. In: R.S.V. Pullin, H. Rosenthal & J.L. Maclean (eds). *Environment and aquaculture in developing countries*. ICLARM Conf. Proc. No. 3 p.139-170
- Mara, D.D., P. Edwards, D. Clark & S.W. Mills. 1993. *A rational approach to the design of waste water-fed fishponds*. In: Water Research Vol. 27 No. 12 p.1797-1799
- Edwards, P. 1996. *Wastewater reuse in aquaculture: socially and environmentally appropriate wastewater treatment for Vietnam*. In: Naga Vol. 1919 No. 1 p.36-37
- Edwards, P. 1996. *Wastewater-fed aquaculture systems: status and prospects*. In: Naga Vol. 19 No. 1 p.33-35

Asian Vegetable Research and Development Centre (AVRDC)

Contact:

Dr. David Midmore

Postal Address:

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74199 Shanhua, Tainan, Taiwan
Phone: +886 6 583 7801
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This publication describes the benefits of household gardens and identifies activities needed to support their future development. This identification of activities is based on a review of past experiences and description of several Asian case studies.

Organisational Type:

International Organisation

Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

Urban Crop Production: Backyard Gardening

Regions:

- South Asia
- Southeast Asia

Recent Activities:

AVRDC is doing research on tropical home gardens. Its focus is on developing different types of vegetable gardens with high nutritional value that can be maintained with low external inputs. It is involved in experimentation, demonstration and has a database on garden crops. AVRDC also gives training and technical assistance through its regional offices in Asia, Africa and Latin America.

Publications:

- 1996. *Combating micronutrient deficiency through vegetables*. In: AVRDC Centerpoint Vol. 14 No. 1 p. 4-5
- Midmore, D.J., V. Ninez & R. Venkatarama. 1991. *Household gardening projects in Asia: past experience and future directions*. AVRDC; UPWARD. Technical Bulletin No. 19

Association of Cities for Recycling

Postal Address:

*Gulledelle 100
1200 Brussels, Belgium
Phone: +32 2 775 7701
Fax: +32 2 775 7611
E-mail: tbe@ibgebim.be*

action", leaves room for discussion and gives information on upcoming events and meetings.

Organisational Type:

Development Organisation

Main Areas of Work:

Information / Communication

Specific Expertise:

Urban Waste Management

Regions:

West Europe

Recent Activities:

In order to achieve a significant improvement in the ecological and economic efficiency of the management of urban waste, the Association aims at bringing together concerned stakeholders and promoting information exchange regarding:

- technical data on urban waste management
- methods of communication, education and public awareness
- legal and economic instruments

Exchanges occur through a regular Newsletter, free reports and specialised Working Group meetings.

Publications:

Newsletter of the Association of Cities for Recycling

The Newsletter serves as an exchange forum between members of the Association. It provides information on the issues of recycling and reuse of wastes, presents examples of "Cities in

Association of Rural and Urban Planners in Southern and Eastern Africa (RUPSEA)

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Nairobi, Kenya
Phone: +254 2 443219
Fax: +254 2 444643
E-mail: mazingira@elci.gn.apc.org

Organisational Type:

Development Organisation

Main Areas of Work:

- Planning
- Information / Communication

Regions:

East Africa

Recent Activities:

RUPSEA runs regional workshops and disseminates information through its publication "*Review of rural and urban planning in Southern and Eastern Africa*". It also pays attention to research and policy development on urban agriculture.

Autonomous Metropolitan University of Xochimilco

Contact:

Dr. Pablo Torres Lima

Agriculture and Human Values, Vol.
11, no. 1 (Winter 1994) p.37

Postal Address:

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Fax: +52 5 724 5238
E-mail: ptorres@cueyatl.uam.mx

Organisational Type:

Academic Institution

Main Areas of Work:

- Education / Training
- Research

Recent Activities:

Organising a symposium on Urban
Agriculture and Metropolitan Processes
held at the Universidad Autónoma de
Mexico City, campus Xochimilco,
October 1997

Publications:

- Torres-Lima, P. *Procesos metropolitanos y agricultura urbana en México*. Universidad Autónoma Metropolitana Xochimilco, Mexico
- Torres-Lima, P. 1991. *Los campesinos en la estructura urbana, el caso de Milpa Alta*. Universidad Autónoma Metropolitana Xochimilco, Mexico
- Torres-Lima, P., B. Canabal-Cristiani, and G. Burelea-Rueda. 1992. *Sustentabilidad, viabilidad económica y estrategias del modelo chinampero*. In: *Revista Geografía Agrícola*, Vol. 17: 127-133
- Torres-Lima, P., B. Canabal-Cristiani, and G. Burelea-Rueda. 1994. *Urban sustainable agriculture: The paradox of the Chinampa system in Mexico City*. In:

Biomass Users Network, Regional Office for Central America (BUN-CA)

Contact:

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Postal Address:

AA 573 -2050

2050 San José, Costa Rica

Phone: +506 283 8835

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E-mail: biomass@sol.racsa.co.cr

Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Information / Communication
- Project Implementation

Specific Expertise:

Urban Forestry

Regions:

Central America

Training Offered:

Short-term training on the use of
vermicompost for the treatment of agro-
industrial residues

Web Site:

<http://www.energyhouse.com>

Publications:

- 1997. *Producción mas limpia y sostenibilidad en la industria beneficiadora de café*. Technical report
- 1997. *Agricultura sostenible en la cuenca del Río Grande de San Ramón*. Technical report
- Brochures on composting and organic agriculture

Bol-Anon Foundation Inc. (BFI)

Contact:

Carlos S. Echavez

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G/F K of C Bldg.

K of C Drive

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Phone: +63 38 411 4587

Fax: +63 38 411 4587

Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

Project Implementation

Specific Expertise:

Urban Crop Production

Regions:

Southeast Asia

Recent Activities:

BFI has been involved in the promotion of permaculture since 1997, focusing on local governance. It is one of the implementing agencies of an AusAID project on Urban Agriculture.

Both ENDS - CITIES Programme

Postal Address:

Damrak 28-30
1012 LJ, Amsterdam, The Netherlands
Phone: +31 20 6230823
Fax: +31 20 6208049
E-mail: bothends@bothends.antenna.nl

Organisational Type:

Non-Governmental Development
Organisation

Specific Expertise:

Urban Agriculture and Urban Ecology

Recent Activities:

Both ENDS is a Dutch NGO established with the objective to strengthen environmental groups all over the world. It provides services free of charge, including assistance in fund raising, tracing information and expertise, and providing links to government, donor and scientific institutions in the Netherlands and worldwide. Both ENDS is involved in different thematic projects.

The Both ENDS - CITIES project focuses on the recognition and enhancement of the capacity of NGOs and community groups to address environmental problems in urban areas, by promoting cooperation with local authorities. The project is aimed at the exchange of information and expertise, the provision of services and cooperation on environmental management. Both ENDS is collaborating with ENDA Tiers Monde and its PRECEUP programme.

Publications:

1997. *Big cities, small means: European funding for environment and urban development: an orientation guide for southern NGOs*. Amsterdam: Both ENDS (available in English and French)

CARE Haiti

Contact:

Mildred Delphin-Regis (Project Manager
Urban Agriculture in Port-au-Prince)

Postal Address:

P.O. Box 15546
Pétion-Ville, Haiti
Phone: +509 57 5358 / +509 57 5389
Fax: +509 57 6785
E-mail: regis@pap.care.org

Visiting Address:

92, rue Grégoire, Pétion-Ville, Haiti

Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Project Implementation
- Research

Regions:

Central America

Recent Activities:

CARE International is a confederation of 10 national members in North America, Europe, Japan and Australia. CARE assists the world's poor in Africa, Asia, Latin America and Eastern Europe in their efforts to achieve social and economic well-being. Programmes include emergency relief and rehabilitation; education; health and population: children's health, reproductive health and water and sanitation; and income: small economic activity development, agriculture and community development and environment.

Recently, CARE has begun to develop a programme to work with people living in marginal urban areas to help them take advantage of urban horticulture

opportunities. In 1996, CARE started an Urban Horticulture Project in Port-au-Prince, Haiti, that aims to introduce technologies which will help increase the production of garden variety crops for hundreds of impoverished urban families living in urban slums. The project, funded by CARE-USA, CIDA and IDRC, documents technical approaches for urban agriculture, documents the food and income generation potential for Port-au-Prince urban slums and tries to develop an effective extension and learning approach. CARE works through local organisations (Haiti Gardens / ODEJHA) and municipal councils. A baseline survey on the socio-economic status of the people living in the slums, including household nutritional information, has been implemented; 48 demonstration gardens, community nurseries and small-scale composting activities have been set up and 13 learning groups (including adults groups and children/teacher groups) have been formed that meet weekly and learn about plant production.

Web Site:

<http://www.care.ca>

Center for Integrated Agricultural Development (CIAD)

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China Agricultural University

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E-mail: xiaoyun@public.bta.net.cn

Organisational Type:

- Academic Institution
- Parastatal / Semi-governmental Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Information / Communication
- Management / Administration
- Planning
- Project Implementation
- Research

Regions:

Southeast Asia

Recent Activities:

Transformation / industrialisation of urban agriculture in China

Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD)

Contact:

- Paule Moustier
- Hubert de Bon

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Fax: +33 4 67617147
E-mail: paule.moustier@cirad.fr
hubert.debon@cirad.fr

Visiting Address:

2477 av. Val de Montferrand
Montpellier, France

Organisational Type:

Parastatal / Semi-governmental
Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research

Recent Activities:

CIRAD works in collaboration with national agricultural research organisations in Africa, Asia, the Pacific and Latin America. It has several research departments concerned with (per) annual crop production, livestock production and animal medicine, fruit and horticultural production, forestry and resources management. CIRAD offers research, documentation and technical assistance.

Vegetables and food crops:

- Support to vegetables, fruits and food crops production: Yaoundé (IRAD), Brazzaville (Agricongo), Libreville (Gabon)
- Organisation of commodity chains: Market Information and Concertation Systems: Brazzaville (Agricongo), Yaoundé (IRAD)

- Support to vegetables production: Dakar (ISRA)
- Development of food microenterprises: Douala, Yaoundé
- Diagnosis of the vegetable commodity chains: Bissau, Bangui, Antananarivo
- CIRAD is also involved in a research project, funded by the European Commission, on 'Urban and peri-urban small and medium-sized enterprise development for sustainable vegetable production and marketing systems'. The project has research sites in the Philippines, Vietnam and Laos and is implemented in collaboration with the Technical University of Munich and local institutes.

Livestock:

- In the field of dairy production, CIRAD collaborates with CORAF and is involved in fish production, poultry farming, sheep raising and pig and dairy production.
- Fish production in Niamey: Development-Research with urban growers communities
 - Poultry farming in Dakar, Antananarivo en Antsirabe: diagnosis, technical advise supporting interprofessional activities
 - Sheep rearing in West and Central Africa: socio-economic aspects and improvement
 - Dairy in N'Djamena and Addis Abeba: commodity chains organizations, dairy technology and livestock health
 - Pig production in the Caribbean area

Management of resources:

- Utilisation of remote sensing to analyze development of built areas (Yaoundé)
- Use of wastes of slaughterhouse in vegetable cropping systems (Dakar)

Web Site:

<http://www.cirad.fr/>

Publications:

- Moustier, P. & D.L. Naire. 1990. *Performances du système de commercialisation des légumes à Brazzaville: un essai d'évaluation socio-économique*. In: IRAD/MESRU (ed.). 1989. Economie des filières en régions chaudes, p.567-585
- Leplaideur, A. & P. Moustier. 1992. *Dynamique du vivrier à Brazzaville: les mythes de l'anarchie et de l'inefficace*. In: Cahier des sciences humaines de l'ORSTOM, Vol. 27, p.148-157
- Leplaideur, A. & P. Moustier. 1994. *Acteurs et circuits maraîchers à Brazzaville*. In: Agriculture et développement, p.23-29
- Moustier, P. 1994. *On performance of urban vegetable supply in African countries*. In: Acta Horticulturae No. 340, p.307-313
- Moustier, P. 1995. *L'économie des filières pour la recherche agronomique et le développement: le cas des légumes frais en Afrique*. In: Fruits Vol. 49 No. 4, p.315-322
- Moustier, P. 1995. *Champs et jardins: des espaces complémentaires pour les marchés urbains*. In: Fertilité du milieu et stratégies paysannes sous les tropiques humides, p.536-543. Editions CIRAD-Colloques
- Moustier, P. 1996. *Organization in the Brazzavillian vegetable market*. Ph.D. Dissertation. University of London
- Moustier, P., and O. David. 1997. *Etudes de cas de la dynamique du maraîchage péri-urbain en Afrique subsaharienne*. FAO Document. Projet Approvisionnement et

Distribution Alimentaire des Villes d'Afrique Francophone

- Moustier, P. & J. Pagès. 1997. *Le péri-urbain en Afrique, une agriculture en marge?* In: Economie Rurale No. 241, p.48-56
- De Bon, H., F. Faye & J. Pages. 1997. *Development of vegetable cropping systems in the Niayes zone of Senegal*. In: Experimental Agriculture Vol. 33, p.1-8

Centre for Built Environment

Contact:

Prof. Santosh Gosh

Postal Address:

2/5 Sarat Bose Rd.

Calcutta, 700 020, India

Phone: +91 33 476 1495

Fax: +91 33 466 0625 / +91 33 954 321

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice
- Research
- Information / Communication

Regions:

South Asia

Recent Activities:

Organised International Workshop on Urban Agriculture and sustainable environment in Calcutta, December 1995, together with TUAN.

Publications:

- Flyer on Urban Agriculture produced for UNDP-Asia Pacific 2000
- *Built Environment: newsletter of Centre for Built Environment.*
Calcutta

Centro de Educación y Tecnología (CET)

Contact:

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Urban Agriculture programme

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Visiting Address:

Europa 2008, Providencia
Región Metropolitana Santiago, Chile

In: Journal of Learnings No. 1 p.19-25. ICFID, Canada

- Montero, A. 1996. *Proyecto Tomé: una experiencia para el desarrollo urbano sustentable. Encuentro subregional sobre experiencias y modelos de proyectos de desarrollo sostenible. Convenio Andrés Bello*. ITACAB, Lima, Peru
- Montero, A. 1997. *Desarrollo local sustentable. Agricultura urbana, microempresas y manejo de residuos sólidos*. In: *Agroecología y Desarrollo* No. 11/12. CLADES

Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research

Specific Expertise:

- Urban Agriculture & Sustainability in Cities
- Urban Agriculture and Urban Ecology

Regions:

South America

Recent Activities:

Organised, together with the city of Tomé and the Universidad de Concepción, an international seminar: *Construyendo las bases de una estrategia de desarrollo urbano sustentable* (Constructing a sustainable urban development strategy) (1996)

Publications:

- Montero, A. & A. Yurjevic. 1994. *Invest in the poor: Tomé / CET Chile*.

Centro de Investigación Social y Educación Popular ALTERNATIVA

Contact:

- Sonia Rodriguez Chávez
- Oswaldo Cáceres Loyola
- Jaime Silva

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programme on urban planning and management aims at participatory development of proposals for planning of urban areas, based on the identification and evaluation of its resources. Projects include urban forestry and planning of ecological protection areas.

Training Offered:

Preparation and use of compost

Web Site:

<http://www.alter.org.pe>

Organisational Type:

Non-Governmental Development Organisation

Main Areas of Work:

- Planning
- Project Implementation

Specific Expertise:

- Urban Land and Water Use Planning and Management
- Urban Waste Management

Regions:

South America

Recent Activities:

ALTERNATIVA is an NGO working in the northern part of Lima. They seek to strengthen local (urban) planning and management, linking community based organisations and local governments.

ALTERNATIVA'S urban development department looks for alternatives to problems concerned with urban extension and consolidation, focusing on urban environmental management. Their programme on environmental health treats the urban environment in an integrated way, prioritising treatment of solid waste residues and waste water. ALTERNATIVA has supported the set up of micro enterprises collecting garbage and producing compost. Their

Publications:

- ALTERNATIVA. *Departamento de Desarrollo Urbano. 1992. Proyecto de elaboración de compost en carabaylo con residuos de mercados y ambulantes. Manual de capacitación.* 16 p.
- CIPUR; ALTERNATIVA. 1988. *Forum "Alternativas de Desarrollo de las Zonas Agro-Urbanas Caso: El Valle del Chillón".*
- *Serie Problemas y Posibilidades* No. 1. 37 p.

Centro de Investigación y Capacitación Rural AC (CEDICAR)

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E-mail: farroyo@laneta.apc.org

Visiting Address:

Camino Real,

Ajusco 933, Col. Tepepan, México

Publications:

- 1997. *Manual para la producción urbana de alimentos*
- 1997. *Producción de hortalizas orgánicas en contenedores.*
- 1998. *Manual de composteo y lombricultura.*

Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice
- Project Implementation
- Research

Specific Expertise:

- Urban Food Security and Nutrition
- Urban Crop Production

Regions:

Central America

Recent Activities:

CEDICAR has been implementing a programme for urban food production (1993-present)

Training Offered:

Capacity development on urban food production for technicians-promoters

Chinese Association of Forestry, Urban Forestry Branch

Contact:

Dr. Weichang Li

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*Campus of Chinese Academy of
Forestry*

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Organisational Type:

Academic Institution

Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

Urban Forestry

Regions:

Southeast Asia

Recent Activities:

Hosting national workshop on urban
forestry

Chulalongkorn University, Department of Urban and Regional Planning

Contact:

Dr. Siriwan Silapacharanan

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Department of Urban and Regional
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Fax: +662 218 4440
E-mail: siriwan@chulkn.car.chula.ac.th*

Visiting Address:

*Phyathai Road, Pathumwan District
Bangkok 10330, Thailand*

Organisational Type:

- Governmental Organisation
- Academic Institution

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training

Specific Expertise:

- Urban Waste Management: Waste Water Management
- Urban Land and Water Use Planning and Management

Regions:

Southeast Asia

Publications:

Silapacharanan, S. 1997. Development plan of Districts Talingchan, Phasi Charoen and Bang Khun Thian. Bangkok Metropolitan Authority (in Thai)

City Farmer - Canada's Office of Urban Agriculture

Contact:

- Michael Levenston, Executive Director
- Wes Barrett, Head Gardener
- Spring Gillard, Compost Expert

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Vancouver, BC, V6B 2V3 Canada
Phone: +1 604 685 5832
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Visiting Address:

Vancouver Compost Demonstration Garden
2150 Maple Street
Vancouver, BC, V6B 2V3 Canada

Organisational Type:

Non-Governmental Development Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication
- Urban Farmer

Specific Expertise:

- Composting
- Organic Gardening

Recent Activities:

City Farmer, a non-profit society that started in Vancouver in 1978, specifically promotes urban agriculture. Its most important work is focused on the promotion of and education on urban agriculture, through training and information services. City Farmer maintains a demonstration garden, which is open to the public for classes, information and voluntary work. They

supported the building of a community garden, roof top garden, school and therapy garden in Vancouver, publish practical booklets and information sheets on the subject and run a Compost Hotline and Web site.

City Farmer frequently publishes media stories on urban agriculture (newspaper/magazine/tv/radio) and provides education courses to Vancouver schools and the University of British Columbia. City Farmer is a member of the Global Initiative on Urban Agriculture (see further in this guide).

Training Offered:

- Composting and vermicomposting workshops
- Water conservation workshops
- Urban food gardening workshops

Web Site:

<http://www.cityfarmer.org/>

Web Site Description:

City Farmer Urban Agriculture Notes

To our opinion simply the best web site on the topic of urban agriculture, collecting valuable information on the Internet, difficult to find elsewhere. The homepage is regularly updated and contains general information on urban agriculture in both developing and developed countries, articles, conference announcements, resources and provides links to other relevant Internet sites. Everybody is free to offer interesting information for the web site and finds it quickly placed and edited. One is able to find information varying from research and policy discussions to composting, vermiculture and community gardens. The site is well organised and easily accessible.

Publications:

- Levenston, M. 1992. *Compost research; questions and answers from the Copost Hotline*
- Levenston, M. 1991. *Urban home composting: rodent-resistant bins and environmental health standards* (price CA\$ 10.00)
- Levenston, M. 1989. *Gardening with people with disabilities* (price CA\$ 6.00)
- Levenston, M. 1986. *School garden guidelines: how to teach children about nutrition and the environment* (price CA\$ 6.00)
- Levenston, M. 1982. *Food gardening in Vancouver* (17 information sheets) (price CA\$ 10.00)

City Tree Project

Contact:

- Daniel Dickel
- Erica Evans

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Chanhassen, MN 55317, USA
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Fax: +1 612 472 7536

Organisational Type:

Community-Based Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development
- Project Implementation
- Research

Regions:

North America

Recent Activities:

1995-present. Establishing plant communities on contaminated urban land

Information Offered:

Quarterly newsletter

Community Resources

Contact:

Paul Jahnige, Executive Director

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*5131 Wetheredsville Road
Baltimore, MD 21207, USA
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Fax: +1 410 448 0874
E-mail: info@communityresources.org*

Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Information / Communication

Specific Expertise:

- Vacant Land Improvement
- Urban Agriculture and Enterprise
Development
- Urban Agriculture and Urban Ecology
- Urban Land and Water Use Planning
and Management
- Urban Forestry
- Urban Crop Production: Community
Gardening

Regions:

North America

Web Site:

<http://www.communityresources.org>

Publications:

Jahnige, P. 1997. *Knowing your
community, showing your community*

Cornell University Cooperative Extension / New York City Programs (CUCE/NYC)

Contact

- John Nettleton (*Issue Leader*)
- John Ameroso (*Agronomist*)

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16 E. 34th Street, 8th Floor
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Phone: +1 212 340 2900
Fax: +1 212 340 2908
E-mail: nyc@cce.cornell.edu

Organisational Type:

Academic Institution

Main Areas of Work:

- Education / Training
- Project Implementation
- Urban Farmer
- Technical Assistance

Regions:

North America

Recent Activities:

- New Farmers / New Market Programme
- Cooking-up business project
- Hydroponics learning model (1996-present)
- Urban resources partnership / NYC Initiative (1994-present)
- Technological systems with 4-H future technologies (1996-present)
- Neighbourhood stewardship with Bronx youth (1996)
- Urban gardening with Bronx youth (1995-96)
- Taqwa community garden / hydroponics project (1995-present)

Training Offered:

- Science/Technology Internship Programme on: soil preparation, compost, crop & animal production,

pest management and control,
marketing skills

- Aquaculture Technician Internship Programme

Web Site:

<http://www.cce.cornell.edu/nyc/>

Publications:

- 1993. *Grow with the flow*
- 1991. *Garden in the city*
- 1995. *Water wonders*
- 1996. *Waste reduction policy and management plan*
- Nettleton, J.S. 1997. *New farmers / new markets: examples of rural-urban linkage to promote sustainability. International Conference on Urban Ecology, Leipzig, Germany, June 1997*
- Nettleton, J.S. 1997. *A case study of rural and urban sustainability in Metro New York. In: Integrating the environment & economy. Conference proceedings of the Int. Soc. for Ecological Economics, Novgorod, Russia, July 1997*
- Nettleton, J.S. 1996. *Regional farmers' market development as an employment and economic development strategy. In: Environmental enhancement through agriculture. Conference proceedings of the Center for Agriculture, Food and Environment, Tufts, Boston, November 1996*

Department for International Development (DFID)

Contact:

*Dr. John Barrett, Natural Resources
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Kenya.

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Fax: +44 171 917 0652
E-mail: JC-Barrett@dfid.gtnet.gov.uk*

Main Areas of Work:

- Policy Development and Advice
Research

Recent Activities:

DFID runs various programmes that have linkages to peri-urban agriculture issues. The processes and interaction between urban and rural and natural resources sectors are of most interest to DFID.

Its Natural Resources Systems Programme (DFID-NRSP) promotes the conservation and sustainable development of natural resources in developing countries to alleviate poverty, promote economic growth and reform and mitigate environmental problems. One of its cross-sectoral activities concerns Peri-urban Interface Production Systems Research, that is managed by Natural Resources International Ltd. (NRIL).

The DFID Environment Research Programme that opts to enhance the sustainability of urban and industrial development, has recently been supporting projects related to investigation of urban and industrial impacts on the environment, especially on air pollution impacts on peri-urban and rural crop production (India).

DFID's Engineering Division is concerned with sustainable urban planning, capacity building for solid waste collection and commissions work on water and energy related matters. A review of the use of urban waste water in irrigation is to be carried out around Kumasi (Ghana) and in

Ecology Action / Common Ground

Contact:

Mary Campagna, Editor

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95490-9730, Willits, CA, USA
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Organisational Type

Non-Governmental Development
Organisation

Main Areas of Work

- Research
- Education / Training
- Information / Communication

Recent Activities:

Ecology Action is a non-profit, environmental research and education organisation, focusing on sustainable ways of living in general and bio-intensive mini-farming in particular.

Training Offered:

Ecology Action provides international training courses on bio-intensive gardening or agriculture, with the objective to raise food or vegetable production using ecological farming techniques. The courses vary from 3-day workshops to 10-week full courses.

Courses are held in the USA, but are also replicated in other countries like Russia, Mexico and Kenya.

Publications:

- Ecology Action has produced a publication "*How to grow more vegetables*" that is also translated into Russian.
- Another publication: "*Lazy-bed gardening*" is presently being translated into Russian.

Eduardo Mondlane University, Veterinary Faculty

Contact:

Dr. M. Harun

Postal Address:

CP 257

Maputo, Mozambique

Organisational Type:

Academic Institution

Main Areas of Work:

Research

Specific Expertise:

Urban Animal Production

Regions:

Southern Africa

Recent Activities:

The Veterinary Faculty does research on health risks of urban livestock keeping.

Educational Concerns for Hunger Organisation (ECHO)

Contact:

Martin Price

interns, missionaries and development workers.

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E-mail: ECHO@xc.org

Since 1994, ECHO supports a Rooftop Gardening Project in St. Petersburg and Russia (see further the St. Petersburg Down Town Gardening Club in this guide).

Web Site:

<http://www.xc.org/echo>

Organisational Type:

Development Organisation

Main Areas of Work:

- Information / Communication
- Urban Crop Production: Roof Garden Technologies
- Peri-Urban Crop Production
- Urban Crop Production

Recent Activities

ECHO is a non-profit, Christian organisation dedicated to the fight against world hunger. Their primary mandate is to strengthen the ministries of missionaries and national churches as they assist small farmers or urban gardeners in the third world.

ECHO's primary activities are:

- publishing the *ECHO Development Notes* (in English and Spanish), addressing Third World agricultural problems
- sending trial packets of seeds of under-utilised tropical food plants to people in their network
- responding to farming and gardening questions from over 140 countries
- running a demonstration farm where a wide variety of plants and innovative agricultural practices are demonstrated, including low-tech roof top gardening methods
- hosting an Annual Agricultural missions Conference
- providing study opportunities, consulting and project planning for

Publications:

- ECHO publishes the quarterly *ECHO Development Notes*. It is also published in Spanish, as *ECHO Notas de Desarrollo*. The content of the bulletin is diverse and comprises information on a wide variety of subjects, ranging from alternative feeds for pigs, disease control, and seed storage to information about upcoming events (training, symposia) and available literature. The bulletin can be visited on ECHO's Internet site. It is also available through email and is sent free of charge to missionaries, agricultural development and health workers, teachers, and scientists. Selected articles from the Bulletin prior to issue No. 52 exist in updated form, arranged by subject, in a book "*Amaranth to Zai holes: ideas for growing food under difficult conditions*" (accessible online or for sale at ECHO).
- Price, M. *Rooftop gardening in St. Petersburg, Russia*. On: <http://www.cityfarmer.org>

Environment and Development Activities (ENDA)

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- Sthembile Mawoneke
- Bowden King

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E-mail: caucus@enda.sn

Visiting Address in Senegal:

Bld du Canal IV, Dakar

Organisational Type:

Non-Governmental Development Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Project Implementation
- Research
- Information / Communication
- Urban Farmer

Specific Expertise:

Urban Agriculture and Urban Ecology

Regions:

- East Africa
- West Africa

Recent Activities:

ENDA – Zimbabwe's research studies in urban agriculture can be classified in two phases. The first phase started in 1994 and mainly focused on determining nature and typologies of urban agriculture, identification and description of the participants and the motives behind urban farming. For this purpose, use was made of aerial photography, interviews, workshops and household monitoring.

The second phase commenced in 1996 and aimed at reaching a comprehensive understanding of the impact of urban agriculture on household socio-economic and nutritional well-being. The impact of urban cultivation on the urban ecological environment was also examined, making use of soil and water sampling and monitoring of vegetation. Studies conducted have concentrated on the cities of Harare and Gweru.

ENDA - Senegal implements the Popular Urban Environment Programme (PRECEUP). Its main purpose is to test innovative approaches in terms of urban environment management, to exchange and compare experiences, to transfer appropriate technologies and to contribute to the definition of environmental policies (funding by the EC).

Web Site:

<http://www.globenet.org/preceup>

Publications:

- 1994. *Urban agriculture in Harare*. ENDA - Zimbabwe
- 1996. *Urban agriculture in Gweru: results and recommendations of a household survey conducted in Gweru during March/April 1996*. ENDA - Zimbabwe
- 1997. *Urban agriculture in Harare: results and recommendations of a*

household survey conducted in Harare in 1996. ENDA -Zimbabwe

- 1996. *Urban agriculture in Gweru: proceedings of a one-day workshop. ENDA - Zimbabwe*
- 1996. *Urban agriculture in Zimbabwe: realities and prospects. Proceedings of a national Workshop held in Harare. ENDA - Zimbabwe*

ETC - Urban Agriculture Programme

Contact:

Henk de Zeeuw, Coordinator Urban Agriculture Programme

Further staff involved:

- *Ann Waters-Bayer, Urban Animal Production*
- *Joanne Hammeijer, Health Aspects of Urban Agriculture*
- *Henk Lette, Urban Forestry*
- *Marc Buijter: Reuse of Urban Organic Waste*
- *Marielle Dubbeling, Urban Crop Production*
- *Wietse Bruinsma, Information Systems*

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3833 AN Leusden, The Netherlands*

Organisational Type:

Advisory Firm

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Peri-Urban Crop Production
- Urban Forestry
- Urban Animal Production
- Urban Land and Water Use Planning and Management
- Urban Agriculture and Gender
- Urban Crop Production

- Urban Agriculture & Sustainability in Cities
- Urban Agriculture and Urban Ecology
- Urban Waste Management
- Permaculture

Regions:

- West Europe
- East Europe
- South America
- Southeast Asia
- East Africa
- Southern Africa
- Middle East

Recent Activities:

ETC is a not-for-profit organisation, active in the field of sustainable resource management and ecological agriculture in both Western and developing countries. ETC's experiences in this field include research, information and documentation services, training, technical and policy advice, and project implementation.

ETC has undertaken exploratory studies on local experiences with urban agriculture in five cities (Lima, New Delhi, Nairobi, Harare, Colombo) and has participated in regional conferences on urban agriculture in Bolivia, the United Kingdom, India, Kenya, Zimbabwe and Germany.

ETC offers tailor-made training courses on urban agriculture.

ETC is a member of the interim steering committee of the Global Initiative on Urban Agriculture (GIUA). ETC is collecting and disseminating information on urban agriculture through its Resource Centre on Urban Agriculture and Forestry (RUAF). This centre will maintain (electronic) databases, a newsletter and a web site, and will moderate various electronic conferences on specific topics (see further under RUAF). In this context, ETC has produced the underlying

resource guide on urban agriculture.

ETC is advising municipal authorities on the integration of urban agriculture in urban planning. It has recently presented a paper on this subject to the Green Party in Germany (June 1998). ETC has supported the World Health Organisation – Europe (Nutrition Department) in drafting an Urban Food and Nutrition Action Plan.

In cooperation with the Ludwig Boltzmann Institute (Austria), ICLEI (Germany) and partners in six Central and East European countries an action – research project on urban agriculture will be implemented (financed by the EU INCO-Coopernicus Programme).

In November 1996, ETC Netherlands organised a workshop on Sustainable Municipal Waste Water Treatment Systems. A follow-up project is under preparation in cooperation with WASTE.

ETC India is currently involved in a project on Community Supported Agriculture in Bangalore, India.

Since early 1996, ETC Andes (La Paz) has been hosting the secretariat of the Latin American Research Network on Urban Agriculture (AGUILA). In collaboration with the Palestine Agricultural Relief Committees (PARC) a project has been initiated that studies the opportunities for and limitations of urban agriculture in the Gaza Strip. In collaboration with GTZ, a 'Reader' with integrated city case studies on urban agriculture is being prepared.

Training Offered:

ETC offers tailor-made training courses in the field of urban agriculture. The course is intended for professionals working -or starting to work- in the field of urban agriculture. The level of experience of the participants will determine the specific level and focus of each course. Most courses only have one participant to whom an individual curriculum is offered. Group courses, however, can also be organised.

Publications:

Email Bulletin on Urban Agriculture in Europe

This quarterly bulletin shares information on European experiences, projects and case studies. It serves as a communication platform for the European Support Group for Urban Agriculture. It can be downloaded from the Internet: <http://www.cityfarmer.org>.

Further publications:

- Bliet, J. van der. 1992. *Urban agriculture: possibilities for ecological agriculture in urban environments as a strategy for sustainable cities*. Leusden: ETC-NL
- Chatterji, S. 1993. *A preliminary study of urban agriculture in New Delhi*. New Delhi: ETC India
- Alders, C., J. van der Bliet & A. Waters-Bayer (eds). 1994. *Farming at close quarters*. ILEIA Newsletter Vol. 10 No. 4 (December 1994)
- Bliet, J. van der. 1994. *A framework for analysis and action for urban agriculture*. Paper presented at the TUAN / NRI policy workshop: Urban Agriculture: a Growing Development Tool. London, United Kingdom, 29 June 1994
- Hiemstra, W. & C. Reijntjes C. *Wastes wanted*. ILEIA Newsletter Vol. 10 No. 3 (October 1994)
- Pinzas, T. 1994. *A preliminary exploration of urban agriculture in Peru*. Lima: ETC-ANDES
- Dubbeling, M., D.J. Adrichem. 1995. *Biologische stadsrandbouw: ideële doelstelling in economisch perspectief*. (unpublished)
- Howorth, C., I. Convery & B. Majani. 1995. *Economic sustainability of urban horticultural projects* [in Tanzania]. ETC UK
- Waters-Bayer, A. 1995. *Living with livestock in town: urban animal husbandry and human welfare*. Keynote paper presented at the VIIIth International Conference of Institutions of Tropical Veterinary Medicine, Berlin, Germany, 25-29 September 1995

- Howorth, C., M. Masoka & J. Harnmeyer J. 1996. *A local stakeholders workshop on urban agriculture. organised by ENDA, Harare, March 1996.* ETC-UK / ETC Zimbabwe / Enda Zimbabwe
- Zeeuw, H. de & M. Dubbeling. 1997. *Urban agriculture: concept, significance and constraints.* Paper presented at CTA meeting on peri-urban agriculture. ETC Netherlands
- Zeeuw, H. de. *Urban agriculture: a new perspective for the urban poor.* Paper presented at Proshika Workshop on Urban Agriculture, Dhaka, March 9-10, 1997. Leusden: ETC Netherlands
- Waters-Bayer, A. *Animal farming in African cities.* In: African Urban Quarterly (forthcoming)
- Zeeuw, H. de & M. Dubbeling. *Local food production for improved nutrition and a healthy living environment.* Paper presented at WHO expert meeting on urban food and nutrition security, Copenhagen, March 23, 1998.
- Blik, J. van der & A. Waters-Bayer. *Farming in the city: from analysis to action.* In: African Urban Quarterly (forthcoming)
- Balkema, A., H. Aalbers & E. Heijndermans. *Proceedings of the International Workshop on Sustainable Waste Water Treatment Systems, Leusden, The Netherlands, November 12-14, 1996.* ETC Netherlands and WASTE (for Ecooperation)
- Waters-Bayer, A., M. Dubbeling. *The significance of urban agriculture in one world: starting points for action.* Paper presented at the Workshop on Urban Agriculture in One World, Buendnis 90 – Die Gruenen, June 22, 1998, Bonn, Germany
- Zeeuw, H de. *Promotion of urban agriculture: what cities can do.* Paper presented at the Healthy Cities Conference, WHO, Athens, Greece, July 21, 1998

European Forest Institute (EFI)

Contact:

Cecil C. Konijnendijk

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Visiting Address:

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Joensuu, Finland*

project, presenting a historical overview of urban forestry in Europe, has been completed by the beginning of 1997. Results are published in Working Papers. On the basis of the historical overview and achieved insight in actual policies, links to expected future development of urban forests will be made.

Web Site:

<http://www.efi.fi>

Publications:

See under: Individuals: Konijnendijk, C.C.

Organisational Type:

Independent Research Institute

Main Areas of Work:

- Research
- Information / Communication
- Education / Training

Specific Expertise:

Urban Forestry

Regions:

- West Europe
- East Europe

Recent Activities:

The EFI is presently implementing a comparative study on urban forests in Europe, with the emphasis on forest policy, including environmental aspects.

The study "Urban forestry: overview and analysis of European urban forest policies" will take 3 years and is implemented in cooperation with the Wageningen Agricultural University and the Dutch Ministry of Agriculture and Fisheries. Research will take place in 30 cities in 16 European countries. Attention will be paid to contents of policies, processes, actors involved, translation of policies into management, and social conflicts. A first stage of the

European Union

Contact:

Anne de Ligne, DG VIII (focal point for rural development)

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Phone: +32 2 2991111
Fax: +32 2 296472

Recent Activities:

Within the European Union there is a growing interest in the subject of (peri-) urban agriculture related to both urban and rural development. In practice, however, few activities have been implemented yet.

DG VIII (cooperation with ACP countries) is in the process of establishing policies on agriculture & rural development and urban development, focusing strongly on rural-urban linkages and local development (decentralised cooperation). DG VIII is also working on a forestry assessment project that specifically deals with trees outside forests, including urban forestry.

DG XII is currently developing policy and action for the urban environment and local sustainability and wants to involve local authorities more closely in this process.

The URBAL programme, dealing with urban environment, runs a cooperation programme between European and Latin American cities and finances networking activities. The ASIA URBS Programme promotes decentralised cooperation between local authorities in Asia and Europe.

DG XI runs the European Sustainable Cities Programme that:

- promotes new ideas on sustainability in European urban settings
- fosters a wide exchange of experience and supports projects to

municipalities through networking (amongst others via its European Sustainable Cities & Towns Campaign Newsletter)

- disseminates its Best Practices database
- formulates recommendations for EU institutes, national, regional and local authorities to assist implementation of the European Commission Fifth Environmental Action Programme

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E-mail:
101360.3262@Compuserve.com
Internet:
http://ourworld.compuserve.com/homepages/European_Sustainable_Cities

Publications:

The European Sustainable Cities & Towns Campaign Newsletter
Editor: Mrs. Piedad Rives
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FarmFolk/CityFolk Society

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Herb Barbolet

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Organisational Type:

Community-Based Organisation

Main Areas of Work:

- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

Urban Food Security and Nutrition

Regions:

North America

Recent Activities:

FarmFolk/CityFolk Society is a not-for-profit registered charity, with its main office in Vancouver. FarmFolk/CityFolk is committed to the development and maintenance of a just and sustainable food system by supporting ecological agriculture, strengthening the local food systems and bringing together consumers and producers (through farmer markets, community kitchens, allotment gardens and demonstration farms).

FarmFolk/CityFolk initiates a wide variety of projects and networks with organisations in the areas of food, environment, health, and agriculture. It organises festivals and fora, conducts research, assists in the creation of policy to implement food security

(working e.g. with the Vancouver Health Board and other organisations in the Vancouver Food Policy Organization), and coordinates actions for change.

Ongoing project activities comprise:

- Colony Farm Regional Park (1996-97). The idea of community gardens was instigated, the garden association was set up and the process of their development was facilitated.
- Working with the city of Richmond to develop policy on the use of agricultural land by religious groups (1996-present)
- General promotion of food security to the public including promotion of farm-gate sales and of the need for gardens.

Web Site:

<http://www.alternatives.com/ffcf/index.htm>

This site provides an online library focusing on food security, agriculture, health and land issues and contains a useful list of links for food security.

