18, JULY 2007 BAN AC

An unexpected surplus of vegetables can be an unplanned source of income and in addition build skills



Building Communities through Urban Agriculture

The number of people around the world who live in and around cities is increasing steadily, and the problems associated with this growth demand creative, multi-dimensional approaches. City authorities face enormous challenges in creating sufficient employment, in providing basic services such as drinking water, sanitation, health services and education, in managing urban wastes and wastewater, in creating efficient local economies and in facilitating the creation of environmentally and socially sustainable communities in their cities.

Editorial

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culture positively affects a wide variety of other urban issues, ultimately contributing to the creation of sustainable cities. While urban agriculture proponents note its value to all city residents, here we focus on urban agriculture as a direct strategy for poverty alleviation and social integration among disadvantaged groups (such as immigrants/refugees/asylees, HIV/Aids-affected households, the disabled, female-headed households with children, elderly people without pensions, young people without jobs) by integrating them more strongly into the urban network and providing them with a decent livelihood.

n addition to its direct contribution

to urban food security, urban agri-

Interventions into urban systems must recognise and reflect the complex interaction of social, economic and environmental factors that drive the daily life of cities. Urban agriculture, when conceived as an intervention into an existing context, is, in principle, multi-functional. It touches on many different urban sectors in its practice and outcomes, specifically urban food security and nutrition, public health, economic development, social inclusion and urban environmental management. In North America, this multi-functionality is articulated by the American Community Gardening Association, which views any city garden as a "resource used to build community, foster social and environmental justice, eliminate hunger, empower communities, break down racial and

ethnic barriers, provide adequate health and nutrition, reduce crime, improve housing, promote and enhance education, and otherwise create sustainable communities" (ASLA, 2006).

Thus, a major challenge in the creation of any urban agriculture project as a community intervention is its integration into local development and social service efforts, and the direction of its multiple benefits to the project's participants. In this issue of the UA Magazine examples of the *social* impact of urban agriculture and the varieties of this impact around the world are presented. In the recent RUAF publication, *Cities Farming for the Future* (notably chapter 6), broad parameters were laid out on how urban agriculture builds communities through the building of social capital.

This issue will focus on this matter further, presenting more detailed stories of actual projects worldwide to fully portray their similarities and differences. Their lessons can be used in supporting other organisations and future urban farmers in the building of sustainable cities.

BUILDING COMMUNITY

Cities in the 21st century contain many different "communities". One can distinguish between communities of shared interest (based on common belief, cultural background, training or avocation), communities of circumstance (based on race, ethnicity, disabilities, etc.; also prisons and orphanages), and communities of spatial place (cities, villages, gated communities, refugee camps, the financial institutions of Wall Street). Members of each recognise the commonalities that link them as a community, but do not necessarily see themselves as fully separate from the rest of urban society.

A distinction can be made between community-based urban agriculture, with its goal of having a collective impact among participants, and urban subsistence farming by a single individual or household acting in its own self-interest. The latter does offer clear benefits to the individual farmer and/or family, and therefore needs encouragement by governments and nongovernmental agencies. But the main characteristic of community-based urban agriculture is that it uses the design of a sustainable urban farming activity to spread its benefits (both through its process and its products) across a group of individuals. Urban agriculture, whether practised as a necessity or recreation, is of universal appeal to city dwellers. "For every potential benefit (...) there exists a garden" wrote Wang (2006), in her analysis of community gardens. She described several types of gardens created with some specific intent: educational or school gardens, gardens for food (and income), gardens used as a vehicle for influencing (social or food) politics and those explicitly for strengthening existing communities. Its practise influences the surrounding community in physical terms through the aesthetic order of a garden and the forms of the plants. Similarly, the social impact of urban agriculture on a community is also manifested, sometimes in less tangible ways.

It is important to note that urban agriculture and its practising farmers are diverse in form and type, and urban farming is not always explicitly aimed at building communities. A large segment of urban food producers are from the poorer strata of the population, but one also finds middle class farmers, lower and mid-level government officials, school teachers and other professionals involved in agriculture, or richer people who are seeking a good investment for their capital. Yet those who assume the often-difficult challenge of starting an urban farming project do so recognising that the daily life of a local community is made stronger by the organised cultivation of food.

The articles in this issue show extensive evidence of how urban farming repeatedly accommodates the inclusion of discriminated or marginalised communities – women, children, the poor, the homeless, the sick and the elderly – in constructive food production activities, providing them with fresh food, additional income, wider social contacts, political and organisational skills, renewed self-respect, as well as greener living environments. Thus many projects set up around communitybuilding agricultural activities are deliberately tailored to the nutritional, social or economic needs of a specific social group.

For example, in Port Elizabeth (currently the Nelson Mandela Metropole) in South Africa, the Ubuntu Foundation has expanded its urban agriculture activity, which started out with three successful school gardens, to reach a diversity of marginalised groups – orphaned and

vulnerable children, HIV/Aids patients and their families, as well as schoolteachers who pass on urban farming techniques to others. In Bogotá, the substantial "Bogotá Without Indifference" programme has extended its reach to the elderly, those with mental retardation. female prison inmates, and HIV/Aids patients. In particular, the Bogotá programme has incorporated former combatants in Colombia's internal conflicts, many of whom have considerable rural agricultural knowledge. The creation of a women's production cooperative in Istanbul, the women-led projects in Lima, and the asset-based urban agriculture projects in the southern Philippines are all cases in which the initiation of city farming represented an intervention in the lives of those in socially and economically marginalised subgroups. The example of Beijing, where migrant farmers are active in the city's periurban areas, shows us how urban agriculture is providing an excluded group of urbanites with a source of income and economic survival, and new connections to an unfamiliar urban society; in other words, it is allowing them to assimilate into the larger urban economic and social network. One could optimistically state that, when supported by other stakeholders with an interest in creating a sustainable Beijing, urban agriculture could be a way for migrant farmers and other, more affluent, groups in society to come together.

BUILDING COMMUNITY CAPITAL

The building of a community can also be expressed as increasing *social or community* capital. Social capital refers to features of social organisation, like networks, norms, and trust. Social capital needs to be built in urban local communities that, because of marginalisation, discrimination, or rapid growth through rural migration, often lack social cohesion and (successful examples of) shared participation around a common vision. Urban farming within or at the edge of a location brings members of that location together, generating collective action around the organisation, planning and implementation of a project and allowing the members to share in the success or failure of the project, thereby often creating bonding and bridging networks that did not exist before.

In Chapter 6 of the *Cities Farming for the Future* book, Bailkey and Smith (2006) identified seven dimensions of community

capital built through community-based urban agriculture. Ideally, in developing community urban agriculture projects, one intentionally sets out to strengthen one or more of these dimensions among participants – building human capital through higher levels of community nutrition, for example. In the process of project implementation, other forms of community capital are often created in ways that were unanticipated (which are difficult to measure properly, as will be elaborated later). An unexpected surplus of vegetables, for example, can prove to be an unplanned source of income if sold, and, in addition, build marketing skills and increase the supply of fresh vegetables for other citizens. Similarly, an unexpected obstacle, such as a little-known government regulation, might force a project's participants to develop an innovative way to address the problem, developing new skills in the process. Successfully dealing with the obstacles to urban agriculture can significantly increase the individual and collective capacity of its participants.

It is important to note that in any urban agriculture project involving a group of participants with a common goal, these dimensions of community capital are connected and inter-related. Thus, the experiences described in this issue combine food production with additional objectives, like the empowerment of women, children and the disabled; the building of leadership skills among community members; the creation of political capital within marginalised communities; the assimilation of migrants and refugees into a new culture; the establishment of niche food products for specific local markets; and the treatment of those suffering from HIV/Aids and other disabilities. For example, the article on HIV/Aids projects in Zimbabwe, by Mubvami and Manyati, describes the social changes brought about through urban agriculture. The farmers in the community built a centre where they meet, talk, discuss and learn from each other. The mere existence of the centre has spurred many activities such as field days and educational discussions on environmental management and HIV/Aids, entrepreneurial training, a soup kitchen for orphans, etc., resulting in farmers now stating: "We are farmers who look after each other."

A sense of community ownership of local food systems leads to a collective sense of empowerment, with those involved thinking better of themselves and their neighbours, and becoming proud of their shared accomplishment. A common phenomenon is the opportunity for women to collectively initiate, structure and implement successful projects tailored to the identified food security needs of their home communities, despite local constraints on resources, or the lack of control attributable to gender-based discrimination. In her article, Rutt notes how the revenues generated by a Kampala catfish farm allowed the women involved to assist their husbands in meeting household expenses, leading to greater domestic equality. And the article on the projects developed by the Atocongo Association in Lima notes how the obstacles faced by the

Urban agriculture is of universal appeal to city dwellers

women involved only served to strengthen their individual and collective abilities to face the poverty and joblessness prevalent in their communities. In this respect, Oelofse et al., in their article on Durban, speak of "hidden services" that are offered to a community by a gardening project, such as leisure, social activities and learning about the democratic structure of a committee, but also "the creation of a self-confident, skilled and motivated group of producers". Teitel-Payne describes a similar effect: "When people become actively involved in creating solutions to food insecurity in their

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Mothers and children working together in the community gardens of Port Elizabeth (South Africa)



community, they feel less stigmatised." But they also learn how to "... develop their skills further ... [and how to] ... have a greater influence in making change".

Objectives can also change and/or expand over time. This is illustrated by this issue's article on Growing Home, a programme in Chicago, USA, originally set up to provide for the entry of homeless men and women into the job market via the experience of urban agriculture. The programme began with a focused socio-economic aim to return unemployed workers to the labour market (of the Englewood community). Now, together with other Chicago NGOs, it aims to strengthen food access and food security across the city. An interesting aspect of Growing Home is that it also seeks to combine different financing mechanisms in its business plan, such as projects, grants, income from sales and government subsidies, thus extending the project's multi-functional character to financial support from multiple sources. Similarly, the social model implemented by Toronto's Stop Community Food Centre was developed with the perspective of interconnectedness as an important conceptual foundation, linking food to

6 boys in one of the school gardens



income, health and agriculture. The article by Teitel-Payne further states that food security approaches focusing only on one or two of these dimensions are prone to failure. The Stop Centre's Urban Agriculture Programme is built on this assumption and unites production initiatives with education on environmental and social issues, amongst others.

MEASURING THE BUILDING OF COMMUNITY

The challenge lies in making the abovementioned *hidden* services explicit; but measuring changes and impacts is not that easy. The success of communitybased urban agriculture can often be seen through the simple observation of productive sites and satisfied participants. Indicators for the impact of gardens on social or community capital can be increased skills and knowledge, local leadership, the creation of relationships between people, improved communication and positive social change (Wang, 2006), which are recognisable in community meetings, in community leadership, community activism, improved living conditions and economic activity. Increasingly these indicators are being developed and incorporated in official government (municipal) policy, like the Millennium Development Goals.

Yet, it is these "hidden services", the lessvisible social impacts of urban agriculture on the community that are hardest to make concrete or capture in numbers. This can be a problem, as the current dominance of results-based management forces donor organisations and development workers both in the North and South to focus on assessing the results of their work through rigorous monitoring and evaluation.

Quantitative figures can capture amounts of food produced, measures of individual, household and community health, and increased school attendance and performance by once-malnourished schoolchildren. But how might one measure the increased self-confidence of community members developed through urban farming? Or the increased motivation of urban farmers to face the struggles of daily life? And with what criteria do we determine how much social capital is built in a certain community? Techniques of qualitative data gathering are essential tools in determining the outcomes of communitybased urban agriculture, as an accompaniment to quantitative techniques, but also as a means for urban farmers to tell their stories in their own words. The importance of making community urban agriculture sustainable over the long term also suggests that the documentation and analysis of an individual project should be longitudinal in nature.

Monitoring and evaluation in RUAF

The RUAF Foundation employs different kinds of methods to monitor and evaluate the outcomes and impacts of its "Cities Farming for the Future" programme, of which the Outcome Mapping methodology as developed by IDRC is one. The mix of methods used, as well as the measuring of results at different levels (outputs, outcomes and impacts), ensure a wide perspective on the changes brought about, but at the same time makes the monitoring system more complex. More information on monitoring and evaluation in relation to urban agriculture can be found on www.ruaf.org.

LINKING TO CITY-SPECIFIC NEEDS

When comparing the possible functional roles of urban agriculture, or the reasons it is employed to (re)build the community, many commonalities between cities in both the North and the South can be witnessed. Increasing food security and income, improved health standards, improved environmental circumstances and enhanced social relations are all motivations to start a project, whether it takes place in the North or in the South. Similarities between cities are evident when comparing any initiative's actual social impacts on the urban community where it is implemented, such as enhanced empowerment of the marginalised groups in the urban community and increased information and resource networks among community members.

The flow of rural to urban migration continues both within countries in the South, and across boundaries from developing to developed nations. The New Entry Sustainable Farming Project in Massachusetts, USA, for example, seeks to facilitate the entry of Asian and African immigrants and refugees into local agricultural markets. Such facilitation is rationalised by the fact that the New England region is losing its traditional farmers, and new farmers are needed to meet the increasing demand for locally produced food.

Although many similarities can be found, and while it is difficult to broadly compare livelihoods in different cities, some differences across North and South can also be noted. Urban agriculture initiatives in cities in developing countries tend to be characterised by basic survival, such as the project in Durban that provides orphans and vulnerable children with a school meal, or the urban poor in Gweru, Zimbabwe, who practise urban agriculture to ensure themselves three daily meals. In France and the USA, urban and periurban agriculture is strongly influenced by higher living standards, as seen in the articles in this issue that describe projects linking collectives of urban and ex-urban farmers to largely affluent local consumers wanting to reconnect with agriculture and its practices.

All in all, the challenge to develop and support innovative approaches to sustainable urban development is very pertinent whichever city one zooms in on. There are several reasons for the existence of urban agriculture and it is important to show its impact in relation to each city's specific mix of needs. A local government concerned about growing food insecurity or the exclusion of certain categories of the population might focus more on the

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Project Bairro Tatuaquara in Curitiba

social dimension of urban agriculture, while a city mainly interested in local economic development will perhaps focus on the entrepreneurial dimension of urban agriculture activities, or seek to encourage subsistence farmers to move into the market sector. Other local authorities may concentrate on the environmental dimension of urban agriculture, or promote a shift from high-input commercial agricultural production towards sustainable and multi-functional agriculture (Dubbeling and de Zeeuw, 2006). Linking projects to these specific needs and opportunities is important, and can best be undertaken in a multi-stakeholder environment, by an initiating organisation or group of organisations aware of these municipal objectives.

SUPPORTING COMMUNITY BUILDING

The examples of urban agriculture presented in this issue together offer a picture of urban farming that distinguishes it from rural farming beyond the obvious differences in setting. Community urban agriculture takes advantage of a significant characteristic of urban life, the close proximity and density of residents and the opportunities for collective action that this offers. Outdated perspectives that see agriculture as a strictly rural activity are changing.

Agriculture in an urban context faces different challenges than agriculture in rural areas. Challenges typical for the urban setting include restrictive or prohibitive policies on urban agriculture, the subsequent absence of institutional support, a higher diversity of members and heterogeneity of backgrounds, a large number of part-time farmers who are involved in a variety of income-earning activities and are thus difficult to organise (see UA-Magazine no. 17), high insecurity of land tenure (which most articles in this issue underline), pollution of environmental resources (or fear thereof) and subsequent restrictive measures, and finally a lack of external support (see Oelofse et al). These challenges are overcome in many innovative ways: the lack of productive land in cities, for example, is being addressed through the use of more intensive food production methods involving rooftop gardens, container gardening and hydroponics. Community residents are seeing the value in managing the immense amounts of urban wastes, recycling and composting, with urban farms receiving the output of these practices (more specific discussions on supporting innovative forms of urban agriculture will be found in the next issue of the UA-Magazine, as shown on the back cover of this issue). On the other hand, there are also specific (relative) advantages to city farming, like proximity to markets, opportunities for direct producer-consumer linkages, and closeness to centres of knowledge and sources of credit.

The different setting of urban agriculture



also necessitates different approaches and support avenues than are required for rural agriculture. In the US, while urban agriculture is not considered an illegal activity as it is in some southern nations, it is weakly supported by all levels of government. In some cities, however, community gardens receive federal block grant funds directed to municipal governments and designated for community development projects. This use of government money is an acknowledgement by these cities that urban gardening can indeed satisfy some of the community objectives often achieved through physical redevelopment. And the increased concern over global warming in both the North and South will make the environmental benefits of urban agriculture more evident to policymakers everywhere.

Small (2006) discussed the transformation process of urban farmers and their organisations from the survival level to a more commercial level. He distinguished four consecutive stages: from survival, through subsistence and livelihood (reinvestment and profits) to commercial (job creation). He argued that each of these stages has specific strategic development support needs. Clearly there are different social impacts and linkages to be made, which will vary across different cities. In their article on the southern Philippines, Holmer and Mercado carry this idea further. They note that for community urban agriculture to represent a successful model of intervention it must draw on the "existing but often unrecognised" assets found among its stakeholders, which are untapped due to their prior inability to access resources such as land and appropriate technologies without assistance.

Oelofse et al. underline the vital importance of external support for the sustainability of community gardens, especially when these gardens serve vulnerable and resource-poor groups, and they highlight the assistance offered by more affluent community members (inter and intra community support). The more vulnerable the members of the community are, the greater and fiercer the challenges will be. External support for urban agriculture, in the form of technical advice, training and inputs (e.g. related to soil fertility or crop diversity), or guidance on social aspects such as group dynamics, help these vulnerable residents utilise urban agriculture to improve their lives. Other criteria, mentioned by Oelofse et al., are strong internal organisation, continuity in membership, social cohesion (regular meetings), strong steering and coordination, availability of (financial) resources, capacity for investment, and ability to attract new members.