Publications:

A bi-monthly Newsletter, the "*FarmFolk/CityFolk Society Newsletter*"

French Ministry for Development Co-operation

Contact:

*Ministère Délégué à la Coopération et à la Francophonie
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Organisational Type:

Governmental Organisation

Main Areas of Work:

- Policy Development and Advice
- Technical Assistance

Specific Expertise:

- Peri-Urban Crop Production
- Urban Animal Production
- Urban Agriculture and Enterprise Development

Recent Activities:

Since the late 1980's, French development aid has begun to focus on urban issues, like urban poverty and related environmental problems. Urban agriculture is legitimised because of the rapid urbanisation and the subsequent food security issue.

The FDA finances and gives technical support to municipal projects in ACP countries like small livestock production and marketing of vegetables. They emphasise small-scale agriculture, also because of the increased privatisation of commercial cash-crop production. Important focus points for the French are land tenure and related access to land and the strengthening of local professional organisations (producer groups, farmer associations, labour organisations).

Two of their recent projects are:

- Peri-urban agriculture in Gabon, in collaboration with the Institut Gabonais d'Appui au Développement (IGAD) and CIRAD. The project deals with vegetable and dairy production on the outskirts of Libreville and consists of three phases:
 - . establishment of 50 food crop production enterprises
 - . agricultural processing and commercialisation
 - . setting up of training centres. Vegetable production activities in Congo (Brazzaville, Dolisie and Pointe-Noire).
- In collaboration with the Institut Congolais d'Appui au Développement (AGRICONGO) the following peri-urban activities were developed:
 - . experimental phase: implementation of socio-economic studies and installation of pilot enterprises in Brazzaville (1986-1989);
 - . upscaling of activities in the region: creation of resource centres (1990-1993);
 - . start of development programme: vegetable production in Brazzaville, identification of 4 new regional programmes, creation of resource centre in Pointe-Noire (1994-1997).

Flickerville Mountain Farm and Groundhog Ranch

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Rt. 1 Box 765

Warfordsburg PA 17267, USA

Organisational Type:

Commercial Enterprise

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Information / Communication
- Urban Farmer

Specific Expertise:

- Peri-Urban Crop Production
- Urban Agriculture and Enterprise
Development: Marketing of
Agricultural Produce

Regions:

North America

Recent Activities:

Peri-urban farm for over 15 years,
supplying produce, plants and flowers
directly to customers in the Washington
DC area

Training Offered:

Seasonal apprenticeship on the farm

Web Site:

[under construction]

Publications:

Newsletter and other materials focusing
on producer-consumer linkages

Food and Agriculture Organization of the United Nations (FAO)

Contact:

Dr. Rachel Nugent, Environmental and Social Department

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00100 Rome, Italy*

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Fax: +39 6 5705 3152

E-mail: rachel.nugent@fao.org

Organisational Type:

- Governmental Organisation
- International Organisation

Main Areas of Work:

- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Recent Activities:

FAO has been involved in urban and peri-urban agriculture through several targeted initiatives in their regular programmes, as well as through general technical assistance and its participation in international fora dealing with (peri)urban agriculture. In this context FAO participated in the 1996 SGUA meeting in Ottawa.

FAO's regular programmes dealing with (peri)urban agriculture comprise:

- The Programme on Peri-urban Production Systems (AGAP) that has conducted case studies to characterise livestock production in seven cities, studying a.o. crop-livestock integration, public health issues, production and agricultural processing. The results of the case studies are presently being finalised.
- The Programme on Peri-urban Horticulture (AGPC) recognises the potential of providing fresh food to the urban population. The programme provides technical advice for establishing intensive

market gardens and small-scale home gardening by the urban poor.

- The Programme on Urban and Peri-urban Forestry (FORC) promotes the integration of forestry into overall urban planning. FAO concentrates on concept development, awareness raising, improved documentation (e.g. through the publication of a bibliographic overview) and technical and methodological support (Yemen, Turkey). A number of case studies (Quito, Cairo, Hong Kong, Singapore, Rio de Janeiro) have also been prepared.
- The Programme on Food Supply and Distribution to Cities (AGSM) mainly focusing on Africa. The objective is to examine the efficiency of marketing systems and production-consumption linkages to increase access to food. It involves a dialogue with municipalities, increasing local management and developing necessary legislation.
- The Natural Resources Programme dealing with improved water management for sustainable agricultural production, including safe and sustainable use of municipal waste water and drainage effluents; and implementation of waste water and sludge reuse programmes.

Next to these regular activities, FAO has an informal staff network involved / interested in urban agriculture and its linkages to land tenure, poverty alleviation, nutrition, women and development.

The Land Tenure Service (SDAA) has recently published an issue of *The Land Reform, Land Settlement and Cooperatives* (Vol. 1997 No. 2) containing several articles related to (peri-) urban agriculture.

FAO is presently working on a white paper on urban agriculture to be presented to the FAO Committee on Agriculture in January 1999, with the

purpose to discuss FAO's future role, programmes and priorities in the field of (peri-) urban agriculture.

Training Offered:

Potential internship opportunities

Web Site:

<http://www.fao.org>

Publications:

- FAO. 1997. Land Reform No. 2
Special issue on urban and peri-urban agriculture
- FAO Food and Nutrition Division.
Improving nutrition through home gardening: a training package for preparing field workers in Southeast Asia. This manual is supplied free of charge and can be ordered with Ellen Muehlhoff: E-mail: Ellen.Muehlhoff@fao.org
- *Food & Nutrition* (6-monthly magazine)
- An annotated bibliography on urban and peri-urban forestry, containing 557 references, was published in hard copy in 1995 and an updated www database on urban and peri-urban forestry is nearing completion. Copies are available on request from the Forest Resources Division of FAO.
- Unasylva, FAO's Forestry Journal, Vol. 44 No. 173 (1993). *Urban and peri-urban forestry*
- Carter, E.J. *The potentials of urban forestry in developing countries: a concept paper* [no further details known]

GARDENS / MINI-FARMS Network

Contact:

Ken Hargesheimer

Postal Address

P.O. Box 1901

Lubbock, TX 79408-1901, USA

Phone: +1 806 744 8517

Fax: +1 806 744 0500

Email: minifarms@aol.com

Main Areas of Work:

- Education / Training
- Urban Farmer

Specific Expertise:

- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening
- Urban Animal Production
- Agricultural Services Provision: Extension and Technical Assistance
- Peri-Urban Crop Production

Regions:

- North America
- West Africa
- Central America

Training Offered:

GARDENS / MINI-FARMS Network offers training (in English and Spanish) in organic bio-intensive home gardening. Topics include:

- . household food production
- . small animal keeping
- . appropriate tools and techniques.

Course material is available in English, French, Spanish, Russian, German, Arabic and Hindi.

German Agency for Technical Cooperation (GTZ)

Contact:

Ulrich Sabel-Koschella (Smallholder
Agriculture Division)

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65726 Eschborn, Germany
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Fax: +49 6196 797352
E-mail: ulrich.sabel-koschella@gtz.de

Organisational Type:

Governmental Organisation

Main areas of work:

- Technical Assistance
- Policy Development and Advice

Recent Activities:

For German technical cooperation, the executive agency is GTZ. It disperses funds allocated by the German Ministry of Foreign Affairs (BMZ) to specific projects. In some programmes, GTZ has direct links with developing country NGOs. GTZ has been going through a process of decentralisation in 1997, implying a.o. that urban agriculture should be promoted within the context of regional programmes, and not as a sectoral approach, and is seen in direct relation with poverty alleviation, environment and health (nutrition).

GTZ is presently involved in urban agriculture through:

- production of a "Reader on urban agriculture", aiming at creating policy awareness on the potential of urban agricultural within regional and urban programmes
- participating in the preparation of an international seminar on urban agriculture (see further DSE)
- project peri-urban vegetable production systems for year around supplies to tropical Asean cities (see also Organisations: Technische Universitaet Muenchen)

- the IPM Regional Horticultural Project for East and Southern Africa (see also Organisations, IPM Regional Horticultural Project for East and Southern Africa)
- supporting the Urban Vegetable Promotion Project in Dar es Salaam, Tanzania (see further separate description UVVP in this resource guide)
- collecting information on urban animal production within its Livestock Farming, Veterinary Services and Fisheries Division
- a programme proposal to the BMZ that will facilitate the integration of urban agriculture in sectoral and regional programmes

Publications:

- Jahn, G. 1996. *Die Bedeutung der Dienstleistungsbereiche fuer die peri-urbane Haltung kleiner Wiederkauer am Beispiel Mourouas, Kamerun*. Institut fuer Tierzucht und Haustiergenetik, Universitaet Goettingen
- See also the UVPP publications.

Global Applied Research Network in Water Supply and Sanitation (GARNET)

Contact:

D.L. Saywell

Postal Address:

Water, Engineering and Development
Centre (WEDC)
Loughborough University
Loughborough, Leics LE11 3TU, United
Kingdom
Phone: +44 1509 222885
Fax: +44 1509 211079
E-mail: wedc@lboro.ac.uk /
d.l.saywell@lboro.ac.uk

NGO professionals to study current development issues and receive training in appropriate project design, community-based approaches and project implementation.

Publications:

- *Global Network Newsletters*; published bi-annually and distributed to an estimated 5,000 contacts worldwide. French and Spanish language summaries of the newsletter appear in the Local Network Centre's bulletins. The newsletter is also distributed via electronic mail.
- GARNET publishes case studies, specialist papers, directories and project listings on applied research in water supply and sanitation

Organisational Type:

Development Organisation

Main Areas of Work:

Information / Communication

Specific Expertise:

Urban Agriculture and Public Health

Web Site:

<http://info.lboro.ac.uk/departments/cv/wedc/index.html>

Recent Activities:

GARNET constitutes one of the fourteen current activities of the Water Supply and Sanitation Collaborative Council. GARNET's objective is to facilitate the sharing of ideas, experiences and research between professionals researchers, field workers and other professionals in different countries working in the water supply and sanitation sector.

Training Offered:

The WEDC is concerned with the subject of provision of basic services (water supply, waste management, sanitation, lighting and community buildings) for low-income urban communities. WEDC enables GO and

Global Urban Research Initiative (GURI)

Contact:

Daniel Berman

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Studies*

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Fax: +1 416 978 7162

Email: dberman@chass.utoronto.ca

Organisational Type:

Development Organisation

Main Areas of Work:

Information / Communication

Recent Activities:

GURI's mandate involves identification, analysis and public discussion of major thematic research and policy issues in the urban field (urban governance, urban environment and sustainability, poverty and economy of cities and urban social structures), and the dissemination of this work through publications, meetings and building networks.

Web Site:

<http://www.chass.utoronto.ca:8080/guri/>

The GURI web site gives information about GURI's mandate, activities and member institutions. It lists GURI's publications and provides links to other relevant Internet sources, magazines, institutions and programmes.

Heifer Project International

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Little Rock, AR 72203, USA

Phone: +1 501 376 6836

Email: amyd@heifer.org

technology for a developing world. It produces a quarterly Newsletter on this theme. Projects of Heifer include those working with urban livestock and backyard animals and two of their Bulletins report on these issues.

- Heifer has published a series of very practical training manuals on production dairy cattle, goats, poultry, rabbits and fish

Main Areas of Work:

Information / Communication

Specific Expertise:

Urban Animal Production

Recent Activities:

Heifer Project International (HPI) is working on appropriate livestock technology for a developing world. Its role in Urban Agriculture / urban animal husbandry is growing. Several projects already exist, e.g. in Peru and India. In September 1996, HPI launched its first North American urban agriculture initiative in Chicago, where the organisation works with low-income families and community groups to develop urban livestock projects. Projects that have been initiated in Chicago include raising honeybees on roof tops, harvesting honey and direct marketing of honey and beeswax products, raising poultry in greenhouses, raising dairy goats and earthworms.

Publications:

- *The Exchange: Heifer Project International* (HPI), published quarterly. Deals with issues in appropriate livestock technology for a developing world, such as urban livestock production and backyard animals.
- *The Exchange: Heifer Project International* (HPI)
The Heifer Project International is working on appropriate livestock

Henry Doubleday Research Association (HDRA)

Contact:

Prof. P.J.C. Harris

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Phone: +44 1203 303517
Fax: +44 1203 639229
E-mail: enquiry@hdra.demon.co.uk*

Organisational Type:

Charitable Membership Trust

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research
- Information / Communication

Specific Expertise:

- Urban Crop Production: Community Gardening
- Urban Crop Production: Backyard Gardening

Recent Activities:

HDRA offers practical organic gardening advice and carries out scientific research into organic horticultural techniques. HDRA runs attractive organic display gardens in Great Britain, at Ryton in the Midlands, and at Yalding near Maidstone in Kent, where all aspects of domestic horticulture are shown, including composting, pest and disease control, fruit and vegetable production, herbs, roses, lawns, shrubbery and herbaceous plantings.

HDRA's Information and Education Department answers questions on organic gardening, produces leaflets on practical garden subjects (e.g. "How to make compost") and runs courses on a wide range of organic and related subjects as well as promoting organic

gardening, farming and food. A recent project, 'Go Organic in the School Grounds' which is sponsored by the Department of the Environment is helping schools to use organic methods in maintaining their school grounds. Members of HDRA get a quarterly magazine packed with organic gardening news, tips and practical information.

Other areas of HDRA's work include running a consultancy service on waste management, organic gardening and landscape design and management, and research into sustainable growing. For the past four years it has worked extensively with local authorities on the design of green waste composting facilities and assistance with home composting trials.

HDRA has an International Research Department with temperate and tropical research programmes. Current temperate research activities include developing soil conditions and growing media using recycled waste materials as alternatives to peat; comparison of vegetable varieties to select the best types for commercial organic growers; biological pest controls and work on winter green manures (cover crops). Their overseas work focuses on the problems of food production by peasant growers in developing countries. It focuses in particular on the role of agroforestry (integrating trees and crops) for rural areas and peri-urban gardening for those living on the edge of cities.

Some examples:

- A visit to Cuba to assist in setting up research and to run workshops
- A review of the use of urban wastes in peri-urban interface production systems on behalf of the Natural Resources Systems Programme of the Department for International Development of the UK

- Two 5-day training workshops in Palestine on all aspects of composting and compost use (1997)
- Collaboration with the International Mycological Institute on the use of composted urban wastes in integrated management systems to control pests and pathogens in peri-urban Agriculture (1997)

Training Offered:

On composting

Web Site:

<http://www.hdra.org.uk>

Publications:

- Harris, P.J.C. 1997. *Urban Agriculture in Havana, Cuba: soil fertility aspects*. NRSP/DFID Soil Fertility Workshop, University of Reading, September 1997
- Wilson, H. & P.J.C. Harris. 1996. *Report of Havana Urban Agriculture organic production*. Technical report. DeMontfort University and HDRA
- Allison, M. & P.J.C. Harris. 1996. *A review of the use of urban wastes in peri-urban interface production systems*. Report prepared for NRSP/DFID, United Kingdom
- *HDRA Quarterly*

Humboldt University, Faculty for Agriculture and Horticulture (LGF)

Contact:

Prof. Dr. Friedhelm Streiffeler

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Fax: +49 30 20936542
E-mail: friedhelm.streiffeler@rz.hu-berlin.de

Visiting Address:

Luisenstrasse 53
19117 Berlin, Germany

Organisational Type:

Academic Institution

Main Areas of Work:

- Education / Training
- Research

Publications:

- Streiffeler, F. *Urban agriculture in Africa with special reference to the former Zaire*. In: Kracht, U. & M. Schulz (eds). Food security (in press)
- Streiffeler, F. 1994. *Urban agriculture in Africa: the recent situation in its most important aspects*. In: Brandstetter, A.-M., G. Grohs & D. Neubert (eds). Afrika hilft sich selbst, p.241-255. Muenster-Hamburg: Lit Verlag
- Streiffeler, F. 1994. *L'agriculture urbaine en Afrique: la situation actuelle dans ses aspects principaux*. In: Systèmes agraires et agriculture durable en Afrique sub-Saharienne, p.437-454. Cotonou, Bénin

- Streiffeler, F. 1993. *General principles and approaches for sustainable urban greenbelts with special reference to Africa*. 59 p.
- Streiffeler, F. 1991. *The knowledge system and the action motives in urban agriculture of Subsaharan Africa*. Workshop Agricultural Knowledge Systems and the Role of Extension. Bad Moll, May 21-24, 1991
- Streiffeler, F. 1987. *Improving urban agriculture in Africa: a social perspective*. In: Food and Nutrition Bulletin Vol. 9 No. 2 (June 1987) p.8-13. The United Nations University
- Streiffeler, F. 1982. *Productive work for low-income families in an urban environment: an experience in Zaire*. In: Ideas & Action Bulletin (FAO) Vol. 1982 No. 149 p.3-8

Hydro/Aquatic Technologies (H/A Tech)

Contact:

Scott Jones

Postal Address:

P.O. Box 777

Princess Anne MD 21853, USA

Phone: +1 410 957 2680

Fax: +1 410 957 2859

E-mail: aqua@hatech.com

Training Offered:

1-day to 2-week hands-on classes in hydroponics, aquaculture and aquaponics given at central locations around the U.S. (other countries considered)

Web Site:

<http://www.hatech.com> (under construction)

Organisational Type:

- Advisory Firm
- Commercial Enterprise

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development
- Project Implementation
- Research

Specific expertise:

- Urban Crop Production: Hydroponics
- Urban Waste Management: Waste Water Management
- Waste Water - Fed Aquaculture

Regions:

North America

Recent Activities:

- 1997. Commercial freshwater indoor prawn (shrimp) production system (New York State)
- 1997. Multiple classroom hydroponic systems (Pennsylvania)
- 1998. Tilapia/basil aquaponic system (using methane from municipal landfill for heat and electricity) (New York State)
- 1998. Educational hydroponic, aquaculture and aquaponic greenhouses for schools in Mississippi, Texas, Virginia, New York, and Michigan

Institute for Food and Development Policy, Food First Programme

Postal Address:

398 60th Street
Oakland CA 94618, USA
Phone: +1 510 654 4400
Fax: +1 510 654 4551
E-mail: foodfirst@igc.apc.org

Food First is coordinating the Bay Area Coalition for Urban Agriculture, which proposes to join with the University of California, Berkeley to create an International Center for Urban Agriculture and Sustainable Food Systems at the Gill Tract (see for further information under University of California).

Organisation Type:

Non-Profit Educational Organisation

Web Site:

[http:// www.foodfirst.org](http://www.foodfirst.org)

Main areas of work:

- Research
- Education
- Policy Development and Advice
- Information / Communication

Publications:

- 1996. *The Greening of Cuba (Verde Que te Quiero Verde)* (Video)
Food First's documentary available on video cassette in English and Spanish chronicles the way Cuba has overcome a food crisis through organic farming and urban agriculture. The story is told by farmers and researchers themselves, and always provokes animated discussion about the future of agriculture in other countries, including our own. Price: USD 29.95. 38 minutes VHS, color
- Development reports on urban agriculture in Cuba

Specific Expertise:

Urban Food Security and Nutrition

Recent Activities

The Institute for Food and Development Policy -better known as Food First- is a member-supported, non-profit research and education-for-action centre highlighting root causes and value-based solutions to hunger and poverty around the world, with a commitment to food as a human right. The strategy is to change consciousness, awaken people to the possibility of social change and their own power to bring it about. Food First works with NGOs and research institutions on developing alternative projections about population growth and food production and advocates sustainable approaches to increasing food production, one of which is considered to be urban agriculture.

As a think tank serving the needs of the public, policy makers, activists, the media, students, educators, and researchers, Food First produces books, reports, articles, films, electronic media, and curricula, plus interviews, lectures, workshops, and courses.

Institute for Soil, Climate & Water (ISWC), Agricultural Research Council

Contact:

*Leonid Korentajer, Project Manager,
Technology Transfer and Training
Programme*

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E-mail: leo@igkw2.agric.za*

research on the use of compost (sewage sludge and household refuse) for vegetable production and on low-cost irrigation systems for urban farmers. The institute recently has secured a grant from the European Union to do urban farming system research, focusing on reuse of household waste in crop production. Four African countries are participating in the project: South Africa, Namibia, Mozambique and Zimbabwe, together with two EU countries: Portugal and UK.

Organisational Type:

- Research Organisation
- Development Organisation
- Governmental Organisation

Main Areas of Work:

- Education / Training
- Project Implementation

Specific Expertise:

- Urban Crop Production: Backyard Gardening
- Urban Crop Production
- Urban Agriculture and Urban Ecology

Regions:

Southern Africa

Recent Activities:

The ISWC has been involved in an urban agriculture project in an informal settlers community outside Pretoria for the past 2 years. The institute intends to establish an urban agriculture training unit at the site, with emphasis on sustainable low-cost methods of crop production, family nutrition and environmental issues (e.g. composting of solid household waste).

Presently, the ISWC is conducting

Inter-American Development Bank (IDB)

Contact:

Kari Kaipi, Senior Forester

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Fax: +1 202 623 3094
E-mail: karik@iadb.org

. 1995-98. Sao Paulo Drainage Program

Web Site:

<http://www.iadb.org>

Publications:

1997. *Good Practices for Urban Greening*. IDB No. ENV-109. IDB, Washington, DC

Organisational Type:

- Funding Agency
- International Organisation
- Inter-Governmental Organisation

Recent Activities:

The Inter-American Development Bank, a regional multilateral development institution, was established in 1959 to help accelerate economic and social development in Latin America and the Caribbean.

The Bank's operations cover the entire spectrum of economic and social development. In the past, Bank lending emphasised the productive sectors of agriculture and industry, the physical infrastructure sectors of energy and transportation and the social sectors of environmental and public health, education and urban development. Current lending priorities include poverty reduction and social equity, modernisation and integration, and the environment.

Programmes supported by the IDB with urban agricultural components are:

- . 1994-98. Mexico City Ecological Conservation Project
- . 1992-97. Bogotá River Watershed Program
- . 1997-present. Guatemala City Environmental Program
- . 1997-present. Quito Slope Stabilization Program
- . 1998-present. Panama City Green Investment Master Plan

International Agricultural Centre (IAC)

Contact:

Dr. Martin A. Beek

Postal Address:

*P.O. Box 88
6700 AB Wageningen, The Netherlands
Phone: +31 317 490111
Fax: +31 317 418552
E-mail: iac@iac.agro.nl*

IAC also organises a new 2-week International Course on Urban Nutrition (May 18-29, 1998), with 1 day on Urban Agriculture.

Web Site:

<http://www.iac-agro.nl>

Visiting Address:

*Lawickse Allee 11, 6701 AN
Wageningen, The Netherlands*

Organisational Type:

Academic Institution

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice

Training Offered:

The IAC is a foundation attached to the Netherlands Ministry of Agriculture, Nature Management and Fisheries. It conducts a diversity of training programmes in agriculture and related sciences in The Netherlands for participants from all over the world.

IAC offers a specific course on vegetable production. The course programme focuses on technological approaches and methods that are appropriate for and accessible to (urban) farmers and lead to an increase of the farm productivity. Aspects covered include: seed technology and quality control, variety testing, Integrated Pest Management, plant nutrition, post harvest and marketing, extension methods in vegetable production.

The course is given in English and is designed for trained horticultural and advisory officers, lecturers and researchers. Applicants should have a working experience of several years.

International Council for Local Environmental Initiatives (ICLEI)

Contact:

Laura Buguna

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E-mail: iclei_europe@compuserve.com*

environmentally sound practices by European local authorities. It also guides towards documents on European policy in the fields of sustainable urban development, environmental management, and local action plans on climate protection.

Web Site:

- <http://cities21.com/europractice>
- <http://www.iclei.org>

Organisational Type:

Network

Main Areas of Work:

- Policy Development and Advice
- Education / Training
- Information / Communication

Regions:

- East Europe
- West Europe

Recent Activities:

ICLEI aims at setting up and supporting local communities in the implementation of local Agenda 21 in cooperation with the International Union of Local Authorities (IULA). ICLEI participates in the European Union's Sustainable Cities Project.

It formulates policy recommendations on how to incorporate environmental objectives into local planning strategies. ICLEI initiates local programmes to do research and to develop and implement action programmes. ICLEI is participating in the coordination of the Sustainable Cities and Towns Campaign that is closely linked to the Sustainable Cities Project of the European Union.

ICLEI provides information and training on sustainable development, and publishes a database on the Internet containing case studies on

International Development Research Centre (IDRC), Cities Feeding People Program

Contact:

- Luc Mougeot
- Alice Hovorka

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E-mail: lmougeot@idrc.ca

Organisational Type:

Development Organisation

Main Areas of Work:

- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Recent Activities:

The International Development Research Centre supports applied, multi-disciplinary research on food security and urban policy issues in the South. Within the "Cities Feeding People" programme, IDRC executes various projects related to urban food production and waste management. The programme initiative aims to encourage policy and technology choices for the sustainable use of urban resources, with an appropriate gender focus. The programme will undertake the following:

- strengthening household food security
- strengthening employment and income generation
- supporting waste and open-space management
- supporting community self-management, particularly for the urban poor
- promoting receptive policy and regulatory frameworks for land tenure, zoning, and use planning.

IDRC manages an International Awards

Programme related to urban food production and waste management (AGROPOLIS). This programme initiative enables researchers to supply a range of intervenors (including NGOs, governmental and development organisations and organised producers) with required expertise and information for more effective policy and technology interventions in urban agriculture.

IDRC is a member of the interim-steering committee of the SGUA, organises and facilitates regional and international meetings/conferences on urban agriculture, publishes articles and books and supplies information to a variety of partners.

IDRC supported the set-up of regional networks on urban agriculture, like AGUILA in Latin America (see also this resource guide) and networks in West and Eastern Africa. IDRC collaborated with ETC in the project formulation for a Resource Centre on Urban Agriculture and Forestry (RUAF), is working with UMP-LAC to document best municipal practices in the region and participates in a regional programme on urban food supply in West Africa. See further enclosed list on past and ongoing IDRC-research programmes.

Current Activities:

- Co-funding of the Resource Centre on Urban Agriculture, and Forestry (RUAF)
- Urban horticultural technologies, Port-au-Prince (Haiti)
- Urban agriculture: food security and nutritional status in Greater Accra (Ghana)
- Urban agriculture in local waste management: Santiago (Dominican Republic)
- Socio-economic and ecological impacts of urban agriculture, Harare (Zimbabwe)

- Urban agriculture in Metro Fortaleza (Brazil)
- institutional support for AGUILA (Latin American Network for Urban Agricultural Research)

Other projects:

- Urban agriculture in Dar es Salaam (Tanzania)
- Farming in the city (Kampala, Uganda)
- Solid waste management (Sale, Morocco)
- Nutrition in urban slums (India)
- Community based solid waste management in slums (Bombay, India)
- Urban food security (Central America)
- The grocery basket in Bolivia
- Engineered wetlands for urban water management (Battambang, Cambodia)
- Integral system for recycling organic waste (Mexico)
- Informal sector street foods (Pune, India)
- By-products (Ghana)
- Resource allocation choices in urban Agriculture (Kenya)
- Land restoration through waste management (India)
- Municipal policy review re: urban agriculture (South Africa)
- Piggery waste treatment (Singapore)
- Household small animal production (Peru)

Web Site:

<http://www.idrc.ca/cfp>

Web Site Description:

This web site is among the most prominent sites on urban agriculture. It provides information on IDRC's research on food security and urban policy issues. The site allows programme team members and their partners to exchange information and documents, discuss issues of interest and share opinions on urban agriculture research. Currently, the site contains online reports from its various urban agriculture programmes, information on new projects and publications. It provides links to other urban agriculture networks and web sites. The site is clearly organised and accessible to all

types of browsers. Furthermore, it provides information both in English and French. It is an excellent resource for anyone interested in the topic.

Publications:

- Egziabher, Auxumite G., Diana Lee-Smith, Daniel G. Maxwell, Pyar Ali Memon, Luc J.A. Mougeot & Camillus J. Sawio. 1994. *Cities feeding people: an examination of urban agriculture in east Africa*. IDRC 160 p., ISBN 0-88936-706-X, price: CA \$25.00 (CA\$15.00 in developing countries)
- Cities Feeding People Report Series: (The first 14 reports are presently available on-line.)
 - . Report 1: Sawio, Camillus J. 1993. *Urban agriculture research, in east & central Africa: record, capacities and opportunities*. University of Dar es Salaam
 - . Report 2: Lamba, Davinder. 1993. *Urban agriculture research, in east Africa: record, capacities and opportunities*. Mazingira Institute
 - . Report 3: Wekwete, Kadmiel H. 1993. *Urban agriculture research, in east & central Africa. I. Record, capacities and opportunities*. University of Zimbabwe
 - . Report 4: Chimbowu, Admos & Davison Gumbo. *Urban agriculture research in east & southern Africa. II. Record, capacities and opportunities*. ENDA-Zimbabwe
 - . Report 5: Diallo, Souleymane. 1993. *Urban agriculture research in west Africa: record, capacities and opportunities*. ENDA -Tiers Monde
 - . Report 6: Yue-man Yeung. 1993. *Urban agriculture research in east & southeast Asia: record, capacities and opportunities*. The Chinese University of Hong Kong
 - . Report 7: Boehrt, Julio Prudencio. 1993. *Urban agriculture research in Latin*

- America: record, capacities and opportunities.* UNITAS
- . Report 8: Mougeot, Luc J.A. 1994. *Urban food production: evolution, official support, significance.* IDRC
 - . Report 9: Sommers, Paul & Jac Smit. 1994. *Promoting urban agriculture: strategy framework for planners in North America, Europe and Asia.* The Urban Agriculture Network (TUAN)
 - . Report 10: Sawio, Camillus. 1994. *Urban agriculture and the Sustainable Dar-es-Salaam Project, Tanzania.* UNCHS-IDRC Project Coordinator
 - . Report 11: Cosgrove, Sean. 1984. *Une histoire de deux villes: comparing community gardening programs in Montreal and Toronto.* 8pp. Toronto Food Policy Council, Canada
 - . Report 12: Greenhow, Timothy. 1994. *Urban agriculture: can planners make a difference?* SWEDEPLAN / Swedish National Board of Housing, Building and Planning
 - . Report 13: Boehrt, Julio Prudencio. 1994. *Agricultura urbana en America latina: evaluación in situ para iniciativa regional.* CIID
 - . Report 14: Golhor, Kando. 1995. *L'agriculture urbaine en Afrique tropicale: évaluation in situ pour initiative régionale.* CRDI
 - . Report 15: Dennery, Pascale. 1995. *Cities feeding people project fact sheets.* IDRC
 - . Report 16: Frojmovic, Michel. 1996. *Urban agriculture in Canada: a survey of municipal initiatives in Canada and abroad.* IDRC
 - . Report 17: IDRC. 1996. *The third meeting of the Support Group on Urban Agriculture (SGUA): proceedings, 18-19 March 1996,* IDRC, Ottawa, Canada. Global Initiative for Urban Agriculture
 - . Report 18: Smit, Jac. 1996. *Urban agriculture, progress and prospect: 1975-2005.* The Urban Agriculture Network (TUAN)
 - . Report 19: Lindayati, Rita. 1996. *Urban agriculture: a survey of academic expertise and programs in Canada.* IDRC
 - . Report 21: Hovorka, A.J. *Gender resources for development research and programming in Urban Agriculture.* IDRC, Ottawa, Canada (forthcoming)

International Food Policy Research Institute (IFPRI)

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- James Garrett

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Organisational Type:

Non-Governmental Development Organisation

Main Areas of Work:

- Education / Training
- Research
- Information / Communication
- Policy Development

Specific Expertise:

Urban Food Security and Nutrition

Recent Activities

The International Food Policy Research Institute (IFPRI) was established in 1975 to help developing countries devise appropriate food policies and the policies needed to ensure the optimum use of new agricultural technologies. IFPRI operates as part of the Consultative Group on International Agricultural Research (CGIAR).

One of IFPRI's programmes is concerned with Urban Challenges to Food and Nutrition Security. This research program, launched in 1995, will provide policymakers, programme administrators, and development practitioners with the information they need to make sound policy decisions to reduce food insecurity and malnutrition in urban areas. Research is implemented in Bangladesh, Egypt, Ghana, Guatemala, Mozambique, and Tanzania.

In *Bangladesh* the research team

collaborated with CARE staff to design and test strategies.

In *Egypt*, the team is supporting the work of the multicountry program on Gender and Intra-household Research on food and antipoverty policies in Egypt with an analysis of nutrition data from Cairo and other urban centers.

In *Ghana*, a survey has been carried out in 1997. An IFPRI Research Report on this will be available by the end of 1998.

In *Guatemala*, an evaluation of the Community Day Care Centers Program of the First Lady will be carried out in 1998. The impact evaluation of the program, which will look at various child, household, and community outcomes, will be implemented during the second half of the year, in collaboration with INCAP/PAHO.

In *Mozambique*, IFPRI collaborates with the government in the framework of its Gender and Intra-household Research Multicountry Programme, in preparing the first national poverty assessment. The team provides assistance in analysing the determinants of rural and urban food security and nutrition in Mozambique.

In *Tanzania*, the team assisted CARE and its partners in designing and carrying out a livelihood security assessment. The assessment was conducted at 12 sites in Dar es Salaam and helped to identify potential areas of intervention for CARE's programming.

More extensive information on each of the research results can be found on IFPRI's web site.

Web Site:

<http://www.cgiar.org/ifpri>

Publications:

- Maxwell, D. 1996. *Measuring food insecurity: the frequency and severity*

of coping strategies. In: Food Policy
Vol. 21 No. 3 p.291-303

- Maxwell, D. 1996. *Highest and best use? Access to urban land for semi-subsistence food production* In: Land Use Policy Vol. 13 No. 3 p.181-195
- Ruel, M. et al. 1997. *Urban challenges to nutrition security: a review of food security, health and care in cities.* Washington, DC: International Food Policy Resesarch Institute
- Maxwell, D. 1996. *Linking policy research to policy reform: social science and food security research in Uganda and Ghana.* Washington: IFPRI, Outreach Division Discussion Paper (paper originally presented at the Rockefeller Foundation SSRF biennial meeting in Nairobi, August 14, 1996) (submitted)

International Institute for Rural Reconstruction (IIRR)

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- Ibus, AC. 1988. *Urban agriculture issues: a case study of DBB*. IIRR-The Philippines (unpubl.)

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E-mail: iirr@cav.pworld.net.ph

Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Project Implementation
- Information / Communication

Specific Expertise:

- Urban Crop Production: Backyard Gardening
- Urban Food Security and Nutrition

Regions:

Southeast Asia

Recent Activities:

- Family food production programme, The Philippines
- Social marketing, Thailand
- Bio-intensive gardening, The Philippines

Publications:

- 1993. *The bio-intensive approach to small-scale household food production*. IIRR-The Philippines
- Ignacio, N.G. 1994. *Resettle and survive*. In: ILEIA Newsletter Vol. 10 No. 4 (December 1994)
- Cantada, A.R. 1987. *Semi-commercial gardening project*. IIRR, The Philippines (unpubl.)

International Institute for Urban Environment (IIUE)

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Organisational Type:

- Non-Governmental Development Organisation
- Academic Institution

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice

Specific Expertise:

- Urban Crop Production: Greenhouses
- Urban Crop Production: Roof Garden Technologies
- Urban Crop Production: Community Gardening

Regions:

- Australia and Oceania
- East Europe
- Middle East
- North America
- Southeast Asia
- West Europe

Recent Activities:

The International Institute for the Urban Environment was established in 1989 to promote sustainable urban development. The institute closely collaborates with the Faculty of Policy

Analysis and Systems Engineering of the Delft University of Technology.

The IIUE carries out studies and research, organises conferences and training programmes and helps to realise demonstration projects. The institute acts as WHO Collaborative Centre for Environmental Health in Urban Development and houses a European Centre for Local Urban Initiatives (CIUL Delft).

IIUE implements projects dealing with various aspects of policy development, environmental planning and technology, including.

- The Local Environmental Charters project (financed by DG XIII), 1994-1995, aimed at involving various local community groups (local authorities, the business sector, technical experts and advisors, and citizens) in the process of policy development towards sustainability. Twenty European cities and towns participated by organising local roundtables to formulate plans for implementing 'Local Agenda 21'.
- Resourceful City project (1994-1996): documents examples of good practice in urban environmental planning, management and design in Europe. Cases from more than 50 cities all over Europe are defined and presented in an illustrated book covering areas such as traffic and transportation, energy, water and waste, green space, land use planning and healthy buildings.
- Developing the Economy from Within (DEW) project (1998-99): aims to develop local action plans towards green jobs in five European regions and cities
- Sustainability Indicators for Cities and Towns (1996-97): provides a tool to measure progress towards sustainable development. Monitoring takes place through data collection on the state of the environment

through affiliated centres for Europe's Environment Agency. IIUE developed the ABC Indicator Model, produced a brochure for distribution, and held a summer course on indicators (financed by the EC)

- European Awareness Scenario Workshops (EASW) (1994-): organised to investigate the systematic use of scenarios for designing a sustainable future. The method can support and facilitate the active participation of stakeholders in making visions for a sustainable city or town.

Training Offered:

The institute does not have a regular trainings programme. It regularly organises, however, international workshops, conferences and congresses as part of its project activities. Also, tailor-made training programmes are organised on request.

Examples of the latter are:

- a course for experts in Central and Eastern Europe (held in 1992 and '93) to help develop local organisations and environmental policy methods
- Urban Greening Workshops (1993), and Workshops on Environmentally Compatible Construction and Transport Technologies and Urban Planning (1994 onwards)
- Public debates on the ecological footprints of cities.

Web Site:

[http:// www.spidernet.nl/~urban/homepage.html](http://www.spidernet.nl/~urban/homepage.html)

International Labour Organization (ILO), Area Office Tanzania

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Dar es Salaam, Tanzania

Organisational Type:

International Organisation

Main Areas of Work:

- Project Implementation
- Policy Development
- Technical Assistance
- Capacity Building

Regions:

East Africa

Recent Activities:

1998-2000. Waste Management Programme for Dar es Salaam: Exploring ways to implement composting in Dar es Salaam, possibly in combination with vegetable cultivation, through Community-Based Organisations and schools

International Potato Center / Users' Perspectives with Agricultural Research and Development Programme (UPWARD)

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Organisational Type:

International Research Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Policy Development and Advice
- Project Implementation
- Research

Specific Expertise:

- Urban Crop Production: Backyard Gardening
- Urban Agriculture and Enterprise Development: Processing of Agricultural Produce

Regions:

Southeast Asia

Recent Activities:

- Under the UPWARD programme the following activities are being implemented:
- Extension-research on inter-agency promotion of sweetpotato-based

household and school gardening. Baguio City, Philippines (1994-present)

- Enhancing family food security through home gardening and sustainable field production of vegetables. Bukidnon, Philippines (1995-97)
- Encouraging the utilisation of sweetpotato as snack food home industries in Cirebon, West Java, Indonesia (1994-present)

Web Site:

<http://www2.bonnet.co.id/cip/>

Publications:

- *UPWARD Field Notes* (newsletter)
- Soontornnarurungel, S. 1990. *Thai food habits and the potential for household processing of sweetpotato products*. In: UPWARD. 1990. *Proceedings of the Inaugural Planning Workshop on the User's Perspective With Agricultural Research and Development*. Los Baños, Philippines
- Mula, R. 1990. *A consumer-oriented approach for the development of processed sweetpotato food products for low and middle income groups*. In: UPWARD. 1990. *Proceedings of the Inaugural Planning Workshop on the User's Perspective With Agricultural Research and Development*. Los Baños, Philippines
- Gayao, B. 1995. *From diagnosis to action research : the case of sweetpotato homegardens in Northern Philippines*. In: UPWARD. 1995. *Taking root: proceedings of the 3rd UPWARD Review and Planning Workshop*. Los Baños, Laguna, Philippines

- Gayao, B. 1996. *Harnessing local agencies to expand sweetpotato-based homegardens in Northern Philippines: quantitative and qualitative impact*. In: UPWARD. 1996. *Into action research: partnership in Asian rootcrop research and development*. Los Baños, Laguna, Philippines
- De Raedt, C. & T. Giminez. 1995. *Biodiversity and micro-enterprise development in Northern Philippines: prospects of symbiosis*. In: UPWARD. 1996. *Into action research: partnership in Asian rootcrop research and development*. Los Baños, Laguna, Philippines
- Boncodin, R. & G. Prain. 1997. *The dynamics of biodiversity conservation by homegardeners in Bukidnon, Southern Philippines*. In: UPWARD. 1997. *Local R&D: institutionalizing innovations in rootcrop research and development*. UPWARD, Los Baños, Laguna, Philippines
- Boncodin, R. & G. Prain. 1997. *Homegardening for sustainable rootcrop agricultural R&D: a case paper on the UPWARD homegardening projects in the Philippines*. In: UPWARD. 1998. *Sustainable livelihood for rural households in Asia: contributions from rootcrop agriculture*. UPWARD, Los Baños, Laguna, Philippines (in preparation)

International Permaculture Association

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Permanent Publications
Hyden House Ltd.
The Sustainability Centre
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Phone: +44 1730 823311
Fax: +44 1730 823322
E-mail: hello@permaculture.co.uk

Organisational Type:

Network

Main Areas of Work:

Information / Communication

Specific Expertise:

Permaculture

Recent Activities:

Permaculture is an approach to design sustainable environments. It is based on the philosophy of co-operation with nature and caring for the earth and its people. It synthesises knowledge about many ecologically sound principles and techniques: agriculture (e.g. mulching, homegardening, beekeeping), architecture and building (e.g. roof top gardening, south-oriented buildings, energy-saving constructions), and social and financial philosophies (e.g. local economies of trade systems). The Permaculture Association has offices in various countries (for addresses see the Permaculture web site).

Web Sites:

- <http://www.permaculture.co.uk>
- <http://www.nor.com.au/environment/perma/>
- <http://sunsite.unc.edu/london/permaculture/mailarchives/pc-homepage/threads.html>
- <http://csf.cdorodo.edu/perma/>

Publications:

The Permaculture Association publishes

more theoretical and practical contributions to these themes in their newsletters:

- The Permaculture International Journal (Australia)
- The Permaculture Activist (USA + Latin America)
- The Permaculture Edge (Australia)
- Permaculture Magazine (Europe)
- Permaculture India Newsletter

With the exception of the first one, the listed Newsletters also have a more regional focus, in addition to an international scope.

Of special interest is the publication by David Watkins: "*Urban permaculture: a handbook for sustainable living*". The book is packed with practical and clear information on Urban Agriculture and gardening techniques, is well illustrated and contains species lists and sources. Price: GBP 7.5 + mailing.

Books, magazine issues and subscriptions can be ordered at: Permanent Publications, Hyden House Ltd.

IPM Regional Horticultural Project for East and Southern Africa

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- Dr. B. Loehr

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ICIFE, Duduville, Kasarani, Kenya

Organisational Type:

Governmental Organisation

Main Areas of Work:

- Capacity Building
- Project Implementation
- Research

Specific Expertise:

Pest and Disease Management in Urban Agriculture

Regions:

East Africa

Recent Activities:

- This GTZ-supported regional programme is focussing on developing sustainable technologies for:
 - . IPM for French bean
 - . IPM for tomato
 - . IPM for cabbage
 - . IPM for citrus
- The project has developed a number of extension manuals and a CD-ROM on production of French bean and cabbage (forthcoming)

Training Offered:

Sponsoring of MSc and PhD training in IPM for horticultural crops (French

beans, cabbage, tomatoes)

Publications:

- Michalik, S. 1994. *State-of-the-art report on crop protection problems in the cultivation of vegetables in Kenya and recommendations for research activities*
- Mingochi, D.S. & E. Musonda. 1994. *Plant protection research in vegetable crops in Zambia: status and future prospects*
- Seif, A.A. & B. Loehr. 1996. *GTZ IPM Horticulture Project for Eastern and Southern African Region: concepts, operational approach and activities*. In: Proceedings of IPM networking in sub-Saharan Africa workshop, Addis Ababa, Ethiopia, October 14-16, 1996, p. 59-64

Ludwig Boltzmann Institute for Biological Agriculture and Applied Ecology, City of Vienna

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Organisational Type:

Development Organisation

Main Areas of Work:

- Project Implementation
- Research

Regions:

West Europe

Recent Activities:

The LBI, incorporated in the Forestry and Agriculture Department of the City of Vienna, Austria, aims at optimising organic farming methods by interdisciplinary research, training and public awareness raising.

From 1986 onwards, the LBI has implemented research on the concept and efficiency of waste recycling and reuse.

Research topics include efficiency of urban waste collection, sorting and mixing of different types of organic wastes, and quality and applicability of composted waste. Information on waste reuse is exchanged through consumer organisations, demonstration sites, radio programmes, leaflets and a special telephone service. Excursions to Vienna's compost plants are organised, seminars are held and school projects have been started. Also, LBI and the City of Vienna are concerned with

conversion to biological farming of city-owned agricultural enterprises, linking of consumers and producers through Community Supported Agriculture and 'do-your-own-harvest' projects and ecologically oriented design of green city spaces.

Research is done on efficiency of waste collection, sorting and mixing of different types of organic wastes and on quality and applicability of composted waste. In 1991, a first compost plant was set up with an annual capacity of 80,000 tonnes. In 1993, a second plant, with a capacity of 13,000 tonnes per year, was established. With a general composition of 1.2% Nitrogen, 1% Potassium, 0.5% Phosphorus, several trace elements and some 30% dry matter, the compost makes a valuable organic fertiliser. The compost is either sold on the market or used in (urban) agriculture and city parks.

Publications:

LBI and the City of Vienna. 1993.
Biotonne Wien: Theorie und Praxis.
Vienna: Florian Amlinger

Tells the story of waste recycling and reuse in Vienna and the special method of collecting, sorting, composting and reusing organic wastes (the "Biotonne") developed in 1986.

MAB Métro Inc.

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Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Education / Training
- Information / Communication

Specific Expertise:

Urban Crop Production: Community
Gardening

Regions:

North America

Training Offered:

- Course on fruit tree growing
- Course on ecological gardening

Publications:

*Reid, D. Créer un jardin communautaire,
l'aménager, le gérer, l'animer*

Mazingira Institute

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Organisational Type:

Non-Governmental Development

Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research

Regions:

East Africa

Publications:

- Lee-Smith, D. et al. 1985. *Urban food production and the cooking fuel situation in urban Kenya*. Nairobi: Mazingira Institute.
- Lee-Smith, D. & Pyar Ali Memon. 1993. *Urban agriculture in Kenya*. In: Canadian Journal of African Studies Vol. 27 No. 1
- Lee-Smith, D. & D. Lamba. *Urban farming in Africa*. In: Ecodecision, December 1997
- *Settlements Information Network Africa Newsletter*

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Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Policy Development and Advice
- Research
- Information / Communication

Specific Expertise:

Urban Crop Production

Regions:

West Europe

Recent Activities:

- Co-management of the City Harvest project (1997-99) - a project to promote and develop food growing activities in London, through:
 - . *Promoting and advocating:* food growing to policy makers in the statutory, business and voluntary sector and in the media; campaigning for more support for local food growing projects
 - . *Support:* for new and existing food growing projects through the provision of advice and information and contacts with

similar projects; establishing a network of London food growers

- . *Research:* into the social, environmental and economic feasibility of food growing in London, examining issues such as land availability, potential yield per area, funding opportunities, sources of training, etc.
- . *London Food Festival:* planned for September 1998 this event will celebrate food growing and food growers by displaying a wealth of food grown by London's communities. There will also be cook and taste sessions, information stalls, etc.
- . *Evaluating:* the success of the project in terms of people contacted, support given to new and existing projects and informal feedback
- The research and evaluation findings will form the basis for a report on food growing in London (to be published in 1999).

Publications:

Garnett, T. 1996. *Growing food in cities: a report to highlight and promote the benefits of Urban Agriculture in the UK.* NFA & SAFE (price GBP 10.00)

This 90-page report makes the case for urban agriculture in the UK in terms of health, environmental, educational, economic, leisure and land use benefits. It gives an overview of nearly 40 food growing projects in the UK and makes a series of recommendations to central and local government.

National Reference Centre for Nature Management (IKC-N)

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Organisational Type:

Governmental Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Planning
- Information / Communication
- Policy Development

Regions:

West Europe

Specific Expertise:

Urban landuse planning and management

Recent Activities:

- 1995-98. Research programme on rural-urban fringe in the Netherlands (for details, see Organisations, Agricultural Economics Research Institute (LEI-DLO)).
- 1998. Member of committee on urban agriculture in the Dutch province of Gelderland
- 1998. Monitoring students
- 1997. Research into factors of success and failure of a project on urban landscapes

Web Site:

<http://www.MinInv.nl>

Publications:

- IKC. 1995-98. *Progress reports on research programme on rural-urban fringe* (in Dutch)
- Corten, I. 1998. *Succes- en faalfactoren stadslandschappen* (Factors of success and failure of a project on urban landscapes.) IKC Work Document
- IKC. 1998. *City landscapes, a new vision on planning*. In: *Naturoopa* No. 1 (1998)
- IKC. 1997. *CD Rom Hydropolis, city and water management*
- VNG, IKC-N. 1997. *Handboek groen, natuur en landschap. (Handbook green, nature, and landscape)*

Natural Resource International Ltd. (NRIL)

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Organisational Type:

Independent Research Institute

Main Areas of Work:

- Research
- Consultancy / Technical Assistance

Specific Expertise:

- Peri-Urban Crop Production
- Urban Agriculture and Enterprise
Development: Production of
Agricultural Inputs
- Urban Agriculture and Enterprise
Development: Transport of
Agricultural Produce

Regions:

Southeast Asia

Recent Activities:

NRIL is a scientific institute with the University of Greenwich, United Kingdom. Scope of the institute is applied research and consultancies in the environment and natural resources sector. Its principal aim is to increase the productivity of renewable natural resources in developing countries in a sustainable way by promoting development through science.

NRIL manages the Peri-Urban Interface Production Systems Research, which is part of DFID's Natural Resources Systems Programme. Two city regions have been selected for systematic case

studies: Kumasi in Ghana and Hubli-Dharwad in India. After a base-line study has been implemented, further research priorities are identified in Kumasi, such as access to land and its management, soil fertility management, and institutional development. In India, the focus is more on environmental pollution in areas surrounding the cities. Several reports have been commissioned or are already available:

- . Waste utilisation by near urban farmers (report available)
- . The potential value of remote sensing materials in studying the peri-urban interface
- . The health implications of exploitation of urban-rural natural resources (report available)
- . Theories and management methods of relevance to peri-urban areas
- . The poverty-related implications of peri-urban natural resource exploitation

Future work is currently being supported on further developing access to remote sensing and GIS for peri-urban areas, energy utilisation and on approaches to the valuation of peri-urban natural resource use.

NRIL implements a project in Bangladesh concerned with improvements in the production and distribution of livestock products in peri-urban areas of cities in Asia.

In 1996, NRIL co-hosted the Workshop on Urban Agriculture: An Action Agenda for the Future.

Web Site:

<http://www.nrinternational.co.uk>

Publications:

- In 1993 NRI compiled a bibliography on "Livestock production in peri-urban and densely settled rural areas in Sub-Saharan Africa".

- NRI. 1995. *Proceedings Workshop on Peri-Urban Interface Research*.

Netherlands Development Agency (NEDA)

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are related to urban agriculture. Reuse of urban solid waste and waste water, rural-urban linkages and strengthening government-NGO-CBO cooperation are important themes. Support is given to the Urban Waste Expertise Programme (UWEP), the UNDP Local Initiative Facilities for the Urban Environment (LIFE), the Healthy Cities Project of the WHO and the Urban Management Programme (UMP) of the UNDP / UNCHS. NEDA is also considering co-funding the Resource Centre on Urban Agriculture and Forestry (RUAF, see further under Organisations: ETC).

Organisational Type:

- Funding Agency
- Governmental Organisation

Main Areas of Work:

Policy Development and Advice

Recent Activities:

NEDA is the Netherlands' principal department for development cooperation and is part of the Ministry of Foreign Affairs. In 1996, NEDA went through a reorganisation process, after which 90% of the development funds were delegated to the Dutch Embassies.

Dutch attention to urban development is organised through the thematic Directorate on Rural and Urban Development. The government's overall focus related to rural and urban areas is on poverty alleviation and urban environment. The Dutch Government endorses the Local Agenda 21, the Habitat Agenda and the Oslo 22 convention and promotes an integrated approach to the urban environment.

Presently NEDA is drafting a policy document on the urban environment and, in collaboration with DGVII (European Union), on urban development.

NEDA is funding various activities that

Ohio Department of Natural Resources, Division of Forestry (ODNR)

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enhance and expand local tree care programmes within participating communities. A statewide coordinator administers competitive grants and facilitates an exchange of information among communities and between urban forestry providers of goods and services.

Training Offered:

Technical urban forestry assistance

Organisational Type:

Governmental Organisation

Web Site:

<http://www.hcs.ohio-state.edu/ODNR/Urban/Urbanfor.htm>

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Information / Communication

Specific Expertise:

Urban Forestry

Regions:

North America

Recent Activities:

Ohio's Urban Forestry Assistance Program is a state-supported service of the Ohio Department of Natural Resources, providing organisational and technical urban forestry assistance primarily to community officials and allied agencies. The programme aims at an improved quality of urban life, maintained by the integration of comprehensive urban forestry programmes with other municipal services.

To this end, six urban foresters, through direct assistance, will encourage,

Palestinian Agricultural Relief Committees (PARC)

Contact:

- Ahmed Jamal Sourani (*Local UA Project Coordinator*)
- Masoud Aishta (*Agricultural Extension Unit Officer*)

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Shufat, East Jerusalem, Palestine
Phone: +972 2 5833818
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E-mail: pr@pal-arc.org

Information Offered:

Leaflets and handouts

Training Offered:

Organic and household farming

Web Site:

<http://www.pal-arc.org>

Organisational Type:

Non-Governmental Development Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Project Implementation
- Information / Communication
- Urban Farmer

Specific Expertise:

- Urban Crop Production: Community Gardening
- Urban Crop Production: Backyard Gardening
- Peri-Urban Crop Production
- Urban Agricultural Services Provision
- Urban Agriculture and Enterprise Development
- Pest and Disease Management in Urban Agriculture

Regions:

Middle East

Recent Activities:

- Demonstrations of organic farming
- Small enterprise development on home gardening techniques
- Agricultural extension
- Organisation of a workshop on urban agriculture in Gaza (1998)

Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS)

Contact:

- Julio Moscoso (*Waste water reuse in agriculture*)
- Leandro Sandoval (*Waste recycling*)

Postal Address:

Casilla 4337, Camacho, La Molina
Lima 12, Peru
Phone: +51 1 4371077
Fax: +51 1 4378289
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Visiting Address:

Los Pinos 259
La Molina, Lima 12, Peru

Organisational Type:

International Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Information / Communication

Specific Expertise:

- Urban Waste Management: Waste Water Management
- Urban Agriculture and Public Health

Regions:

- Central America
- South America

Recent Activities:

CEPIS is a specialised centre for environmental technology. It belongs to the Division of Health and Environment of the Pan American Health Organization (PAHO) and supports Latin American and Caribbean countries in solving environmental problems that threaten human health, mainly in water supply and sanitation, waste water treatment and reuse, domestic and

hazardous waste management.

The Centre promotes programmes that reinforce cooperation among its member countries and focuses on developing low-cost technologies that are easy to maintain and to operate. It disseminates information, conducts applied research, and offers training courses on waste(water) management, sanitary education and community participation in environmental management projects.

Some of CEPIS ongoing programmes concern:

- Domestic solid waste management
- Environmentally sound management of residues
- Collaboration in the WHO Healthy Cities programme
- Household water and food disinfection study

Furthermore, CEPIS coordinates the Pan American Information Network on Environmental Health (REPIDISCA), which maintains an interesting bibliographic database holding presently over 85,000 records on the subject of environment and health.

Training Offered:

Specialised workshops on waste water treatment and reuse in aquaculture and horticulture

Web Site:

<http://www.cepis.org.pe>

The REPIDISCA database is accessible via the CEPIS web site, where information about CEPIS publications and PAHO members and projects can also be found.

Publications:

- Moscoso, J. *Aquaculture using treated effluents from the San Juan*

- stabilization ponds*, Lima, Peru.
[source unknown]
- Yanez, F. 1978. *Investigación en tratamiento de aguas residuales*. 16 p. Paper presented at the meeting of the Comité Asesor en Investigaciones Médicas de la OPS, Lima, February 1978
 - Yanez, F. & C. Kirchmer. 1978. *Literature survey and development of experimental procedures for stabilization pond*. CEPIS research report prepared for IDRC, Canada
 - Yanez, F. 1979. *Aspectos tecnológicos en operación y mantenimiento de sistemas de agua potable y alcantarillado*. 7 p. Proceedings of Forum on Desarrollo Tecnológico de Instituciones de Agua Potable y Alcantarillado, Lima, Peru. OPS/CEPIS
 - Yanez, F. 1979. *Manejo y control de procesos en operación de plantas de tratamiento de aguas residuales. Memorias del Simposio sobre Operación y Mantenimiento de Sistemas de Agua Potable y Alcantarillado*, Lima, Peru. OPS/CEPIS. 33 p.
 - Yanez, F. 1979. *Procesos de lodos activados y aeración prolongada*. In: *Manual del curso sobre tratamiento de aguas residuales para países en desarrollo*. 2nd ed. OPS/CEPIS. 145 p.
 - Yanez, F. 1980. *Lagunas facultativas y de alta producción de biomasa*. In: *Manual del curso regional sobre lagunas de estabilización*. Lima, Peru. OPS/CEPIS. 99 p.
 - Yanez, F. *Lagunas aeradas*. In: *Manual del curso regional sobre lagunas de estabilización*. Lima, Peru. OPS/CEPIS. 50 p.
 - Yanez, F. 1980. *Avances en el tratamiento de aguas residuales por lagunas de estabilización*. Paper presented at the 17th Congreso de AIDIS, La Paz, Bolivia. 99 p. (also published as Documento Técnico No. 7 (1981). OPS/CEPIS. 58 p.)
 - Yanez, F. 1982. *Manual de métodos experimentales de evaluación de lagunas de estabilización*. Manual Serie Técnica No. 24. OPS/CEPIS. 164 p.
 - Yanez, F. 1986. *Priorities in waste stabilization pond research*. Paper presented at the Regional Seminar in WSP Research, organized by PAHO/CEPIS. Lima, Peru. March, 1986

Pollution Control Services (PCS)

Contact:

Ahmed Rehan, Director

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Fax: +92 21 4536858
E-mail: ape@cyber.net.pk

- Technical paper on wastewater utilization for agriculture in Hub, Gadap, Mahir and Manghopir areas in Karachi
- 1992. Wastewater utilization in Suidh Industrial Estate.

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

Urban Waste Management: Waste
Water Management

Regions:

South Asia

Recent Activities:

- Technical and environmental studies related to waste water treatment
- Social and community surveys for assessing public acceptability of agricultural produce raised by waste water.
- Studies on recycling of solid and liquid waste in Karachi
- Assessment of public health impact by urban agriculture
- Preparation of pre-feasibility and feasibility studies

Publications:

- 1989. *Recycling of wastewater for irrigation and agriculture for Karachi.* Study for Karachi Water and Sewerage Board.

Resource Centre on Urban Agriculture and Forestry (RUAF)

Contact:

Henk de Zeeuw, Coordinator

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ETC

Urban Agriculture Programme

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Main Areas of Work:

Information / Communication

Recent Activities:

The Resource Center on Urban Agriculture and Forestry is implemented by ETC, in coordination with IDRC, TUAN, Farm City and 6 key institutions in various southern regions (to be selected).

The RUAF programme operationalises the Information and Communications Section of the action programme of the Global Initiative on Urban Agriculture (GIUA), the inter-agency coordinating mechanism that was established in March 1996 and in which participate UNDP, IDRC, FAO, GTZ, NEDA, and other international development organisations.

The general aim of the RUAF-programme is to facilitate integration of urban agriculture in the concepts, policies, plans and activities of local stakeholders (especially: city administrations, urban planners, NGOs, CBOs, relevant thematic networks, extension and credit organisations, local universities) and to facilitate the formulation of adequate projects on urban agriculture.

Specific objectives of the RUAF-programme are:

- To create awareness regarding the potentials of urban agriculture and enhance recognition of urban agriculture as an area of intervention.
- To facilitate the identification and analysis of critical issues jointly with local stakeholders, in order to generate information on urban agriculture geared towards the regional and local needs and priorities.
- To improve access of local stakeholders in urban agriculture to documented experiences in the field of crop production, forestry and animal production in urban and peri-urban areas, as well as the reuse of urban wastes for productive purposes.
- To support local capacity development and networking regarding urban agriculture in close co-operation with international, national and local programmes oriented at sustainable urban development, poverty alleviation and urban food security.
- To secure embedding of the functions temporarily performed by RUAF in the regular programmes of international organisations like FAO and UNDP and of relevant national and regional networks, in order to secure the continuity of these services.

Expected programme outputs:

The direct results of RUAF in the 5-year period (1998-2000) will be the following:

- Six Regional Focal Points on Urban Agriculture in operation
- An electronic newsletter on urban agriculture (3 issues/year) and hard copy distribution by the regional focal points in four languages
- An annual electronic conference will be organised on a selected key theme, backed up by a bibliography

- A database on urban agriculture (bibliographic data and audio visual materials) accessible via the Internet and also distributed on diskettes
- An urban agriculture resource directory (resource persons and organisations, training possibilities, information sources) accessible via the Internet and also distributed on diskettes;
- A "Reader" on urban agriculture
- A web site on urban agriculture on the Internet
- Contributions to 10 to 15 local stakeholder consultations and training workshops for urban policy makers, urban planners and representatives of Non-Governmental Organisations (NGOs) and Community-Based Organisations (CBOs)

The RUAF programme will be administered by IDRC, which is hosting the Global Initiative on Urban Agriculture (GIUA)

The leading implementing organisation will be ETC Netherlands, Leusden, The Netherlands, which will co-ordinate the participation of six regional focal points, TUAN, City Farmer Network and other organisations participating in the programme.

Rooftop Gardens Resource Group (RGRG)

Contact:

- Monica E. Kuhn (Architect)
- Sean Cosgrove

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Organisational Type:

Community-Based Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research
- Information / Communication

Specific Expertise:

Urban Crop Production: Roof Garden Technologies

Regions:

North America

Recent Activities:

The Rooftop Garden Resource Group aims at contributing to the promotion and realisation of Healthy City principles by raising public awareness of the benefits of roof top gardening. Different fields of work comprise:

- development of a resource base on roof top gardening
- implementation of research and creation of pilot projects within the Toronto community
- promotion through education, information and media
- establishment of relationships with community organisations, research institutes and governments.

Specific projects implemented mainly

concern consultation and design of roof top gardens on Toronto school buildings.

Training Offered:

- Permaculture
- Roof top gardening

Publications:

- Cosgrove, S. 1994. *Une histoire de deux villes: Canadian community gardening in Montreal and Toronto*. IDRC
- Kuhn, M.E. 1997. *Urban permaculture / roof top gardening*. City Seeds, Ashville, North Carolina, USA
- Kuhn, M.E. 1997. *Blooming rooftops*. In: Permaculture International Journal (Australia)
- Kuhn, M.E. 1996. *Roof greening*. Ontario Eco-Architecture
- Kuhn, M.E. 1996. *Learning from the rooftops*. Green Teaker
- *Fact sheets on rooftop gardening* (including information on plant species, soil and water management, and funding strategies)

Seed Saver's Network

Contact:

- Michel Fanton
- Jude Fanton

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Visiting Address:

9-13 Old Bangalow Road
Byron Bay, Australia

Organisational Type:

Non-Governmental Development
Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Urban Farmer
- Research

Regions:

- Australia and Oceania
- Central America

Specific Expertise:

Seed Production

Recent Activities:

The Seed Saver's Network's major aims are to develop and promote educational programmes for the preservation of open-pollinated (non-hybrid) seeds and the genetic diversity of plant varieties; to preserve seed banks for non-hybrid plant varieties; and to provide open-pollinated seed stock to individuals, groups and communities.

The Seed Saver's Network was founded in 1986 to preserve the diversity of Australia's cultural plants. Its activities include a newsletter, seed exchange, seed bank, frequent workshops and the publication of a handbook on the subject

in Australia with, recently, a version for cold climates, published in the UK.

Next to their activities in Australia, Seed Saver's Network has initiated the setting up of three networks: in the Solomon Islands (Planting Materials Network), Tonga (Save Our Seed Project) and the Caribbean (Red de las Semillas). They delivered Community Seed Bank Training to government and non-government workers, agriculture teachers and lecturers, women's groups and farmers.

The Solomon Islands (1995-onwards)

The Seed's Savers Network works with local people to publish four newsletters, establish seed gardens near the capital and at a hospital in the western provinces, and runs a community awareness campaign about dynamic seed banks and conserving local food varieties.

Havana, Cuba (1996)

In collaboration with the Australian Green and the Cuban Department of Urban Agriculture, Seed Savers trained 67 agriculture extensionists in how to locate, gather, multiply and disseminate local seeds. A Red de las Semillas (Seed Network) has been established, and is being administered by the Urban Agriculture Department.

Training Offered:

- Training in domestic food production by the Seed Saver's Network
- Courses on urban permaculture and quality seed production
- Training in seed saving, seed banking and seed networking

Web Site:

<http://www.om.com.au/seedsave>

Publications:

- *The Seed Saver's Newsletter*
- *The Seed Saver's Handbook*
- Fanton, M. & J. Fanton. 1993.

The Seed Savers' Handbook.

A complete reference for growing, preparing and conserving traditional varieties of food plants. Written especially for Australian and New Zealand conditions.

Southern Urban Forestry Associates (SUFA)

Contact:

Brian Darr

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Fax: +1 205 333 2977

Visiting Address:

4049 Dalewood Street
Northport, 35475 AL, USA

- Darr, B.K. 1994/95 *Who should you call.* In: Builder / Architect Magazine, December 1994 & January 1995
- Darr, B.K. 1996. *Tree nutrition and fertilization.* In: Arbor Age Magazine, February 1996

Organisational Type:

Commercial Enterprise

Main Areas of Work:

Consultancy / Technical Assistance

Specific Expertise:

Urban Forestry

Regions:

North America

Recent Activities:

- Education of citizens, tree workers, builders and developers
- Protection of trees during construction
- Tree appraisals and problem diagnosis
- Tree care: planting, pruning, fertilisation, mulching

Training Offered:

Urban forestry workshops for communities and citizens

Publications:

- Darr, B.K. 1994. *Global re-leaf for new communities unites builders and foresters.* In: Builder / Architect magazine, October 1994
- Darr, B.K. 1994. *Protecting trees during construction.* In: Builder / Architect Magazine, November 1994

St. Petersburg Down Town Gardening Club

Contact:

Alexander Gavrilov

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Organisational Type:

Development Organisation

Specific Expertise:

Urban Crop Production: Roof Garden Technologies

Regions:

East Europe

Recent Activities:

The St. Petersburg Down Town Gardening Club aims to promote and develop sustainable and productive agriculture in urban areas through its Rooftop Gardening programme and a Farmers Support Service. Activities comprise research, advisory services, creation of political will and understanding, information exchange and publication, establishment of market relations among the different actors in agriculture, training and extension. Partners and beneficiaries in both programmes comprise more than 7,000 (urban) farmers, gardeners and 'dacha plot' owners, but also farmers' associations, agricultural universities, research institutes, children's schools, hospitals and two of St. Petersburg 's prisons. It also maintains close links to governmental bodies. Staff consists of several graduate agricultural and technical engineers.

Within the Roof Top Gardening Programme (RTG), the institution has

executed a number of research projects related to:

- checking of opportunities for vegetable and flower growing on roof tops
- testing for contamination of vegetables with heavy metals
- testing of different soil mixes and plant propagation methods
- examining financial profitability of roof top gardening.

Publications:

A Russian-language booklet on roof top gardening has been published.

Support Group on Urban Agriculture (SGUA)

Contact:

Luc Mougot, IDRC

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IDRC
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Ottawa ON Canada
Phone: +1 613 236 6163,
Fax: +1 613 238 7230
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Organisational Type:

Network

Main Areas of Work:

- Policy Development and Advice
- Research

Recent Activities:

The Support Group on Urban Agriculture (SGUA) was formed by the UNDP in 1992 to examine issues related to food security and urban agriculture in developing countries.

The SGUA aims at stimulating and facilitating activities in the field of urban agriculture in developing countries and countries in transition in Central and Eastern Europe, by

- managing innovative research and development activities related to Urban Agriculture, such as training, technical assistance, publications, and investments;
- stimulating networking in Urban Agriculture in both external support agencies and developing countries;
- promoting synergies between Urban Agriculture and rural agriculture;
- linking the urban development challenges of: poverty alleviation, food security and health, waste resource reuse, employment and income generation, productive open-space management, environmental protection, community resource management, women's

development, and ecological regeneration.

In March 1996, the SGUA created the Global Initiative on Urban Agriculture (GIUA), a co-ordination mechanism that is led by a Steering Committee, currently consisting of UNDP, IDRC, ETC, and CIRAD. The SGUA is hosted by IDRC's Cities Feeding People Programme.

At present, the following institutions are participating in the SGUA:

- Agricultura Urbana Investigaciones Latino Americana (AGUILA)
Julio Prudencio Boehrt:
aguila@coord.rds.org.bo
- CARE International, Atlanta, USA
Project Management Unit (Canada),
Jackie Wood: jackie@care.ca
Agriculture and Natural Resource Management Team (Haiti), Milred Delphin-Regis: regis@pap.care.org
<http://www.care.org/>
- Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD)
Département des Productions Fruitières et Horticoles
Paule Moustier:
paule.moustier@cirad.fr
- City Farmer - Canada's Office of Urban Agriculture, Vancouver, Canada
Michael Levenston:
cityfarm@unixg.ubc.ca
<http://www.cityfarmer.org>
- Developing Countries Farm Radio Network (DCFRN) Toronto, Canada
Jennifer Pittet: d CFRN@web.net
- German Foundation for International Development DSE, Rural Development Department
Juergen Richter:
j_richter@zelfe.dse.de
- ETC, Leusden, The Netherlands
Henk de Zeeuw: h.dezeeuw@etcnl.nl
- United Nations Food and Agriculture Organization (FAO), Rome, Italy

- Rural Development and Sustainable Development Division
Rachel Nugent:
rachel.nugent@fao.org
<http://www.fao.org/>
- German Technical Cooperation, (GTZ) Eschborn, Germany
Ulrich Sabel-Koschella: ulrich.sabel-koschella@gtz.de
Petra Jacobi, Urban Vegetable Promotion Project:
uvpp@uvpp.africaonline.co.tz
<http://www.gtz.de/>
 - International Development Research Centre (IDRC), Ottawa, Canada
Cities Feeding People Programme
Luc J.A. Mougeot: lmougeot@idrc.ca
<http://www.idrc.ca/>
 - International Food Policy Research Institute (IFPRI), Washington, D.C., USA
James Garrett: j.garrett@cgnnet.com
<http://www.cgiar.org/IFPRI>
 - NEDA (Netherlands Development Agency), The Hague, The Netherlands
Rural and Urban Development Department
Joep Bijlmer: bijlmer@dru.minbuza.nl
 - Noguchi Memorial Institute for Medical Research (NMIMR), Ghana
Daniel Maxwell: noguchi@ncs.com.gh
 - NRIL (Natural Resources International Ltd.), Kent, United Kingdom
Peri-Urban Interface Research
Chris Lewcock:
c.p.lewcock@greenwich.ac.uk
<http://www.nrinternational.co.uk>
 - Toronto Food Policy Council (TFPC)
Sean Cosgrove:
scosgrov@city.toronto.on.ca
 - The Urban Agriculture Network (TUAN), Washington, D.C., USA
Jac Smit:
urbanag@compuserve.com
 - United Nations Centre for Human Settlements (UNCHS) – Sustainable Cities Programme (w/UNEP), Jochen Eigen: jochen.eigen@unep.no
 - United Nations Centre for Human Settlements (UNCHS) – United Nations Development Programme (UNDP) - Urban Management Programme (UMP – LAC)
Yves Cabannes:
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 - United Nations Development Programme (UNDP), New York, USA
Urban Development Unit
Jonas Rabinovitch:
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 - University of British Columbia, Center for Human Settlement Centre for Human Settlements
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 - World Sustainable Agriculture Association (WSAA), West Hollywood, USA
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 - York University, Canada, Department of Geography
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Sustainable Nutrition

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Organisational Type:

Advisory Firm

Specific Expertise:

- Urban Forestry
- Urban Crop Production

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research
- Information / Communication
- Urban Farmer

Recent Activities:

- Implementation of tree crops nutrition programmes
- Nutritional advice for greenhouses, field crops, vegetable gardens
- Implementation of nutritional programs according to balanced and sustainable principles.

Training Offered:

Training workshops to understand soil-plant relationships and the effect on animal health and animal production.

Publications:

Sustainable Nutrition Newsletter

Swiss Federal Institute for Environmental Science & Technology (EAWAG), Department of Water and Sanitation in Developing Countries (SANDEC)

Contact:

- Martin Strauss, Senior Programme Officer
- Roland Schertenleib, Director SANDEC

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schertenleib@eawag.ch

Organisational Type:

- Academic Institution
- Governmental Organisation

Main Areas of Work:

- Research
- Consultancy / Technical Assistance
- Education / Training

Specific Expertise:

Urban Waste Management

Recent Activities:

In 1968, the "WHO-International Reference Centre for Waste Disposal" (IRCWD) was established at EAWAG, Switzerland.

Until 1980, the IRCWD acted mainly as a general documentation centre for solid waste management. Later, it changed its focus and mandate mainly to make the comprehensive scientific and technical know-how within EAWAG available to improve the water and sanitation situation in Third World countries and in 1995 was renamed to SANDEC.

SANDEC's main activities center on applied research, teaching and consultancy in the field of water and

sanitation in economically less developed countries. Its aim is to find and / or develop water, sanitation and solid waste management concepts and technologies which are appropriate and sustainable for the different physical and socio-economic conditions prevailing in developing countries. To achieve this, use is made of the comprehensive and multidisciplinary scientific and technical knowledge available within EAWAG. In other disciplines, such as social sciences, tropical medicine, SANDEC collaborates with well-established institutions outside EAWAG. A key element of their activities is the building up and strengthening of research capacities in developing countries.

SANDEC publishes a newsletter that aims at regularly informing individuals and institutions in the sector about SANDEC's research activities on affordable water treatment, sanitation and solid waste management solutions in developing countries and at finding potential partners for its research projects.

Information offered:

- SANDEC Newsletter
- IRCWD / SANDEC Reports

Training Offered:

Periodic continued education course for consultants on (mostly) urban excreta, waste water and solid waste management, and on rural water treatment (in German only, so far).

Web Site:

<http://www.eawag.ch/dept/san>

Publications:

- *SANDEC News* periodically informs about the institute's applied research projects in urban solid and liquid waste management, and in water treatment. The newsletter is free of

charge and aims at informing individuals and institutions in the sector about SANDEC's research activities on affordable water treatment, sanitation and solid waste management solutions in developing countries and at finding potential partners for its research projects.

Several of its issues are particularly related to urban agriculture:

- No. 23 (December 1985). *Health aspects of nightsoil and sludge use in agriculture and aquaculture*
- No. 24/25 (May 1988). *Human wastes: health aspects of their use in agriculture and aquaculture*
- No. 26 (March 1992). *Municipal solid waste management in developing countries: problems and issues; need for future research" and "Synergetic effects of municipal solid waste collection, recycling and disposal*
- No. 27 (August 1993). *Roughing filters for water treatment and "Community involvement in municipal solid waste collection in two West African cities"*
- *IRCWD/SANDEC Reports*
 - Lewis, W.J., S. D. Foster & S. Drasar. 1982. *The risk of groundwater pollution by on-site sanitation in developing countries: a literature review*. IRCWD Report No. 01/82
 - Boesch, A. & R. Schertenleib. 1985. *Emptying on-site excreta disposal systems: field tests with mechanised equipment in Gaborone (Botswana)*. IRCWD Report No. 03/85
 - *Health aspects of nightsoil and sludge use in agriculture and aquaculture*. 1985.
 - . Part 1. Cross, P. *Existing practices and beliefs in the utilisation of human excreta*.
 - . Part 2. Strauss, M. *Pathogen survival*. IRCWD Report No.04/85
 - . Part 3. Blum, D. & R. Feachem. *An epidemiological perspective*. IRCWD Report No. 05/85
 - Wegelin, M. 1986. *Horizontal-flow roughing filtration (HRF): a design, construction and operation manual*. IRCWD Report No. 06/86 (revised edition in press: to be published as SANDEC Report No. 02/96) (also exists in French as IRCWD Report No. 07/87; revised edition in preparation)
 - Strauss, M. & U.J. Blumenthal. 1989. *Human waste use in agriculture and aquaculture: utilisation practices and health perspectives*. IRCWD Report No. 08/89. 325 p.
 - Strauss, M. & U.J. Blumenthal ; compiled by M.B. Pescod. 1990. *Executive summary of human waste use in agriculture and aquaculture: utilisation practices and health perspectives*. IRCWD Report No. 09/90
 - Pfammatter, R. & R. Schertenleib. 1996. *Non-governmental refuse collection in low-income urban areas: lessons learned*. SANDEC Report No. 01/96
 - Wegelin, M. *Surface water treatment by roughing filters*. SANDEC Report No. 02/96 (in press)
 - Heinss, U., S.A. Larmie & M. Strauss. 1998. *Solids separation and pond systems for the treatment of faecal sludges in the tropics*. SANDEC Report No. 05/98
 - Strauss, M. & U. Heinss (eds). 1998. *Proceedings Workshop on Faecal Sludge Treatment, Sogakope, Ghana*

For subscriptions to SANDEC News, contact:
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Swiss Tropical Institute

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Organisational Type:

- Academic Institution
- Parastatal / Semi-governmental Organisation

Recent Activities:

- The STI was founded in 1943. The institute aims to contribute to improving the health of populations on both national and international levels through its activities in the field of teaching, research, support of development in the field of health in countries of both the South and the East, provision of services for the general public in Switzerland and the surrounding region. Their development work overseas is largely financed by the Swiss Agency for Development and Cooperation (SDC).
- STI consists of two departments carrying out teaching and research (Medical Parasitology and Biology of Infection (MPI) and Public Health and Epidemiology) and two Service and Support Centres (Medical Services and Support Centre and the Support Centre for International Health).
- Recent activities in the field of urban agriculture include:
 - . Reduction of risks related to the use of water in home gardens in Ouagadougou and Nouakchott
 - . Evaluation of economics of urban small-scale agriculture
 - . Development of risk models

Web Site:

<http://www.wb.unibas.ch/sti>

Publications:

- Harpham T., M. Tanner. 1995. *Urbanization and health in developing countries: a review of some trends*. In: Harpham T, M. Tanner (eds). *Urban health in developing countries: progress and prospects* p. 1-8. Earthscan, London
- Lemine M. & A. Azandossessi. 1997. *Méthode accélérée de planification participative: étude de cas: sites maraichers de Tar el Zatar (Moughataa de Dar Naim) et de la Sebkhha*. Rapport OMS/UNICEF/STI, Nouakchott
- Odermatt P. et al. 1998. *Maraîchage dans les villes sahéliennes: Ouagadougou et Nouakchott*. In: Bolay J.-C., P. Odermatt, Y. Pedrazzini & M. Tanner (eds) *Environnement urbain: recherche et action dans les pays en développement*. Birkhäuser, Basel
- Schneider Ch. et al. 1997. *Different water sources in two homegarden sites in Nouakchott, Mauritania: perceived morbidity and potential risk for diarrhea*. In: Schweiz. Med. Wochenschr. Vol. 127 No. 39 p. 1624
- Wiese M. 1997. *Comparative social profile of two sites of urban home gardening in Ouagadougou, Burkina Faso*. EIER/STI, September 1997
- Cissé G. 1997. *Impact sanitaire de l'utilisation d'eaux polluées en agriculture urbaine: cas de maraîchage à Ouagadougou*. PhD thesis No. 1639, Federal Institute of Technology, Lausanne
- Schneider C. & S. Gagneux. 1997. *Impact sanitaire de l'utilisation d'eaux usées et polluées en agriculture urbaine: cas du maraîchage à Nouakchott*, Rép. Islamique de

Mauritanie. Travail de Dipôme, Institut
Tropical Suisse, Université de Bâle

Technical University Munich, Department for Horticulture

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Organisational Type:

Academic Institution

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Research

Recent Activities:

- EU Project on urban and periurban small and medium-sized enterprise development for sustainable vegetable production and marketing systems
- BMZ / GTZ project on development of periurban vegetable production systems for sustainable year-round supplies to tropical Asian cities (see also Organisations: German Agency for Technical Co-operation (GTZ))

Training Offered:

Lecture at University of Muenchen on urban agriculture

Web Site:

<http://www.edv.agrar.tu-muenchen.de/gb/start1.htm>

Publications:

- Kleinhenz, V. 1997. *Technologies for sustainable vegetable production in the tropical lowlands*. Herbert Utz Verlag Wissenschaft, Muenchen, ISBN 3-89675-160-3.
- Holmer, R.J., V.B. Heinrich & W.H. Schnitzler. 1997. *Poster on urban and peri-urban small and medium-sized enterprise development for sustainable vegetable production and marketing systems*. Tropentag 1997 - Technischer Fortschritt im Spannungsfeld von Ernaehrungs-sicherung und Ressourcenschutz, December 11-12, 1997. Stuttgart-Hohenheim. Programm / Zusammenfassung der Vortraege und Poster, 113

The Urban Agriculture Network (TUAN)

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Organisational Type:

Non-Governmental Development Organisation

Main Areas of Work:

- Education / Training
- Policy Development and Advice
- Information / Communication

Recent Activities:

TUAN is a NGO based in the USA promoting urban agriculture in low-income countries and increased interaction and co-operation among agencies working in urban farming at local, national and international level. TUAN is committed to ecologically and nutritionally sustainable cities through optimum use of natural resources, including urban waste.