Support for community-based urban agriculture is lacking in a number of developing countries. In Durban, the political attention given to urban agriculture has been stimulated by the increased attention being paid to food security issues. However, this has not been translated into activities on the ground. In her article on experiences in Kampala and Nairobi, Rutt notes the important role that the municipal sanctioning of urban agriculture in Kampala plays in the success of projects there, as opposed to the added difficulties that the illegitimacy of it causes in Nairobi. The addendum to the article on Nakuru in UA-Magazine 16 (see page 43) illustrates confusion on legislation, but also the ongoing dialogue between policy makers and researchers on urban agriculture.

Other articles in this issue, however, present positive signs of municipal support. In Bogotá, urban agriculture was placed within the city's district development plan to address poverty and social exclusion. This suggests a valuable and effective strategy to obtain increased governmental support for communitybased urban food production. In essence the strategy entails taking advantage of the multi-functionality identified in this editorial and using urban agriculture as a vehicle to achieve stated goals of local and national governments, local community-based organisations, and global aid agencies. The example from Lima shows that private companies have a role to play here also.

While external support is indeed critical at the start of a community urban agriculture activity, its managers must look for ways for the activity to become self-sustaining over time. Conceptually, then, the strongest community projects are those that direct the community capital built through

the development of urban agriculture into appropriate strategies for its continuation. An entrepreneurial urban agriculture project, for example, develops the capacity of its stakeholders to successfully market products for revenue generation. Going further by developing value-added products extends the skills developed in getting a project underway into new levels of complexity, but also leads to greater reward.

BUILDING CITIES

According to Wang (2006) a healthy community "... is one that has high levels of social, ecological, human and economic 'capital,' the combination of which may be thought of as 'community' capital"". The challenge for communities in the 21st century will be to increase all forms of capital simultaneously. This means working with suitable partners in the private sector (see the Lima article), making human development the central purpose of governance, and more closely integrating social, environmental and economic policy (as the linkage to waste recycling in Cagayan de Oro, Philippines, illustrates).

This editorial is a prelude to many examples of communities that have taken up urban agriculture in order to enhance the quality of their own lives and strengthen the places where they live. Whether activities were self-initiated or created from the outside, it is clear that urban agriculture has enriched their communities in many different ways, even ways that were not envisaged from the outset. Among other lessons, the examples tell us that those initiatives that can utilise urban agriculture's inherent multi-functionality and ability to simultaneously build different community capital dimensions benefiting all involved - directly and indirectly - are likely to be more sustainable and effective. And those urban gardening projects that are capable of defining and pointing out the (social) impact they have on the community – whether through monitoring and evaluation or through other means - will likely build more valuable alliances with a wide variety of other stakeholders and mobilise multiple resources for continuation. City governments have a clear role to play in the strengthening of urban agriculture for community building as well as in the benefits hereof (e.g. by establishing a conducive policy environment). But it will take more time and effort from urban farming communities and their organisations to make these governments recognise that urban agriculture builds life skills, which allows participants to build communities and neighbourhoods, and thus also sustainable cities.

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Growing Home trainees at Su Casa community garden in Chicago



HIV and Aids affect all communities – both urban and rural. This article looks at how urban agriculture can be a way to integrate the HIV/Aids-infected and -affected households in a community. The article starts by highlighting some of the issues relating to HIV/Aids and their impact before presenting case studies that demonstrate how urban agriculture has been used to integrate HIV/Aids-affected households into communities.



Local food production contributes to mitigating the effects of HIV/Aids

HIV/Aids, Urban Agriculture and Community Mobilisation: cases from Zimbabwe

amilies affected by HIV/Aids tend to have higher expenses due to costs related to treatment of the infections. Meanwhile, family income tends to go down due to loss of strength and status of the HIV/Aids-affected family members leading to further socioeconomic deterioration.

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In their effort to try to cope with this situation, these families often also apply survival strategies that in the long run have negative effects on family livelihood and increase the vulnerability of the family. Although the presence of HIVinfected persons requires more food and better diets, in practice resource-poor HIV/Aids-affected families tend to save money by reducing food expenditures (since these constitute 50-70 percent of expenditures of poor families). Other survival strategies include: taking children out of school, young women becoming sex workers, reallocation or splitting up the family, taking loans to fill the gaps, etc. The consequence is deepening poverty and malnutrition, which make the remaining family members more at risk of becoming HIV infected. Young women are especially susceptible to contracting HIV/ Aids. In South Africa, Zimbabwe and Zambia, young women are three to six times more likely to be infected by HIV than young men, in part due to their subservient status in the household/ community and in part because becoming a sex worker is used as a survival strategy. Orphans are also particularly susceptible since they are likely to be more malnourished and more exposed to unsafe sexual behaviours.

URBAN AGRICULTURE AS A RESPONSE TO HIV/AIDS

Urban agriculture projects can make important contributions to mitigate the impacts of HIV and Aids at the individual, family and community level. Its benefits include improved nutrition of HIV/Aidsaffected families, savings on food expenditures, added income from the sale of surpluses, and community mobilisation to respond to HIV and Aids.

Nutrition

There are several reasons why local food production contributes to mitigating the effects of the HIV/Aids pandemic:

- HIV-infected adults and children have increased energy (10-30 percent) and protein needs (up to 15 percent) (FANTA-AED, 2004) and need a sufficient amount of vitamins and minerals to compensate for losses and increasing inefficiency of the body. However, most urban poor families find themselves unable to cope with the nutrition requirements of the sick members of their families and themselves due to income losses and lack of access to fresh and nutritious food.
- A person with HIV who is malnourished is likely to progress faster to full-blown Aids and finally to death. Adequate nutrition cannot cure HIVinfection, but it can substantially enhance the life expectancy and quality of life of HIV-infected persons. Balanced diets are essential to maintain body weight and muscle tissue, replace lost vitamins and minerals, and strengthen the immune system, which in turn reduces the person's susceptibility to co-infections, enhances his or her ability to fight infections such as

diarrhoea, TB, and respiratory infections, and delays the onset of full-blown Aids.

- Adequate nutrition also improves the response to treatment. Antiretroviral drugs (ARVs) are much more effective if the treated persons are well-nourished, which is normally not the case in low-income neighbourhoods. *"It is like building a house. If you have a roof but there are no walls and no foundation, the house is not very useful. If you include drug therapy but you do not have adequate nutritious food, you will not be able to fight the infection" (UN-Aids, 2001).*
- Hence, proper attention to enhancing access to nutritious food is a key to effective HIV/Aids mitigation programmes. Urban agriculture offers a very good opportunity for families affected by HIV/Aids (or others caring for them) to produce enough food to satisfy the nutrition requirements of the sick and themselves. Just providing nutrition education is not effective as long as food supply programmes are not sustainable.

Savings/income

HIV/Aids-affected families frequently turn to urban agriculture not only to provide food, but also to save scarce cash resources by reducing food and medicine expenditures (by growing their own food and medicinal herbs). It also provides them with an accessible opportunity to earn some income by selling the surplus produce.

Exercise, fresh air, the reduction of stress Exercise and fresh air, spin-offs of the food-growing activities, help to strengthen the immune system in the fight against Aids, TB and poor mental health, among other illnesses. Residues of agro-chemicals stress the body and may lead people with malfunctioning immune systems to many infections such as diarrhoea and intestinal problems. Hence, local production of organic food adds to reducing stress for people living with HIV/Aids.

Community mobilisation

Urban agriculture contributes in a number of ways to the mobilisation of communities against HIV and Aids, enhancing support to HIV/Aids-affected households and their integration in the community:

• Urban agriculture can be used as a strategy to provide an occupation to

high-risk groups, thereby reducing their vulnerability (e.g. it can prevent girls from entering into prostitution).

- Community agriculture is also a strategy to organise community groups and provide services to HIV-affected households in the community (e.g. soup kitchen for orphans or free distribution of fresh food and medicinal herbs to the most needy HIV/Aids-affected families).
- Community gardens are a learning ground for issues related to nutrition and health and caring for HIV/Aids patients.
- HIV/Aids patients (who are often socially isolated due to loss of selfesteem and social prejudice) can become reintegrated by working in garden allotments along with other community members who are not affected by HIV/Aids.

CASE STUDIES

The case studies below highlight some of these community integration and building mechanisms involving HIV-affected households.

New Dawn of Hope Community Gardens, Harare

The New Dawn of Hope gardens were formed by a group of HIV/Aids-affected households as a way of producing cheap but nutritional food whilst at the same time trying to raise funds for sustenance from the sale of surplus produce. The gardens started operating in Mufakose, one of the low-income areas of Harare in Zimbabwe. The group has been able to galvanise communities in Mufakose around urban agriculture. The HIV/Aidsaffected families have now been joined by other resource-poor community members who are keen to produce nutritional crops for their own consumption. The participation of other members who are not HIVpositive has removed the stigma from HIV-infected members. Other members of the community have benefited from the free lessons in nutrition offered by members of the New Dawn of Hope group. The group has also offered its services for free to people in other communities within Mufakose and the city of Harare who are interested in starting nutrition gardens involving the HIV/Aids households in their community.

Through urban agriculture HIV/Aidsaffected families gain improved access to organically grown, nutritious and fresh food. Such commodities are available now at lower prices since transport and handling are minimal. *Growing Positively- A handbook on Developing Low-Input Gardens –*

Snow John International 2005 New Dawn of Hope - Mufakose, Harare, Zimbabwe

Allotment Gardens, Bulawayo

In Bulawayo 12 allotment gardens were established by the city council in selected areas throughout the high-density (lowincome) areas of the city, e.g. West Park, Makoba, Mpopoma and Mabutweni. The beneficiaries of the garden allotments are HIV-affected households, the elderly, widows and the destitute. In order to avoid the stigmatisation associated with HIV, the gardens draw from a mixed group of beneficiaries as highlighted above. The size of each allotment garden ranges from 0.42 ha to 2 ha. Treated wastewater is used for irrigation. The availability of this water tends to be erratic for various reasons including breakdown of pumps, faulty taps and vandalisation of equipment. The garden allotments, which largely produce vegetables have contributed to local community development. The HIVaffected households feel less discriminated against as they work with other community members in their gardens. Mr. J.J. Ndebele, Bulawayo City Council, Tower Block, 7th Floor, Bulawayo.

School gardens, Harare and Bulawayo Since 2003, Action Aid International (AAI) has been stimulating the establishment of school gardens in order to improve and diversify the diets of poor vulnerable households affected by HIV/Aids. Local community volunteers and teachers are

Community gardens are a learning ground



trained in the specific nutritional and care requirements of people living with HIV/Aids as well as the establishment and management of low-input gardens for the production of green leafy vegetables and herbs (nutritional and medicinal), which are particularly important for people living with HIV/Aids. Food produced at the schools is provided to selected HIV/Aids households in the community.

An assessment of the project results has found that the benefits of the approach include economic returns, increased food security and nutrition as well as psychosocial benefits, such as increased self-esteem, improved group cohesion, decreased stigma, and increased community support for the HIV/Aids-affected families. Furthermore, the herbs produced in these gardens have been used for medicinal purposes, thereby improving the health of HIV-affected beneficiaries. Urban gardens are an essential part of urban livelihood systems, particularly of the poor and vulnerable.

Household gardens, Harare

The Zimbabwe Projects Trust (ZIMPRO) has been involved with HIV-affected households in Mbare, Harare, for some time. Initially they assisted families with hygiene kits. However, they soon realised that nutrition was an important aspect and had palliative effects on HIV-positive people. They therefore established gardens with over 200 HIV/Aids-affected households in Mbare. They call them nutrition gardens. Other (non-HIV-affected) households have also been involved in order to remove the stigma of the families working in the gardens. The gardening activities provide the platform for life skills training and a strong peer education component is built in.

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Integration of former Commercial Sex Workers, Gweru

The city of Gweru started a recycling and organic farming project as a way of rehabilitating and integrating former commercial sex workers (including those from HIV/Aids-affected families) into society. Some agricultural plots close to the dump were allocated to the group of over twenty where they practice agriculture using organic wastes salvaged from the dump. They grow a variety of crops including leafy vegetables, tomatoes, beans and maize. The surplus crops are sold and income shared amongst the group. *Gweru Municipality, 8th Street, Gweru Zimbabwe*

CONCLUSION

HIV and Aids pose challenges to individuals, communities and governments. The issues around HIV/Aids are complex and responses should be multi-pronged. Nutrition, stress management, treatment of opportunistic infections and poverty reduction all contribute to effective management of the pandemic. Urban household gardens and community food gardens on the grounds of community centres, schools, churches and vacant public land as well as institutional food gardens (health care centres, clinics, etc.) can make important contributions to mitigating the negative effects of HIV/Aids by enabling participants to improve their nutrition, reduce stress, save money and enhance their incomes. The gardens also mobilise community support, facilitate integration and help reduce the stigma.

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The Municipal Development Partnership (MDP) organised a three-day regional workshop from 21 – 23 March 2007, in Harare, Zimbabwe, with participants from East and Southern Africa. Participants discussed the findings of studies on mainstreaming HIV/ Aids and mainstreaming gender with the AMICAALL (Alliance of Mayors and Municipal Leaders on HIV/Aids) chapters from these regions, specifically focussing on issues related to HIV/Aids.

A report on the workshop can be found at http://www.mdpafrica.org.zw/hivwrk-shop2007.htm.

Main conclusions and recommendations of the 2004 Workshop on Urban agriculture and HIV/Aids

In 2004 the International Network of Resource Centres on Urban Agriculture and Food Security (RUAF Foundation), the EU-ACP Technical Centre for Agricultural and Rural Cooperation (CTA) and the South African NGO Abalimi Bezekhaya organised a workshop and study visit on urban gardening projects at the household and community level for 30 participants from 10 countries in Southern Africa.

The **main conclusions** of this workshop regarding the relation between urban agriculture and HIV/Aids are the following:

- 1. Adequate nutrition cannot cure HIV-infection, but it can substantially enhance life expectancy and the quality of life of HIV-infected persons. Adequate nutrition is also essential to optimise the benefits of antiretroviral (ARV) treatment.
- 2. Many HIV-affected households find it difficult to follow the nutrition recommendations provided to them due to poverty and lack of access to fresh nutritious food.
- 3. Food aid is not a sustainable solution.

- Local food production projects enhance access to nutritious food at low cost. Such projects are especially effective during the early stages of HIV-infection before the disease develops into stages requiring ARV treatment.
- 5. Communities are willing to work hard to provide food to HIV/Aids sufferers and other affected community members as long as they receive a subsidy to enable initial investments. Participants normally provide their labour for free with the hope of receiving food and income in the future.
- 6. No large tracts of land are needed for successful urban agricul-

ture projects (20 m² of land per family already improves nutrition substantially, while 150 m² per family can provide most of their vegetables year round). Many community groups have successfully acquired access to land by approaching local councils (public land), or by acquiring land leases from local schools, hospitals, clinics, community centres, etc.

 Next to higher food intake / better diets and savings on food expenditures / raising of complementary income, urban agriculture projects also lead to community building, reduction of stigma and improved quality of life (less stress, greater self-esteem, social inclusion, skills development) for people living with HIV/Aids.

Recommendations: The participants concluded that the social and nutritional impacts of local food production initiatives can be greatly enhanced in the following ways:

- A well-coordinated multi-stakeholder approach should be followed involving NGOs and community centres (lobbying, group and leadership development, technical and management training, monitoring, problem solving), the national health department (link with conventional HIV/Aids programmes, promotion of local food/ herbs production by health workers, care and nutrition training, etc.); municipal council (provision of land, compost, access to water, etc.) and the agriculture department (provision of irrigation equipment, seeds and seedlings, training/technical advice).
- 2. It is also important to increase *access to vacant public and private land* in or close to low-income neighbourhoods (under power lines, on grounds of community centres, schools, churches and factories) for community gardening by HIV/Aids-affected families and other vulnerable households.
- 3. In order to prevent stigma and to overcome the problems related to the limitations of HIV-infected persons in providing labour on a regular basis, it is recommended wherever possible that beneficiaries work in groups and share labour tasks. Urban farming groups should be open and accessible to all poor and vulnerable households in the neighbourhood, rather than restricted to HIV-infected households. Community-driven gardens have stronger social benefits than home gardens, since they contribute to community building and the individual gardeners can expect more support from fellow gardeners during critical periods and in times of illness. The group undertaking has a high therapeutic and instructional value for the participating people living with HIV/Aids. The community garden also makes it easier to jointly buy tools and inputs at cheaper rates and to market surpluses. One of the disadvantages of the allotment garden for HIV-infected households may be that they have to invest time and money in meetings and in maintaining the joint infrastructure of the allotment garden. Compared to home gardens, the allotment garden may also need more investments in fencing, irrigation infrastructure, sheds, etc., which makes it more difficult to get started and increases the participants' dependency on external sources of funding.
- 4. Existing community gardens can also be used as local demonstration plots, training centres and seed production units in order to promote home gardening in available micro-spaces by vulnerable households (on home plots, in containers, on the roof and in small sheds for small animals and mushrooms, etc.). Starter packages can also be distributed to the participating households. In addition to those noted above, home gardens also have the following advantages: they are easier to protect from thieves; require less travelling time; farming activities can be performed at the most convenient moments and are more easily combined with household chores

and resting; and each family can grow the crops and raise the animals that they prefer. Storm water harvesting and reuse of household waste and grey water can easily be practiced. However, the amount of food produced in home gardens is often small due to the very limited space available for farming activities around the homes in low-income neighbourhoods. Although, with techniques such as trench bed gardening, use of vertical spaces, container farming, hydroponics, etc., good results can be achieved. Since many urban people, especially male adolescents, have a negative attitude towards farm work, it is important not just to promote plot gardening (which has a strong association with traditional field farming), but to involve the youth in more "modern" types of urban micro-farming (e.g. mushroom growing, organic hydroponics, growing and processing medicinal herbs, vermiculture, aquaculture, raising small animals, etc.) as well as in non-farming activities related to the garden centre like running a soup kitchen, a visitors' service and restaurant, arranging for marketing and transport, waste collection and production of compost, etc. In this way the garden will become a vibrant centre of a variety of agriculture-related, food and income-earning activities for people with varying interests.