TUAN is a founding member of the Support Group on Urban Agriculture (SGUA) and assists City Farmer in running its Urban Agriculture web site (<http://www.cityfarmer.org>). TUAN will also participate in the Resource Centre on Urban Agriculture and Forestry. (See also under Organisations: RUAF).

TUAN has advised IDRC, UNDP, World Bank, CARE, USDA, UNICEF, CGIAR, Catholic Relief Services and GTZ in research, training in the field of urban agriculture.

TUAN has an information and technical referral service and holds a library on urban agriculture. TUAN assists in networking and is active in (inter-)

national urban and agricultural conferences worldwide, like the workshop on rural-urban linkages in Brazil (March 1998) and the 1997 Second Mayors conference in New York (see further UNDP). It also facilitated a workshop for the World Bank in Sub-Saharan Africa (*Urban agriculture: an opportunity for environmentally sustainable development in Sub-Saharan Africa.*) TUAN has given lectures at various universities in the USA.

In 1996, in collaboration with UNDP, TUAN executed a global survey in 20 countries on urban agriculture and published findings in the book: *Urban Agriculture: Food, Jobs and Sustainable Cities*.

TUAN is active in writing and promoting articles in the media on urban agriculture (African Urban quarterly, Arid Lands Newsletter, ARNUM Newsletter, DC/FRN Radio, Environment and Urbanisation, Hunger Notes, In-Context, Natur, Next City, Our Planet, Urban Age, Voice of America radio, etcetera).

TUAN is currently developing manuals on specific urban agriculture themes.

Training Offered:

- Urban agriculture policy (2-3 days)
- Urban agriculture management (3-5 days)
- Getting started in urban agriculture (4-8 days)

Publications:

- Smit, J., A. Ratta & J. Nassr. 1996. *Urban agriculture: food, jobs and sustainable cities*. Washington: UNDP
TUAN produced this book for UNDP. It is based on exploratory trips made to more than 20 countries. The book encompasses a theoretical background on the potential and constraints of urban agriculture and presents experiences of urban

farming in countries across Asia,
Africa and Latin America

- Smit, J., A. Ratta & J. Bernstein. 1996. *Urban agriculture: an opportunity for environmentally sustainable development in sub-Saharan Africa*. World Bank Paper No. 11
- Smit, J. & J. Nassr. 1992. *Urban agriculture for sustainable cities: using wastes and idle land and water bodies as resources*. In: Environment and urbanization Vol. 4 No. 2 (October 1992)

Thames Valley University, Centre for Food Policy

Contact:

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Fax: +44 181 280 5125
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1980's and 1990's. London: Child
Poverty Action Group

- Lang, T. 1997. *The public health impact of globalisation of food trade*. In: Shetty, P. & K. McPherson (eds). *Diet, nutrition and chronic disease: lessons from contrasting worlds*. London: J. Wiley & Sons

Organisational Type:

Academic Institution

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Research

Specific Expertise:

- Food Policy
- Urban Agriculture and Public Health
- Urban Food Security and Nutrition
- Agricultural Services Provision:
Marketing

Regions:

West Europe

Recent Activities:

The Centre for Food Policy has been involved in research, on various topics, such as cooking stoves, food poverty and globalisation. Prof. Lang has held the chair in the SAFE study on Urban Agriculture.

Publications:

- Raven, H. & T. Lang. 1995. *Off our trollies? Food retailing and the hypermarket economy*. Institute for Public Policy Research
- Lang, T. 1997. *Dividing up the cake: food as social exclusion*. In: Walker, A. & C. Walker (eds). *Britain divided: the growth of social exclusion in the*

Toronto Food Policy Council (TFPC)

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Organisational Type:

Governmental Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Planning
- Project Implementation
- Information / Communication
- Policy Development

Specific Expertise:

- Urban Crop Production: Community Gardening
- Composting

Regions:

North America

Recent Activities:

Promotion of community gardening and community composting

Publications:

Cosgrove, S. et al. 1993. *Toronto's Garden City Report*

Tree City - Urban Forestry & Arboricultural Programme

Contact:

- Dr. Guido Kuchelmeister
- Dr. Tjeerd Deelstra

Postal Address:

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Organisational Type:

Development Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice
- Research
- Information / Communication
- Lobbying

Specific Expertise:

Urban Forestry

Recent Activities:

The Tree City Initiative was created in 1995 by the Gesellschaft fuer Walderhaltung und Waldbewirtschaftung (GWB), Institut fuer Baumpflege and The International Institute for the Urban Environment (IIUE). The programme is designed to enhance the knowledge and application of urban forestry in developing countries to simultaneously meet economic, social and environmental needs. The overall goal of the initiative is to assist in improving the quality of life with a focus on resource-poor citizens through sound urban forestry practices and services.

The programme is committed to an interdisciplinary approach by synthesising ideas and techniques from

arboriculture, development forestry, ecological landscaping, horticulture, project management and urban/regional planning.

Members of the initiative can provide support in research, technical backstopping, project management and evaluation and training. Tree City maintains a database on urban forestry. Tree City activities include documentation, research, project proposals and advisory services. Present themes are "multifunctional parks for low-income communities" and "urban participatory appraisal for natural resource management".

1998. Participation in annual meeting of the Alliance for Global Sustainability – resource person for working group on rural-urban fringe. Swiss Federal Institute of technology, Tokyo University.

Training offered:

1998. Teaching course on urban forestry in developing countries at the Technical University of Berlin.

Web Site:

http://ourworld.compuserve.com/homepages/G_Kuchelmeister

Tree City's web site gives information on its approach, organisation and activities, and provides links to other urban forestry web sites.

Publications:

- Kuchelmeister, G. 1991. *Peri-urban multipurpose forestry in development cooperation: experience, deficits and recommendations*. Unpublished study funded by the EC
- Kuchelmeister, G. 1993. *Settlements and people in developing countries*. In: *Arboricultural Journal*, the *International Journal of Urban Forestry* Vol. 174 p.399-411

- Kuchelmeister, G. 1996. *Urban forestry: a new field of action in development cooperation*. In: *Entwicklung und Laendlicher Raum* Vol. 1996 No. 6
- Kuchelmeister, G., Braatz, S. 1993. *Urban forestry revisited*. In: *Unasyva* Vol. 44 p.13-18
- Kuchelmeister, G. 1997. *Urban trees in arid landscape: multipurpose forestry for local needs in developing countries*. In: *Arid Land News* No. 42
- Kuchelmeister, G. 1998. *Multipurpose urban forestry for developing countries*. In: *BUFPRA Newsletter* Vol. 2 No. 1 (January 1998)
- Kuchelmeister, G. 1998. *Urban green for local needs: improving quality of life through multipurpose urban forestry in developing countries*. Paper presented at the International Conference on Quality of Life in Cities, Singapore, March 4-6, 1998
- Kuchelmeister, G. 1997. *The urban forestry research agenda: one missing link in setting research priorities relevant to tropical forest research*. In: *ETFR News* No. 22 (December 1997)
- Tree City plans to publish a bi-monthly electronic news bulletin on urban greening with a focus on resource-poor citizens and trees in developing countries, which will be distributed through its urban forestry mailing list. *Tree City News on Urban Greening* will consist of the following sections: events, initiatives and projects, research, training, job opportunities and miscellaneous.

Tree Route Network (TRN)

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*Dr. Thomas B.Randrup (Coordinator
COST Action E12 - European Union)*

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*Danish Forest and Landscape Research
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Horsholm Kongevej 11
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Phone: +45 45 76 3200
Fax: +45 45 76 3233
E-mail: trn@fsl.dk*

Main Areas of Work:

- Planning
- Research

Specific Expertise:

Urban Forestry

Region:

- West Europe
- East Europe

Recent Activities:

The Tree Route Network (TRN) deals with research on urban trees in Europe. The main aim of this Network is to improve coordination of the existing knowledge base to facilitate better planning design, establishment and management of urban forests and urban trees in Europe, and hereby, to establish urban forests and urban trees as a scientific domain in Europe. The network consists of European researchers and professionals, all dealing with urban forests and trees. A database with resource persons can be downloaded from their newly developed Internet site.

Web Site:

<http://www.fsl.dk/trn>

UNDP / Urban Management Programme, Regional Office for Latin America and the Caribbean (UMP – LAC)

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Yves Cabannes

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plants), and the relation with the urban environment (including waste water management).

UMP and IDRC will jointly document best practice cases of municipal urban agriculture to specifically analyse when, where and how urban management practices have been incorporated into policy. In a second phase, UMP wants to enter into city concertation: participatory city planning in a demonstrative model city.

Main areas of work:

- Policy Development and Advice
- Information / Communication
- Research

Specific Expertise:

- Urban Agriculture and Sustainability in Cities
- Urban Land and Water Use Planning and Management

Regions:

- South America
- Central America

Recent Activities:

The Urban Management Programme (UMP) is a technical support programme designed to strengthen the contribution that cities and towns in developing countries make towards human development, including economic growth, social development and reduction of poverty. UMP is coordinated by the UNDP and is executed in the context of the UNCHS. Funding is received from NEDA, SDC, SIDA, and GTZ.

The UMP programme in Latin America and the Caribbean approaches urban poverty from a local government perspective. Urban agriculture is considered in relation to food security and urban poverty, urban health (including production of medicinal

UMP - LAC runs an international databank on urban management (URBANET) with GTZ, promotes exchange of information through organising seminars in which the lessons learned from the case studies are shared. UMP is also involved in the publication of the journal *Urban Age / La Era Urbana* which is distributed freely (see further under Newsletter descriptions in this guide). They are also working on translating the UNDP/TUAN book “*Urban agriculture: Food, Jobs and Sustainable Cities*” into Spanish, including a Latin American supplement.

United Nations Centre for Human Settlements (UNCHS-Habitat)

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Fax: +254 2 624266 / 254 2 623080
E-mail: bestpractices@unchs.org

Organisational Type:

- Development Organisation
- International Organisation

Main Areas of Work:

- Education / Training
- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication
- Technical Assistance

Recent Activities:

UNCHS aims to improve the quality of human settlements through combining economic development, social development and environmental protection. UNCHS runs a Sustainable Cities Programme, a Community Development Programme, a Global Urban Observatory Programme and The Best Practices and Local Leadership Programme. UNCHS has urban agriculture as an explicit area of municipal intervention in poverty reduction.

- The Sustainable Cities Programme (SCP) is a joint facility of the UNCHS and the United Nations Environment Programme (UNEP) for the development of a sustainable urban environment founded on broad-based public participation. The SCP is active since 1990 in over 15 countries in the world, organises international fora (Shanghai 1997)

and publishes the *Sustainable Cities News*.

- The Best Practices and Local Leadership Programme (BLP), part of the United Nations Programme on Human Settlements, aims at stimulating sustainable urban development by promoting the sharing, exchange and transfer of expertise and experience derived from successful local actions in improving the living environment, including urban agriculture. Best Practices are initiatives that have resulted in tangible improvements in the quality of life and living environments of people, in a sustainable way. These initiatives are the product of partnerships between two or more key groups of actors. For example, a Best Practice might be a community-based scheme that provides women with access to credit. It might also be a set of economic incentives for manufacturers to reduce and recycle packaging. Or it might concern a community resource information centre.

While problems in relation to human settlement development may vary from country to country, the processes and procedures used to address these problems may be similar. By recording experiences in a unified recording format and sharing them, much can be learned. In partnership with the Together Foundation, UNCHS maintains a global database with a search engine which enables users to access the data quickly and efficiently.

For more information you may contact:

The Best Practices and Local Leadership Programme
UNCHS – Habitat, Nairobi
Email: bestpractices@unchs.org
<http://www.bestpractices.org/>

The web site shows a series of Best Practices on urban development that

can be searched by geographic region, project initiative, partnerships and different keywords. A summary of each Best Practice can be taken from Internet. For provision of full records you have to apply for an account.

To order a copy of the database contact:

*The Together Foundation
55 East 75th Street
New York, NY 10021, USA
Phone: +1 212 6281939
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Email: together@together.org*

- The Global Urban Observatory Programme (GUOP) is an integrated set of capacity building programmes and a global network of resources to help governments, local authorities and their partner groups monitor progress in implementing the Habitat agenda and to expand the base of knowledge for better urban policies and practices. Working through competent national and local observatories, the Global Urban Observatory facilitates the collection, management, comparison, and interpretation of information on urban trends and conditions. In addition, it identifies and evaluates successful urban policies and practices. It reports the impacts of urban programmes and plans of action, and facilitates the creation of a learning environment for more effective civic engagement and decision making.

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Email: guo@unchs.org;
Habitat2@unep.no
Internet: <http://www.unhabitat.org/>*

Publications:

A newsletter is published by the Global Urban Observatory of the United Nations Centre for Human Settlements (Habitat) to inform and to stimulate exchanges between local authorities, civic organisations, policy makers, researchers and urban practitioners for making cities and communities more livable.

Future issues will contain information

about GUO activities as well as other urban news and events. If your organisation would like to announce an event, publication or other news, please contact: guo@unchs.org

United Nations Development Programme (UNDP)

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Main areas of work:

- Policy Development and Advice
- Information / Communication

Recent Activities

UNDP has adopted an approach to urban problems that link human development with economic productivity. UNDP promotes human development in urban areas through support for actions in five priority areas:

- alleviating urban poverty
- improving the urban environment
- providing urban infrastructure, shelter and services
- promoting the private sector and NGO's
- strengthening urban governance and administration.

UNDP implements the Urban Management Programme (see also Organisations: UNDP / UMP – LAC), the LIFE programme (Local Initiative Facility for Urban Environment), a Public-Private Partnerships programme, and the Habitat Programme. Urban agriculture is viewed upon as a cross-sectoral approach related to each of the above mentioned priority areas and programmes.

UNDP provides technical assistance, creates fora for exchange, strengthens regional institutions, and contributes to capacity building. In 1991-1992, a worldwide survey on urban agriculture

was executed with the help of TUAN. Results were published in the book "Urban Agriculture: Food, Jobs and Sustainable Cities". The publication of an updated version is currently planned.

In 1997, the Second International Colloquium of Mayors on Governance for Sustainable Growth and Equity was organised in New York, in which the perspectives of urban agriculture for food security, jobs and waste recovery were discussed. Early 1998, a seminar on urban-rural linkages was organised in Brazil.

The UNDP also takes part in the steering committee of the Global Initiative on Urban Agriculture. (GIUA).

Web Site:

<http://www.undp.org/>

University of Pennsylvania, Department of Landscape Architecture and Regional Planning

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Organisational Type:

Academic Institution

Main Areas of Work:

- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication
- Technical Assistance
- Education

Specific Expertise:

- Urban Forestry
- Urban Waste Management: Waste Water Management
- Vacant Land Improvement

Regions:

North America

Recent Activities:

- Community development in inner-city neighbourhoods
- Environmental education in an inner-city public school
- Storm water and waste water management

Web Site:

<http://www.upenn.edu/wplp>

Publications:

- West Philadelphia Landscape Plan. 1991. *Vacant land: a resource for reshaping urban neighbourhoods*. Graduate School of Fine Arts. University of Pennsylvania
- West Philadelphia Landscape Plan. 1990. *The garden is a town*. Graduate School of Fine Arts.
- Knack, Ruth. *Dig these gardens*. In: *Planning* Vol. 60 No. 7 (July 1994) p.20-24
- Whiston Spirn, A. 1998. *Reclaiming common ground: water, neighborhoods, and public spaces*. In: Lacey, M. 1998. *Regionalism and planning in the twentieth century*. Woodrow Wilson Center, Washington, DC (forthcoming)

University of Zimbabwe, Department of Rural and Urban Planning

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Organisational Type:

Academic Institution

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Research

Regions:

Southern Africa

Publications:

- Mbiba, B. 1995. *Urban agriculture in Zimbabwe: implications for urban management and poverty*. Aldershot: Avebury. ISBN 1 85628 88579. 238 p.
- Mbiba, B. 1995. *Implications of housing standards reduction on subsistence survival of the urban poor in Zimbabwe*. In: Schaur E. (ed.). 1995. *Building with intelligence: aspects of a different building culture*. Stuttgart. ISBN 3 78282041 X. p.34-37
- Mbiba, B. 1993. *Urban agriculture, the poor and planners: a Harare case study*. In: Elgohary, A.F. 1993. 10th Inter-Inter-Schools Conference on

Development Graduate School Publications. London: University College. ISBN 1 898932 00 X. p.128-136

- Mbiba, B. 1994. *Institutional responses to uncontrolled urban agriculture in Harare: prohibitive or accommodative?* In: Journal of Environment and Urbanisation Vol. 6 No. 1 (April 1994)
- Mbiba, B. 1994. *The cattle of Chitungwiza: farming at close quarters or conflicts on the rural urban fringe*. In: ILEIA Newsletter Vol. 10 No. 4 (December 1994) p.22-23
- Mbiba, B. *Classification and description of urban agriculture in Harare, Zimbabwe*. In: Development Southern Africa Vol. 12 No. 1 (February 1995)
- Mbiba, B. 1992. *Urban agriculture, urban management and the urban poor: issues and dimensions for research - Harare Metropolitan*. Paper presented at the Workshop on Gender Research on Urbanisation, Planning, Housing and Everyday Life (Gruphel); March 30 - April 2, 1992. Zesa Training Centre, Harare, Zimbabwe
- Mbiba, B. 1993. *Urban agriculture in Zimbabwe: testimonies of women from Warren Park Suburb - Harare*. Paper presented at the Gruphel Workshop, Zimbabwe Women's Resource Centre Network (ZVMCN). March 2-3, 1993
- Mbiba, B. 1994. *Urban agriculture in Zimbabwe*. In: Report of Seminar Proceedings, July 24, 1994. Department of Rural and Urban Planning, University of Zimbabwe
- Mbiba, B. 1993. *Socio-economic and gender aspects of urban cultivation in Harare, Zimbabwe*. Paper presented

at the Regional Development
Planning Occasional Seminar,
Institute of Social Studies, The
Hague, October 1, 1993

- Mbiba, B. 1993. *Government policy on rural-urban development in Zimbabwe since 1980: substantive determinants of change*. Paper presented at the RUPSEA Conference, Maseru Sun Hotel, Lesotho, October 25-30, 1993
- Mbiba, B. 1994. *Are conditions ripe for urban agriculture in Zimbabwe?* Paper presented at the ENDA Workshop, February 25, 1994, The George Hotel, Harare
- Mbiba, B. 1996. *Urban agriculture in Southern Africa: policy conflicts and challenges*. Paper presented at Green Beach Hotel, Netanya, Israel, under the auspices of the Bar Ilan University, June 23-30, 1996.
- Mbiba, B. 1998. *Urban Agriculture in Southern Africa: theory and practice*. Paper presented at the Conference on Urban Agriculture in Southern Africa, Productive Open Space Forum of South Africa, Pretoria, March 3-5, 1998

Urban Vegetable Promotion Project (UVPP)

Contact:

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- Suzan Kiango, Project Co-ordinator UVPP
- Dr. Joerg Amend, Project Adviser / Project Leader UVPP

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Mikocheni, Dar es Salaam, Tanzania

Organisational Type:

Development Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

Urban Crop Production

Regions:

East Africa

Recent Activities:

Implementation of the Urban Vegetable Promotion Project under the Ministry of Agriculture and Co-operative and supported by GTZ (1993-1998 (2000)):

- Promotion of urban vegetable and fruit production in Dar es Salaam
- Urban farming systems research and research in other relevant fields related to urban agriculture (production techniques,

environmental effects of / on urban agriculture)

- Introduction of integrated pest management strategies in urban vegetable production
- Development of appropriate technical messages for urban vegetable farmers
- Development of an extension approach for the urban areas of Dar es Salaam
- Monitoring and evaluation of environmental effects on / from urban agriculture in Dar es Salaam
- Awareness creation among decision makers about the potentials of urban agriculture
- Linking with other actors in the field of urban agriculture

Information offered:

- Internal project papers (available on demand)
- Leaflets on IPM and crop production techniques

Training Offered:

- Training sessions for urban producer groups on:
 - . vegetable and fruit production techniques
 - . integrated pest management
 - . group formationThis training is available through the governmental extension service.
- Training for government extensionists on participatory extension
- Possibilities to organise national seminars on urban agriculture

Publications:

- Stevenson, C. 1993. *A proposal for the selection of sites for a situation analysis on urban vegetable and fruit production, consumption and marketing*. Urban Vegetable Promotion Project, Dar es Salaam, Tanzania (UVPP). 28 p.
- Stevenson, C., J. Kinabo & D. Nyange. 1994. *Urban horticulture in*

- Tanzania: a situation analysis of the production, marketing and consumption of fruits and vegetables in Dar es Salaam, Dodoma and Arusha.* UVPP. 94 p.
- Urban Vegetable Promotion Project. 1994. *Participatory Urban Appraisal training held at Mbalgala Spiritual Centre and Mbuyuni, Temeke.* UVPP. 66 p.
 - Fleer, J H. 1995. *Die Förderung des urbanen Gemüsebaus im städtischen Zentrum von Arusha.* M.Sc. Thesis, Fachhochschule Wiesbaden, Fachbereich Gartenbau und Landschaftspflege, Wiesbaden, Germany. 115 p. (only available in German)
 - Brodowy, D. 1995. *Die städtische und stadtnahe Produktion von Obst und Gemüse in Dodoma, Tansania.* M.Sc. Thesis, Fachhochschule Wiesbaden, Fachbereich Gartenbau und Landespflege, Wiesbaden, Germany. 102 p. (only available in German)
 - Urban Vegetable Promotion Project. 1995. *Participatory Urban Appraisal report in Manzese, Kinondoni.* UVPP. 15 p.
 - Youze, E. 1995. *Participatory Urban Appraisal report, Chan'ombe, Dodoma.* UVPP. 35 p.
 - Kogi-Makau, W. 1995. *Consumption and the state of nutritional knowledge and beliefs on fruits and vegetables among urban poor in Dar es Salaam.* UVPP. 93 p.
 - Kogi-Makau, W. 1996. *Vegetables and fruits: monitoring of produce levels and utilization in Mbuyuni and Manzese, Dar es Salaam.* UVPP. 44 p.
 - Stevenson, C, P. Xavery & A. Wendeline 1996. *Market production of fruits and vegetables in the peri-urban area of Dar es Salaam.* UVPP. 40 p.
 - Jacobi, P. 1996. *Economy of Amaranthus spp. (Mchicha) growing on open spaces in Dar es Salaam.* UVPP. 10 p.
 - Kiango, S. & T. Likoko. 1996. *Vegetable production in open spaces in Dar es Salaam City.* UVPP. 26 p.
 - Byarugaba, P.B. 1997. *Shallow ground water potential for vegetable production in selected sites in Dar es Salaam City.* UVPP. 14 p.
 - Amend, J., I. Magazini, S. Mutahiwa & I. Swai. 1997. *Integrated Pest Management in urban vegetable production in Dar es Salaam.* UVPP. 17 p.
 - Jacobi, P. 1997. *Importance of vegetable production systems in Dar es Salaam.* UVPP. 5 p.
 - Muster, G. 1997. *Environmental problems of urban agriculture: a case study of Dar es Salaam, Tanzania.* MA Thesis School of Oriental Studies, University of London. UVPP. 28 p.
 - Mndiga, H. & M. Lyimo 1997. *Training manual on communication skills and moderation.* UVPP. 89 p.
 - Yachkaschi, J. 1997. *Produktion, Vermarktung und Konsum von Obst und Gemüse im urbanen und periurbanen Bereich in drei Städten Tansanias.* Ph.D. Thesis Universität Hannover, Institut für Gartenbauökonomie, Hannover, Germany (PhD research done in Arusha, Dodoma, Dar es Salaam)
 - Kogi-Makau, W. 1997. *Vegetables and fruits: monitoring production and utilization of vegetables and fruits in selected sites in Dar es Salaam.* UVPP
 - Jacobi, P. & J. Amend 1996. *Gemüsebau in Dar es Salaam: bedeutende Einkommensquelle nicht nur für die Armen.* In: Entwicklung + ländlicher Raum. Vol. 30 No. 6 (1996) p. 12-14
 - Jacobi, P. & J. Amend. 1997. *Vegetable farming in Dar es Salaam: an important source of income, and not only for the poor.* In: Agriculture and Rural Development Vol. 4 No. 2 (1997) p. 52-54

Wageningen Agricultural University, Department of Agricultural Environment and Systems Technology

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Organisational Type:

Academic Institution

Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

Urban Waste Management: Waste
Water Management

Regions:

- East Africa
- West Africa
- Middle East

Recent Activities:

- Studies in the field of sewage treatment for agricultural reuse
- Studies on waste water management in Middle East, Cape Verdian islands and Mozambique

Training Offered:

Treatment and reuse of waste water in developing countries for MSc students

WASTE, Advisers on Urban Environment and Development

Contact:

- Inge Lardinois
- Herbert Aalbers
- Anne-Lies Risseeuw

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Organisational Type:

- Advisory Firm
- Development Organisation

Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Urban Waste Management: Waste Water Management
- Urban Waste Management: Solid Waste Management

Recent Activities:

Activities are related to linking waste management and Urban Agriculture:

- inventory studies
- fertilizer needs of farmers
- implementation of pilot projects

WASTE coordinates the Urban Waste Expertise Programme (UWEP), started in 1992, as a research and pilot project programme on urban waste in the South.

UWEP was created in response to the rapid growth of cities / urban populations and the corresponding increasing amount of urban waste. The programme inventorises local expertise in waste

management among individuals, small companies or community organisations, gathering information and understanding about waste processing.

This stage will be followed by pilot projects in which the role of local waste managers, the transfer of knowledge and the involvement of local governments are all-important elements. Results will be disseminated through resource centres ranging from neighbourhood libraries to national universities.

UWEP also manages a question-and-answer service, offers some training facilities, may contribute to financing and backstopping of innovative projects and makes its findings accessible through a regularly updated e-mail bulletin.

Publications:

- Hart, D. 't & J. Pluimers. 1996. *Wasted agriculture: the use of compost in urban agriculture*. UWEP Working Document No. 1. WASTE, Gouda, The Netherlands
- *UWEP Newsletter*
UWEP publishes a bi-monthly e-mail bulletin with information on their projects and field work, their sustainable waste management concept, related projects, conferences and a list of interesting UWEP-publications. Subscriptions can be obtained from Anne-Lies Risseeuw:
E-mail: alrisseeuw@waste.nl
- Urban Waste Series: (price USD 20.00)
 - . Lardinois, I. & A. v.d. Klundert. 1994. *Organic waste*. TOOL / WASTE
 - . Lardinois, I. & A. v.d. Klundert. 1994. *Plastic waste*. TOOL / WASTE

- . Lardinois, I. & A. v.d. Klundert. 1996. *Rubber waste*. TOOL / WASTE
 - . Lardinois, I. & A. v.d. Klundert. 1995. *Hazardous waste*. TOOL / WASTE
 - . Arroyo Moreno, J., F. Rivas Ríos & I. Lardinois (eds). *Solid waste management in Latin America: the case of small and micro-enterprises*. IPES / ACEPESA / WASTE (also in Spanish).
- Muller, M.S. (ed.). *The collection of human excreta from household latrines in low-income urban areas*. ENSIC / AIT / WASTE (forthcoming)
- UWEP Working Documents: (price USD 15.00)
- . WD 1: 't Hart, D. & J. Plumiers. 1996. *Wasted agriculture: the use of compost in urban agriculture*.
 - . WD 2: Anschutz, J. 1996. *Community-based solid waste management and water supply projects: problems and solutions compared*
 - . WD 3: Diarra, M. 1996. *Traitement des boues de vidange en commune IV du district de Bamako* (in French)
 - . WD 4: Eerd, M. van. 1996. *Occupational Health Aspects in Waste Collection and Recycling. Part I*
 - . WD 4: Eerd, M. van. 1997. *Occupational Health Aspects in Waste Collection and Recycling. Part II*
 - . WD 5: 1997. *Reader with background papers to the Programme Policy Meeting, 1997*
 - . WD 6: 1997. *Proceedings of the UWEP Programme Policy Meeting, 1997*
 - . WD 7: 1997. *Sustainable municipal wastewater treatment systems*. Papers presented at ETC-WASTE workshop
- . WASTE is publishing a new series: "*UWEP Case Study Reports*" containing results of research done in 1995-97, the 1st phase of the UWEP programme. Case study reports are available on hospital waste management, collection of human excreta, small and micro enterprise involvement in waste management, composting, plastic recycling, separation at source, ship and port waste, and community participation in waste management. A full list of case study reports can be obtained from WASTE.

West African Urban Agriculture Research Network

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*Institute Africain de Gestion Urbaine
BP 7263
Dakar, Senegal*

Regions:

West Africa

Specific Expertise:

Urban Agriculture and Urban Ecology

Main Areas of Work:

- Policy Development and Advice
- Information / Communication

Organisational Type:

Development Organisation

Recent Activities:

The West African Network for Research in Urban Agriculture and Environment, established in 1994, seeks to influence government policy with regard to urban farming by providing information on its potential.

Winand Staring Centre for Integrated Land, Soil and Water Research (SC-DLO)

Contact:

Dr. L.M. van den Berg

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- Dynamics of functions and land development topics
- Regional interrelations and management topics

Specific activities in the field of peri-UA comprise:

- Joint research with Israeli and Nigerian counterparts on small-scale market gardening in Jos, Nigeria (1993-97).
- Participation in EU-backed research programme on peri-urban agriculture (1998-present)

Organisational Type:

Academic Institution

Web Site:

<http://www.intern.sc.dlo.nl/>

Main Areas of Work:

Research

Specific Expertise:

Peri-Urban Crop Production

Regions:

West Africa

Recent Activities:

The DLO Winand Staring Centre for Integrated Land, Soil and Water Research investigates the use, quality and prospects of rural areas, to enable sound decisions on their designation, layout and management. Research focuses on problems of physical planning, environmental protection and water management in rural areas and is directed by government policy at different levels.

Five strategic fields of research have been formulated:

- Rural areas and environmental quality
- Water management in relation to agriculture and nature
- Nature and landscape: conservation, development and additional land use

World Bank

Contact:

Tjaart Schillhorn-van Veen

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E-mail:
tschillhornvanveen@worldbank.org*

Organisational Type:

Development Organisation

Main Areas of Work:

Planning

Recent Activities:

In the context of the WB's programme on 'Liveable cities for the 21st century: the post Habitat II agenda for the World Bank', a major effort to coordinate and apply state-of-the-art knowledge of urban waste management is under way in the Bank. The priorities for urban waste management (both waste water and solid wastes) support the broad urban priorities identified by the Bank at Habitat II - extending basic services to the poor, providing a clean urban environment, and building up a sustainable financial and institutional capacity for waste management. These translate into the following principles for action:

- Adopting a citywide strategic planning approach for urban waste management services combining spatial, technical, institutional, and financial views
- Promoting a policy and regulatory framework for economically sound waste reduction, recovery, recycling, and reuse, and environmentally-sound waste disposal.
- Mobilising public and private resources for service delivery, seeking greater efficiency and cost effectiveness.

The application of the above principles and priorities takes many forms in

recent Bank-supported projects in several different contexts. For metropolitan solid waste management, projects in Colombo, Sri Lanka, and Madras, India, both include the development and implementation of a strategic solid waste management strategy and action plan. The Bank's Urban Development Division and the Swiss Development Cooperation (SDC) have entered into a collaborative effort to distill the lessons learned from these and other urban solid waste projects and to prepare, field test, and disseminate a guide for strategic solid waste management strategies for large cities. Field testing will be tied to future investment projects so that the exercise will have concrete outcomes for the participating cities.

The World Bank is a member of the Global Initiative on Urban Agriculture (GIUA).

Information offered:

See: <http://rocks.worldbank.org/html/extdr/pubs.htm>

Web Site:

<http://www.worldbank.org>

World Health Organisation-Europe (WHO)

Contact:

*Aileen Robertson, Acting Regional
Advisor for Nutrition*

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- Encourage schools to include food production in their educational subjects
- Involve the health sector in promoting vegetable and fruit production
- Assess the city environment using community mapping tools

Web Site:

<http://www.who.dk/>

Main areas of work:

- Information / Communication
- Policy Development and Advice
- Research
- Education / Training

Specific Expertise:

- Urban Food Security and Nutrition
- Urban Agriculture and Public Health

Regions:

- West Europe
- East Europe

Recent Activities:

The World Health Organisation sees the need for an integrated approach to food, health and environment with the aim to increase availability of and accessibility to fruits and vegetables for the urban population. In an increasingly urbanised Europe, nutritional deficiencies and increased disease incidence are closely associated with low vegetable and fruit consumption and urban poverty.

WHO-Europe has developed a Draft Urban Food and Nutrition Action Plan that was presented in the Healthy Cities Conference in Athens (July 1998). The plan identifies several opportunities for municipal action:

- Lease urban land for growing food
- Promote, support and protect local shops and farmers' markets
- Promote social cohesion by supporting community food initiatives

II. RESOURCE PERSONS



Marketing home-grown produce can make an important contribution to the household incomes of Bolivia's urban population.

Photo: Jaime Rojas

Aalbers, Herbert (MSc.)
Environmental Engineer

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Main Areas of Work:

- Consultancy / Technical Assistance
- Research

Specific Expertise:

- Urban Agriculture and Public Health
- Urban Waste Management: Waste Water Management
- Waste Water - Fed Aquaculture

Regions:

- East Africa
- Middle East

Main Interests:

- Use of human excreta and sewage in agriculture and aquaculture
- Integrated sewage farms
- Biomass production with waste water

Recent Activities:

- Desk study on selection of sustainable sanitation for developing countries
- Desk study on wetlands for faecal sludge treatment

Publications:

- Aalbers, H. 1997. *Selection of sustainable sanitation for developing countries*. Wageningen Agricultural University
- Balkema, A., H. Aalbers & E. Heijndermans (eds). 1996. *Sustainable municipal wastewater treatment systems*. Proceedings ETC / WASTE workshop, November 1996

Abu-Rukah, Yousef (Dr.).

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Main Areas of Work:

Research

Specific Expertise:

- Urban Land and Water Use Planning and Management
- Solid Waste Management
- Urban Waste Management: Waste Water Management

Regions:

Middle East

Recent Activities:

- Projects related to soil pollution control
- Project on the use of superabsorbent polymers to save irrigation water in saline soil in the Mediterranean region

Akinbamijo, Yemi (Dr.)

Postal Address:

*International Trypanotolerance Centre
(ITC)
PMB 14
Banjul, The Gambia
Phone: +220 46 29 31
Fax: +220 46 29 24
E-mail: Yemi.Akinbamijo@commit.gm*

Main Interests:

- Peri-urban dairy production
- Exploitation of the potential benefits of the livestock / horticulture integrated peri-urban farming system

Main Areas of Work:

- Education / Training
- Project Implementation
- Research

Specific Expertise:

- Urban Agriculture and Gender
- Agricultural Services Provision: Extension and Technical Assistance
- Urban Food Security and Nutrition
- Urban Animal Production
- Peri-Urban Crop Production
- Urban Crop Production: Community Gardening

Regions:

West Africa

Publications:

Akinbamijo, Y. & S.T. Fall. 1998.
Integrated peri-urban systems: horticulture and livestock in West African cities. Paper presented at the Workshop on Urban Agriculture and Food Security in West Africa, Ouagadougou, Burkina Faso, 14-18 June 1998

Alabaster, Graham

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E-mail: graham.alabaster@unchs.org*

Publications:

- Various publications related to urban waste recycling
- Alabaster, G. *Small-scale composting in urban low-income areas* (forthcoming)

Main Areas of Work:

- Education / Training
- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication
- Technical Assistance

Specific Expertise:

- Urban Agriculture and Public Health
- Urban Waste Management: Solid Waste Management
- Urban Waste Management: Waste Water Management
- Waste Water - Fed Aquaculture

Regions:

- Central Africa
- Central America
- Central Asia
- East Africa
- South America
- South Asia
- Southeast Asia
- Southern Africa
- West Africa

Main Interests:

- Integrated solid waste and waste water reuse and urban agriculture
- Income-generating activities in the urban environment

Recent Activities:

Field demonstrations and research in 10 countries

Altieri, Miguel A. (Prof. Dr.)
Associate Professor

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Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Peri-Urban Crop Production
- Urban Crop Production: Community Gardening

Regions:

- North America
- Central America
- South America

Recent Activities:

- Development of a biological control system of pests of urban agriculture
- Design of diversified urban agroecosystems

Training Offered:

Training in agroecology and biological control

Publications:

- Altieri, M.A. 1996. *Agroecology: the science of sustainable agriculture*. Westview Press
- Altieri, M.A. *The greening of the barrios: urban agriculture for food security in Cuba* (forthcoming)

Amend, Jörg (Dr.)

Project Advisor

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GTZ Urban Vegetable Promotion
Project (UVPP)
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784033
Fax: +255 51 75549 / +255 51 115930
E-mail: uvpp@uvpp.africaonline.co.tz

- development of an extension approach for the urban areas of Dar es Salaam
- monitoring and evaluation of environmental effects on / from urban agriculture in Dar es Salaam
- awareness creation among decision makers about the potential of urban agriculture
- linkages with stakeholders in the field of urban agriculture

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Research

Regions:

- East Africa
- South Asia
- Southeast Asia
- West Europe

Specific Expertise:

- Urban Waste Management
- Urban Agriculture and Urban Ecology
- Urban Agriculture and Gender
- Agricultural Services Provision: Extension and Technical Assistance
- Urban Agriculture Pest and Disease Management
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening

Main Interests:

- In the framework of the UVP Project:
- promotion of urban vegetable and fruit production in Dar es Salaam
 - development of appropriate technical messages for urban vegetable farmers
 - development of IPM strategies for urban vegetable production

Recent Activities:

- Project advisor to the Urban Vegetable Promotion Project, Dar es Salaam, Tanzania
- Member of the Working Group on Urban Agriculture organised by the Sustainable Dar es Salaam Project (HABITAT) in Dar es Salaam, Tanzania
- GTZ representative in Third Meeting of the SGUA in Ottawa, Canada, March 1996

Publications:

- Jacobi, P. & J. Amend. 1996. *Gemüsebau in Dar es Salaam: bedeutende Einkommensquelle nicht nur für die Armen*. In: Entwicklung und Ländlicher Raum Vol. 30 No. 6/96 p.12-14
- Jacobi, P. & J. Amend. 1997. *Vegetable farming in Dar es Salaam: an important source of income, and not only for the poor*. In: Agriculture and Rural Development Vol. 4 No. 2/97 p.52-54
- Amend, J., I. Magazini, S. Mutahiwa & I. Swai. 1997. *Integrated pest management in urban vegetable production in Dar es Salaam*. 17 p. Urban Vegetable Promotion Project, Dar es Salaam, Tanzania. Internal project paper
- Amend, J. & E. Mwaisango. 1998. *Environmental pollution and urban agriculture: status of soil contamination in Dar es Salaam*.