- 5. Emerging gardening groups in low-income neighbourhoods require *advice and support* for group formation and management, training in basic gardening techniques in combination with nutrition, cooking and HIV/Aids training as well as the initial *provision of starter packages* (especially seeds and compost and simple tools) preferably in the form of a group revolving fund. Regular visits during a prolonged period of time have proven to be of critical importance (problem solving, reinforcement of initial training).
- 6. External financial support for *investments in water harvesting infrastructure* (gutters for rainwater collection from roofs, drains to divert street storm water into water tanks in the gardens, wells) or a supply of water from other sources at a subsidised rate is needed in order to lower recurrent costs of local food production. Water-saving irrigation (drum, bottle and drip irrigation) and cultivation practices (ridging, mulching, no till, use of compost and teas, etc.) can reduce water needs substantially.
- 7. In order to overcome apathy and low esteem among HIV/ Aidssufferers and -affected households and to create a spirit of community cooperation and volunteerism it is important to build in mobilisation of group resources and savings. This will develop feelings of ownership, group discipline and accumulate some money for investments needed for the next season (seed, compost, etc.). Training in joint decision making, action planning and monitoring, conflict management, lobbying and resource mobilisation are also important. The inclusion of "celebration" ("ilima") type of activities helps enhance group building. It is also very important to develop *linkages between gardening groups* so that they can learn from each other (horizontal action learning) and can develop partnerships (joint buying of inputs or selling of surpluses, joint lobbying, etc.). Formalisation and registration of community groups may enhance the group's access to resources (e.g. subsidies), but this should not be done in the initial stages nor be the main driver of group formation.

The full proceedings plus the papers of the workshop and study visit are available on: http://www.ruaf.org/node/743.

The fact that handicapped children are involved in urban agriculture is an innovation



Community-Based Urban Agriculture in Two East African Capitals

Urban agriculture is commonly a solo endeavour practiced by individuals and households in search of fresh food. The benefits of urban agriculture activities are well-documented, so the search for ways to realise its valuable societal contributions is a vital issue particularly within the developing world, where urban farming is frequently the main livelihood activity and has the highest potential for impacting daily lives.

ne of the ways that city farming may contribute exponentially to a developing urban centre is through the collective action of farmers. Repeatedly, groups will form when community members are faced with an overwhelming social crisis or need that is felt by a number of a neighbourhood's residents. Shared struggles give birth to teamwork and cooperation. In two capital cities of East Africa, Kampala, Uganda, and Nairobi, Kenya, evidence of the achievements of community-based urban agricultural ventures abound. This article focuses on creative farmers and their achievements, which came about through hard work and collaboration. Furthermore, it will elucidate some of the distinct differences experienced by farmers and farmers'

Rebecca L. Rutt

International School for Humanities and Social Sciences, Universiteit of Amsterdam, The Netherlands Schwyrutt@hotmail.com groups based on the legal or illegal status of urban agriculture. Illegality can often be equated with a lack of confidence in urban agricultural activities due to the greater risks involved.

This article presents several community-based agricultural endeavours in Kampala, Uganda, and Nairobi, Kenya, as encountered in mid-2006 during research on local innovation in urban agriculture by the author. Involving marginalised groups such as women, physically and mentally disabled as well as at-risk youth, these projects have revitalised impoverished areas and improved the overall health of people in many small neighbourhoods.

KAMPALA, UGANDA

Now that it has been legalised (as of 2005), urban agriculture in Kampala, Uganda, has become a valued addition to the urban livelihood mosaic, and it has been enhanced by governmental recognition and supportive urban policies. Kampala's farmers are now better able to unite in order to address common problems and needs. Alice Tebyasa of the Kawempe Division of Kampala is a community leader and organiser of one of many successful collectives.

In 1997, Alice was elected councillor. In this role she searched for a way to involve her female neighbours in some kind of agricultural activity. She invited extension workers, poultry, fishery and agricultural experts to participate in a workshop to educate women in the community. The women then prioritised their personal needs and abilities and came up with the idea of establishing a catfish pond. This idea was chosen because the pond would provide a nutritious dietary supplement for the neighbourhood families as well as profits from the sale of surplus catfish. The Chairman of the Local Council 1 donated the land, and over a six-month period the women constructed the pond.

About 900 catfish, each with a market value of 5,000 Shillings (USD 3), are now harvested every seven months. The capital for this endeavour originated within the community and maintenance costs are shared, including upkeep, feed and eggs. If a member is unable to pay her portion she will earn less when the profits are divided. Alice considers the community and social improvements to be the most important aspects of the project. Forty women and two youths (boys who are paid a small wage for their help) maintain this venture. She has noticed a change in the community atmosphere. Women are better able to negotiate with their husbands and there is a heightened sense of cohesiveness. She notes that people are not leaving for "greener pastures", but rather have made an investment and seek long-term growth and development.



Gardening activities by students of the school for disabled in Kampala

Women have become more empowered, are able to contribute to household costs and school fees, and in general are more active and organised. One may wonder what the husbands of these women think about their activities. Alice advocates the project in discussions with the men, and she notes that some of them are "feminists and love the idea". "Men now see their wives as resources." Some of the families were struck most by their increased ability to pay their children's school fees. Income generated from the fish pond has eased this financial burden, resulting in extended education for their children. The families also value the training and cooperation aspects. One further shared benefit, which is not directly linked to the fish pond but rather to the group's overall success, is a donated water tank. Previously, the community did not have water access of this kind, and now the water can be distributed for irrigation and pond maintenance.

Other local groups and communities have tried similar projects in the wake of the successful fish pond, yet they have not achieved the same results. The secret to Alice and her community's accomplishment is "openness". They refuse outside funds and government grants whenever possible in order to maintain a nonpoliticised atmosphere. This also allows a greater sense of ownership in which each person is a "stakeholder" and has a deeper commitment to the success of the project. The group even avoids holding meetings during elections in order to allow individuals their political preferences and to circumvent discussion on the hot topic. The group wants to come together when the only thing on their minds is mutual progress and development. Alice's future plans include expanding her market as well as increasing the pond's capacity in order to increase the amount of fish each family can receive per month. This is testament to the project's greatest objective: improved nutrition. Currently, each household receives one fish per month. In addition, each household receives 50,000 Shillings (USD 30) every seven months from sales.

Other community-based urban agricultural cooperatives in Kampala can be found within area schools. Thanks to a project promoting the cultivation of orange-flesh sweet potatoes from 2004 to 2006, in which schools were utilised by FARM-AFRICA as training centres to reach local farmers, relationships were forged and ideas generated for the continuation of cooperation. In the Lubaga Division, the Kampala School for the Physically Handicapped is home to 100 youths who suffer from both mental and physical disabilities. The school maintains a productive garden that contributes to feeding the student body. The pupils range in age from 6 to 24 years and are divided into eight groups. All of the groups participate in some way in the growing of crops and the maintenance of the gardens. The youngest learn about agriculture through observation. Older students maintain class plots, and during the wet season they grow cabbages, carrots, kale, maize, amaranths, and the popular orange-flesh sweet potatoes. The harvested crops go directly into the school nutrition programme, as students reside there permanently.

Agricultural extension agent Pross Owino commented, "Just the fact that handicapped children are involved in urban agriculture, with the weeding and planting, is an innovation! Being able to grow their own food, means that some day they will be able to earn an income and feed themselves, all because of a skill they learned in school. "The community benefit of this programme must be viewed in terms of the future of these children. In Uganda, physically and mentally handicapped people have a "very, very low chance" of finding employment in the formal sector. These disabilities severely limit their opportunities to achieve stable and secure adulthoods. Florence Tweyambe, a teacher at the school. explained that urban agriculture is an integral part of the school curriculum because it will enable the students to support and feed themselves in the future. They may eventually be able to sell the surplus, and they therefore practice selling techniques with the teachers. They will also have a greater chance of staying healthy and less likelihood of relying on begging or worse for survival. Some of the difficulties the school experiences include land restraints and insufficient labour. Some of the garden maintenance is too difficult for the children; therefore the teachers are obligated to take part. When even they are unable to perform certain necessary activities, such as tilling the soil, they hire outside help and this can become expensive. Nevertheless, the benefits do outweigh the costs.

NAIROBI, KENYA

Urban agriculture is a popular activity in many if not all urban centres of the country, but is not always allowed. In the capital city of Nairobi, community-based agricultural ventures not only provide food but also contribute to youth employment, area safety, and generally enhance the city's productive capabilities.

For eight years, the Mathare Youth Foundation Centre has run a communitybased agricultural project in the slums of Mathare. The project is comprised of 15 young men between the ages of 20 and 30, who used to be petty thieves but are now prosperous farmers and have thereby regained the respect of their neighbours. The Foundation provides a stable income for the young men through crop sales to the local villagers. This money allows them to attend evening adult education courses at the Mathare Hope Achiever Adult Education. With school fees taken care of, they have turned their lives around completely. *"We used to mug people"* in the village. We came together to change that life, and also to support each other," says Chairman James Karaoke, age 26.

The farm, which includes around ten goats for meat and six dairy cows, and which produces kale, spinach, and many other **Rebecca** Rutt



Tebyasa fishpond in Uganda

local and exotic vegetables, is located on what was once a regional dump. The land is now fertile and productive, revitalising this part of Mathare and providing a fresh source of food to the community. In addition, it has eliminated the idleness (and joblessness) of some local youths, thus helping them steer away from a life of crime. Some of the problems experienced by the Foundation include struggles with the local gangs. Some of their counseling programmes had to be shut down due to gang resistance to positive change. Gangs also occasionally steal their goats and crops. Other issues arise from the illegal status of urban farming and livestock keeping in Nairobi. When the City Council threatened to confiscate the farm's cows, the group successfully appealed to the officials, telling them, "We don't want to *mug people!"* The Nairobi City Council then told them to keep their animals where they are not visible and the group has tried to follow this rule.

Finally, the farmers fear they might lose their land. Father Frederick from the neighbouring Catholic girl's school, St. Theresa's, gave them the initial idea and support, including the first acre of land, to get this project up and running. They have been expanding slightly, and some neighbours have grown jealous of their success, even though it has been achieved on previously wasted landfill space. They also lack some inputs such as water pumps.

CONCLUSIONS

The uncertainty faced by urban farmers in Nairobi are in sharp contrast to the confident standing of Kampala's community groups. The catfish pond and other community-based agricultural projects visited by the researcher in Kampala receive clear rewards such as land grants

provided by government authorities. Private organisations also commonly provide support to urban farmers who use sustainable practices. The Heifer International Project, for example, is active in Kampala offering not simply dairy cows to members but also training for hygienic livestock keeping in the city. The support, training and rewards successful projects receive can only occur once leading authorities recognise the benefits of, or legitimise, urban farming within their urban centres. Legality is the crucial element for the enhancement of community-based agricultural endeavours, allowing for specialised, progressive urban agriculture policies and strategic support mechanisms. With regard to policies, de Zeeuw et al. (2006) commented that "In this way, municipal policy makers and support institutions can substantially contribute to the development of safe and sustainable urban agriculture." Although some of Nairobi's urban farmers' collectives have stood up to local authorities throughout the years with various degrees of success, it is still possible that everything could be taken away from them one day. Legitimisation, promptly followed by legalisation and well-formed policies, will encourage these commonly poor farmers while significantly augmenting their returns.

Introduction to many farmers' groups within Kampala and Nairobi was made possible thanks to kind, helpful extension staff provided by the local governments in both cities. In Kampala, the activities of these specialists were clearly legal while in Nairobi the existence of governmentemployed agriculture and livestock professionals was paradoxical. Although urban agriculture is illegal, Nairobi (unique in Kenya as a municipality, capital and province in one) has provincial representation of the Ministries of Agriculture and Livestock and Fisheries Development. Indeed, these bodies have extension agents on staff and as one employee explained, "We have to justify our activities with the farmers, so we focus on the safety of the consumer." Regardless of the reason, their activities help Nairobi's urban farmers daily by improving their technologies and practices.

Urban agriculture provides an excellent means of social inclusion for many marginalised sectors of society. In the stories above we see the empowerment of poor women, improved futures for handicapped youth, and at-risk young men who have turned from a life of crime to a life of farming. Collectives not only offer a way out of poverty but also allow farmers to build up social capital in the urban environment. Stronger examples of community-based urban agriculture will be found in locations where its contributions to the city as a whole are recognised, where it is permitted by the government and supported by active NGOs and other regional bodies. The examples described above are testament to the life-changing possibilities of community-based urban agricultural projects for women, youth and those who suffer from mental and physical disabilities. Furthermore, urban farming collectives can also provide a major contribution to families afflicted by HIV/Aids. With a healthier community comes peace and prosperity. These examples may provide inspiration for other individuals to unite, regain their sense of community and improve their lives through empowerment and selfdetermining cooperative action.

Acknowledgements: I would like to thank Dr. William Critchley of the Centre for International Cooperation at the Free University, the Netherlands, Onyema Onwuka, Associate Expert at the United *Nations Centre for Regional Development* Nairobi, Ronald Lutalo and the staff at Environmental Alert in Kampala and PROLINNOVA Uganda, and extension agents Pross Owino of Kampala and Josephine Wandaho of Nairobi for their support.

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Targeting Socially Excluded Groups: community gardening in KwaZulu-Natal, South Africa

The multi-functionality of urban agriculture makes it a widely practised activity in the townships surrounding the city of Durban, South Africa¹. In Mpumalanga Township, due to the lack of land for small-scale agricultural production in the area, community gardening in the few available plots within the township has become a popular activity that provides community members with a number of ecological as well as community services.



Cultivation outside the perimeter of Sizamimpilo Community

ince its inception in the sixties, Mpumalanga Township has been strongly influenced by the prevailing political situation in South Africa. In the early eighties, many political and community organisations existed in the township. However, in the late eighties and early nineties, escalating political violence and unrest prior to the transition to democracy in South Africa had a marked effect on the socio-economic environment and the infrastructure of the township (Mosoetsa 2004). Following the transition to democracy in South Africa, and a period of national economic stagnation, the challenges faced by the community were, and still are, of no small order.

In response to the poor state of affairs, a local NGO which has operated in the township for the past decade facilitated the establishment of a number of community gardens in the area in the late nineties.

Myles Oelofse^a, Raymond Auerbach^b and Andreas de Neergaard^a ^a Department of Agricultural Sciences, Faculty of Life Sciences, Copenhagen University, Denmark ^b Rainman Landcare Foundation, South Africa Myles@life.ku.dk (Corresponding author) Community gardens, often typical for urban agriculture activities, were seen as a multi-facetted approach for improving the livelihoods of township inhabitants. The primary goal of the gardens was to help develop resource-poor local communities, focussing on issues of food security, sustainability and poverty alleviation. In addition, the process of establishing and maintaining a community garden in itself was seen as a vehicle for rebuilding community relations and self-confidence, and the establishment of the gardens was undertaken as a participatory exercise (Auerbach 1999).

A study of the community gardens was undertaken in 2004/5 to evaluate the impacts of the project, both with regard to the ecological sustainability of the agricultural practices as well as livelihood impacts. The study included five of the 28 gardens which had been established in the preceding five to seven years. The main focus was on the agricultural practices of the community gardens, however it emerged as the study progressed that, over and above the agricultural aspects, the gardens fulfilled many other community functions. Therefore, in accordance with the topic of this issue, this article will elaborate on these and some of the challenges faced by periurban farmers in Mpumalanga Township.

The five community gardens investigated have achieved widely varying degrees of success. The continuance of some gardens is under severe threat, whilst others have flourished to become well-established entities providing members with suitable facilities for vegetable production as well as 'hidden' community services such as leisure, social activities and learning about the democratic structure of a committee. To what can these disparate results be attributed? Let us explore some of the criteria which have been pivotal in ensuring the continued functioning of some of the gardens. Since their establishment, when they received guidance, farming implements as well as fencing and fertiliser, they have received little external support. Food security, amongst other issues, has received increased political interest in urban agriculture at the local and provincial level; yet good political intentions have yet to produce results in the field. The NGO which helped establish the gardens attempted to make the gardens self-sufficient but was unable to provide much material support. It now concentrates more on training organic farmers. Thus, in the face of limited external support, community gardens with a strong structural organisation (a community garden committee), often steered by more resourceful members of the garden in question who ensure dayto-day functioning of garden activities, are the most sustainable – that is, in the sense that the community garden is still able to provide members with a basis for producing vegetables as well as fulfil its function of providing community services.

Broadly speaking, members of the community gardens can be classified into various social groups with varying degrees of livelihood security ranging from the distinctly vulnerable to a confined group of much more resourceful participants. Firstly, there is a vulnerable, resource-poor group consisting primarily of femaleheaded households reliant on government support, for whom vegetable production from their garden plots provides an important contribution to household food security. Gardeners in this group are either unemployed (seeking employment) or oldage pensioners whose households rely on one governmental pension or social grant. At the other end of the scale, most gardens have a few resourceful members, most of whom are old-age pensioners with sufficient resources and resilient households. Successful examples of community gardens were typified by the presence of such more resourceful community members who can be considered the main driving force behind the community gardens (one of whom in an interview described himself as an altruist!). Therefore, a pivotal element of the sustainability of community gardens is the influence of such members, who together with other elderly members also provide constancy in the membership. These members are important because, in contrast to more opportunistic members, they provide necessary stability for the community garden.