Urban Vegetable Promotion Project,
Dar es Salaam, Tanzania

Ameroso, John

Extension Resource Educator

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Urban Farmer

Specific Expertise:

- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Urban Food Security and Nutrition
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Roof Garden Technologies

Regions:

North America

Main Interests:

- Food security, new producers (farmers), green entrepreneurship and farmers' market development

Recent Activities:

- Education in agriculture
- Technical services in soil testing, crop planning, market development
- Project development in urban and rural settings

Publications:

50 subject matter fact sheets from previous bi-monthly newsletter issues titled *The Gotham Gardener*

Apiiga, Samuel Yaw

Postal Address:

*Department of Agricultural Extension
Ministry of Food and Agriculture
P.O. Box 199
Bolgatanga, UE/R Ghana*

Specific Expertise:

Urban Animal Production

Regions:

West Africa

Main Interests:

Small ruminants in urban agriculture

Publications:

Apiiga, S.Y. 1996. *Rearing rabbits for home consumption*. In: Development Focus Vol. 1 No. 2

Arias-Zeballos, Maria

Associate Director

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linking consumers of Manhattan and New Jersey with an organic agriculture programme run by the Rutgers University 1997. Practising nature farming in a community garden

- 1998. Training and extension in urban gardening at a Senior Citizen Center in Manhattan

Main Areas of Work:

- Education / Training
- Project Implementation
- Information / Communication
- Policy Development
- Urban Farmer

Publications:

- *Potatoes - nature farming method.* Information sheet
- *Increasing the repertoire of play*

Specific Expertise:

- Urban Agriculture and Gender
- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Urban Agriculture and Public Health
- Urban Food Security and Nutrition
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

North America

Main Interests:

- Organic flower cultivation
- Pest and disease management in urban agriculture

Recent Activities:

- Convenor of the Women and the Environment Working Group of the United Nations, NGO Committee on the Status of Women, New York
- Contributions to Platform for Action, UN document for UN Fourth World Women Conference, Beijing, 1995
- Dissemination of UN report on urban agriculture 'Food, Jobs and Sustainable Cities' 1996.
- Organisation and development of a community supported agriculture

Arroyo, Francisco Javier
Ing. Agrónomo en Desarrollo Rural

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice
- Project Implementation
- Research

Specific Expertise:

- Urban Agricultural Services Provision
- Urban Food Security and Nutrition
- Urban Agriculture Pest and Disease Management
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening
- Urban Crop Production: Roof Garden Technologies

Regions:

- Central America
- North America

Main Interests:

- Liquid organic fertiliser
- Vermicompost
- Crop health: non-toxic products and homeopathy
- Fermentation processes

Recent Activities:

- Coordination and implementation of the Programa de Producción Urbana de Alimentos (700 families) (1993-97)
- Organic production systems in homegardening
- Production of liquid organic fertilizer

Asomani-Boateng, Raymond

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*planners (submitted to Waste
Management and Research)*

- Asare, S.N. & R. Asomani-Boateng.
199? *Environmental impact assessment
process and public involvement: case
study Volta River Project, Ghana*

Main Areas of Work:

- Consultancy / Technical Assistance
- Planning
- Research

Specific Expertise:

Urban Waste Management

Regions:

- North America
- West Africa

Main Interests:

- Relating urban agriculture to land
use planning
- Composting solid household waste

Recent Activities:

- Neighbourhood project on
composting solid household waste
(Accra, Ghana)
- Documenting problems of urban
cultivators in Accra, Ghana

Publications:

- Asomani-Boateng, R. et al. 1996.
*From dump to heap: community
composting in West Africa*. In:
Biocycle January 1996 p. 70-71
- Asomani-Boateng, R. & M. Height.
*Assessment of municipal solid waste
management practices in Accra,
Ghana, West Africa* (submitted to
Journal of Environmental Systems)
- Asomani-Boateng, R. & M. Height.
*Reusing organic waste in urban farming
in African cities: a challenge to urban*

Beek, Martinus A. (Dr.)

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Course on Food and Nutrition
Programme Management

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training

Specific Expertise:

- Pest and Disease Management in Urban Agriculture
- Urban Crop Production
- Agricultural Services Provision: Credit
- Peri-Urban Crop Production

Regions:

- East Europe
- Central America
- South America
- South Asia
- Southeast Asia
- Central Asia
- North Africa
- East Africa

Main Interests:

- Applying general sectoral insights from agriculture in rural areas to urban agriculture:
- Technical aspects of production and processing
- Institutional aspect (research-extension-client linkages)
- Users' perspective (contribution to household food security and nutrition)

Recent Activities:

- 1995. Organizing a joint classwork session on urban agriculture and food security in the International Course on Vegetable Production together with the International

Belem, Bassirou
Ingénieur Forestier

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National Tree Seeds Center (CNSF)
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E-mail: cnsf@fasonet.bf

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Forestry
- Urban Crop Production: Community Gardening

Regions:

West Africa

Main Interests:

- Nursery activities for greening towns and villages
- Consultancies on urban greening

Recent Activities:

- Ornamental and forest nursery settlement and management
- Training people in nursery technics
- Contribution to conceptualising greening of towns policies

Publications:

- Belem, B. 1995. *Contribution des pépinières villageoises dans les opérations d'afforestation au Burkina Faso: cas de 14 pépinières des régions du Centre, Centre Est, Centre Ouest et de la Région de la Boucle du Mouhoun*. In: Rapport final de la 5ème rencontre tripartite annuelle entre chercheurs en technique de pépinière et

régénération à Korhogo du 21 au 23 mars 1995. IDEFOR-DFO, Station de Korhogo, Ivory Coast

- Belem, B. 1996. *La domestication des plantes forestières, ornementales et fruitières au Burkina Faso: contribution à l'élaboration de la monographie nationale sur la diversité biologique au Burkina Faso*. Programme des Nations Unies pour l'Environnement / Conseil National pour la Gestion de l'Environnement, Ministère de l'Environnement et de l'Eau, Ouagadougou, Burkina Faso

Bellows, Anne Camilla

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Main Areas of Work:

- Education / Training
- Project Implementation
- Research
- Information / Communication
- Policy Development

Specific Expertise:

- Urban Agriculture and Gender
- Urban Agriculture and Public Health
- Urban Food Security and Nutrition
- Peri-Urban Crop Production
- Urban Crop Production: Community Gardening
- Urban Crop Production: Roof Garden Technologies

Regions:

- East Europe
- North America
- Central Asia

Main Interests:

- Food security, also in the context of socio-economic human rights
- Demographical aspects (gender, age)
- Environment and health: link between urban agriculture, pollution and contaminated food
- Urban - periurban food system links

Recent Activities:

- 1996-present. Chair of Task Force on Food Contamination, Women and Environment Working Group of the United Nations NGO Committee on the Status of Women (CSW)

- 1994-present. Conference Planning Committee, East-West Women and Environment Cooperative Action

Publications:

- Bellows, A.C. 1997. *Urban food security in Poland*. In: Ecology and Agriculture No. 16 (September) p. 24-25. Special issue on urban agriculture
- Bellows, A.C. 1997. *Where kitchen and laboratory meet: the 'Tested Food for Silesia' program. (summary)*. In: Holzner, B.M. , T. Truong & A. Krahl (eds). *Gender and social security in Central and Eastern Europe and the countries of the Former Soviet Union: a resource guide*. Institute of Social Studies (ISS), Women and Development Programme, The Hague, The Netherlands / Netherlands Development Assistance (NEDA), Ministry of Foreign Affairs. 200 p.
- Bellows, A.C. 1994. *Polish project links environment, health and food supply*. In: *Surviving together: a quarterly on grassroots cooperation in Eurasia* Vol. 12 No. 3 (Autumn) p. 60-61
- Bellows, A.C. *Trouble with urban food, environments, and health: local and non-local aspects of sustainability in Upper Silesia, Poland*. In: Sustainable urban food systems. International Development Research Centre (IDRC), Toronto / Centre for Studies in Food Security, Ryerson Polytechnic University, Toronto (in press)
- Bellows, A.C. *100 years of women and urban agriculture in Poland: a complicated arrangement*. In: Women and Environments Magazine. Special issue on urban agriculture (in press)

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Main Areas of Work:

- Education / Training
- Policy Development and Advice
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Land and Water Use Planning and Management

Regions:

- South America
- South Asia

Main Interests:

- Programme design for workshop on regional policy level training in urban agriculture
- Possibilities of launching a programme on urban agriculture in the future

Berg, L.M. van den (Dr.)

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Main Areas of Work:

Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture and Gender
- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Agricultural Services Provision: Marketing
- Agricultural Services Provision: Extension and Technical Assistance
- Urban Land and Water Use Planning and Management
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

- East Africa
- Southeast Asia
- Southern Africa
- West Africa
- West Europe

Main Interests:

- Urban and agricultural land use planning to become more beneficial to urban and peri-urban farming (compensation in land, security of tenure)
- Establishment of action-oriented associations by urban and peri-urban farmers

Recent Activities:

- Joint research project with Israeli and Nigerian counterparts on small-scale market gardening around Jos, Nigeria
- Preparing similar projects with LEI-DLO and counterparts in Mali and Burkina Faso for sponsoring by EU (project approved and to start in October 1998)

Publications:

- Berg, L.M. van den. 1984. *Anticipating urban growth in Africa: land use and land values in the urban fringe of Lusaka, Zambia*. Zambia Geogr. Association. Occasional Study No. 13. PhD Thesis Department of Geography, University of Amsterdam
- Berg, L.M. van den (ed.). 1982. *In the shadow of Lusaka: land and people under pressure of urban growth*. Studies in Zambian Society Vol. 6. University of Zambia
- Berg, L.M. van den et al. 1998. *Small-scale market gardeners around Jos, Nigeria*. In: Mas, P. & K. Aoyagi (eds). *Towards sustainable cities*. University of Leyden, The Netherlands (in press)
- Berg, L.M. van den, H.I. Ajaegbu & D. Grossman. 1998. *Market gardening, urban growth and sustainable income generation on the Jos Plateau, Nigeria*. Final report. NUFFIC/MIRP, The Hague
- Berg, L.M. van den. 1993. *Patterns of harmony and conflict between horticulture and urban growth in The Netherlands*. In: Geography Research Forum, Vol. 13 p. 32-45

Boakye, Edward Asare

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Project Implementation
- Research
- Urban Farmer

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture and Gender
- Urban Land and Water Use Planning and Management
- Urban Agriculture and Public Health
- Urban Food Security and Nutrition
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

- West Africa
- Southern Africa
- Central Africa

Main Interests:

- Nutritional improvement
- Hunger reduction
- Income generation
- Enterprise development
- Environmental improvement

Recent Activities:

Identification of initiatives of squatter settlers to support themselves through small-scale farming and urban agriculture

Publications:

- Boakye, E.A. *The problems of urban land development: an evaluation and use of open spaces in Kumasi, Ghana*
- Boakye, E.A. *Agricultural development on urban fringes: a social or economic challenge*
- Boakye, E.A. *Agro-forestry education in Zambia: a potential resource for development*
- Boakye, E.A. *Urban land, urban poor and informal settlement: the informal sector initiatives*

Bon, Hubert de (Dr.)

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Main Areas of work:

Research

Specific Experience:

- Peri-Urban Crop Production
- Agricultural Services Provision:
Marketing
- Urban Agriculture and Enterprise
Development

Recent Activities:

- Involved in CIRAD's horticulture
programme in the field of vegetables
and food crop
- Represents CIRAD in the Global
Initiative on Urban Agriculture
(GIUA)

Publications:

De Bon, H., F. Faye & J. Pagès. 1997.
*Development of vegetable cropping
systems in the Niayes zone of Senegal.*
In: Experimental Agriculture Vol. 33 p.1-
8

Boncodin, Raul Mora

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Regions:

Southeast Asia

Main Areas of Work:

- Consultancy / Technical Assistance
- Planning
- Project Implementation
- Research

Specific Expertise:

- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Urban Agriculture and Enterprise Development: Processing of Agricultural Produce
- Urban Food Security and Nutrition
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Main Interests:

Understanding the dynamics of home gardening systems, their contribution to household food security and their potential for plant genetic resource conservation, particularly of root crops

Recent Activities:

- Extension-research on inter-agency promotion of sweetpotato-based household and school gardening. Baguio City, Philippines (1994-present)
- Enhancing biodiversity conservation and family security through home gardening and sustainable field

production of vegetables. Bukidnon, Philippines (1995-97)

Publications:

- Boncodin, R. & G. Prain. 1997. *The dynamics of biodiversity conservation by home gardeners in Bukidnon, Southern Philippines*. In: UPWARD. 1997. Local R&D: institutionalizing innovations in rootcrop research and development. 233 p. UPWARD, Los Baños, Philippines
- Boncodin, R. & B. Gayao. *Homegardening for sustainable rootcrop agricultural R&D: a case paper on the UPWARD homegardening projects in the Philippines*. In: UPWARD. Sustainable livelihood for rural households in Asia: contributions from rootcrop agriculture. UPWARD, Los Baños, Laguna, Philippines (forthcoming)

Bowyer-Bower, Tanya A.S. (Dr.)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Research

Specific Expertise:

- Illegal Urban Agriculture on Public Land
- Urban Agricultural Services Provision
- Urban Land and Water Use Planning and Management
- Urban Food Security and Nutrition
- Peri-Urban Crop Production
- Urban Crop Production: Community Gardening

Regions:

- East Africa
- West Africa
- Southern Africa

Main Interests:

- Governmental policies towards urban agriculture
- Spreading of urban agriculture as a self-help strategy of the urban poor

Recent Activities:

- Environmental assessment of urban agriculture in Kano, Nigeria
- Environmental, social and economic implications of urban agriculture in Harare, Zimbabwe

Publications:

- Bowyer-Bower, T.A.S. (ed.). 1997. *Urban agriculture in Africa*. Special publication of the Geographical

Journal of Zimbabwe. 123 p.

- Bowyer-Bower, T.A.S., I. Mapaure & R.B. Drummond. *Ecological degradation in cities: the impact of urban agriculture in Harare, Zimbabwe*. In: Journal of Applied Science in Southern Africa (forthcoming)
- Bowyer-Bower, T.A.S. 1996. *Environmental protection and control of urban agriculture in Harare, Zimbabwe*. Paper presented to the Commonwealth Geographical Bureau Conference on Degrading Environments and Management Policies: a Tropical Perspective, Georgetown, Guyana, August 1994. Chapter 18, p. 223-233. In: Eden, M.J. & J.T. Parry (eds). *Land degradation in the Tropics: Environmental and Policy Issues*. Printer Press, USA
- Bowyer-Bower, T.A.S. & D. Drakakis-Smith. 1996. *The needs of the urban poor versus environmental conservation: conflict in urban agriculture*. Final Report of ODA-ESCOR Project R5946. 114 p.
- Bowyer-Bower, T.A.S. 1996. *Criticism of environmental policy for land management in Zimbabwe*. In: Global ecology and biogeography letters Vol. 5 p. 7-17
- Bowyer-Bower, T.A.S. & G. Tengbeh. 1995. *The environmental implications of (illegal) urban agriculture in Harare*. ODA Project R5946. Working paper No. 4. Paper presented to the Workshop on the Environmental, Social and Economic Impacts of (Illegal) Urban Agriculture in Harare, Zimbabwe, University of Zimbabwe, August 30-31, 1995.
- Bowyer-Bower, T.A.S. 1996. *A review of the environmental*

implications of the urban and peri-urban farming activities of Kano city, Northern Nigeria. Report submitted to NRI, Chatham Maritime, Kent, United Kingdom

Briz Escribano, Julian (Prof.)
President of PRONATUR

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Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Agricultural Services Provision: Marketing
- Urban Crop Production: Community Gardening
- Urban Crop Production: Roof Garden Technologies
-

Regions:

- Central America
- South America
- West Europe

Main Interests:

- Greening of cities
- Roof garden technologies

Publications:

- Briz Escribano, J. 1994. *Marketing ecológico*. In: *Agricultura*, December 1994
- Briz Escribano, J. *Arquitectura, urbanismo y naturación urbana*. In: *Revista Agricultura*

Brock, Berend

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Main Interests:

- Research into environmental aspects of urban agriculture
- Introducing urban agriculture in African refugee camps

Main Areas of Work:

- Policy Development and Advice
- Research
- Information / Communication

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Agricultural Services Provision: Extension and Technical Assistance
- Urban Land and Water Use Planning and Management
- Urban Waste Management: Waste Water Management
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

- East Africa
- West Africa
- Southern Africa
- Central Africa

Recent Activities:

- 1996. Literature study (50 titles): problems and possibilities of promoting urban food production in cities of the developing world (for Prof. Christian Rogerson at WITS-University, Johannesburg)
- 1996. Field visits and studies in Bloemfontein and Pietermaritzburg

- 1996. Conference with South African agricultural NGOs for World Food Summit preparation
- 1997. Five months fieldwork on the real and potential contributions of urban horticulture to solutions for environmental problems in Cotonou (Benin, West-Africa). (issues: solid and liquid waste management; drainage; urban agriculture as a planning tool; use of (in)organic agro-inputs)
- 1998. Participation in IDRC workshop on urban agriculture in West Africa, Ouagadougou, 15-18 June 1998

Publications:

- Brock, B. 1996. *Problems and prospects of promoting urban food production in cities of the developing world*. University of the Witwatersrand paper
- Brock, B. 1998. *The contribution of urban agriculture to the sustainable development of Cotonou*. Paper presented at IDRC workshop on UA in West Africa, Ouagadougou, 15-18 June 1998 (forthcoming)

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Regions:

West Africa

Main Interests:

- Creating employment and micro-enterprise opportunities for youth and women
- Introducing 'best practices'
- Supporting privatisation programmes

Recent Activities:

Land tenure legislation project in Ivory Coast with The World Bank

Publications:

- Brou, C. 1997. *The impact of urban agriculture, main issue of sustainable development*
- Brou, C. 1998. *Internet and urban agriculture: a new technology for agricultural development in terms of quality*

Bruinsma, Wietse (MSc.)
Senior Documentalist

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Main Areas of Work:

- Consultancy / Technical Assistance
- Project Implementation
- Information / Communication

Specific Expertise:

- Urban Crop Production
- Urban Agriculture Pest and Disease Management
- Peri-Urban Crop Production

Regions:

- East Africa
- North Africa
- Southern Africa
- West Africa

Main Interests:

- Linking low-external-input agricultural issues to urban farming
- Information systems on urban agriculture

Recent Activities:

- Compilation of a resource guide on urban agriculture
- Preparation of a reader on urban agriculture

Publications:

- Bruinsma, W. & M. Dubbeling. 1998. *Resource guide on urban agriculture*. (Electronic database and web document)
- Bruinsma, W. *Annotated bibliography on urban agriculture* (in preparation)

Budowski, Gerardo (Dr.)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research
- Policy Development

Specific Expertise:

- Ecotourism
- Living Fences
- Urban Forestry
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

- Central America
- South America

Main Interests:

Retrieving, analysing and, if possible, improving technologies related to home gardens and living fences

Recent Activities:

Assessment of home gardens for ecotourism

Training Offered:

Short course on agroforestry including practices related to home gardens and living fences

Publications:

- Budowski, G. 1987. *Living fences in tropical America: a widespread agroforestry practice*. In; Gholz, H.L. (ed.). *Agroforestry: realities, possibilities and potentials*. p. 169-178. Martinus Nijhoff, Dordrecht, The Netherlands.
- Budowski, G. & R. Rosso. 1993. *Living fence posts in Costa Rica: a compilation of the farmer's beliefs and technologies*. In: *Journal of Sustainable Agriculture* Vol. 3 No. 2 p. 65-87
- Budowski, G. 1993. *Tropical home gardens and living fences: two successful technologies with world diffusion potential*. Addendum to Proceedings No. 4, Swaminathan Research Foundation, Madras, India. 15 p.
- Budowski, G. 1995. *Cercos vivos y otros atractivos turísticos en el medio urbano y rural*. Resumen de conferencia (mimeo), Escuela Centroamericana de Ganadería, Costa Rica. 3 p.
- Budowski, G. 1990. *Home gardens in tropical America: a review*. In: Landauer, K. & M. Brogie (eds). [Proceedings of] International Workshop, Bandung, Indonesia. p. 3-8

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Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

Urban Waste Management: Waste
Water Management

Regions:

- East Africa
- Southeast Asia
- West Europe

Main Interests:

To get to know the possibilities of urban agriculture, especially waste water in urban agriculture, in its various forms and to integrate this knowledge into training and research.

Recent Activities:

- Lecturer of course on waste water treatment and reuse in developing countries
- Research on pathogen removal from sewage
- Research on small-scale waste water treatment

Publications:

Van Buuren, J.C.L. & J. van der Heide.
1995. *Abatement of the water pollution in the Infulene Basin (Mozambique)*. TU Delft Report No. 63, ISSN 0169-6246

Campbell, Gerald R. (Dr.)
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development, to understand the role
of agriculture, agribusiness and food
marketing in community economic
development

Main Areas of Work:

- Education / Training
- Project Implementation
- Research

Specific Expertise:

- Urban Agriculture and Enterprise
Development
- Urban Agriculture and Enterprise
Development: Marketing of
Agricultural Produce

Regions:

North America

Main Interests:

- Helping urban communities
understand their food systems and
their linkages to agriculture both
within and beyond their boundaries
- Developing an understanding of
regional food systems as elements in
creating sustainable communities
and regions
- Helping connect US Land Grant
universities more closely to the
urban residents of their states
especially around food

Recent Activities:

- Engaged in participatory research on
the food systems of Madison and
Milwaukee, Wisconsin
- Working with community
development and agriculture
extension workers and others
interested in community economic

Centres, Jean-Michel (Dr.)
Veterinarian and Economist

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Main Areas of Work:

- Consultancy / Technical Assistance
- Project Implementation

Specific Expertise:

- Agricultural Services Provision:
Marketing
- Agricultural Services Provision:
Extension and Technical Assistance
- Urban Animal Production

Regions:

- Central Africa
- East Africa

Main Interests:

- How to adapt urban agriculture to the town constraints: land allocation, human health, environment
- How to improve efficiency of urban agriculture and, thus, family income
- How to set up proper marketing systems in order to improve town supply
- Methodology for rapid analysis of the production systems, marketing systems and consumption

Recent Activities:

- Urban and peri-urban agriculture studies for GRET in collaboration with IDP, DNE and DNA (1990-92)
- Urban and peri-urban agriculture in Bobo Dioulasso for GRET in collaboration with DGUT, INERA, University of Ouagadougou (1991-93)

Publications:

- Centres, J.-M. 1996. *L'élevage et l'agriculture en zones urbaines et péri-urbaines dans deux villes sahéliennes: Bamako et Bobo Dioulasso*. In: Cahiers Agriculture Vol. 5 No. 5 (Sept. 1996), p. 373-381. Paris: J. Libbey (also published in: L'agriculture dans l'espace périurbain: des anciennes aux nouvelles fonctions. Workshop Rambouillet, May 1995, p.98-107. INRA/SAD/ENSH)
- Centres, J.-M., A. Bellinguez, A. le Masson, P. Lhoste. 1996. *Systèmes d'élevage laitiers périurbains en Afrique: le cas de Bamako*. Id., p. 108-111
- Centres, J.-M., R. Metzger, L. Thomas, J.C. 1995. *L'approvisionnement des villes africaines en lait et produits laitiers*. Animal Production and Health Paper No. 124. FAO / GRET. 102 p.
- Centres, J.-M. *Agriculture et élevage à Bobo Dioulasso*.
 1. *Typologie des systèmes de production*. 1991. 77 p
 2. *Quelques données sur l'importance des activités*. 1992. 33 p.
 3. *Les filières d'approvisionnement et intrants et de commercialisation des produits agricoles*. 1992. 31 p.
 4. *Diagnostic et propositions*. 1992. 44 p. GRET / Université de Ouagadougou / INERA.
- Centres, J.-M. 1992. *Améliorer l'approvisionnement de Bamako en produits maraîchers et en protéines animales*. GRET. 78 p.

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- Chaipa, I. 1997. *Urban agriculture in Harare: results and recommendations of a household survey conducted in Harare*. ENDA
- Chaipa, I. 1997. *Urban agriculture in Harare: household nutrition, economic costs and benefits*. ENDA

Main Areas of Work:

- Planning
- Policy Development and Advice
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Crop Production
- Urban Agriculture and Gender
- Urban Food Security and Nutrition
- Urban Animal Production

Regions:

Southern Africa

Main Interests:

- Research on the practice of urban agriculture and governance
- Citizen participation in urban governance and the development of sustainable urban food production systems

Publications:

- Chaipa, I. 1998. *Urban agriculture in Zimbabwe: nature, significance and prospects*. Paper presented at the Int. Conference on Urban Agriculture Policy in Southern Africa. Technicon, Pretoria, 3-5 March 1998
- Chaipa, I. 1996. *Urban agriculture and good governance*. Paper presented at a National Workshop on Urban Agriculture in Zimbabwe, Harare, 14-15 May 1996
- Chaipa, I. 1996. *Urban agriculture in Zimbabwe: realities and prospects*. ENDA-Zimbabwe

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Main Areas of Work:

- Consultancy / Technical Assistance
- Management / Administration
- Project Implementation

Specific Expertise:

Urban Crop Production: Roof Garden Technologies

Regions:

- Central America
- East Europe
- North America
- South America

Recent Activities:

- Coordination of urban agriculture project in St. Petersburg and Moscow, Russia, with ECHO
- Conducted field research in Haiti, with ECHO

Publications:

- Cockram, M. 1993. *Agriculture in Third World cities: the invisible food supply*. MSc Thesis Cornell University, Ithaca NY
- Cockram, M. & S. Feldman. *The bountiful city: gardens in Third World cities*. In: African Urban Quarterly
- Cockram, M., D. Rakow & R. Kline. 1991. *Garden in the city*. Cornell Cooperative Extension, Ithaca, NY

Cosgrove, Sean

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Main Areas of Work:

- Consultancy / Technical Assistance
- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication
- Urban Farmer

Specific Expertise:

- Urban Agriculture and Public Health
- Urban Food Security and Nutrition
- Urban Waste Management: Solid Waste Management
- Urban Crop Production: Community Gardening
- Urban Crop Production: Roof Garden Technologies

Regions:

North America

Recent Activities:

- Has spent a 4-year term on Board of American Community Gardening Association (ACGA)
- Brought ACGA to Montreal for its 17th conference in 1996
- Was on many community gardening committees in Toronto
- Member of the Rooftop Gardens Resource Group

Publications:

Cosgrove, S. 1994. *Une histoire de deux villes: Canadian community gardening in Montreal and Toronto*. IDRC

Cropper, John

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Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Urban Land and Water Use Planning and Management
- Urban Food Security and Nutrition

Regions:

Central America

Main Interests:

Opportunities for urban agriculture, especially food forest gardening, to:

- . revegetate hillsides
- . reduce erosion and downstream siltation, flooding, pollution, etc.
- . improve food supply and nutrition of poor families
- . promote more sustainable livelihoods for highly disadvantaged families on eroded hillsides

Recent Activities:

- Identification of opportunities for urban agriculture in Trinidad and Tobago
- Survey of urban hillsquatter communities to identify interest and current practices of residents
- Design and promotion of limited resource approaches to promoting food forest gardening among urban

hillside squatter communities in Trinidad and Tobago

Publications:

- Cropper, J. 1996. *Sustainable human livelihoods in Trinidad and Tobago: addressing the problems of low income squatters on the lower slopes of the Northern Range*. Paper presented at the launch of the Sustainable Economic Development Unit, University of the West Indies, October 1996
- Cropper, J. 1996. *Revegetating residential squatter and other marginal communities on the slopes of Trinidad's East-West Corridor*. Paper presented to the University of the West Indies workshop on Urbanisation and Urban Policy in the Caribbean, December 1996 (in press)
- Cropper, J. 1997. *Regreening the foothills of the Northern range. Part 1. First assessment of the potential for implementation of a programme of revegetation of squatter and other low income communities on the hillsides of the East-West Corridor in Trinidad*. Report to UNDP-T&T

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Main Areas of Work:

Planning

Specific Expertise:

- Urban Waste Management
- Urban Agriculture and Urban Ecology
- Urban Land and Water Use Planning and Management

Regions:

- Australia and Oceania
- East Europe
- Middle East
- North America
- Southeast Asia
- West Europe

Main Interests:

Urban planning dimension

Dennery, Pascale (MSc.)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Urban Agriculture and Gender
- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Agricultural Services Provision: Extension and Technical Assistance
- Urban Food Security and Nutrition
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

- Central Africa
- East Africa

Main Interests:

- Impact of urban agriculture at household and community level, especially poverty alleviation, resource allocation to and from food production, implications for project planning
- Practical aspects of gender and urban agriculture: land tenure, labour, decision-making, female headed households
- Agricultural produce as a multiple use resource

Recent Activities:

- Masters thesis on Urban Agriculture (1995)
- Former intern at IDRC Cities Feeding People Programme (1995)
- Participant at International Conference on Sustainable Urban Food Systems, Ryerson Polytechnic University, Toronto, May 1997
- Serving as contact for City Farmer Vancouver for inquiries from Africa (on-going)

Publications:

- Dennery, P. 1994. *Martha is a city farmer*. In: ILEIA Newsletter for Low-External-Input and Sustainable Agriculture Vol. 10 No. 4 (December 1994) p.7
- Dennery, P. 1995. *Inside urban agriculture: an exploration of food producer decision making in a Nairobi slum*. M.Sc. Thesis, Department of Ecological Agriculture and Department of Sociology of Rural Development, Wageningen Agricultural University, Wageningen, The Netherlands
- Dennery, P. 1995. *Cities Feeding People fact sheets*. Cities Feeding People Report No. 15. International Development Research Centre, Ottawa, Canada
- Dennery, P. 1996. *Urban agriculture in informal settlements: how can it contribute to poverty alleviation?* In: *Entwicklung und Ländlicher Raum* Vol. 1996 No. 6 p.5-7 (also published in the English version *Agriculture and Rural Development* Vol. 4 (1997) No. 2 p.46-48)
- Dennery, P. *Urban producer decision making*. In: *African Urban Quarterly* (forthcoming)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Community-Supported Agriculture
- Permaculture
- Urban Agriculture and Urban Ecology
- Urban Agriculture and Sustainability in Cities
- Urban Crop Production
- Peri-Urban Crop Production

Regions:

- West Europe
- East Europe
- South America
- Middle East

Main Interests:

- Participatory design of low-external-input urban agriculture systems
- Consumer-producer linkages
- Safe food production

Recent Activities:

- 1994. Set-up of an urban organic garden in the Netherlands
- 1997. Provide advice to the City Council of Emmen (The Netherlands) on integration of urban agriculture and urban planning
- 1997. Preparation of project proposals on urban agriculture in the Netherlands, Palestine and Eastern Europe
- 1997-present. Supervision of students

- 1997-present. Publication of E-mail Bulletin on urban agriculture in Europe
- 1998. Tailor-made training on urban agriculture for SIDA (Sweden)
- 1998. Resource person to the Green Party in Germany on inclusion of urban agriculture in development policies
- 1998. Facilitating a workshop on urban agriculture in Ghaza (Palestine)
- 1998. Preparation of a resource guide on urban agriculture
- 1998-99. Preparation of a reader on urban agriculture

Publications:

- *E-mail bulletin on urban agriculture in Europe*
- Dubbeling, M., D.J. Adrichem. 1995. *Biologische stadsrandbouw: ideële doelstelling in economisch perspectief*. (unpublished)
- Zeeuw, H. de & M. Dubbeling. 1997. *Urban Agriculture: concept, significance and constraints*. ETC Netherlands
- Zeeuw, H. de & M. Dubbeling. *Local food production for improved nutrition and a healthy living environment: what cities can do*. WHO-Europe and ETC Netherlands (forthcoming)
- Bruinsma, W. & M. Dubbeling. 1998. *Resource guide on urban agriculture*. (Electronic database and web document)

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Main Areas of Work:

Project Implementation

Specific Expertise:

- Permaculture
- Urban Waste Management
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

Southeast Asia

Recent Activities:

- Urban community gardening
- Urban home gardening
- Capacity building of urban community organization
- Designing urban permaculture garden

Edwards, Peter (Prof.)
Professor of Aquaculture

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

Waste Water - Fed Aquaculture

Regions:

- South Asia
- Southeast Asia

Main Interests:

- The role of waste water-fed aquaculture to treat sewage and produce fish (and duckweed) for human and/or animal food
- The overall assessment of the relevance of such systems in particular areas and specifically the biological aspects of production of aquatic biomass

Recent Activities:

- Experience in waste water-fed aquaculture which covers strategic research on the design of various systems at AIT and field visits globally, but especially in South and Southeast Asia
- Consultancies for UNDP / World Bank in Peru and India
- Author of state-of-art reviews for World Bank

Publications:

- Edwards, P. 1980. *A review of recycling organic wastes into fish, with emphasis on the tropics.* In: Aquaculture Vol. 21 No. 3 p.261-279
- Edwards, P. 1980. *The production of microalgae on human wastes and their harvest by herbivorous fish.* In: Shelef, G. & C.J. Soeder (eds). *Algae biomass: production and use.* p.191-203. Elsevier / North Holland Biomedical Press
- Edwards, P. & O. Sinchumpasak. 1981. *The harvest of microalgae from the effluent of a sewage fed high rate stabilization pond by Tilapia nilotica. Part 1. Description of the system and the study of the high rate pond.* In: Aquaculture No. 23 p.83-105.
Part 2. Studies of the fishponds. In: Aquaculture No. 23 p.107-147
Part 3. Maize cultivation experiment, bacteriological studies, and economic assessment. In: Aquaculture No. 23 p.149-170
- Edwards, P. 1985. *Aquaculture: a component of low cost sanitation technology.* World Bank Technical Paper No. 36. The World Bank, Washington, D.C., USA. 45 p.
- Wee, K.L., N. Kerdchuen & P. Edwards. 1986. *Use of waste grown tilapia silage as feed for Clarias batrachus L.* In: J. Aqua. Trop. No. 1 p.127- 137
- Colman, J.A. & P. Edwards. 1987. *Feeding pathways and environmental constraints in wastewater-fed aquaculture: balance and optimization.* In: Moriarty, D.J.W. & R.S.V. Pullin (eds). *Detritus and microbial ecology in aquaculture.* ICLARM Conference Proceedings No. 14 p.240-281

- Edwards, P. 1988. *Tilapia raised on septage as high protein animal feed*. In: Pullin, R.S.V., T. Bhukaswan, K. Tonguthal & J.L. Maclean (eds). *The Second International Symposium on Tilapia in Aquaculture*. p. 7-13. ICLARM Conference Proceedings No. 15

- Edwards, P. & R.S.V. Pullin (eds). 1990. *Wastewater-fed aquaculture: Proceedings of the International Seminar on Wastewater Reclamation and Reuse of Aquaculture, Calcutta, India, 6-9 December, 1988*. Environmental Sanitation Information Center, Asian Institute of Technology, Bangkok. 296 p.

- Edwards, P. 1990. *General discussion on wastewater-fed aquaculture*. In: Edwards, P. & R.S.V. Pullin (eds). *Wastewater-fed aquaculture. Proceedings of the International Seminar on Wastewater Reclamation & Reuse for Aquaculture*. p.281-291. Environmental Sanitation Information Center, Asian Institute of Technology, Bangkok

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Main Areas of Work:

- Research
- Education

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Crop Production
- Urban Agriculture and Gender

Regions:

East Africa

Main Interests:

- The use of urban public open space for informal-sector food production
- The role of women in urban agriculture

Publications:

- Freeman, D.B. 1991. *A city of farmers: informal urban agriculture in the open spaces of Nairobi, Kenya.* Montreal and Kingston. McGill-Queen's University Press
- Freeman, D.B. 1993. *Survival strategy or business training ground? The significance of urban agriculture to the advancement of women in African cities.* In: African Studies Review Vol. 36 No. 3 (December) p.1-22

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City Harvest Project Officer

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Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development and Advice
- Research
- Information / Communication
- Urban Farmer

Recent Activities:

- Co-management of the City Harvest project (1997-99) - a project to promote and develop food growing activities in London, through:
 - *Promoting and advocating:* food growing to policy makers in the statutory, business and voluntary sector and in the media; campaigning for more support for local food growing projects
 - *Support:* for new and existing food growing projects through the provision of advice and information and contacts with similar projects; establishing a network of London food growers
 - *Research:* into the social, environmental and economic feasibility of food growing in London, examining issues such as land availability, potential yield per area, funding opportunities, sources of training, etc.
 - *London Food Festival:* planned for September 1998 this event will celebrate food growing and food growers by displaying a wealth of food grown by London's communities. There will also be cook and taste sessions, information stalls, etc.

- *Evaluating:* the success of the project in terms of people contacted, support given to new and existing projects and informal feedback
- The research and evaluation findings will form the basis for a report on food growing in London (to be published in 1999).

Publications:

Garnett, T. 1996. *Growing food in cities: a report to highlight and promote the benefits of Urban Agriculture in the UK.* National Food Alliance and Sustainable Agriculture, Food and Environment (SAFE). London, June 1996 (available from SAFE, 5-11 Worship Street, London, EC1A 2BH, United Kingdom. Tel. + (171) 823 5660. Cost GBP 10)

Grayson, Russ

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Information / Communication

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Food Security and Nutrition
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

Australia and Oceania

Main Interests:

- Improving technical skills of community gardeners
- Establishment of national network with Australian City Farms and Community Gardens Network
- Urban agriculture in developing countries in South Asia-Pacific region
- Production of useful printed information on relevant technical and organisational skills

Recent Activities:

- Forum for community gardeners
- Organisation of seed saving workshop
- Presentations on urban agriculture at conferences

Publications:

Australian City Farms and Community Gardens Newsletter

Gura, Susanne (Dr.)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Planning
- Policy Development and Advice
- Research

Specific Expertise:

- Urban Crop Production
- Urban Agriculture and Gender
- Urban Food Security and Nutrition
- Peri-Urban Crop Production

Regions:

- East Africa
- South Asia
- Southeast Asia
- Southern Africa

Main Interests:

The following aspects of urban agriculture:

- Coordination
- Information
- Networking
- Policy formulation
- Research

Recent Activities:

- Preparation of a EU INCO-COPERNICUS proposal on urban agriculture in Eastern Europe for ETC (1997)
- Advice on special issues of 'Entwicklung und laendlicher Raum' on urban agriculture (6/96) and on vegetable production (4/95)
- Coordination of expert consultation on peri-urban vegetable production in Zschortau, Germany, jointly organised by ATSAF, GTZ, and DSE, November 1994

- Compilation of data on tropical vegetable research and development activities in Europe, funded by EU Commission

Publications:

- Gura, S. 1995. *Vegetable production: a challenge for urban and rural development*. In: Entwicklung und Ländlicher Raum Vol. 24 ('95) Heft 4
- Gura, S., J. Richter and W. Schnitzler (eds). 1994. *Vegetable production in periurban areas in the tropics and subtropics: food, income, quality of life*. Proceedings of an International Workshop held in Zschortau, Germany, 14-17 November 1994
- Gura, S., P. Boie. 1994. *Tropical and subtropical vegetable research and development: a documentation of research and development activities of institutions in Europe*. Bonn, November 1994

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- Howorth, C. , M. Masoka & J. Harnmeijer. 1996. *A local stakeholders' workshop on urban agriculture*. ENDA / ETC Zimbabwe, Harare, March 1996

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Research

Specific Expertise:

- Urban Waste Management
- Urban Agriculture and Public Health
- Urban Food Security and Nutrition

Regions:

- South Asia
- Southeast Asia
- North Africa
- East Africa
- West Africa
- Southern Africa

Main Interests:

- Relations between urban agriculture and community health, food security and nutrition
- Process and impact evaluations

Recent Activities

- Participation in production of a special issue of the ILEIA newsletter on '*Farming at close quarters*' (1994)
- Cooperation in the organisation and reporting of a local stakeholders' workshop on urban agriculture in Harare, Zimbabwe (1996)

Publications

- Harnmeijer, J. & S. Sutton. 1993. *Measuring sustainability in the water sector*. In: Waterlines Vol. 12 No. 1 (July 1993)

Harris, Phil John Charles (Prof.)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Research
- Information / Communication

Specific Expertise:

- Urban Waste Management
- Urban Waste Management: Waste
Water Management
- Peri-Urban Crop Production

Regions:

- Central America
- East Africa
- Southern Africa
- West Africa

Main Interests:

- Waste management for soil fertility
- All aspects of crop production

Recent Activities:

- A visit to Cuba to assist in setting up
research and to run workshops
- A review of the use of urban wastes
in peri-urban interface production
systems on behalf of the Natural
Resources Systems Programme of
the Department for International
Development of the United Kingdom
- Collaboration with the International
Mycological Institute on the use of
composted urban wastes in
integrated management systems to
control pests and pathogens in peri-
urban agriculture (1997)

Publications:

- Wilson, H. & P.J.C. Harris. 1996.
*Report of Havana urban agriculture
organic production*. Technical report.
DeMontfort University and HDRA
- Allison, M. & P.J.C. Harris. 1996. *A
review of the use of urban wastes in
peri-urban interface production
systems*. Report prepared for
NRSP / DFID, United Kingdom
- Harris, P.J.C. 1997. *Urban
agriculture in Havana, Cuba: soil
fertility aspects*. NRSP/DFID Soil
Fertility Workshop, University of
Reading, September 1997

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice

Specific Expertise:

- Urban Waste Management: Waste Water Management
- Urban Agriculture and Urban Ecology

Regions:

- West Europe
- North America
- South Asia
- Southeast Asia
- Central Asia
- North Africa
- East Africa
- West Africa
- Southern Africa

Main Interests:

- Reuse of urban organic agricultural wastes and waste waters
- Reduction of pollution of organic waste and waste waters by industry discharges

Recent Activities:

- Preparation and coordination of an international workshop on Sustainable Municipal Waste water treatment (1997)
- Studies regarding heavy metals and radio active elements in industrial products and discharges (1991-)

Publications:

- Balkema, A., H. Aalbers & E. Heijndermans. 1997. *Proceedings of the International Workshop on Sustainable Municipal Waste Water Treatment Systems, 12-14 November 1996*. ETC Netherlands and WASTE (for ECOOPERATION).
- Heijndermans, E. 1991. *Heavy metals and radioactive elements in phosphate fertilizers*. In: *Agrochemicals News Vol. 14 No. 1* (January 1991)

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Horticulture Advisor

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Main Areas of Work:

- Consultancy / Technical Assistance
- Research
- Education

Specific Expertise:

- Pest and Disease Management in Urban Agriculture
- Urban Crop Production: Greenhouses

Regions:

- East Europe
- North America
- Middle East

Main Interests:

Greenhouse vegetable production

Recent Activities:

Consultancies in Armenia, Russia, Albania and Jordan

Publications:

Hickman, G.W. 1998. *Greenhouse vegetable production handbook*. University of California Publications

Hovorka, Alice J.

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Main Areas of Work:

Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture and Gender

Regions:

Southern Africa

Main Interests:

- Gender
- Urban ecology
- Rural-urban interface
- Focus on Southern Africa

Recent Activities:

Developing gender resources for the Cities Feeding People Program initiative at IDRC. This includes:

- . an annotated bibliography
- . a directory of institutional and professional expertise
- . web page
- . methodology on incorporation of gender analysis into development research on urban agriculture

Web Site:

<http://www.idrc.ca/cfp/>

Publications:

Hovorka, A.J. *Gender resources for development research and programming in urban agriculture*. Cities Feeding People Report Series No. 21. IDRC, Ottawa, Canada (forthcoming)

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Regional Officer Crop Production FAO

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Main Areas of Work:

- Consultancy / Technical Assistance
- Project Implementation
- Research

Specific Expertise:

- Urban Crop Production: Hydroponics
- Peri-Urban Crop Production
- Urban Crop Production: Roof Garden Technologies
- Urban Crop Production: Greenhouses

Regions:

- Central America
- South America

Publications:

Izquierdo, J. 1997. *La huerta hidropónica popular*. In: Prudencio Boehrt, J. (ed.). *Agricultura urbana en América Latina*. AGUILA, La Paz, Bolivia

Jacobi, Petra

Project Leader UVPP

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture and Gender
- Agricultural Services Provision: Extension and Technical Assistance
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

- East Africa
- South Asia
- Southeast Asia
- West Europe

Main Interests:

- In the framework of the UVP Project:
- Promotion of urban vegetable and fruit production in Dar es Salaam
 - Development of appropriate technical messages for urban vegetable farmers
 - Development of IPM strategies for urban vegetable production
 - Development of an extension approach for the urban areas of Dar es Salaam

- Monitoring and evaluation of environmental effects on / from urban agriculture in Dar es Salaam
- Awareness creation among decision makers about the potential of urban agriculture
- Linkages with stakeholders in the field of urban agriculture

Recent Activities:

- German project leader of the Urban Vegetable Promotion Project, Dar es Salaam, Tanzania
- Member of the Working Group on Urban Agriculture organised by the Sustainable Dar es Salaam Project (HABITAT) in Dar es Salaam, Tanzania
- GTZ representative in Third Meeting of the SGUA in Ottawa, Canada, March 1996

Publications:

- Jacobi, P. & J. Amend. 1996. *Gemüsebau in Dar es Salaam: bedeutende Einkommensquelle nicht nur für die Armen.* In: Entwicklung und Ländlicher Raum Vol.30 No. 6/96 p.12-14
- Jacobi, P. & J. Amend. 1997. *Vegetable farming in Dar es Salaam: an important source of income, and not only for the poor.* In: Agriculture and Rural Development. Vol. 4 No. 2/97 p.52-54
- Jacobi, P. 1996. *Economy of Amaranthus spp. (Mchicha) growing on open spaces in Dar es Salaam.* 10 p. Urban Vegetable Promotion Project, Dar es Salaam, Tanzania
- Jacobi, P. 1997. *Importance of vegetable production systems in Dar es Salaam.* 6 p. Urban Vegetable Promotion Project, Dar es Salaam, Tanzania

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Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development and Advice
- Project Implementation
- Research

Recent Activities:

- Leader peri-urban research group of DLO
- Development of a project proposal on waste recycling and peri-urban development in West-Africa
- Development of a project proposal and organisation of a workshop on peri-urban agribusiness in Indonesia and the Philippines

Web Site:

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Main Areas of Work:

- Education / Training
- Planning
- Project Implementation
- Urban Farmer
- Technical Assistance

Specific Expertise:

- Agricultural Services Provision:
Credit
- Urban Crop Production: Backyard
Gardening
- Urban Crop Production: Community
Gardening

Regions:

Southern Africa

Recent Activities:

- Providing support to residents'
kitchen gardening
- Giving support with procurement of
inputs
- Input loans services to home
gardeners

Jim, C.Y. (Prof.)
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- Jim, C.Y. 1996. *The multiple value of urban trees*. Urban Council, Hong Kong. 79 p.

Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Land and Water Use Planning and Management
- Urban Forestry

Regions:

Southeast Asia

Recent Activities:

- Urban forestry research in Hong Kong
- Urban agriculture and landuse issues in Hong Kong

Main Interests:

- Selection of tree species for urban forestry
- Tree-environment interactions
- Tree care and maintenance
- Soils at urban planting sites

Publications:

- Jim, C.Y. 1990. *Trees in Hong Kong: species for landscape planting*. Hong Kong University Press. 434 p.
- Jim, C.Y. 1994. *Champion trees in urban Hong Kong*. Urban Council, Hong Kong. 294 p.
- Jim, C.Y. 1994. *Urban tree survey*. Vol. 1-6. Urban Council, Hong Kong

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Hydro/Aquatic Technologies

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- Tilapia/basil aquaponic system (using methane from municipal landfill for heat and electricity) (New York State, USA)
- Educational hydroponic, aquaculture and aquaponic greenhouses for schools in Mississippi, Texas, Virginia, New York, and Michigan, USA

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice
- Project Implementation
- Research

Publications:

Staff writer for bi-monthly magazine
Aquaponic Journal

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Crop Production: Hydroponics
- Urban Waste Management: Waste Water Management
- Waste Water – Fed Aquaculture
- Urban Crop Production: Community Gardening
- Urban Crop Production: Roof Garden Technologies
- Urban Crop Production: Greenhouses

Regions:

- North America
- Central America
- South America

Main Interests:

- Hydroponic, recirculating aquaculture and aquaponic

Recent Activities:

- Hydro and aqua classes given for educators and students at Penn State University and University of Maryland (USA)
- Commercial freshwater indoor prawn (shrimp) production system (New York State, USA)
- Multiple classroom hydroponic systems (Pennsylvania, USA)

Katzir, Raanan

Director, Projects & Technology

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Publications:

- Katzir, R. 1996. *Agroecological aspects of the periurban process*. Workshop on Urban & Periurban Agriculture in Africa. Bar Ilan University, Israel

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Project Implementation

Specific Expertise:

- Urban Crop Production: Greenhouses
- Peri-Urban Crop Production
- Urban Waste Management: Waste Water Management
- Urban Waste Management: Solid Waste Management
- Urban Agriculture Pest and Disease Management
- Agricultural Services Provision: Extension and Technical Assistance

Regions:

- Central America
- East Europe
- Middle East
- North America
- South America

Main Interests:

Socio-economic changes in the peri-urban area

Recent Activities:

Lecturing on urban agriculture

Training Offered:

Lecturing at CINADCO international courses on peri-urban agriculture

Kiango, Suzan

Project Co-ordinator

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- Development of an extension approach for the urban areas of Dar es Salaam
- Monitoring and evaluation of environmental effects on / from urban agriculture in Dar es Salaam
- Awareness creation among decision makers about the potential of urban agriculture
- Linkages with stakeholders in the field of urban agriculture

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation

Recent Activities:

Project Co-ordinator of the Urban Vegetable Promotion Project, Dar es Salaam, Tanzania

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture and Gender
- Urban Agriculture and Enterprise Development: Production of Agricultural Inputs
- Agricultural Services Provision: Extension and Technical Assistance
- Urban Food Security and Nutrition
- Urban Animal Production
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Publications:

Kiango, S. & T. Likoko. 1996. *Vegetable production in open spaces in Dar es Salaam City*. 10 p. Urban Vegetable Promotion Project, Dar es Salaam, Tanzania. Internal paper

Regions:

East Africa

Main Interests:

In the framework of the UVP Project:

- Promotion of urban vegetable and fruit production in Dar es Salaam
- Development of appropriate technical messages for urban vegetable farmers
- Development of IPM strategies for urban vegetable production

Kintana, Rolando V.

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Main Areas of Work:

- Education / Training
- Planning
- Information / Communication
- Policy Development

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Waste Management: Solid Waste Management
- Urban Animal Production
- Urban Crop Production: Community Gardening
- Urban Crop Production: Roof Garden Technologies

Regions:

Southeast Asia

Main Interests:

- Promote the adoption of urban agriculture, particularly in Quezon City in Metro Manila
- Promote solid waste recycling through composting of biodegradable materials
- Involve government offices in urban agriculture projects
- Train interested parties and disseminate information on urban agriculture

Konijnendijk, Cecil C. (MSc.)

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Main Areas of Work:

- Management / Administration
- Research

Specific Expertise:

- Urban Land and Water Use Planning and Management
- Urban Forestry

Regions:

- East Europe
- North America
- West Europe

Main Interests:

- Planning and policy aspects of urban forestry (both forest ecosystems and urban green space at large)
- Research of urban forest use (especially for recreational purposes), public participation, and conflict management

Recent Activities:

- Research project 'Urban forestry: Overview and Analysis of European Forest Policies' (1995-1998) for the European Forest Institute, the Wageningen Agricultural University, and the Netherlands Ministry of Agriculture, Nature Management and Fisheries. This project studies policy-making and planning for urban woodlands, mainly at city level. 16 case-studies of larger European cities have been carried out
- Member of Management Committee of COST-Action E12 Urban Forests and Trees

- Publishing journalist and member of several networks, such as the Tree City Initiative
- Supervisor of students' research on urban agriculture in the Netherlands

Publications:

- Konijnendijk, C.C. 1992. *Urban forestry and foresters*. In: Hummel, J.A. & M.P.E. Parren (eds). *Forests: a growing concern*. Proceedings of the XIXth International Forestry Students Symposium, Wageningen, 30 September - 7 October 1991. Gland, Cambridge: IUCN. p.33-37
- Konijnendijk, C.C. 1994. *A brief history of Dutch urban forests*. In: Groen Vol. 50 No. 10 p.15-20 (in Dutch)
- Konijnendijk, C.C. 1994. *Opportunities for urban forestry in the United States*. In: Nederlands Bosbouw tijdschrift Vol. 66 p.66-69 (in Dutch)
- Konijnendijk, C.C. 1995. *The Mastbos has found its friends: conflict over future management seems to be solved*. In: Nederlands Bosbouw tijdschrift Vol. 67 No. 2 p.61-67 (in Dutch)
- Konijnendijk, C.C. 1995. *Planning and managing the urban forest*. In: Segalina (ed.). *Learning from forests*. Proceedings of the XXth International Forestry Students Symposium, Padua. p.368-380. Cleup
- Konijnendijk, C.C. 1996. *From Fontainebleau to Amelisweerd: the urban forests' lessons*. In: Nederlands Bosbouw tijdschrift Vol. 68 No. 2 p.86-91 (in Dutch)
- 1997. *Among asphalt and concrete: the forest comes to the city*. In: Leven, R., M. Hall & D. Crook (eds). *Proceedings of the 24th International Forestry Students Symposium*, Australia. IFSS 1996. Melbourne ;

Canberra: Organising Committee
p.30-31 (abstract)

- Konijnendijk, C.C. 1997. *A short history of urban forestry in Europe*. In: Journal of Arboriculture Vol. 23 No. 1 p.31-39
- Konijnendijk, C.C. 1997. *Urban forestry in Europe: comparative research*. In: BUFPPRA Newsletter Vol. 1 No. 1 p.2
- Konijnendijk, C.C. 1997. *Urban forestry in the Netherlands: lessons from the past*. Paper for the XI World Forestry Congress, Antalya, Turkey, October 13-22, 1997. (forthcoming)
- Konijnendijk, C.C. 1997. *Urban forest policy-making in the Netherlands: a matter of shared responsibility*. In: Tikkanen, I., P. Glück and B. Solberg (eds). Review on forest policy issues and policy processes. EFI Proceedings No. 12 p. 51-58. European Forest Institute, Joensuu
- Konijnendijk, C.C. 1997. *Causes of conflicts affecting urban forest policy-making: a theoretical approach*. In: Solberg, B. & S. Miina (eds). Conflict management and public participation in land management. EFI Proceedings No. 14 p.133-147. European Forest Institute, Joensuu
- Konijnendijk, C.C.- 1997. *Urban forestry: overview and analysis of European urban forest policies. Part 1. Conceptual framework and European urban forestry history*. EFI Working Paper No. 12. European Forest Institute, Joensuu
Part 2. Urban forest policy-making in selected cities and countries of Europe: a comparative approach. EFI Working Paper. European Forest Institute, Joensuu (in preparation)
- Konijnendijk, C.C. 1997. *Urban forests in Europe: a comparative study*. Groenkontakt, September 1997 (in Dutch)
- Konijnendijk, C.C. *Urban forestry: overview and analysis of European urban forest policies*.

Kuchelmeister, Guido (Dr.)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Urban Land and Water Use Planning and Management
- Urban Forestry

Regions:

- Central America
- South America
- South Asia
- Southeast Asia
- West Africa
- Australia and Oceania

Main Interests:

- Promotion of all kinds of urban vegetation
- Joining initiatives on urban greening
- Awareness creation and lobbying for urban greening

Recent Activities:

Initiated and coordinates the Tree City initiative

Web Site:

http://ourworld.compuserve.com/homepages/G_Kuchelmeister

For description of this site, see under I. Organisations: Tree City

Publications:

- Kuchelmeister, G. 1991. *Peri-urban multipurpose forestry in development cooperation: experience, deficits and recommendations*. Unpublished study funded by the EC
- Kuchelmeister, G. 1993. *Settlements and people in developing countries*. In: Arboricultural Journal, the International Journal of Urban Forestry Vol. 174 p.399-411
- Kuchelmeister, G. 1996. *Urban forestry: a new field of action in development cooperation*. In: Entwicklung und Laendlicher Raum Vol. 1996 No. 6
- Kuchelmeister, G., Braatz, S. 1993. *Urban forestry revisited*. In: Unasyuva Vol. 44 p.13-18
- Kuchelmeister, G. 1997. *Urban trees in arid landscape: multipurpose forestry for local needs in developing countries*. In: Arid Land News No. 42

Kuhn, Monica E.
Architect

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E-mail: rooftop@interlog.com*

- Kuhn, M.E. 1997. *Blooming rooftops*. In: Permaculture International Journal (Australia)
- Kuhn, M.E. 1996. *Roof greening*. Ontario Eco-Architecture
- Kuhn, M.E. 1996. *Learning from the rooftops*. Green Teaker

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research
- Information / Communication
- Urban Farmer

Specific Expertise:

- Permaculture
- Design
- Urban Crop Production: Hydroponics
- Urban Land and Water Use Planning and Management
- Urban Food Security and Nutrition
- Urban Crop Production: Community Gardening
- Urban Crop Production: Roof Garden Technologies

Regions:

North America

Main Interests:

- Rooftop gardening
- Urban permaculture
- Urban greening
- Bioregional food systems

Recent Activities:

- Information & education for the public (lectures, workshops)
- Implementation of own garden on roof

Publications:

- Kuhn, M.E. 1997. *Urban permaculture / rooftop gardening*. City Seeds, Ashville, North Carolina, USA

Lang, Timothy (Prof.)

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In: Shetty, P. & K. McPherson (eds).
*Diet, nutrition and chronic disease:
lessons from contrasting worlds.*
London: J. Wiley & Sons

Main Areas of Work:

- Education / Training
- Policy Development and Advice
- Research

Specific Expertise:

- Food Policy
- Urban Agriculture and Public Health
- Urban Food Security and Nutrition

Regions:

West Europe

Main Interests:

- The need to rebuild localism in food production, to combat globalisation which is energy-wasteful
- 'Food Miles' issues

Recent Activities:

- Study of supermarket concentration
- Review of food poverty and public policy in United Kingdom
- Research on food security and globalisation

Publications:

- Raven, H. & T. Lang. 1995. Off our trollies? *Food retailing and the hypermarket economy*. Institute for Public Policy Research
- Lang, T. 1997. *Dividing up the cake: food as social exclusion*. In: Walker, A. & C. Walker (eds). *Britain divided: the growth of social exclusion in the 1980's and 1990's*. London: Child Poverty Action Group
- Lang, T. 1997. *The public health impact of globalisation of food trade*.

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Publications:

Lardinois, I. & A. van de Klundert. 1993.
Organic waste: options for small-scale resource recovery. Urban solid waste series No. 1. WASTE / TOOL

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Project Implementation
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture and Public Health
- Urban Waste Management: Solid Waste Management

Regions:

- Central America
- South America
- South Asia
- East Africa
- West Africa
- Southern Africa
- Middle East

Main Interests:

Linking waste management and urban agriculture:

- . use of compost in urban agriculture
- . fertiliser needs of farmers
- . health and gender aspects

Recent Activities:

- Research: links between waste management and urban agriculture
- Pilot project implementation in Bamako (Mali) and La Ceiba (Honduras)

Lee-Smith, Diana (Dr.)

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E-mail: mazingira@elci.gn.apc.org

Main Areas of Work:

- Consultancy / Technical Assistance
- Research

Specific Expertise:

Urban Agriculture and Enterprise
Development: Processing of Agricultural
Produce

Regions:

East Africa

Publications:

- Lee-Smith, D. et al. 1985. *Urban food production and the cooking fuel situation in urban Kenya*. Nairobi: Mazingira Institute.
- Lee-Smith, D. & Pyar Ali Memon. 1993. *Urban Agriculture in Kenya*. In: Canadian Journal of African Studies Vol. 27 No. 1
- Lee-Smith, D. & D. Lamba. *Urban farming in Africa*. In: Ecodecision, December 1997

Levenston, Michael

Executive Director

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Fax: +1 604 685 0431
E-mail: cityfarm@unixg.ubc.ca

- Levenston, M. 1986. *School garden guidelines: how to teach children about nutrition and the environment* (price CA\$ 6.00)
- Levenston, M. 1982. *Food gardening in Vancouver* (17 information sheets) (price CA\$ 10.00)

Main Areas of Work:

- Consultancy / Technical Assistance
- Information / Communication

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture Pest and Disease Management
- Urban Waste Management: Solid Waste Management
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

North America

Main Interests:

Communication services and urban agriculture

Training Offered:

Food garden demonstration site

Web Site:

<http://www.cityfarm.org>
For a description of this site, see under Organisations: City Farmer.

Publications:

- Levenston, M. 1991. *Urban home composting: rodent-resistant bins and environmental health standards* (price CA\$ 10.00)
- Levenston, M. 1989. *Gardening with people with disabilities* (price CA\$ 6.00)

Li, Weichang (Dr.)
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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research
- Information / Communication
- Policy Development

Specific Expertise:

- Urban Forestry
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

Central Asia

Main Interests:

- Community forestry
- Home gardening
- Urban ecology and gender

Recent Activities:

Hosting national workshop on urban forestry

Loefstroem, Irja
Research Scientist

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Fax: +358 9 8570 5569
E-mail: irja.lofstrom@metla.fi*

Main Areas of Work:

Research

Specific Expertise:

Urban Forestry

Regions:

West Europe

Recent Activities:

- Planning and management of urban forests in Finland
- Revegetation of eroded urban forests
- Research into fragmentation of urban forests
- Integration of ecological and aesthetic aspects in urban forests

Publications:

- Lofström, I. 1987. *Taajamametsien hoito*. Summary: Urban Forestry. *Folia Forestalia* 693. 53 p.
- Lofström, I. 1990. *Kuntien omistamien metsien hoito*. The management of municipal forests. Ministry of Environment. Publication 87. 118 p.
- Lofström, I. 1996. *The management of urban forests in Finland*. In: Urban Forestry in Nordic Countries. Danish Forest and landscape Research Institute. 59 p.
- Lofström, I. 1996. *Virkistyskäytössä kuluneiden virkistysmetsien kunnostaminen*. The revegetation of erosion damaged recreational forests. MT 619 p. 165-181.

Magobolo, Vuyiswa

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training

Specific Expertise:

Urban Crop Production: Backyard Gardening

Regions:

Southern Africa

Recent Activities:

- Assisting communities in developing community gardening
- Conducting training courses on vegetable growing

Training Offered:

Training courses on growing vegetables

Publications:

Magobolo, V. *LDU's experiences and learnings in agricultural development* (forthcoming)

Mahendrarajah, E.S. (Dr.)

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Regions:

- South Asia
- Southeast Asia

Main Interests:

- Hydroponics
- Small ruminants in cities
- Shade trees for roadside planting
- Biogas for cooking and lighting

Recent Activities:

School gardening programme incl.
waste recycling, composting and
beekeeping

Publications:

- Mahendrarajah, E.S. 1995. *Urban microfarms: concepts, practices and constraints*
- Mahendrarajah, E.S. 1990. *Mahendra model dairy shed for urban farming*. GTZ Journal

Malavasi, Ubirajara Contro (Dr.)

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Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Food Security and Nutrition
- Urban Forestry

Regions:

South America

Recent Activities:

- Survey of urban arboriculture
- Effects of vandalism on tree growth
- Effects of urban soil on tree growth

Publications:

- Malavasi, UC. 1993. *The urban ecosystem*
- Malavasi, UC. 1995. *Future perspectives of urban forestry*
- Malavasi, UC. 1991. *A survey of forest nurseries linked to urban forestry in the state of Rio de Janeiro*
- Malavasi, UC. 1996. *The urban forestry program in Ontario, Canada*

Mawoneke, Sthembile

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Main Areas of Work:

- Information / Communication
- Planning
- Policy Development and Advice

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Peri-Urban Crop Production

Regions:

Southern Africa

Main Interests:

Effect of urban agriculture on health, socio-economic issues and the environment, in particular the effect of fertiliser use and cultivation on vegetation, soils and water bodies

Recent Activities:

Popular Urban Environment Programme (PRECEUP). This programme is implemented by ENDA - Senegal. Main purpose of this programme is to test innovative approaches in terms of urban environment management, to exchange and compare experiences, to transfer appropriate technologies and to contribute to the definition of environmental policies (funding by the EC).

Maxwell, Daniel G. (Prof. Dr.)

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Main Areas of Work:

Research

Specific Expertise:

- Urban Agriculture and Gender
- Urban Land and Water Use Planning and Management
- Urban Agriculture and Public Health
- Urban Food Security and Nutrition
- Peri-Urban Crop Production
- Urban Crop Production: Community Gardening

Regions:

- East Africa
- West Africa

Main Interests:

- Food security and nutrition
- Land use / tenure

Recent Activities:

Publications on urban agriculture in West and East Africa

Publications:

Articles and chapters:

- Maxwell, D. 1997. *Food security in urban areas*. In: Hansen, H.B. & Twaddle, M. (eds). *Developing Uganda*. London: James Currey (in press)
- Maxwell, D. & G. Atukunda. 1997. *Farming in the city of Kampala: issues for urban management*. In: *African Urban Quarterly* (forthcoming)
- Maxwell, D., M. Armar-Klemesu, L. Brakohiapa & J. Sarpei. 1997.

Participatory concept mapping to understand perceptions of urban malnutrition. In: *PLA Notes* No. 30 (October 1997) p.11-16

- Maxwell, D. 1996. *Measuring food insecurity: the frequency and severity of coping strategies*. In: *Food Policy* Vol. 21 No. 3 p.291-303
- Maxwell, D. 1996. *Highest and best use? Access to urban land for semi-subsistence food production* In: *Land Use Policy* Vol. 13 No. 3 p.181-195
- Maxwell, D. 1995. *Alternative food security strategy: a household analysis of Urban Agriculture in Kampala*. In: *World Development* Vol. 23 No. 10 p.1669-1681
- Maxwell, D. 1994. *The household logic of urban farming in Kampala*. In: Egziabher, A. et al. (eds). *Cities feeding people: an examination of Urban Agriculture in East Africa*. Ottawa: IDRC Books (also published in French under the title: *Logique de l'agriculture urbaine dans les ménages de Kampala*. Faire Campagne en Ville)
- Maxwell, D. 1994. *The impact of urban agriculture in Kampala on household food security and nutritional status*. In: *African Crop Science Society Annual Proceedings* Vol. 1 p.455-458
- Maxwell, D. & S. Zziwa. 1993. *Urban Agriculture: indigenous adaptive response to the African economic crisis*. In: *Ecology of food and nutrition* Vol. 29 No. 2 p.91-109
- Maxwell, D. 1990. *After the famine: perspectives on the agrarian crisis in sub-Saharan Africa*. In: *Mawazo: Makerere Journal of Social Sciences* Vol. 6 No. 3 p.18-32
- Maxwell, D. 1987. *Adaptability of non-formal education strategies in rural development*. In: *Agricultural*

Administration and Extension Vol. 24
No. 1 p.49-60

- Bruce, R., D. Maxwell & P. Galvin. 1986. *Graduate studies and the practice of adult education: a problem of congruence*. In: Lifelong Learning Vol. 10 No. 3 p.4-12

Books:

- Maxwell, D. & K. Elbow. 1997. *A comparative and multi-dimensional analysis of private and communal land tenure in Africa*. Rome: FAO (forthcoming)
- Maxwell, D. & S. Zziwa. 1992. *Urban farming in Africa: the case of Kampala, Uganda*. Nairobi: ACTS Press

Institute Reports and Discussion Papers:

- Maxwell, D. & K. Wiebe. 1997. *Land tenure and food security: a conceptual, empirical, and methodological review*. Land Tenure Center Research Paper, University of Wisconsin. Madison, WI
- Ruel, M., J. Garrett, P. Engle, L. Haddad, D. Maxwell, P. Menon, S. Morris & A. Oshaug. 1997. *Urban challenges to nutrition security: a review of food security, health and care in cities*. Washington, DC: International Food Policy Research Institute
- Maxwell, D. 1996. *Linking policy research to policy reform: social science and food security research in Uganda and Ghana*. Washington: IFPRI, Outreach Division Discussion Paper (paper originally presented at the Rockefeller Foundation SSRF biennial meeting in Nairobi, August 14, 1996) (submitted)
- Maxwell, D. & Ga Mashie Study Team. 1996. *Ga Mashie: a participatory rapid appraisal of food security in a densely populated urban community*. Legon: Noguchi Memorial Institute for Medical Research
- Maxwell, D. & Ngleshie-Amanfro Study Team. 1996. *Ngleshie-Amanfro: a participatory rapid appraisal of food security in a peri-urban community*. Legon: Noguchi

Memorial Institute for Medical
Research

- Maxwell, D. 1993. *Land access and household logic: urban farming in Kampala*. Makerere Institute of Social Research Research Paper. Makerere University
- Maxwell, D. 1988. *Responses of non-governmental organizations to conflict situations*. Akron, PA: MCC Occasional Paper No. 5 (paper originally presented to the International Seminar on Internal Conflicts, Makerere University, Kampala, Sept. 21-25, 1987)

Mbiba, Beacon (Dr.)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication
- Urban Farmer

Specific Expertise:

- Urban Agriculture and Gender
- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Urban Food Security and Nutrition
- Urban Waste Management: Solid Waste Management
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

- West Europe
- East Africa
- Southern Africa
- Central Africa

Main Interests:

- To develop further links with implementors of projects
- To prepare concise materials for degree level course (in conjunction with other depts. of the University of Zimbabwe)

Recent Activities:

- Research, teaching & advisory work, supervising three projects at MSc level
- Presented material at conferences
- Was consulted as referee for several international journal articles

Publications:

- Mbiba, B. 1998. *Urban agriculture in Southern Africa: theory and practice*. Paper presented at the Conference on Urban Agriculture in Southern Africa, Productive Open Space Forum of South Africa, Pretoria, March 3-5, 1998
- Mbiba, B. 1997. *Managing urban transition in Southern Africa: do frameworks really matter?* Paper presented at the 14th Inter-Schools Conference on Development. Edinburgh College of Art, School of Housing and Planning, March 1997
- Mbiba, B. 1996. *Urban agriculture in Southern and Eastern Africa: policy, questions and challenges*. Paper presented at workshop Department of Geography, Bar-Ilan University, Israel, June 1996
- Mbiba, B. 1995. *Urban agriculture in Zimbabwe: implications for urban management and poverty*. Aldershot: Avebury. ISBN 1 85628 88579. 238 p.
- Mbiba, B. 1995. *Implications of housing standards reduction on subsistence survival of the urban poor in Zimbabwe*. In: Schaur E. (ed.). 1995. Building with intelligence: aspects of a different building culture. Stuttgart. ISBN 3 78282041 X. p.34-37
- Mbiba, B. 1993. *Urban agriculture, the poor and planners: a Harare case study*. In: Elgohary, A.F. 1993. 10th Inter-Inter-Schools Conference On Development Graduate School Publications. London: University

- College. ISBN 1 898932 00 X. p.128-136
- Mbiba, B. 1994. *Institutional responses to uncontrolled urban agriculture in Harare: prohibitive or accommodative?* In: Journal of Environment and Urbanisation Vol. 6 No. 1 (April 1994)
 - Mbiba, B. 1994. *The cattle of Chitungwiza: farming at close quarters or conflicts on the rural urban fringe.* In: ILEIA Newsletter Vol. 10 No. 4 (December 1994) p.22-23
 - Mbiba, B. *Classification and description of urban agriculture in Harare, Zimbabwe.* In: Development Southern Africa Vol. 12 No. 1 (February 1995)
 - Mbiba, B. 1992. *Urban agriculture, urban management and the urban poor: issues and dimensions for research - Harare Metropolitan.* Paper presented at the Workshop on Gender Research on Urbanisation, Planning, Housing and Everyday Life (Gruphel); March 30 - April 2, 1992. Zesa Training Centre, Harare, Zimbabwe
 - Mbiba, B. 1993. *Urban agriculture In Zimbabwe: testimonies of women from Warren Park Suburb - Harare.* Paper presented at the Gruphel Workshop, Zimbabwe Women's Resource Centre Network (ZVMCN). March 2-3, 1993
 - Mbiba, B. 1994. *Urban agriculture in Zimbabwe.* In: Report of Seminar Proceedings, July 24, 1994. Department of Rural & Urban Planning, University of Zimbabwe
 - Mbiba, B. 1993. *Socio-economic and gender aspects of urban cultivation in Harare, Zimbabwe.* Paper presented at the Regional Development Planning Occasional Seminar, Institute of Social Studies, The Hague, October 1, 1993
 - Mbiba, B. 1993. *Government policy on rural-urban development in Zimbabwe since 1980: substantive determinants of change.* Paper presented at the RUPSEA Conference, Maseru Sun Hotel, Lesotho, October 25-30, 1993
 - Mbiba, B. 1994. *Are conditions ripe for urban agriculture In Zimbabwe?* Paper presented at the ENDA Workshop, February 25, 1994, The George Hotel, Harare
 - Mbiba, B. 1996. *Urban agriculture in Southern Africa: policy conflicts and challenges.* Paper presented at Green Beach Hotel, Netanya under the auspices of the Bar Ilan University, Israel, June 23-31, 1996

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Chicago Field Representative

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Main Areas of Work:

- Education / Training
- Planning
- Project Implementation

Specific Expertise:

- Urban Crop Production
- Waste Water - Fed Aquaculture
- Urban Animal Production

Regions:

North America

Main Interests:

- Links between community food security, economic development and local production and distribution of food
- Integration of animals into crop production for more sustainable land use
- Using unconventional spaces for agriculture such as basements, roof tops, balconies
- Preserving land in urban areas for agricultural purposes
- Using urban agriculture as a means of providing entrepreneurial training to youth

Recent Activities:

- Vermiculture and aquaculture project in the Robert Taylor Homes Housing Project in Chicago
- Dairy goat farm and organic salad green production in the Cabrini Greens Housing Project in Chicago
- Vermiculture and aquaculture project in a greenhouse in Milwaukee

Publications:

- Meares, A.C. *The weaving of the landscape and lifescape: people at the center of urban livestock projects.* Chapter in proceedings of Conference on International Urban Food Systems, Toronto, Canada, May 1997. IDRC (forthcoming)
- Meares, A.C. 1997. *Cows in the city or urban agriculture.* In: The Exchange, Appropriate Livestock Technology for a Developing World No. 86, January-March, 1997. Heifer Project International

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Research
- Information / Communication

Specific Expertise:

- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

East Africa

Recent Activities:

- Exploratory urban agriculture research in six towns in Tanzania (1993)
- PhD research on urban agriculture in Dar es Salaam (Tanzania, 1993)
- Research on urban vegetable production in Vancouver (Canada, 1995)
- GTZ/Ministry of Agriculture urban vegetable research in Dar es Salaam (Tanzania, 1997)

Publications:

- Mlozi, M.R.S. 1997. *Impacts of urban agriculture in Dar es Salaam, Tanzania*, In: The Environmentalist Vol. 17 No. 2 p. 115-124
- Mlozi, M.R.S. 1997. *Ethnicity, cattle raising and some environmental implications in Dar es Salaam city,*

Tanzania. In: African Studies Review (forthcoming)

- Mlozi, M.R.S. 1996. *Urban agriculture in Dar es Salaam: its contribution to solving the economic crisis and the damage it does to the environment*. In: Development Southern Africa Vol. 13 No. 1 p. 47-65
- Mlozi, M.R.S. 1995. *Child labour in urban agriculture: the case of Dar es Salaam, Tanzania*. In: Children's Environments Vol. 12 No. 2 p. 197-208
- Mlozi, M.R.S. 1995. *Information and the problems of urban agriculture in intentions and realizations*. Ph. D. dissertation. Vancouver, Canada: University of British Columbia
- Mlozi, M.R.S. 1994. *Inequitable agricultural extension services in the urban context: the case of Tanzania*. In: Stromquist, N.P. (ed.). Education in urban areas: cross-national dimensions p. 105-128. Westport: Praeger
- Mlozi, M.R.S. 1992. *Urban women and agricultural extension: the case of Tanzania*. In: Blunt, A. (ed.). Proceedings of the 33rd Adult Education Research Conference at the College of Education, University of Saskatchewan, Saskatoon, Canada, May 12-13, 1992. p. 173-181
- Mlozi, M.R.S. 1992. *Development of urban agriculture through unethical agricultural extension services: a case of Tanzania*. In: Taylor, M. & R. Bedard (eds). Proceedings of the 12th Canadian Association for the Study of Adult Education held at the College of Education, University of Saskatchewan, Saskatoon, Canada, May 12-13, 1992. p. 251-256
- Mlozi, M.R.S., I.J. Lupanga and Z.S.K. Mvena. 1992. *Urban agriculture as a survival strategy in*

- Tanzania*. In: Baker, J. & P.O. Pedersen (eds). The rural-urban interface in Africa: expansions and adaptation. Scandinavian Institute of African Studies No. 27 p. 284-294. Uppsala, Sweden
- Mvena, Z.S.K., M.R.S. Mlozi & I.J. Lupanga. 1990. *Urban agriculture: the application and limitations of quantitative research techniques*. In Hoeper, B. (ed.). Quantitative versus qualitative approaches in applied empirical research in rural development. Proceedings of a workshop held at Sokoine University of Agriculture, Morogoro, Tanzania, May 21-25, 1990. p. 55-65. Bonn: German Foundation for International Development (ZED)
 - Mlozi M.R.S., I.J. Lupanga & Z.S.K. Mvena. 1989. *Urban agriculture: the livestock dimensions and its implications*. In: Kurwijila, R.L. (ed.). Animal production research in Eastern and Southern Africa: some recent experiences. Proceedings of the 16th Tanzanian Society of Animal Production Scientific Conference Vol. 16 p. 197-208. Sokoine University of Agriculture, Morogoro, Tanzania
 - Mvena, Z.S.K., M.R.S. Mlozi & I.J. Lupanga. 1989. *The nature of urban agriculture: an overview*. In: Mattee, A.Z., I.J. Lupanga, N.M. Mollel & S.C. Lugeye (eds). The emergence of urban agriculture in Tanzania and its implications. Proceedings of a workshop held in Dodoma, Tanzania, November 27-29, 1989. p. 1-9

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Project Implementation
- Research

Specific Expertise:

Urban Animal Production

Regions:

South America

Main Interests:

- Use of organic waste in urban agriculture
- Food security through urban agriculture
- Relationship between urban agriculture, management of green areas in cities and grassroots development

Recent Activities:

- Research on the contribution of urban agroecology to food security and the use of organic waste as input for urban agriculture
- Participation in International Course on Solid Waste, Argentina, November 1997
- Various partnerships for implementation of urban agriculture projects

Publications:

- Montero, A. & A. Yurjevic. 1994. *Invest in the poor: Tomé / CET Chile*. In: Journal of Learnings No. 1 p.19-25. ICFID, Canada

- Montero, A. 1996. *Proyecto Tomé: una experiencia para el desarrollo urbano sustentable*. Encuentro subregional sobre experiencias y modelos de proyectos de desarrollo sostenible. Convenio Andrés Bello. ITACAB, Lima, Peru
- Montero, A. 1997. *Desarrollo local sustentable. Agricultura urbana, microempresas y manejo de residuos sólidos*. In: Agroecología y Desarrollo No. 11/12. CLADES

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research

Specific Expertise:

- Urban Waste Management: Waste Water Management

Regions:

- Central America
- South America

Main Interests:

Development of domestic waste water reuse in Latin American countries, including management and recycling of animal excreta

Recent Activities:

Missions in Latin America for technical assistance and training in waste water reuse

Training Offered:

Course on treatment and reuse of waste water

Publications:

- Moscoso, J. *Aquaculture using treated effluents from the San Juan stabilization ponds, Lima, Peru* [source unknown]
- Moscoso, J. & H. Nava. 1991. *Reuso en acuicultura de las aguas tratadas*

en las lagunas de estabilización de San Juan, Lima. In: Memorias del Seminario Internacional sobre Uso Eficiente del Agua, México, October 21-25, 1991 p. 174-179. Instituto Mexicano de Tecnología del Agua. México, Mexico

- Moscoso, J. & A. Florez. 1991. *Reuso en acuicultura de las aguas residuales tratadas en las lagunas de estabilización de San Juan.*
 - . *Sección 1. Resumen Ejecutivo.* 33 p. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente (CEPIS), Organización Panamericana de la Salud. Lima, Peru
 - . *Sección 2. Tratamiento de aguas residuales y aspectos sanitarios.* 70 p. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente (CEPIS), Organización Panamericana de la Salud. Lima, Peru
 - . *Sección 3. Acuicultura.* 71 p. Centro Panamericano de Ingeniería Sanitaria Y Ciencias del Ambiente (CEPIS), Organización Panamericana de la Salud. Lima, Peru
 - . *Sección 4. Estudio de factibilidad técnica, económica y social.* 78 p. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente (CEPIS), Organización Panamericana de la Salud. Lima, Perú.
- Moscoso, J. 1992. *Acuicultura con aguas residuales tratadas*, Video técnico. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente, Organización Panamericana de la Salud.
- Moscoso, J. 1994. *Reuso de aguas residuales en Perú: estudio de caso.* In: Memoria del Taller Regional para las Américas sobre Aspectos de Salud, Agricultura y Ambiente vinculados al Uso de las Aguas Residuales. Instituto Mexicano de

- Tecnología del Agua. Noviembre, 1993. Jiutepec, Morelos, Mexico
- Moscoso, J. 1994. *Reuso de aguas residuales en el Perú*. In: Ingeniería Sanitaria y Ambiental. Vol. 1994 No. 17 (November) p. 40-46. Asociación Argentina de Ingeniería Sanitaria y Ciencias del Ambiente (AIDIS Argentina). Buenos Aires, Argentina
 - León, G. & J. Moscoso. 1995. *Strategies for the reuse of stabilization lagoons effluents in Latin America: the aquaculture model of Lima, Peru*. In: Waste stabilization ponds technology and applications. International Association of Water Quality, Specialist Group on Waste Stabilization Ponds and Centre for Science and Technology, Federal University of Paraiba, Brazil
 - Moscoso J. & G. León. 1995. *Uso de aguas residuales: introducción*. In: REPINDEX sobre uso de aguas residuales. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente. Lima, Peru
 - Moscoso, J. 1995. *Aspectos técnicos de la agricultura con aguas residuales*. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente, Lima, Perú
 - Moscoso, J. 1996. *El uso de efluentes de lagunas de estabilización en acuicultura y agricultura*. In: Realizacao do Seminario Internacional de Tratamento e Disposicao de Esgotos Sanitarios. Companhia de Agua e Esgotos de Brasilia, Brasilia, Brazil
 - León, G. & J. Moscoso. 1996. *Curso de tratamiento y uso de aguas residuales*. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente (CEPIS), Organización Panamericana de la Salud (OPS), Lima, Peru
 - Moscoso J., G. León & E. de la Torre. 1996. *Programa de computadora sobre diseño y evaluación económica de sistemas integrados de tratamiento de aguas residuales y acuicultura*. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente (CEPIS), Organización Panamericana de la Salud (OPS), Lima, Peru
 - Moscoso, J. 1997. *El uso de efluentes de lagunas de estabilización en acuicultura y agricultura*. p 89-97. In: Prudencio, J. (ed.). Agricultura urbana en América Latina. Memoria. Secretaría Ejecutiva AGUILA. International Development Research Center, La Paz, Bolivia
 - Moscoso J., L. Egocheaga & E. de la Torre. 1997. *Programa de computadora sobre uso de aguas residuales tratadas en cultivos: modelo de formulación y evaluación económica para perfiles de proyecto*. Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente (CEPIS), Organización Panamericana de la Salud (OPS), Lima, Peru

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Main Areas of Work:

Research

Specific Expertise:

Urban Crop Production

Regions:

Central Africa

Publications:

- Moustier, P. & D.L. Naire. 1990. *Performances du système de commercialisation des légumes à Brazzaville: un essai d'évaluation socio-économique*. In: IRAD/MESRU (ed.). 1989. *Economie des filières en régions chaudes*, p.567-585
- Leplaideur, A. & P. Moustier. 1992. *Dynamique du vivrier à Brazzaville: les mythes de l'anarchie et de l'inefficace*. In: *Cahier des sciences humaines de l'ORSTOM*, Vol. 27, p.148-157
- Leplaideur, A. & P. Moustier. 1994. *Acteurs et circuits maraîchers à Brazzaville*. In: *Agriculture et Développement*, p.23-29
- Moustier, P. 1994. *On performance of urban vegetable supply in African countries*. In: *Acta Horticulturae* No. 340, p.307-313
- Moustier, P. 1995. *L'économie des filières pour la recherche agronomique et le développement: le cas des légumes frais en Afrique*. In: *Fruits* Vol. 49 No. 4 p.315-322
- Moustier, P. 1995. *Champs et jardins: des espaces complémentaires pour les marchés urbains*. In: *Fertilité du milieu et stratégies paysannes sous les tropiques humides*, p.536-543. Editions CIRAD-Colloques
- Moustier, P. 1996. *Organization in the Brazzavillian vegetable market*. Ph.D. Dissertation. University of London
- Moustier, P., and O. David. 1997. *Etudes de cas de la dynamique du maraîchage péri-urbain en Afrique subsaharienne*. FAO Document. *Projet Approvisionnement et Distribution Alimentaire des Villes d'Afrique Francophone*
- Moustier, P. & J. Pagès. 1997. *Le péri-urbain en Afrique, une agriculture en marge?* In: *Economie Rurale* No. 24 1, p.48-56

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Main Areas of Work:

- Consultancy / Technical Assistance
- Planning

Specific Expertise:

- Urban Food Security and Nutrition
- Urban Waste Management: Solid Waste Management

Regions:

East Africa

Main Interests:

- Homegardening
- Use of compost
- Use of urban agriculture to improve urban microclimate

Recent Activities:

- Identification of a multi-sectoral working group on managing urban agriculture
- Preparing an inventory on urban agriculture in Dar es Salaam city
- Conducting a mini workshop to discuss urban agriculture in Dar es Salaam
- Preparing a project proposal to rehabilitate, develop and manage city horticulture gardens (now under implementation)

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Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

- Urban Animal Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

Southern Africa

Main Interests:

- Urban agriculture as a survival strategy
- Urban managers' attitudes towards urban agriculture

Recent Activities:

Teaching; research; research supervision; field trips

Publications:

Necker, P.H. de, J.J. Uys & J.H. van der Merwe. 1996. *Urban and periurban farming in the Western Cape: feasibility of a development mechanism for the private sector*. Publication 35/1996. Institute for Cartographic Analysis, Stellenbosch

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Main Areas of Work:

- Research
- Urban Farmer

Specific Expertise:

- Urban Land and Water Use Planning and Management
- Urban Forestry

Regions:

North America

Main Interests:

- Integration of farm market production with community-based organisations' programmes, both urban and rural
- Integration of food production spaces in rehabilitated housing stock
- Development of farmers' markets as a venue for additional economic activity in inner city neighbourhoods
- Utilisation of alternative sources of energy in farm market production

Recent Activities:

- Organisational goal-setting and programme planning to include urban agriculture in development plans
- Ongoing work with groups developing farm production as part of summer camp and retreat facilities, for kitchen-oriented production and education of camp participants (1996-date)
- Fundraising for farmer market development

- Participant in research to assess ethnic market preferences leading to increased regional production
- Sustainable development education to include regional production, rehabilitation of existing housing and reuse of vacant land in inner city neighbourhoods

Publications:

- Nettleton, J.S. 1997. *New farmers / new markets: examples of rural-urban linkage to promote sustainability*. International Conference on Urban Ecology, Leipzig, Germany, June 1997
- Nettleton, J.S. 1997. *A case study of rural and urban sustainability in Metro New York*. In: *Integrating the environment & economy*. Conference proceedings of the Int. Soc. for Ecological Economics, Novgorod, Russia, July 1997
- Nettleton, J.S. 1996. *Regional farmers' market development as an employment and economic development strategy*. In: *Environmental enhancement through agriculture*. Conference proceedings of the Center for Agriculture, Food and Environment, Tufts, Boston, November 1996

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Main Areas of Work:

- Consultancy / Technical Assistance
- Project Implementation
- Research

Specific Expertise:

- Urban Agriculture and Public Health
- Urban Waste Management: Waste Water Management

Regions:

West Africa

Main Interests:

- Urban waste water treatment systems as an alternative for more expensive classical systems

Recent Activities:

- Research on home gardening
- Survey of government administrations working in urban agriculture

Publications:

- Niang S. 1996. *Utilisation des eaux usées domestiques en maraîchage périurbain à Dakar (Sénégal)*. In: Sécheresse Vol. 7 No. 3 p.217-223
- Niang S., B.S. Diop, M. Mbéguéré & M. Radoux. 1996. *Epuration des eaux usées urbaines par des techniques extensives en région sahélienne*. In: Vecteur Environnement Vol. 29 No. 5 p.31-36. La Station Expérimentale de Cambérène (SEC), Dakar-Sénégal

- Niang S., B.S. Diop, M. Mbéguéré & M. Radoux. 1997. *Optimisation des rendements de six stations miniatures d'épuration par voie naturelle soumises à des eaux usées urbaines fortement chargées*. Bull. Inst. fond. Afr. noire Cheikh Anta Diop, Dakar. Série A, 49
- Niang S. 1995. *Assainissement et épuration des eaux usées urbaines domestiques à Dakar: bilan de la situation, étude des comportements de la population et perspectives d'avenir*. Thèse de 3eme cycle en Sciences de l'Environnement. Université de Dakar, Sénégal
- Niang S. 1996. *Purification and re-use of domestic waste water in the suburbs farm gardening of Dakar, Sénégal*. AUQ No. 3 (May) and No. 4 (August)
- Niang S., B.S. Diop, M. Mbéguéré & M. Radoux. 1993. *Epuration des eaux usées urbaines par voie naturelle et récupération des eaux traitées pour la production de bois de feu et l'irrigation de maraîchage*. *Suivi scientifique de la Station Expérimentale de Cambérène*. Rapport annuel 1993. 81 p. Institut des Sciences de l'Environnement. Faculté des Sciences et Techniques
- Niang S., B.S. Diop, M. Mbéguéré & M. Radoux. 1994. *Epuration des eaux usées urbaines par voie naturelle et récupération des eaux traitées pour la production de bois de feu et l'irrigation de maraîchage*. *Suivi scientifique de la Station Expérimentale de Cambérène*. Rapport annuel 1994. 61 p. Institut des Sciences de l'Environnement. Faculté des Sciences et Techniques
- Niang S., B.S. Diop, M. Mbéguéré & M. Radoux. 1995. *Epuration des eaux usées urbaines par voie naturelle et récupération des eaux traitées pour la production de bois de*

feu et l'irrigation de maraîchage.
Suivi scientifique de la Station
Expérimentale de Cambéréne.
Rapport annuel 1995. 50 p. Institut
des Sciences de l'Environnement.
Faculté des Sciences et Techniques

- Niang S., B.S. Diop, M. Mbéguéré &
M. Radoux. 1996. *Epuration des
eaux usées urbaines par voie
naturelle et récupération des eaux
traitées pour la production de bois de
scientifique de la Station
Expérimentale de Cambéréne.*
Rapport annuel 1996. 25 p. Institut
des Sciences de l'Environnement.
Faculté des Sciences et Techniques
au Sénégal: politique et perspectives
d'avenir. In: *Cities Feeding People: a
growth industry.* IDRC Development
Forum Series. Vancouver, Ottawa,
Montreal, Toronto, May 20-25, 1997

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Main Areas of Work:

- Management / Administration
- Planning
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Forestry

Regions:

West Europe

Main Interests:

- Park engineering
- Urban ecology and park management

Recent Activities:

- Chair of COST Action E12 Urban Forests and Trees
- Chair of IUFRO Working Group on Urban Forestry

Web Site:

<http://www.fsl.dk/trn>

Publications:

- Nilsson, K. & T.B. Randrup. 1997. *Urban and peri-urban forestry: forest and tree resources*. In: Proceedings of the 11th World Forestry Congress, Antalya, Turkey. p. 97-109
- Nilsson, K., T.B. Randrup & T. Tvedt. 1996. *Technological aspects of urban greening*. In: Proceedings of an international seminar on Urban Greening in Latin America and the caribbean, Mexico City

- Nilsson, K. & T.B. Randrup. 1996. *Urban forestry: definitions, European research activities and organisational matters*. In: Randrup, T.B. & K. Nilsson (eds). *Urban forestry in the nordic countries*. Proceedings of a Nordic Workshop on Urban Forestry, held in Reykjavik, Iceland, September 21-24, 1996. Danish Forest and Landscape Research Institute, Hørsholm. p.10-17
- Nilsson, K. 1994. *Park and landscape research in Sweden*. In: Forest and Landscape Research No. 1 p. 167-180
- Nilsson, K. 1992. *Where industry meets nature: how public concern has influenced the design of Swedish industrial landscapes during the 20th century*. In: Landscape and Urban Planning No. 23 p. 33-45

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Main Areas of Work:

Policy Development and Advice

Specific Expertise:

Economics of Urban Agriculture

Main Interests:

- Analysis of economic issues and policy improvements for support of urban agriculture
- Comparative analysis of sustainability in different cities

Recent Activities:

Representing FAO as a focal point for urban agriculture

Publications:

- Nugent, R. 1996. *Urban agriculture: an oxymoron?* In: FAO state of food and agriculture
- Nugent, R. *The sustainability of urban agriculture: a case study of Hartford, CT.* Proceedings of the Conference on Urban Food Systems, Ryerson Polytechnic University, Toronto (forthcoming)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Information / Communication

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Forestry

Regions:

Southern Africa

Main Interests:

- Developing permaculture-based urban agriculture to enrich lives of disadvantaged township residents
- Contributing to policy development proposals and projects

Recent Activities:

- Established the 'Urban Greening Association'
- Developing township project on urban agriculture
- Running workshops for government officials and teachers

Publications:

- *The first South African permaculture manual*
- *The permaculture villager* (quarterly newsletter)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Information / Communication

Specific Expertise:

- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

North America

Main Interests:

- Community gardening
- Information materials on community gardening

Recent Activities:

- Fostering community gardening as part of community revitalisation efforts.
- Preparing a manual on community gardening
- Providing training on how gardens can improve communities

Publications:

Patterson, M.O. 1997. *An introduction to community gardening*

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Main Areas of Work:

- Planning
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Agriculture and Gender
- Urban Waste Management: Solid Waste Management
- Peri-Urban Crop Production
- Urban Crop Production: Community Gardening

Regions:

- North America
- East Africa
- West Africa
- Southern Africa

Recent Activities:

Establishing community garden in downtown Toronto

Web Site:

<http://www.ecouncil.ac.cr>

Publications:

Adam-Peters, Kim. 1996. *Community-based waste management for income generation and environmental management: a case study of Nairobi, Kenya*. Toronto: York University, Faculty of Environmental Studies

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Main Areas of Work:

- Policy Development and Advice
- Research
- Information / Communication
- Project Monitoring & Evaluation

Specific Expertise:

Urban Food Security and Nutrition

Regions:

- Central America
- South America

Main Interests:

- Coordinating and strengthening networking in the field of urban agriculture in Latin America
- Setting up a Latin American magazine on urban agriculture
- Monitoring of urban agriculture projects

Recent Activities:

- Executive Secretary to the Red Latinoamericana AGUILA (1997)
- Research on the impact of urban agriculture in El Alto de La Paz - PGU-IHS-PROA (1996) (Presented at the Habitat Conference in Istanbul, 1996)
- Winner of the contest on Successful Experiences in Poverty Alleviation. World Bank - PNUD, with the title "Una experiencia exitosa de cooperación - alianza interinstitucional. El caso de la cooperativa Agropecuaria Solidaria en La Paz". (1997)

- Support to formulation of Urban Agriculture projects to Bolivian institutions participating in AGUILA

Publications:

- Prudencio Boehrt, J. 1997. *Agricultura urbana en América Latina*. La Paz
- Prudencio Boehrt, J. 1996. *Los huertos comunitarios de Villa Tejada en El Alto de La Paz: una experiencia exitosa*. In: Ciudades para la vida: experiencias exitosas y propuestas para la acción. Lima: UNCHS / PNUD / World Bank / GTZ / HIS / PGU
- Prudencio Boehrt, J. *Una experiencia exitosa de cooperación: alianza interinstitucional: el caso de la cooperativa agropecuaria Solidaridad en La Paz*. World Bank / UNDP (forthcoming)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Project Implementation
- Research
- Information / Communication

Specific Expertise:

- Urban Forestry
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

- West Europe
- East Europe
- North America

Main Interests:

Urban growing conditions and coordination within urban forestry

Recent Activities:

- Coordination of COST Action E12 Urban Forests and Trees
- Coordination of urban forestry in the Nordic and Baltic Countries
- Coordination of Tree ROUTE Network (research on urban trees in Europe)
- Research on soil compaction on construction sites
- Research on de-icing salt in relation to urban vegetation
- Research on tree root intrusion in sewer systems

- Research on establishment methods for urban trees
- Urban tree inventory systems for Denmark

Publications:

- Randrup, T.B. 1993. *Soil compaction and plant growth: a literature study supplied with an experimental study (PhD ancillary subject report)*. The Royal Veterinary and Agricultural University. Department of Soil Science. Published by the Danish Forest and Landscape Research Institute (in Danish)
- Nilsson, K. & T.B. Randrup. 1996. *Urban forestry: definitions, European research activities and organizational matters*. In: Randrup, T.B. & K. Nilsson (eds). Proceedings of a Nordic Workshop on Urban Forestry, held in Reykjavik, Iceland, September 21-24, 1996. Danish Forest and Landscape Research Institute, Hørsholm. p.10-17
- Randrup, T.B. 1996. *Plant growth in relation to constructions: the influence of planning and projecting on growing conditions of woody plants in inadvertent compacted soil*. PhD thesis. The Research Series Vol. 1996 No. 15. Danish Forest and Landscape Research Institute (in Danish, with English summary)
- Randrup, T.B. 1996. *Urban soils as a growing medium for urban trees*. In: Randrup, T.B. & K. Nilsson (eds). Proceedings of a Nordic Workshop on Urban Forestry, held in Reykjavik, Iceland, September 21-24, 1996. Danish Forest and Landscape Research Institute. p.24-27
- Randrup, T.B. & K. Nilsson (eds). 1996. *Urban forestry in the nordic countries. Proceedings of a Nordic Workshop on Urban Forestry, held in Reykjavik, Iceland, September 21-24,*

1996. Danish Forest and Landscape Research Institute, Hørsholm. 59 p.
- Randrup, T.B. & L.B. Pedersen. 1996. *De-icing salt, trees and shrubs: a literature study on the impact of NaCl on trees along roads*. The Danish Road Directorate, Operation and Maintenance Unit. Report No. 64. 69 p. (in Danish, with English summary)
 - Nilsson, K. & Randrup, T.B. 1997. *Urban and peri-urban forestry*. Proceedings of the XI World Forestry Congress, 13-22 October 1997, Antalya, Turkey. Vol. 1 p.97-110
 - Randrup, T.B. 1997. *Soil compaction on construction sites*. In: Journal of Arboriculture Vol. 23 No. 5 p.207-210
 - Randrup, T.B. & K. Dralle. 1997. *Influence of planning and design on soil compaction in construction sites*. In: Landscape and Urban Planning No. 38 p.87-92
 - Randrup, T.B. & I. Faldager. 1997. *Tree roots in sewer systems: a study of the extent of the problems with roots from trees and shrubs damaging the Danish sewer systems* (Danish Forest and Landscape Research Institute. Park and Landscape report series No. 14. 56 p.- Assessment of public health impact of Urban Agriculture
 - Randrup, T.B. & K. Nilsson. 1997. *Research on urban trees in Europe*. In: Decembrini, F. (ed.) Proceedings from the III. European Arboriculture Congress. Merano, Italy, p.133-141
 - Randrup, T.B. & L.B. Pedersen. 1998. *De-icing salt, trees and shrubs: a questionnaire survey on de-icing, plant damages and protection of woody plants along roads and streets in Denmark*. The Danish Road Directorate, Operation and Maintenance Unit. Report No. 142. 110 p. (in Danish, with English summary)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research
- Information / Communication

Specific Expertise:

- Urban Waste Management: Solid Waste Management
- Urban Waste Management: Waste Water Management

Regions:

South Asia

Main Interests:

Urban waste management

Recent Activities:

- Technical and environmental studies related to waste water treatment
- Social and community surveys for assessing public acceptability of agricultural produce obtained with waste water.
- Studies on recycling of solid and liquid waste in Karachi

Publications:

- Rehan, A. 1989. *Recycling of wastewater for irrigation and agriculture for Karachi*. Study for Karachi Water and Sewerage Board
- Rehan, A. *Technical paper on wastewater utilization for agriculture in Hub, Gadap, Mahir and Manghopir areas in Karachi*

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning

Specific Expertise:

Urban Crop Production: Community
Gardening

Regions:

North America

Recent Activities:

Organisation of colloquium of the
American Community Gardeners
Association (1996)

Publications:

Reid, D. *Créer un jardin communautaire,
l'aménager, le gérer, l'animer*. MAB-
Métro, Montreal, Canada

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Research
- Information / Communication

Specific Expertise:

- Wind- and Solar Energy
- Agricultural Services Provision:
Extension & Technical Assistance
- Urban Crop Production: Backyard
Gardening

Regions:

Southeast Asia

Main Interests:

Information dissemination on urban
agriculture through mass media

Recent Activities:

- Broadcasting
- Journalistic activities
- Research on information, science-
and technology-based findings,
results of studies on Urban
Agriculture

Publications:

Sun and Wind Newsletter

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Training Offered:

Course on informal economy of the city

Publications:

- Sanyal, B. 1987. *Urban cultivation amidst modernization: how should we interpret it?* In: *Journal of Planning Education and Research* Vol. 6 No. 3
- Sanyal, B. 1985. *Urban agriculture: who cultivates and why? A case study of Lusaka, Zambia.* In: *Food and Nutrition Bulletin* Vol. 7 No. 3 p. 15-24

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Main Areas of Work:

- Consultancy / Technical Assistance
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Urban Farmer

Specific Expertise:

- Urban Crop Production
- Urban Animal Production
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening
- Urban Crop Production: Greenhouses

Regions:

- Central Africa
- East Europe
- East Africa
- Southeast Asia
- West Africa

Main Interests:

- Technical agricultural practices (traditional and modern)
- Gender, social and economic profile of market gardeners
- Yield capacity of market gardening
- Functioning of market gardening cooperatives
- Study of commercial network (gardening)
- Impact on employment and income

- Food security

Recent Activities:

- Research on urban agriculture in Lomé (Togo) (1985-88)
- Information market on dangers of pesticides in urban agriculture
- Listing of market garden vegetables (local and introduced)

Publications:

- Schilter, C. 1991. *L'agriculture urbaine à Lomé (Togo): approches agronomique et socio-économique*. 334 p. Paris: IUED
- Schilter, C. 1991. *L'agriculture urbaine: une activité créatrice d'emplois en économie de survie (le cas de Lomé)*. In: La sécurité alimentaire à l'heure du néo-libéralisme. ORSTOM, Cahiers des Sciences Humaines Vol. 27 Nos. 1-2 (1991) p.159-168
- Schilter, C. 1998. *Possibilities and limits of Urban Agriculture (the case of Lomé)*. Paper prepared for Workshop of Urban Agriculture Network (USA) and Natural Resources Institute (UK), London, 1994
- C. Schilter & P.A. Schaefer. 1998. *Plantes des jardins maraîchers à Lomé (Togo)*. In: Annales de l'Université du Bénin. Série Sciences
- C. Schilter. 1998. *Rôle et limites de l'agriculture urbaine dans l'alimentation et la sécurité alimentaire urbaine: le cas de Lomé*. In: L'agriculture urbaine dans les pays du Sud. Série Vivre Autrement

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Research

Specific Expertise:

- Pest and Disease Management in Urban Agriculture
- Urban Crop Production: Hydroponics
- Urban Agriculture and Enterprise Development: Processing of Agricultural Produce
- Agricultural Services Provision: Extension and Technical Assistance
- Urban Food Security and Nutrition
- Urban Waste Management: Solid Waste Management
- Peri-Urban Crop Production
- Urban Crop Production: Community Gardening

Regions:

- West Europe
- East Europe
- North America
- Central America
- South Asia
- Southeast Asia
- North Africa
- East Africa
- Middle East

Main Interests:

- Socio-economic issues
- Vegetable production and marketing

- Biological pest control
- City biowaste in composts for fertilisation
- Water management for irrigation and drainage

Recent Activities:

- EU Project on urban and peri-urban small and medium-sized enterprise development for sustainable vegetable production and marketing systems
- German BMZ / GTZ project on development of peri-urban vegetable production systems for sustainable year-round supplies to tropical Asian cities
- International workshop DSE on Vegetable production in peri-urban areas in the tropics and subtropics: food, income and quality of life, 1994

Publications:

- Kleinhenz, V. 1997. *Technologies for sustainable vegetable production in the tropical lowlands*. Herbert Utz Verlag Wissenschaft, Muenchen, ISBN 3-89675-160-3.
- Holmer, R.J., V.B. Heinrich & W.H. Schnitzler. 1997. *Poster on urban and peri-urban small and medium-sized enterprise development for sustainable vegetable production and marketing systems*. Tropentag 1997 - Technischer Fortschritt im Spannungsfeld von Ernahrungssicherung und Ressourcenschutz, December 11-12, 1997. Stuttgart-Hohenheim. Programm / Zusammenfassung der Vortraege und Poster, 113

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Planning
- Research

Specific Expertise:

- Urban Land and Water Use Planning and Management
- Urban Waste Management: Waste Water Management

Regions:

Southeast Asia

Main Interests:

- The change of agricultural land use in the context of urban growth
- Study of land use by using satellite images

Recent Activities:

Land use study in the fringe of Bangkok Metropolitan through aerial photographs, satellite images and field surveys

Publications:

Silapacharanan, S. 1997. *Development plan of Districts Talingchan, Phasi Charoen and Bang Khun Thian*. Bangkok Metropolitan Authority (in Thai)

Silverside, David

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Main Areas of Work:

- Consultancy / Technical Assistance
- Management / Administration
- Research
- Urban Farmer

Specific Expertise:

- Urban Food Security and Nutrition
- Urban Animal Production

Regions:

South Asia

Main Interests:

Supply of animal products to urban markets from peri-urban sources

Recent Activities:

- Defining the urban, peri-urban and rural areas of three study towns, Sylhet, Mymensingh and Pabna, Bangladesh
- Characterising the production and marketing systems for livestock and their products in the three areas of the three towns
- Conducting case studies of specific production and marketing systems in these towns and their surrounding areas
- Analysing the data and constructing a simple model which will indicate the most useful interventions on the production and marketing systems which should bring about an improved supply of animal proteins to urban markets

Small, Robert Allan)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Management / Administration
- Project Implementation
- Information / Communication
- Urban Farmer

Specific Expertise:

- Urban Food Security and Nutrition
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening
- Urban Crop Production: Community Gardening

Regions:

Southern Africa

Main Interests:

Urban agriculture as a stepping stone towards institutional and personal development

Recent Activities:

- Organisation development, process and capacity support to grassroots women food growers' associations
- Serving some 7,000 food growers / annum
- Partnerships with grassroots urban agricultural associations

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Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

- Urban Agriculture and Sustainability in Cities
- Urban Crop Production
- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Urban Food Security and Nutrition
- Peri-Urban Crop Production

Regions:

- Southeast Asia
- Southern Africa

Main Interests:

- Economic and social aspects of urban agriculture, e.g. marketing, uses for family, etc.
- Work on environmental impacts with physical geographers

Recent Activities:

- Urban food systems in Harare, Zimbabwe, covering retailing and urban agriculture (1989-95)
- Adviser to IDRC on Research Programme (1997)
- Contributing to report for DFID (UK) on peri-urban natural resource management

Publications:

- Smith, D. & P.T. Kivell. 1990. *Food production, retailing and consumption patterns in Harare*. In: Findlay, A. & J. Dawson (eds). *Urban retailing in*

the Third World. p.156-180.
Routledge

- Smith, D. 1990. *Food for thought: thoughts on food*. In: Potter, R. & A. Salau (eds). *Cities and development in the Third World*. p.100-120. Mansell
- Smith, D. 1991. *Urban food distribution systems in Asia and Africa*. In: *Geographical Journal* Vol. 157 No. 1 p.51-61
- Smith, D. 1992. *Strategies for meeting basic food needs in Harare, Zimbabwe*. In: Baker, I. & P.O. Pedersen. *The rural-urban fringe in Africa*. p.258-283. Uppsala: Nordiska Afrikainstitutet
- Smith, D. 1992. *Food on the fringes*. In: *Urban Nature* Vol. 1 No. 1 p.18
- Smith, D. 1993. *Food for thought: meeting a basic need for low income urban residents*. In: Schell, L.M., Smith, M. & A. Bilsborough (eds). *Urban ecology and health in the Third World*. p.193-201. Cambridge University Press
- Smith, D. 1993. *Food production in Third World cities*. In: *Hunger Notes* Vol. 18 No. 2 p.5-6
- Smith, D. 1993. *And the cupboard was bare: food security and food policy for the urban poor*. In: *Zimbabwe Journal of Geography* No. 23 p.38-57
- Smith, D. 1993. *Food security and food policy for the urban poor*. In: Dahl, J., A. Narman & D. Drakakis-Smith (eds). *Land, food and basic needs in developing countries*. Series B No. 83. Goeteborg: Kulturgeografiska Inst., Goeteborgs Universitet. p.197-212

- Smith, D. & D. Tevera. 1993. *Informal food retailing in Harare*. Occasional Paper No. 7. Kulturgeografiska Inst., Goteborgs Universitet. 31 p.
- Smith, D. 1995. *Food systems and the poor in Harare under conditions of structural adjustment*. In: Geografiska Annaler No. 76(B) p.3-20
- Smith, D., D. Tevera & T. Bowyer-Bower. 1995. *Urban Agriculture in Harare*. In: Habitat International Vol. 19 No. 2 p.183-193
- Smith, D. 1997. *Sustainable development. 3. Basic needs and human rights*. In: Urban Studies Vol. 34 No. 5/6 p.797-823
- Smith, D. *Urban food systems and household food security in Africa*. In: Urban Edge. World Bank (in press)
- Smith, D. *Urban food systems and the poor in developing countries*. Trans. IBG (in press) Smith, D. 1995. *Socio-economic aspects of urban agriculture in Harare*. Paper presented at the International Workshop on Urban Agriculture in Harare. University of Harare, Zimbabwe
- Smith, D. & D. Tevera. 1995. *Background to urban agriculture in Harare*. Paper presented at the International Workshop on Urban Agriculture in Harare. University of Harare, Zimbabwe
- Smith, D. 1996. *Urban food systems in developing countries*. Paper presented at the Annual Conference, Institute of British Geographers, University of Strathclyde, Glasgow

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research
- Information / Communication

Specific Expertise:

- Urban Agriculture and Public Health
- Urban Waste Management: Waste Water Management
- Waste Water - Fed Aquaculture

Regions:

- South America
- South Asia
- Southeast Asia
- North Africa
- West Africa
- Middle East

Main Interests:

- Health, institutional and socio-economic aspects of excreta and waste water reuse
- Services: information dissemination, teaching / training and consultancy on above issues

Recent Activities:

- Literature reviews on human waste utilisation, excreted pathogen survival and health impacts of reuse (1983-90)
- Field visits and case studies in 13 countries on excreta and waste water utilisation (1983-90)

- Member of WHO expert panel to formulate new health guidelines for waste water reuse (1989)

Publications:

- Strauss, M. 1996. *Health (pathogen) considerations regarding the use of human waste in aquaculture. In: Recycling the resource ecological engineering for wastewater treatment.* Environmental Research Forum, 5-6. Proceedings, 2nd International Conference on Ecological Engineering for Wastewater Treatment, Waedenswil, Switzerland, 18-22 Sept. 1996
- Strauss, M. & U.J. Blumenthal. 1994. *Health implications of excreta and wastewater use.* Hubei Environmental Sanitation Study, 2nd Workshop, March 3-4, 1994
- Strauss, M. 1991. *Human waste use: health protection practices and scheme monitoring.* In: Water Science and Technology Vol. 24 No.9 p.67-79
- Strauss, M. & U.J. Blumenthal. 1990. *Human waste use in agriculture and aquaculture: utilization practices and health perspectives.* Main report No. 08/90. 300 p. International Reference Centre for Waste Disposal, Duebendorf, Switzerland (an executive summary is also available)
- Strauss, M. (1990). *Food from waste.* In: World Health Forum Vol. 11 p.46-59
- Blumenthal, U.J., M. Strauss, D.D. Mara & S. Cairncross. 1989. *Generalised model of the effect of different control measures in reducing health risks from waste reuse.* In: Water Science and Technology Vol. 21 p.567-577
- Strauss, M., D.D. Mara, S. Cairncross, U.J. Blumenthal, H. Shuval & A. Prost. 1988. *Human*

wastes: health aspects of their use in agriculture and aquaculture. IRCWD News No. 24/25 (May)

- Strauss, M. 1985. *Health aspects of nightsoil and sludge use in agriculture and aquaculture. Part 2. Pathogen survival.* IRCWD Report No. 04/85. International Reference Centre for Waste Disposal, Duebendorf, Switzerland

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Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Crop Production
- Urban Agriculture Pest and Disease Management
- Urban Waste Management: Solid Waste Management
- Peri-Urban Crop Production

Regions:

- West Africa
- Central Africa

Main Interests:

- Research on the organisation of people in poor city quarters in Africa concerning the collection of organic urban waste
- Organisation of the collection of urban household wastes with the purpose of plant protection in Western Africa (project proposal introduced to INCO-DC)
- Transfer of knowledge between urban farmers

Recent Activities:

- Surveys on urban agriculture in former Zaire
- Direction of master theses on urban agriculture in Bangui and Havana

Publications:

- Streiffeler, F. *Urban agriculture in Africa with special reference to the former Zaire*. In: Kracht, U. & M. Schulz (eds). *Food security* (in press)
- Streiffeler, F. 1994. *Urban agriculture in Africa: the recent situation in its most important aspects*. In: Brandstetter, A.-M., G. Grohs & D. Neubert (eds). *Afrika hilft sich selbst*, p.241-255. Muenster-Hamburg: Lit Verlag
- Streiffeler, F. 1994. *L'agriculture urbaine en Afrique: la situation actuelle dans ses aspects principaux*. In: *Systèmes agraires et agriculture durable en Afrique sub-Saharienne*, p.437-454. Cotonou, Bénin
- Streiffeler, F. 1993. *General principles and approaches for sustainable urban greenbelts with special reference to Africa*. 59 p.
- Streiffeler, F. 1991. *The knowledge system and the action motives in urban agriculture of Subsaharan Africa*. Workshop Agricultural Knowledge Systems and the Role of Extension. Bad Moll, May 21-24, 1991
- Streiffeler, F. 1987. *Improving urban agriculture in Africa: a social perspective*. In: *Food and Nutrition Bulletin* Vol. 9 No. 2 (June 1987) p.8-13. The United Nations University
- Streiffeler, F. 1982. *Productive work for low-income families in an urban environment: an experience in Zaire*. In: *Ideas & Action Bulletin* (FAO) Vol. 1982 No. 149 p.3-8

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Policy Development and Advice
- Project Implementation
- Information / Communication
- Urban Farmer

Specific Expertise

- Urban Crop Production: Hydroponics
- Urban Agriculture and Gender
- Agricultural Services Provision:
Extension and Technical Assistance
- Urban Crop Production: Backyard
Gardening
- Urban Crop Production: Community
Gardening

Regions:

Southeast Asia

Main Interests:

Home gardening on small homelots

Recent Activities:

Introducing home gardening and waste management to groups of elderly people

Publications:

Articles in *Kowani News*

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Main Interests:

In the setting of Sahelian cities, urban agriculture based on irrigation of locally grown vegetables:

- . Quantification of environmental contamination
- . Measurement of impact on health
- . Studies on perceptions of actors involved in the production chain

Specific Expertise:

- Urban Waste Management: Waste Water Management
- Urban Agriculture and Public Health

Recent Activities:

Health impact of waste water use in small-scale agriculture in Sahelian urban setting

Regions:

West Africa

Publications:

[see Organisations: Swiss Tropical Institute]

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Main Areas of Work:

- Research
- Education

Specific Expertise:

- Urban Agriculture and Gender
- Urban Food Security and Nutrition

Regions:

- Central America
- South America
- South Asia
- Southeast Asia
- East Africa
- West Africa
- Southern Africa

Main Interests:

- Raising awareness that urban food production is an important income and feeding issue, especially for women
- Calling for a methodological conference so that studies would have a common base for the collection of significant and robust comparative data in order to influence policy analysts

Recent Activities:

- Teaching graduate students
- Participation in conferences
- Publications
- President of the Equity Policy Center (EPOC) on women's use of housing and land for income purposes in Vietnam, Laos, and China. Urban agriculture is one the income-earning strategies to be studied.

Publications:

- Tinker, I. 1998. *Feeding megacities: a worldwide viewpoint*, In: *Urban Age*, winter 1998 p. 4-7
- Tinker, I. 1994. *Urban agriculture is already here*. In: *Cities Feeding People*. Ottawa: IDRC (also published in: *Ag-Sieve* Vol. 4 (1993) No. 1 p. 6
- Tinker, I. (ed.) 1992. *Hunger Notes*. Special issue: *Urban Food Production*. Fall, 1992
- Tinker, I. 1997. *Street foods: urban food and employment in developing countries*. Oxford University Press (details EPOC activities and relates street foods to urban agriculture)
- Summerfield, G. (ed.). *Women's changing rights to land and housing in Vietnam, Laos, and China*. Lynne Rienner Publications (forthcoming)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Information / Communication

Specific Expertise:

Urban Forestry

Regions:

North America

Main Interests

- Enhancing the quality of urban life through proper management of the urban forest resource
- Stimulating increased awareness of the potential, value, and benefits of a well managed urban forest

Recent Activities:

- Planning, organising, directing and controlling Ohio state's urban forestry assistance program
- Ohio's six regional urban foresters provide direct urban forestry assistance to municipalities

Torres Lima, Pablo (Dr.)

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UAM Xochimilco
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system in Mexico City. In: Agriculture and Human Values, Vol. 11, no. 1 (Winter 1994) p.37-46

Main Areas of Work:

- Education / Training
- Research

Specific Expertise:

Peri-Urban Crop Production

Regions:

- North America
- Central America

Recent Activities:

Organising a symposium on urban agriculture and metropolitan processes held at the Universidad Autónoma de Mexico City, campus Xochimilco, October 1997.

Publication:

- Torres-Lima, P. *Procesos metropolitanos y agricultura urbana en México.* Universidad Autónoma Metropolitana Xochimilco, Mexico
- Torres-Lima, P. 1991. *Los campesinos en la estructura urbana, el caso de Milpa Alta.* Universidad Autónoma Metropolitana Xochimilco, Mexico
- Torres-Lima, P., B. Canabal-Cristiani, and G. Burelea-Rueda. 1992. "Sustentabilidad, viabilidad económica y estrategias del modelo chinampero": *Revista Geografía Agrícola*, Vol. 17: 127-133
- Torres-Lima, P., B. Canabal-Cristiani, and G. Burelea-Rueda. 1994 *Urban sustainable agriculture: The paradox of the Chinampa*

Trefon, Theodore (Dr.)
Coordinator Forest-City Relations

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de la Société d'Ecologie Humaine,
Editions de Bergier, Châteauneuf de
Grasse (forthcoming)

- Trefon, T. 1997. *Urban threats to biodiversity in the Congo Basin*. In: The Congo Basin: recent developments and alternatives for sustainable development. BOS Newsletter: Journal on Tropical Forests and Forestry for Sustainable Development Vol. 16(3) No. 37 Nov. 1997
- Trefon, T. 1995. *Forest conservation and Central African cities: Kinshasa, Libreville and Yaoundé*. African Studies Center, Boston University, Working Paper No. 200

Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Land and Water Use Planning and Management
- Urban Food Security and Nutrition
- Urban Animal Production
- Urban Forestry
- Peri-Urban Crop Production
- Urban Crop Production: Backyard Gardening

Regions:

Central Africa

Main Interests:

Understanding urban dynamics in dense tropical forest areas in Central Africa: what impact does the rapid growth of urban populations have on forest resources?