This can be illustrated by providing an example of such a community garden in Mpumalanga Township, namely Sizamimpilo Community Garden, where the 36 members of the garden cultivate a plot of land of approximately 0.75 ha. The garden is popular and even areas outside the fence are cultivated. The garden is structured as an official organisation, which consists of a committee responsible for day-to-day functioning. The committee meets on a weekly basis and ensures that fertiliser inputs are purchased regularly. It also promotes the use of compost and mulch. An important factor to note is that two of the members of the committee in Sizamimpilo are currently taking a course in organic agriculture at



Winter in Sizamimpilo community garden: garden plots next to the school playground

a local college (run by the same NGO). Traditional knowledge of agricultural practices is confined mainly to the production of cereals and non-intensive vegetable production; therefore the dissemination of knowledge is a very important aspect in enhancing future gardening practices.

In periurban settings, land availability is a typical constraint impeding the development of agricultural activities. In Mpumalanga Township, this constraint is partially overcome by using school yards as community gardens. Sizamimpilo garden is located within the boundary of a school yard and has a good, cooperative working relationship with the adjacent primary school. The school has a few plots of its own, which besides being used for food production also form part of the curriculum. Garden plots can be used in many aspects of teaching such as mathematics and science and can also help improve agriculture's image among the younger generations. In the headmaster's words, teachers are no longer sending the pupils to weed the garden as a punishment, but to educate and encourage them in horticultural activities.

Community gardens that do not have a strong committee or any committee at all face a number of challenges, and they miss out on the community services such gardens can be expected to provide. One of the gardens in the study, also located on a school's property, consists primarily of resource-poor households. Whilst members meet once a week, the garden does not have an official committee as there is nobody who could steer it. Therefore, due to lack of coordination, or perhaps rather lack of resources or facilitation, what was originally a community garden has become a field where various people cultivate a few crops independently. Granted, they do meet in small groups to discuss pertinent issues, but the benefits of functioning as a community garden have been foregone. The benefits of functioning as an entity could have ensured that various fundamental structural and functional aspects of the garden would be maintained, such as a water connection and fencing.

Produce from the gardens, primarily leafy green vegetables, provides a healthy dietary supplement for the local community. Vegetables are either consumed by the gardeners themselves or given to neighbours. Therefore, income generation from the sale of garden produce is minimal. The major challenges facing community gardens in the area are primarily of a financial nature - at least in the short term. As is common when dealing with marginalised groups, their capacity for investment is low. For example, user fees, which cover basics such as seed and water, are often not paid. The resulting lack of seed can prevent planting whilst a lack of water will make vegetable production impossible. In such cases, support from more resourceful members is vital. Whilst payment for water connections in the study area is not always undertaken, availability is also subject to municipal leniency or poor control.

For some community gardens, another major challenge is recruitment of new members. For many, cultivating a garden plot is an activity undertaken when there are no other viable livelihood alternatives. The moment a job opportunity comes along, many understandably neglect their garden plots; however, this negatively affects other members and garden morale.

Continued on page 18



Just like other cities in the country and around the world, Bogotá, the capital of Colombia, is undergoing rapid population growth leading to more pronounced social inequalities. In 2005, this city of approximately 6.8 million people had a poverty rate of 38.5 percent, and most of the poor were suffering from significant nutritional deficiencies due to the lack of access to food in the necessary quantities and quality.

There is always space for plants

Promoting a City without Hunger and Indifference: urban agriculture in Bogotá, Colombia

ardín Botánico de Bogotá

n an effort to improve the population's standard of living, and as part of its social policies, the current municipal administration - led by Mayor Luis Eduardo Garzon - implemented a district development plan called "Bogotá without indifference - A social commitment against poverty and exclusion". This plan encompasses a number of programmes, including Bogotá Without Hunger, which involves a number of activities intended to improve the nutritional status of vulnerable groups in the district. One of its main initiatives is the urban agriculture project led by the Jose Celestino Mutis Botanic Garden.

Claudia Marcela Sánchez, Jairo Andrés Silva and Rolando Higuita José Celestino Mutis Botanic Garden Marcesanchez1@yahoo.es This initiative recognises the practices of the residents and encourages growing crops in urban areas as an alternative source of food for self-consumption, in addition to promoting environmental conservation, the strengthening of the social fabric and the appropriation of land through citizen participation.

In general terms, the project's activities are aimed at:

- complementing basic biological research with applied research in an urban context, for the sustainable use of some native plant species with high nutritional value;
- carrying out exchanges of agricultural knowledge and know-how using clean technologies in spaces called Educational Nuclei with the communities of the city of Bogotá;
- promoting environmental education initiatives to improve awareness and healthy habits and encourage the consumption of food with high nutritional value;
- promoting participatory community alliances that can strengthen urban agricultural activities and neighbourhood ties, and thereby contribute to a better quality of life.

Bogotá is one of the pilot cities of the Cities Farming for the Future Programme (CFF) of the RUAF Foundation, and implemented in Latin America and the Caribbean by IPES -Promotion of Sustainable Development. As part of its activities, a local team made up of the Botanic Garden and the University of Rosario is developing a participatory diagnostic assessment of urban agriculture in order to identify and analyse the stakeholders, describe the legal and regulatory framework, identify available spaces and prepare a situational analysis of urban agriculture and agriculturalists. The study area encompasses the Bosa Central area, located in Bosa, one of the poorest districts of Bogotá. By the end of 2007, it is hoped that there will be a multi-stakeholder alliance made up of various institutions and civil society organisations interested in urban agriculture along with policy guidelines that promote urban farming as a permanent activity in the Capital District.

URBAN AGRICULTURE IN BOGOTÁ

The urban agriculture project in Bogotá began at the end of 2004 and has made it possible to implement a wide variety of activities in applied research, thereby promoting local know-how and improving the quality of life of the vulnerable communities of the district.

Applied Research. This is one of the central activities of the Botanical Garden, which carries out basic research and transforms it into applied research, focussing both on native species (quinua, amaranth, cubios, hibias, chugas, etc.) with high nutritional value which are being reintroduced to people's diet, as well as traditionally consumed exotic species (lettuce, spinach, carrots, gooseberry, etc.). Research includes the use of different containers and alternative substrates, which is very necessary in the urban context. Currently, 60 edible species are being studied.

Nuclei of education and knowledge exchange. The techniques of raising crops in containers and in the ground that come out of the research are transferred to the project's target group through the educational nuclei that exist throughout the city. It is important to highlight that in addition to training, a rich exchange of know-how takes place with the participants, who have a vast amount of knowledge about traditional agriculture, often stemming from their rural origins. To date, there are 124 educational nuclei operating throughout Bogotá, and more than 31,000 people have been trained, including over 1,000 urban farmers in the city and many people with great potential and interest in getting involved in the activity.

The nuclei also work, both theoretically and practically, on various issues related to agronomic management, the application of clean technologies (organic waste management, the collection of rainwater, the use of alternative energies like solar), citizen participation and the construction of networks. The latter are built through exchanges of know-how among neighbours and people from other neighbourhoods and distant parts of our city, as well as through visits to other interesting urban farmers, who offer them new ideas on how to improve production or local exchange. To date, more than 50 neighbourhood and local exchanges and tours have taken places, which have been very helpful and useful to the beneficiaries.

WHO ARE THE BENEFICIARIES?

A vulnerable existence is one characterised by one or more of the following factors: a high level of economic dependence, a lack of housing, malnutrition, a lack of education and training, impossible access to health care and living in settlements that are environmentally at risk. Vulnerability quickly leads to poverty, and for that reason, the project's activities seek to influence the causes of poverty and not its effects. As a medium-term strategy, urban agriculture training is planned and carried out in vulnerable communities. Included in this vulnerable population are, among many other groups, women heads of household, prisoners in various penitentiaries in the city, people with HIV, the displaced¹ and the reincorporated², and students.

Despite the low levels of participation registered in many sector-specific programmes and projects, the urban agriculture project is one which enjoys relatively high levels of permanence and replication of the activities learned about during the trainings. The methodology of intervention is simple. Initially, the project identifies the local resources possessed by the population, and then encourages the adoption of innovative strategies which seek to solve or complement existing nutritional needs. The project's activities promote the alternative production of quality food by linking traditional and scientific knowledge, which is a key aspect of the project's approach. This allows the community to gain recognition in the city, and for its knowledge to be valued.

Among the different experiences with specific population groups, one that stands out is the work done by NGOs that trained people with slight mental retardation, deaf-mutes and people with Tourette syndrome aged 26 to 61. With this group, training efforts included the planting of different kinds of produce to create a large salad. The intention was also for the participants to forge relationships through the activities without forgetting what has been learned, which proved to be a difficult and challenging task.

At Buen Pastor – a prison facility of the National Institute of Penitentiaries of Colombia (INPEC) – work was done with different groups of women, including maximum security inmates and others soon to be released. In working with them, it was possible to lower their anxiety and the levels of aggression and conflict that exist among those living together in a penitentiary. In some cases, it was even possible to arrange it so that the time spent working counted towards a reduction in the sentence. Many of the women expressed their desire to replicate the experience in their homes once they are released. Urban agriculture practices offered them the option to reflect on their lives, and on what they can do when they are out of prison. Similar experiences took place in the La Picota and La Modelo penitentiaries.