Recent Activities:

Peri-urban land use evolution in Gabon (Oyem and Franceville)

Publications:

- Trefon, T. *Une exploitation durable des produits forestiers par les citoyens d'Afrique Centrale: une gageure?* In: Bley, D. (ed.). Urbanisation et environnement dans les pays en développement. Travaux

Waters-Bayer, Ann (Dr.)

Livestock Specialist

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research
- Information / Communication

Specific Expertise:

Urban Animal Production

Regions:

- East Africa
- North Africa
- West Africa

Main Interests:

- Urban livestock-keeping
- Forage supply to urban livestock
- Informal marketing of livestock products in urban areas
- Promotion of exchange of information and experiences related to supporting the above
- Development / compilation of methods of Participatory Technology Development related to the above
- Analysis of gender issues related to the above

Recent Activities:

- Member of Urban Agriculture taskforce in ETC Netherlands (present)
- Literature review of urban livestock keeping (1995)
- Resource person for urban livestock keeping at International Conference of Veterinary Educational Institutes (1995)

- Resource person for urban agriculture at Zschortau workshop (1994)
- Co-initiator of workshop on urban agriculture in Harare, Zimbabwe (1995)
- Steering Committee, DSE urban agriculture workshop (present)
- Co-editor of issue of ILEIA Newsletter on urban agriculture (1994)
- Study of informal milk marketing in and around town in central Nigeria (1981-85)

Publications:

- Bliet J. van der & A. Waters-Bayer. 1997. *Farming in the city: from analysis to action*. In: African Urban Quarterly (in press)
- Waters-Bayer A. 1997. *Animal farming in African cities*. In: African Urban Quarterly (in press)
- Waters-Bayer A. 1995. *Living with livestock in town: urban animal husbandry and human welfare*. Keynote paper, 8th International Conference of Institutions of Tropical Veterinary Medicine, 25-29 September 1995, Berlin, Germany
- Alders, C., J. van der Bliet & A. Waters-Bayer (eds). 1994. *Farming at close quarters*. ILEIA Newsletter Vol. 10 (1994) No. 2

Sections on urban livestock keeping also in:

- Bayer, W. & A. Waters-Bayer. 1997. *Forage husbandry*. Tropical Agriculturalist Series. London: Macmillan / CTA / GTZ (in press)
- Various publications on milk processing and marketing

Whiston Spirn, Anne (Prof.)

Prof. of Landscape Architecture and Regional Planning

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Main Areas of Work:

- Education / Training
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Research
- Information / Communication
- Technical Assistance

Specific Expertise:

- Urban Agriculture and Urban Ecology
- Urban Land and Water Use Planning and Management
- Urban Forestry
- Urban Crop Production: Community Gardening

Regions:

- Australia and Oceania
- North America
- West Europe

Main Interests:

- Community development in inner-city neighbourhoods, environmental education in an inner-city public school
- Urban forestry
- Storm water and waste water management

Recent Activities:

Director West Philadelphia Landscape Project

Publications:

- Whiston Spirn, A. 1984. *The granite garden: urban nature and human design*. New York: Basic Books (also published in Japanese in 1996 and in 1995 under the title: Jardim de granito: a natureza no desenho da cidade. Sao Paulo: Universidade de Sao Paulo)
- West Philadelphia Landscape Plan. 1991. *Vacant land: a resource for reshaping urban neighborhoods*. Graduate School of Fine Arts. University of Pennsylvania
- West Philadelphia Landscape Plan. 1990. *This garden is a town*. Graduate School of Fine Arts. University of Pennsylvania
- Whiston Spirn, A., A. Howitt & E. Lardner. 1987. *Managing lasting improvements to public open space*. Cambridge, Massachusetts: Center for State and Local Government, Harvard University
- Whiston Spirn, A. 1988. *The poetics of city and nature: toward a new aesthetic for urban design*. In: Landscape Journal, Fall 1988
- Whiston Spirn, A. 1990. *From Uluru to Cooper's Place: patterns in the cultural landscape*. In: Orion, Spring 1990
- Whiston Spirn, A. 1998. *Reclaiming common ground: water, neighborhoods, and public spaces*. In: Lacey, M. 1998. *Regionalism and planning in the twentieth century*. Woodrow Wilson Center, Washington, DC (forthcoming)
- The West Philadelphia Landscape Project Web site (<http://www.upenn.edu/wplp>)

Winne, Mark
Executive Director

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Main Areas of Work:

- Consultancy / Technical Assistance
- Management / Administration
- Planning
- Policy Development and Advice
- Project Implementation
- Information / Communication
- Urban Farmer

Specific Expertise:

- Community-Supported Agriculture
- Urban Crop Production: Hydroponics
- Urban Agriculture and Enterprise Development: Marketing of Agricultural Produce
- Urban Food Security and Nutrition
- Urban Crop Production: Community Gardening
- Urban Crop Production: Greenhouses

Regions:

North America

Main Interests:

- Urban agriculture as a component of an integrated and comprehensive approach to local food security
- Incorporation of commercial farming at the urban fringe

Recent Activities:

- Farmers' markets
- Community supported agriculture

Xiaoyun, Li (Prof. Dr.)

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Management / Administration
- Planning
- Project Implementation
- Research
- Policy Development

Specific Expertise:

- Agricultural Services Provision
- Urban Agriculture and Gender
- Urban Food Security and Nutrition
- Urban Animal Production
- Urban Crop Production: Community Gardening

Regions:

Southeast Asia

Main Interests:

- Policy issues and social aspects of urban agriculture in China
- Structural change of urban agriculture in Beijing

Recent Activities:

Transformation / industrialisation of urban agriculture in China

Yameogo, Rigobert (Dr.)

Chef de Département Substances Naturelles de l'IRSAT

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Research

Specific Expertise:

- Urban Waste Management: Solid Waste Management
- Urban Waste Management: Waste Water Management
- Waste Water - Fed Aquaculture

Regions:

West Africa

Recent Activities:

- Waste water treatment and reuse for urban agriculture: bioreactor design and construction with local raw material.
- Waste water quality control
- Urban solid waste management: design and construction of pit for composting of waste

Publications:

- Yameogo, R. et al. 1995. *Dépollution des eaux usées de la ville de Ouagadougou: rapport final de contrat*. Ministère Français de la Coopération. Paris France
- Yameogo R. & R. Moletta. 1992. *Proposition d'un programme de valorisation des eaux usées industrielles de la ville de Ouagadougou*. EU project proposal

Yanez, Fabian A. (Dr.)
Environmental Engineer

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Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development and Advice

Specific Expertise:

Urban Waste Management: Waste
Water Management

Regions:

- Central America
- Middle East
- South America

Recent Activities:

Design, evaluation and operation of
large waste stabilisation ponds

Publications:

- Yanez, F. & C. Kirchmer. 1976.
*Reuso de aguas residuales con fines
de irrigación.* In: Proceedings of 1er
Seminario Sobre Sistemas
Ecológicos y Medio Ambiente,
ONERM, Lima, Peru. 56 p.
- Yanez, F. *Lagunas de estabilización.*
In: Proceedings of 1er Seminario
Sobre Sistemas Ecológicos y Medio
Ambiente, ONERM, Lima, Peru. 32
p.
- Yanez, F. 1978. *Panorama de la
tecnología de tratamiento de aguas
residuales en países de América
Latina.* Paper presented at the
session Avances Tecnológicos en
Tratamiento de Agua y Aguas
Residuales of the 16th Congress of

AIDIS. Santo Domingo, República
Dominicana. 24 p.

- Yanez, F. 1978. *Investigación en
tratamiento de aguas residuales.* 16
p. Paper presented at the meeting of
the Comité Asesor en
Investigaciones Médicas de la OPS,
Lima, February 1978
- Yanez, F. & C. Kirchmer. 1978.
*Literature survey and development of
experimental procedures for
stabilization pond.* CEPIS research
report prepared for IDRC, Canada
- Yanez, F. 1979. *Aspectos
tecnológicos en operación y
mantenimiento de sistemas de agua
potable y alcantarillado.* 7 p.
Proceedings of Forum on Desarrollo
Tecnológico de Instituciones de Agua
Potable y Alcantarillado, Lima, Peru.
OPS/CEPIS
- Yanez, F. 1979. *Manejo y control de
procesos en operación de plantas de
tratamiento de aguas residuales.*
*Memorias del Simposio sobre
Operación y Mantenimiento de
Sistemas de Agua Potable y
Alcantarillado, Lima, Peru.*
OPS/CEPIS. 33 p.
- Yanez, F. 1979. *Procesos de lodos
activados y aeración prolongada.* In:
*Manual del curso sobre tratamiento
de aguas residuales para países en
desarrollo.* 2nd ed. OPS/CEPIS. 145
p.
- Yanez, F. 1980. *Lagunas facultativas
y de alta producción de biomasa.* In:
*Manual del curso regional sobre
lagunas de estabilización.* Lima,
Peru. OPS/CEPIS. 99 p.
- Yanez, F. *Lagunas aeradas.* In:
Manual del curso regional sobre
lagunas de estabilización. Lima,
Peru. OPS/CEPIS. 50 p.
- Yanez, F.. 1980. *Avances en el
tratamiento de aguas residuales por*

- lagunas de estabilización*. Paper presented at the 17th Congreso de AIDIS, La Paz, Bolivia. 99 p. (also published as Documento Técnico No. 7 (1981). OPS/CEPIS. 58 p.)
- Yanez, F. 1982. *Manual de métodos experimentales de evaluación de lagunas de estabilización*. Manual Serie Técnica No. 24. OPS/CEPIS. 164 p.
 - Yanez, F. 1985. *Reducción de organismos patógenos y diseño de lagunas de estabilización en países en desarrollo*. Paper presented at the 19th Congreso de AIDIS, Santiago, Chile, 1985
 - Yanez, F. *Costo de sistemas de lagunas de estabilización*. Paper presented at the 3d Congreso de AEISA, Cuenca, Ecuador
 - Yanez, F. 1986. *Priorities in waste stabilization pond research*. Paper presented at the Regional Seminar in WSP Research, organized by PAHO/CEPIS. Lima, Peru. March, 1986
 - Yanez, F. *Herramientas modernas para diseño de lagunas de estabilización*. Paper presented at the Seminario Internacional Sobre Lagunas de Estabilización. 21st Congreso de AIDIS, Rio de Janeiro, Brasil, September 1988
 - Yanez, F. & M.B. Pescod. 1988. *Joint mission report on wastewater treatment and reuse in Jordan*. UNDP / World Bank Integrated Resource Recovery Project
 - Yanez, F. 1988. *Modern tools for design of waste stabilization ponds*. Paper presented at the Regional Seminar On Wastewater Treatment and Reuse in Agriculture, organised by FAO and the World Bank, Cairo, Egypt, December 1988
 - Yanez, F. 1988. *Research on waste stabilization ponds in Peru*. Paper presented at the Regional Seminar On Wastewater Treatment and Reuse in Agriculture, organised by FAO and the World Bank, Cairo, Egypt, December 1988
 - Yanez, F. 1988. *Temperature behavior in waste stabilization ponds*. Paper presented at the Regional Seminar On Wastewater Treatment and Reuse in Agriculture, organised by FAO and the World Bank, Cairo, Egypt. December 1988
 - Yanez, F. 1988. *Costs of waste stabilization ponds*. Paper presented at the Regional Seminar on Wastewater Treatment and Reuse in Agriculture, organised by FAO and the World Bank, Cairo, Egypt. December 1988
 - Yanez, F. 1993. *Lagunas de estabilización: teoría, diseño, evaluación y mantenimiento*. Cuenca, Ecuador: ETAPA. 580 p.
 - Yanez, F. *Metodología experimental para modelos de calidad del agua de ríos de alta montaña*. Documento Técnico No. 1. Cuenca, Ecuador: ETAPA

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Main Interests:

- Study of the spatial and economic security dimensions of small-scale food retailing
- Social capital issues related to small-scale enterprises
- "Downstream" issues, particularly of food retailing and distribution

Main Areas of Work:

- Consultancy / Technical Assistance
- Policy Development and Advice

Specific Expertise:

Urban Food Security and Nutrition

Main Areas of Work:

- Project Implementation
- Research

Specific Expertise:

- Urban Agriculture & Enterprise Development: Processing of Agricultural Produce
- Urban Food Security and Nutrition

Regions:

Southeast Asia

Recent Activities:

- 1997-1999. Research in the framework of the Development and Security in Southeast Asia (DSSEA) Project managed out of York University Centre for International and Security Studies and the Institute for Strategic and Development Studies of Manila (funded by CIDA)

- conducting interviews within NGOs and government agencies providing the means to build social capital such as Grameen Bank-type micro-credit schemes and approaches focused on organizing women vendors.

Publications:

- Yasmeen, G. 1998. *Canadian capacity on sustainable cities: an overview of Canadian expertise on sustainable urbanization within government, business, academe, and non-governmental organizations*. Report submitted to the National Round Table on the Environment and the Economy
- Yasmeen, G. 1996. *Plastic bag housewives and postmodern restaurants: public and private in Bangkok's foodscape*. In: *Urban Geography* Vol. 17 (1996) No. 6 p. 526-544 (Special issue on "The City and the New Cultural Geography", David Ley ed.)
- Yasmeen, G. 1996. *From scratch: Thai food-systems and public eating*. In: *Contemporary perspectives on Thai foodways / Gisèle Yasmeen and Marilyn Walker (eds)*. Vancouver: Centre for Southeast Asian Research Monograph # 11 (1996) p. 20-43
- Yasmeen, G. 1995. *Exploring a foodscape: the case of Bangkok*. In: *Malaysian Journal of Tropical Geography* Vol. 26 (1995) No. 1 p. 1-11 (Special Issue: Proceedings of the Third International Conference on Geography of the ASEAN Region, Part I)
- Yasmeen, G. 1995. *The geography of public eating: gendered access to urban space in Bangkok ; Views from the edge - three*. In: *Papers from the Third Annual Graduate Student Symposium, 1995*. . p. 146-53. Vancouver: Center for Research in Women's Studies and Gender

Relations, University of British
Columbia

- Yasmeen, G. 1992. *Bangkok's restaurant sector: gender, employment and consumption*. In: *Journal of Social Research* Vol. 15 (1992) No. 2 p. 69-81. Chulalongkorn University, Bangkok
- Yasmeen, G. 1990. *Mutual aid and social networks: a feminist-inspired housing co-op in Montreal*. In: *Canadian Woman Studies* Vol. 11 No. 2 (Fall 1990) p. 25-28

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Main Areas of Work:

- Consultancy / Technical Assistance
- Education / Training
- Policy Development and Advice
- Research

Specific Expertise:

- Agricultural Services Provision: Extension and Technical Assistance
- Participatory Development of Appropriate Farming Technologies
- Participatory Extension Methodology

Regions:

- Central America
- East Africa
- South America
- Southeast Asia

Main Interests:

- To facilitate the integration of urban agriculture into national and city policies and plans
- To assist local stakeholders in the planning and implementation of urban agriculture projects applying a participatory and multi-stakeholder approach
- To train and guide staff of local organisations in participatory development of appropriate farming technologies for urban production conditions

Recent Activities:

- Coordinator of the Resource Centre on urban agriculture and Forestry (RUAF) (1998-)
- Resource person in regional workshop on urban agriculture, La Paz, Bolivia (1995)

- Preparation and implementation of an Introductory Workshop on urban agriculture for staff of PROSHIKA, Bangladesh (1997)
- Advisor of PARC, Palestina, on the formulation of a collaborative action-research project on urban agriculture for the Gaza strip (1998)
- Resource person to the Study meeting on Urban Agriculture organised by SNV/GOM (1998)
- Participant in Expert meeting WHO-Europe on Local Food Production and Urban Health (1998)
- Member of the Steering Committee of the International Support Group on Urban Agriculture (1997-)
- Co-founder of the Latin American Network on Urban Agriculture (AGUILA)

Publications:

- Bliet J. van der, H. de Zeeuw, H. Kieft. 1992. *Urban agriculture: possibilities for ecological agriculture in urban environments as a strategy for sustainable cities*. ETC Netherlands
- Zeeuw, H. de & M. Dubbeling. 1997. *Urban agriculture: concept, significance and constraints*. ETC Netherlands
- Zeeuw, H. de. *Urban agriculture: concept, significance and constraints*. Paper presented at Proshika Workshop on urban agriculture, Dhaka, March 9-10, 1997. Leusden: ETC Netherlands
- Zeeuw, H. de & M. Dubbeling. *Local food production for improved nutrition and a healthy living environment: what cities can do*. WHO-Europe and ETC Netherlands (forthcoming)

III. NEWSLETTERS, WEB SITES



In China, human wastes are collected from households and carted to treatment sites, prior to application as fertiliser in gardens. Photo: Yue-man Yueng

Agriculture and Rural Development (periodical)

Agriculture and Rural Development is a periodical published jointly by CTA, GTZ, DES-ZEL and DLG. It is published twice a year and can be ordered at a cost of 21 DM per issue.

In Vol. 3 (1996) No. 1, 1996, two articles are published on vegetable production in (peri)urban areas.

Vol. 4 (1997) No. 2 includes 5 articles related to urban agriculture, covering information on urban agriculture and poverty alleviation in Kenya, urban livestock keeping in Cairo, vegetable farming in Dar es Salaam, municipal agricultural projects in Paraguay and allotment gardening in Germany.

Contact:

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AGRODOK Series AGROMISA

Agromisa regularly publishes practical manuals on small-scale agricultural practices in the tropics. *Agrodoks* are published in cooperation with the Technical Centre for Agricultural and Rural Cooperation (CTA) that subsidises translation into English and French. The *Agrodoks* are also available in Tamil and Sinhala.

Agrodok manuals of interest to urban agriculture practitioners include:

- Preservation of foods
- Small-scale poultry production
- Preparation and use of compost
- Vegetable gardens in the tropics
- Backyard rabbit farming
- Beekeeping in the tropics
- Small-scale preparation of dairy products
- How to grow tomatoes and peppers

Agrodoks are available at a cost of NLG 7.50. Members of ACP countries (Africa, Caribbean and Pacific states) can apply for free copies at:

CTA
P.O. Box 380
6700 AJ Wageningen, The Netherlands

Contact:

Agromisa
P.O. Box 41
6700 AA Wageningen, The Netherlands
Phone: +31 317 441227
Fax: +31 317 419178
E-mail: agromisa@wxs.nl

AGUILA (web site)

Web Site:

http://www.idrc.ca/cfp/aguila_e.html

AGUILA's homepage offers information on mandate, members and activities of AGUILA. Also of interest are their Noticias AGUILA, a small Spanish news bulletin on planned activities and related contacts and coming events. As far as we know, this is the only source of information about Urban Agriculture available on the Web in Spanish.

Arid Lands Newsletter (ALN)

The *Arid Land Newsletter* is published twice a year by the office of Arid Lands Studies, University of Arizona. The Newsletter is available as hard copy, per e-mail and on the World Wide Web.

Issue No. 42, Fall/Winter 1997, deals entirely with the subject of urban agriculture in drylands. It contains articles on urban agriculture in the Middle East, the potential of urban trees in drylands, the efficiency of urban gardens and the potential use of treated waste water and solar energy in urban Africa.

Contact:

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Internet: <http://ag.arizona.edu/OALS/ALN/ALNHome.html>

Association of Cities for Recycling Newsletter

This Newsletter serves as an exchange forum between members of the Association. It provides information on the issues of recycling and reuse of wastes, presents examples of "Cities in action", leaves room for discussion and gives information on upcoming events and meetings.

Contact:

Association of Cities for Recycling
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1200 Brussels, Belgium
Phone: +32 2 775 7701
Fax: +32 2 775 7611
Email: tbe@ibgebim.be

BioCycle: Journal of Composting & Recycling

BioCycle reports on projects, policies and research concerned with world-wide waste utilisation practices like collection and recycling programmes, composting of municipal and industrial organic wastes and animal manure, biogas digestion, and use of recycled wastes in agricultural production.

BioCycle is published monthly. Subscription rates are 69 USD/p.a. for the USA and 97 USD/p.a. for other countries.

Contact:

Jerome Goldstein, Editor
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BUFPPRA Newsletter on Urban Forestry

The Belgian Urban Forestry Research Association (BUFPPRA), created in 1992 by civil servants responsible for green space planning and by ornamental tree professionals, aims at providing information on international urban forestry. It produces the quarterly *BUFPPRA Newsletter on Urban Forestry* dealing with present status and future tendencies of urban forestry towards the 21st century. The newsletter contains interesting information on European and international projects in the field of urban forestry. These project descriptions are completed with information on relevant conferences and available proceedings.

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Cidade Verde (periodical)

Cidade Verde is the bimonthly journal in Portuguese of the Grupo de Defesa Ecológica (GRUDE) in Brazil. GRUDE works in the field of sustainable environmental management through information exchange (journal, videos, and workshops), studies and education, and practical implementation (tree planting in urban areas). The journal gives information on GRUDE's recent activities.

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City Farmer - Urban Agriculture Notes (web site)

Web Site:

<http://www.cityfarmer.org/>

To our opinion simply the best web site on the topic of urban agriculture. City Farmer, a non-profit society that started in 1978, promotes urban agriculture and collects valuable information that is difficult to find elsewhere. The home page is regularly updated and contains general information on urban agriculture both in developing and developed countries, articles, conference announcements, and resources. It provides numerous links to other relevant Internet sites. Everybody is free to offer interesting information for the web site and finds it quickly placed and edited. Information can be found varying from research and policy discussions to composting, vermiculture and community gardens. The site is well organised and easily accessible.

COMPOST: Science and Utilisation (periodical)

COMPOST: Science and Utilisation is a quarterly scientific journal to communicate findings from researchers in agricultural engineering, biomass utilisation, horticultural science, microbiology, economics, solid waste water management and waste water treatment. Journal topics focus on management techniques to improve compost process control and product quality, with special emphasis on the utilisation of composted materials.

The journal can be obtained at an annual rate of 150 USD.

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E-mail: biocycle@aol.com

Developing Countries Farm Radio Network (DCFRN)

DCFRN distributes free radio scripts on simple low-cost techniques of food production. It offers several 6-8 minute scripts on city farming issues such as "Grow food in the city", "Profit from raising rabbits in the city", "Farm in a box", and "Grow food cheaply by the roadside". Scripts are available in English, French and Spanish.

Contact:

*Farm Radio Network
40 Dundas Street West
Box 12, Suite 227B
Toronto ON, M5G 2C2 Canada
Phone: +1 416 593 7279;
Fax: +1 416 593 3752
Email: dcfrrn@web.apc.org*

ECHO Development Notes

ECHO (Educational Concerns for Hunger Organisation) publishes an informative quarterly bulletin, *ECHO Development Notes*, in which information is bundled for smallholders and home gardeners. The content of the bulletin is diverse and comprises information on a wide variety of subjects, ranging from pig breeding, disease control, and seed storage to information about upcoming ECHO events (training, symposia) and available literature.

The bulletin is also available in Spanish (*ECHO's Notas de Desarrollo*) and can be visited on ECHO's Internet site. It is also available through email and is sent free of charge to missionaries, agricultural development and health workers, teachers, and scientists.

Selected articles from the Bulletin prior to issue No. 52 exist in updated form, arranged by subject, in a book "*Amaranth to Zai holes: ideas for growing food under difficult circumstances*" (accessible online or for sale at ECHO).

Contact:

*ECHO Development Notes Editor
Educational Concerns for Hunger Organisation (ECHO)
17430 Durrance Rd.
N. Ft. Myers, 33917 FL, USA
Phone: +1 941 543 3246
Fax: +1 941 543 5317
E-mail: ECHO@xc.org
Internet: <http://www.xc.org/echo>*

Ecology and Farming

Ecology & Farming is the English language magazine of the International Federation of Organic Agriculture Movements (IFOAM). Summaries of articles are given in French and/or Spanish. Subscription rates (for 6 issues/two years) are DM 48 / USD 30 / 180 FF. Postage for airmail outside Europe (6 issues): add DM 30.00 / USD 18.00 / FF 50.00.

The December 1997 issue reports on 4 articles on urban food production in Poland, United Kingdom, France and Cuba.

Contact:

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Subscription handling:

IFOAM
Oekozentrum Imsbach
66636, Tholey-Theley, Germany
Phone: +49 6853 5190
Fax: +49 6853 3011

Ecology Action Newsletter

Ecology Action is a non-profit, environmental research and education organisation, focusing on bio-intensive mini-farming with the objective to raise food or vegetable production using ecological farming techniques.

The *Ecology Action Newsletter* provides information about workshops, courses and projects on bio-intensive mini-farming in USA, Mexico, Kenya and Russia. It also contains articles, mainly from former course or workshop participants.

Ecology Action has produced a publication "*How to grow more vegetables*", that is also translated into Russian. Another publication "*Lazy-bed gardening*" is currently being translated into Russian.

Contact:

Mary Campagna, Editor
Action/Common Ground
5798 Ridgewood road
Willits, 95490-9730CA, USA
Phone: +1 707 459 0150

Environment and Urbanization (periodical)

The *Environment and Urbanization* is a bi-annual journal with contributions from Third World specialists written both for a specialist and a general audience. Each issue is based on a central theme and contains articles, a specific bibliography, a book review section and a bulletin board.

Themes include: sustainable cities, health and well-being in cities, women in environment and urbanisation, children and their environment. In several of these issues, peri-urban agriculture is touched upon in the light of urban management and institutional responses to urban cultivation.

Subscriptions cost USD 35.00 for one year and USD 56.00 for 2 years. Subscriptions are available at half price to subscribers from Latin America, Asia (except Japan), Africa and to students. Back issues cost USD 18.00 each.

A Spanish journal, with similar scope to *Environment and Urbanisation*, called *Medio Ambiente y Urbanización*, concentrates mainly on Latin America. Annual subscriptions (3-4 issues/p.a.) cost USD 50.00.

Contact:

Environment and Urbanization
International Institute for Environment and Development
3 Endsleigh Street
London, WC1H 0DD, United Kingdom
Phone: +44 171 388 2117
Fax: +44 171 388 2826
Email: iieduk@gn.apc.org

Contact:

Medio Ambiente y Urbanización
IIED America Latina, 6 Cpo. A
Corrientes 2835
1193 Buenos Aires, Argentina

ETC E-mail Bulletin on Urban Agriculture in Europe

A quarterly E-mail Bulletin is produced by the ETC Netherlands Urban Agriculture Programme. The bulletin aims at sharing information on urban agriculture in Europe, European experiences, projects and case studies, important contacts and addresses, and gives a selection of relevant literature. The bulletin also serves as a communication platform for the European Support Group on Urban Agriculture (ESGUA). It can be downloaded from the Internet: <http://www.cityfarmer.org>.

Contact:

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ETC Urban Agriculture Programme
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Fax: +31 33 4940791
Email: office@etcnl.nl

FAO Magazine: Food and Nutrition

Food and Nutrition is published six-monthly in English, French and Spanish. The magazine covers aspects of food production and nutrition in both rural and urban areas.

Contact:

*Editor Food and Nutrition
FAO Food Policy and Nutrition Division
Viale del Terme di Caracalla
00100, Rome, Italy*

FAO Programme on Urban and Peri-Urban Agriculture (web site)

Web Site:

<http://www.fao.org/waicent/FaolInfo/Agricult/AGP/AGPC/Hort/urban/default.htm>

The Urban and Peri-Urban Programme is part of FAO's Plant Production and Protection Services, Horticultural Crops Group. The web site holds an introduction to the FAO programme, along with descriptions of activities, publications, events and a contact address for feedback. This is a site to keep an eye on as FAO activities in urban agriculture are further developed. Currently, the site is only accessible through frames-capable browsers.

FAO Programme on Urban and Peri-Urban Forestry (web site)

Web Site:

<http://www.fao.org/waicent/FaolInfo/forestry/urbfor/urbanfo.htm>

FAO launched its urban forestry programme in 1993. The site contains a brief description of the programme and some contact addresses. An annotated urban forestry bibliography is due for uploading soon.

Food and Nutrition Bulletin (periodical)

The *Food and Nutrition Bulletin* has been reporting about issues related to urban and household level food production (household and home gardens, kitchen gardens, peri-urban agricultural farms), and health and nutrition for over 15 years. This publication from the United Nations University provides a variety of articles and case studies from all over the world.

Contact:

*Editor Food and Nutrition Bulletin
The United Nations University
Massachusetts Institute of Technology, 20A-201
Cambridge, 02139 Ma, USA*

Garden to Kitchen Newsletter

The *Garden to Kitchen Newsletter* is a quarterly publication of the Family Food Production and Nutrition Project, UNICEF Pacific Operations. The newsletter provides information on practical gardening and cooking tips relevant for the Pacific Region.

Contact:

G. Nuufou Petaia
South Pacific Commission, Private Mail Bag
Suva, Fiji

Heifer Exchange (periodical)

Heifer Project International is working on appropriate livestock technology for a developing world. It produces a quarterly Newsletter on this theme: the *Heifer Exchange*. Projects of Heifer include those working with urban livestock and backyard animals and two of their Bulletins report on these issues.

Contact:

Heifer Project International (HPI)
P.O. Box 808
Little Rock, 72203 AR, USA
Phone: +1 501 376 6836

IDRC Cities Feeding People Program (web site)

Web Site:

<http://www.idrc.ca/cdf>

This web site is among the most prominent ones on urban agriculture. It provides information on IDRC's research on food security and urban policy issues. The site allows programme team members and partners to exchange information and documents, discuss issues of interest and share opinions on urban agriculture research. Currently, the site contains online reports from its various urban agriculture programmes, information on new projects and publications. It provides links to other urban agriculture networks and web sites. The site is clearly organised and accessible to all types of browsers.

Furthermore, it provides information both in English and French. It is an excellent resource for anyone interested in the topic.

ILEIA Newsletter

The ILEIA Newsletter is a quarterly publication concerned with Low-External-Input and Sustainable Agriculture (LEISA). It is published by the Information Centre for Low-External-Input and Sustainable Agriculture (ILEIA), implemented by ETC Netherlands. The newsletter contains interesting information on research, extension and education in LEISA (crop cultivation, animal husbandry, land management, pest and disease management, marketing, networking), illustrated with practical examples from all over the world. Authors include local and international researchers, NGO or University staff. Since 1996, the Newsletter is available in both English and Spanish.

Vol. 10 No. 3 (October 1994), a specific issue called "*Wastes Wanted*", describes the potential and practice of recycling and reusing wastes for productive purposes. Cases are presented from Ecuador, Ghana, Pakistan, China and India.

Vol. 10 No. 4 (December 1994), a thematic issue entitled "*Farming at Close Quarters*", deals with the concept of (peri-) urban farming, providing concrete examples from Bangladesh and the Philippines (vegetable gardening), Zambia and Latin America (reuse of waste and hydroponics), Vietnam and Cameroon (small livestock keeping).

Subscriptions cost USD 17.00/p.a. for individuals and organisations in the Third World and students. Others: USD 34.50. Third World organisations may also request the Newsletter free of charge.

Contact:

(Back) issues and subscriptions can be ordered at:

ILEIA

P.O. Box 64

3830 AB Leusden, The Netherlands

Phone: +31 33 4943086; Fax: +31 33 4951779

Email: ileia@ileia.nl

The Spanish version of the ILEIA Newsletter, "El Boletín de ILEIA", can be ordered at:

ETC Andes,

Av. Reducto 971

San Antonia, Lima 18, Peru

Phone: +51 14 462446

Fax: +51 14 453957

Email: postmaster@etcandes.com.pe

International Permaculture Association (various)

The Permaculture Association publishes more theoretical and practical contributions to permaculture themes in various newsletters:

- *The Permaculture International Journal* (Australia)
- *The Permaculture Activist* (USA + Latin America)
- *The Permaculture Edge* (Australia)
- *Permaculture Magazine* (Europe)

With the exception of the first one, the listed newsletters also have a more regional focus, in addition to an international scope.

Of special interest is the publication by David Watkins: "*Urban permaculture: a handbook for sustainable living*". The book is packed with practical and clear information on urban agriculture and gardening techniques. It is well illustrated and contains species lists and sources. Price: GBP 7.50 + mailing.

Contact:

Books, magazine issues and subscriptions can be ordered at:

Permanent Publications

Hyden House Ltd.

The Sustainability Centre

East Meon, Hants GU32 1HR United Kingdom

Phone: +44 1730 823311

Fax: +44 1730 823322

E-mail: hello@permaculture.co.uk

Internet site: <http://www.uea.ac.uk/~e415/home.html>

Maine Organic Farmer & Gardener (periodical)

MOFGA works to promote environmentally sound farming and gardening, build rural communities through local food production on small farms, and educate consumers about the connections among healthy food, environmental protection and farming practices. MOFGA implements the following activities: organic certification, technical assistance, information exchange through farmer-to-former exchange and country fairs, education and public policy advocacy.

MOFGA publishes "*The Maine Organic Farmer & Gardener*", a quarterly magazine as part of their educational programme.

Postal Address:

Maine Organic Farmers & Gardeners Association (MOFGA)

P.O Box 2176

Augusta, 04338 Maine, USA

Phone: +1 207 622 3118

Visiting Address:

Farrell Building, Fourth Floor,

283 Water Street

Augusta, Maine, USA

SANDEC News

SANDEC News informs periodically about the Institute's applied research projects in urban solid and liquid waste management (formerly IRCWD News). *SANDEC News* (formerly IRCWD News) is published by the Department for Water & Sanitation in Developing Countries (SANDEC). The newsletter is free of charge and aims at informing individuals and institutions in the sector about SANDEC's research activities on affordable water treatment, sanitation and solid waste management solutions in developing countries and at finding potential partners for its research projects.

Several of its issues are of interest for Urban Agriculture:

- No. 23 (December 1985). *"Health aspects of nightsoil and sludge use in agriculture and aquaculture"*
- No. 24/25 (May 1988). *"Human wastes: health aspects of their use in agriculture and aquaculture"*
- No. 26 (March 1992). *"Municipal solid waste management in developing countries: problems and issues; need for future research"* and *"Synergetic effects of municipal solid waste collection, recycling and disposal"*
- No. 27 (August 1993). *"Roughing filters for water treatment"* and *"Community involvement in municipal solid waste collection in two West African cities"*

Contact:

Swiss Federal Institute for Environmental Science & Technology
Department of Water and Sanitation in Developing Countries (SANDEC)
EAWAG
Ueberlandstrasse 133
8600 Duebendorf, Switzerland
Phone: +41 1 823 5020
Fax: +41 1 823 5399

For subscriptions contact:

Sylvie Peter
E-mail: sylvie.peter@eawag.ch

For single issues, contact:

Brigitte Hauser
E-mail: brigitte.hauser@eawag.ch

SINA Newsletter

The Settlements Information Network Africa (SINA) promotes the sharing of experiences and information among those working towards improving the quality of life and the living environment of people –particularly the poor- in the villages, towns and cities in Africa.

Contents include:

- News from members
- Articles on urban construction, health, nutrition, employment projects
- Announcements of meetings and courses
- Lists of documents

The newsletter is free to members in Africa. Subscriptions cost USD 30.00 for individuals and organisations outside Africa.

Contact:

*Dr. Diana Lee-Smith, Editor
Mazingira Institute
P.O. Box 14550
Nairobi
Kenya*

STREETWISE: the magazine of urban studies

STREETWISE is published quarterly by the National Association for Urban Studies to explore and promote the role of education in developing good practice and public participation in improving the urban environment. Subscribers include many local authorities and professional organisations as well as universities and colleges of further and higher education.

Contents include:

- Policy development in Europe: LA 21
- Local initiatives and good practice
- Urban design and sustainability
- Public participation in urban planning and neighbourhood projects
- Education and teaching

Supplements to *STREETWISE* include occasional resource directories and 2 regular publications:

- *Streetwise Education Extra*, aimed at people working in schools
- *Sustainable City Newsletter*, focusing on research, policy development and networking by local authorities and voluntary organisations.

Contact:

*Lewis Cohen
National Association for Urban Studies
Urban Studies Centre
University of Brighton
68 Grand Parade
Brighton BN2 2JY, United Kingdom*

Urban Age

Urban Age, published under the auspices of the Urban Partnership Programme, is the world's largest magazine about cities and sustainable urban development. With a circulation of 36,000 and editions in English, Spanish, Arabic, French and Russian, *Urban Age* highlights the growing debate in urban affairs with diverse and interesting articles from around the world and gives information on relevant books and events.

Urban Age is published 4 times a year and is available to developing country subscribers free of charge. Developed country subscribers pay USD 20 annually.

Contact:

Margaret Bergen, Editor
The World Bank Group
Room 4K-256, 1818 H Street, NW
20433 Washington, DC, USA
Fax: +1 202 522 3223
E-mail: mbergen@worldbank.org

Urban Nature Magazine

Urban Nature Magazine provides regular intelligence and information on urban ecology and ecosystems. The Magazine is a 44-page quarterly journal, now in its fourth volume.

Each issue contains:

- Short articles on current urban ecological topics.
- A section exploring how plants and animals are reacting to urbanisation of their habitats, and how scientists are characterising the ecology of the urban environment in more detail.
- A section entitled City News which explores ecological and environmental developments in cities worldwide.
- A review section covers recent books and reports on urban ecology
- Listings and abstracts sections keep you up-to-date with urban, ecological and environmental research. A bibliography of between 500-600 references is provided, each year.

In addition, the magazine carries features concerning Local Agenda 21 and sustainability, in an urban context.

Postal Address:

B17 9RL Birmingham
United Kingdom
Phone: +44 121 428 2462
E-mail: UrbanEnvt@aol.com

Subscription Information:

Price per volume (4 issues)

Within the United Kingdom: individuals: £18.00; corporate subscriber: £30.00

Europe (outside UK): individuals: £21.00; corporate subscriber: £34.00; pay by Eurocheque or in GBP.

Rest of the World: individuals: £22.00; corporate subscriber: £34.00; pay by International Money Order or Draft in GBP.

UNCHS Best Practices Database (web site)

Web Site:

<http://www.bestpractices.org>

The Best Practices Initiative, part of the United Nations Programme on Human Settlements, contains a selection of success stories of human settlements. Best Practices are initiatives that have resulted in clear improvements in the quality of lives and living environments of people, in a sustainable way. A Best Practice might be a community-based scheme that provides women with access to credit. It might also be a set of economic incentives for manufacturers to reduce and recycle packaging. Or it might concern a community resource information centre.

While problems in relation to human settlement development may vary from country to country, the processes and procedures used to address these problems are often similar. By recording experiences in a unified recording format and sharing them, much can be learned. In partnership with the Together Foundation, UNCHS has developed a database with a search engine that enables users to access the data quickly and efficiently.

The site shows a long list of Best Practice cases on urban development that can be searched by geographic region, project initiative, partnerships and different keywords. A summary of each Best Practice can be taken from Internet. For provision of full records you have to apply for an account.

To order a copy of the database contact:

The Together Foundation

55 East 75th Street

New York, NY 10021, USA

Phone: +1 212 6281939

Fax: +1 212 6284265

Email: together@together.org

or search the Internet-site: <http://www.bestpractices.org>

UWEP E-mail Bulletin

The Urban Waste Expertise Programme (UWEP), coordinated by WASTE, started in 1992 as a research and pilot project programme on urban waste in the South. UWEP publishes a monthly e-mail bulletin with information on their projects and field work, their sustainable waste management concept, related projects, conferences and a list of interesting UWEP-publications.

Organisations interested can request these e-mail bulletins at the address mentioned above.

Contact:

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Urban Waste Expertise Programme (UWEP)

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