Work with older adults (people over 60) has also taken place at most of the locations, and has led to better health thanks to the participants' improved outlook and feeling of being useful and recognised for their knowledge of agriculture, "....working in the garden made me feel alive and worth something...." said one of the urban farmers.

Another group the urban agriculture project in Bogotá focuses on is people who are HIV-positive. Under traditional protocols, they only receive care, and are treated as passive objects rather than as subjects of their own growth and change. However, through Participatory Action and city farming practices, they are able to develop their potentials as protagonists in their own lives, where co-responsibility and the joint completion of tasks are very important achievements.

"A friend from the group of HIV-infected invited me to participate in the urban agriculture course, and I liked it. My sister helps me take care of the plants; she has a physical limitation and this work is a distraction for her. When the family earns income, we all decide what will be done with it; there is no discrimination here. I am from Tunja (a small city); I always lived in the city and never had anything to do with agriculture. I was a hairdresser but currently the salon is closed. I don't belong to any other groups in the area, because there are complications and I prefer to live my life peacefully."

Manuel, urban farmer – person living with HIV/Aids.

The reincorporated population, people who have participated as combatants in the internal armed conflict, has had a special place in the project. The work done with young people from 12 to 19 years old, who have experienced the horrors of war first hand, has been one of the most difficult undertakings so far in the project. Their memories of their places of origin – mostly rural – are brought to the surface through practicing urban agriculture. The person leading them has to modify the design of the trainings to fit their specific needs. The participants now live in the big city and are being trained together with people from the community rather than separately, which provides them with more support as they reintegrate themselves into civilian life.

The large displaced population resulting from the internal conflict and the migrations caused by the poverty gripping many areas of the country possesses a wealth of agricultural knowledge and know-how which is often put into practice when they get to the city. This provides them with a link to their place of origin. For this reason, many of the people who have been farming in the city for years feel affirmed when project specialists talk to them about an issue they know a lot about. This affirmation leads them to reconsider their ideas about the area in the city where they live (often in very difficult conditions), where rural is not seen as backwards, but rather as a way to improve their living conditions. Urban agriculture thus promotes greater urbanrural linkages.

"Urban agriculture is very satisfying for me. They have taught us a lot. We were not doing anything, I was very bored and this farming makes us happy. When I didn't have anything to do, I would get nostalgic.... because I was used to working. Now, with my co-workers, we plan what we are going to do on our little plot. I think that with this, I can move forward and teach more people what I have learned.... it seems like a great idea to me to farm in the city, because the crops are in the house or very close. I wish everyone would grow crops because a lot of food would be produced.... I, at least, have made a lot of products like compost and earthworms, which I can sell and with that income buy things that we need in the house. I am happy to be farming with a group; one works better as part of a team.

Ruben, urban farmer – displaced since 2002 One of the outcomes of the programme is that the population has begun to apply the knowledge shared through the education nuclei. The fruits of their actions have begun to influence their way of seeing the city, of building it and living in it, despite the difficult economic conditions they endure.

ENDNOTES

¹ A displaced person is any person who has been forced to move within the national territory, abandoning his or her residence and/or habitual economic activities, because their lives, their physical safety, security or personal liberties have been harmed mainly due to internal conflict and violence. The project also works with people who have been economically displaced from their region. ² Reincorporated people are those men and women who have demobilised in the framework of agreements with armed groups operating outside of the law (paramilitaries and guerrillas) with whom the national government has engaged in a peace process and who are willing to rejoin civilian life.



During a training, an alternative use of egg shells is demonstrated

From page 15

Investment in natural capital such as soil fertility is also minimal – so the low inherent soil fertility presents a major challenge for gardeners. Soil fertility analyses revealed that within the garden plots, soil fertility was strongly influenced by the resourcefulness of the individual users; some gardeners were severely depleting soil minerals, whereas others were maintaining or in a few cases even improving soil fertility. The analyses also revealed that certain parameters, such as pH and phosphorus were strongly influenced by the initial liming and fertilisation performed by the Department of Agriculture upon garden establishment. The general decline in soil fertility which was evident demonstrated the community's lack of knowledge on soil fertility maintenance and its inability to carry out larger investments/operations.

How can the community gardens be sustained? The most sustainable community gardens were those with more resourceful members in a position to ensure the functioning of the gardens. Therefore, if the community gardens are to offer services to vulnerable groups, external support is vital. This was evidenced, for example, in analyses on the fertility of soils, in which signs of initial intervention (traces of phosphorous and liming) could still be detected years later. Furthermore, crop diversity was much higher in irrigated gardens, demonstrating the importance of and need for infrastructure and formalisation. Formalisation in particular is important for recognition of tenure security and to ensure that both gardeners as well as public institutions are interested in investing resources in the gardens.

Gardening generally loses its prime importance when other livelihood opportunities arise; hence the creation of a productive, self-sufficient, economically viable vegetable garden is difficult to achieve – in addition to the fact that competition with supermarkets is fierce. The success criteria of community gardens should therefore also include facets of community building and community services – elements which are not readily on offer in a struggling community. The creation of a self-confident, skilled and motivated group of producers is needed in order to realise the potential of the community gardens. The NGO that helped initiate the gardens continues to be an important resource with regard to support and training. Considering the current institutional setting, support from local NGOs is imperative. Unfortunately, as evidenced here, the reliance of weaker groups on NGOs is not in itself a viable path to ensuring the sustainability of community gardens.

ENDNOTE

1. See for example article by Marshall Smith (2005), which describes community gardening in Umlazi Township south of Durban.

References

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Community Supported Agriculture: French approaches

The first forms of agriculture in Europe seem to have been community-based, as is still the case in many rural societies of the South. But, in the vicinity of modern cities, farmers have found it difficult to resist the processes of individualisation and increasing urbanisation. This article will highlight two recent phenomena taking place in France, which respond to and sometimes even counterbalance these processes. The phenomena both illustrate initiatives that try to restore local urban-rural relationships.



Children are taking part in clearing a site; branches are grinded and used as mulch by farmers

he growing openness of the food market has created a situation in which only big players are now left in the chain, varying from cooperative farms to wholesale markets and industrial food processing and distribution companies. Simultaneously, urban as well as rural consumers have distanced themselves from food production processes, hereby also losing their ability to influence them. These two processes have instigated the discussion on "food miles": the increasing physical distance between producers and consumers has contributed to increased transport and more advanced food processing and conservation systems, ultimately resulting in increased greenhouse emissions.

RENEWED LINKAGES

As a response and counterbalance to these developments, consumers and small producers have started to join hands again in a variety of ways, one of which is through Community Supported Agriculture (CSA). In France this takes place in the form of *Associations pour le Maintien d'une Agriculture Paysanne (AMAPs)* (literally: Associations for the Maintenance of Peasant Farming). The goal of these associations is to recreate a joint community of producers and consumers. This goes beyond a mere commercial relationship

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between consumers and producers as the consumers agree in advance to buy a certain amount of agricultural products, e.g. in the form of a basket of vegetables. The producer is thus guaranteed a more stable income as well as increased abilities to cope with risks, such as a harvest failure. In this system, producers and consumers jointly share the risks of farming. In some situations, community support can also result in a higher security of land tenure for the farmer. The consumer benefits of CSA (or AMAPs) are the rapid supply of high-quality fresh and seasonable food products as well as increased insight into the production system used (whether organic or other), both resulting from the close proximity of the farmer.

In the discussion around AMAPs, it has been argued that they contribute to the development of a more united and integral economy and that they promote *in situ* fair trade. Consumers are called upon to demonstrate their solidarity and at the same time, they are once again given a voice in the choice of production methods. Producers are relinked to their communities, which also makes them individually responsible again for the quality of their products. Ultimately, this results in an enhanced quality of life for both groups.

The main challenge for AMAPs in France is recruiting producers. Many farmers are reluctant to participate as they fear city dwellers' rapid lack of interest and unfamiliarity with cropping patterns. In Ile-de-France, more than 200 AMAPs exist, but so far without local farmers. This impels the consumers to turn to producers located farther away to fill their baskets, and in so doing to adapt the AMAP concept. This challenge could be overcome by trying to convince farmers who are also retail sellers to become involved in an AMAP. These farmers are already used to interacting with their customers, for example at farmers' markets, and would only need to package their products differently (e.g. in baskets). Other farmers with an interest in AMAP might prefer to set up a small collective of more specialised farmers and serve customers through this collective.

Another challenge for the AMAP system is that farmers see themselves and their production systems being questioned by the consumers, who are sometimes motivated by nostalgic and non-realistic ideas. The farmers need adequate communication skills to defend their technical choices, the complexity of which is unknown to city dwellers. An additional challenge is the need to set a fair price for the produce that truly accounts for the production costs involved. Unlike assessing automated production processes, for which numerous accounting references are available, determining the farmers' remuneration -to be set a priori- is a delicate process as it is a direct result of the existing social relation with the community. This actually places the farmers in a

wage-earning type of relationship, which is unfamiliar to most of them. In effect, a CSA system will be weakened if it is only defined from a city dwellers' perspective. Its true strength is demonstrated when communities are recreated in which consumers have established a real partnership with the farmers, recognising their professional competence, their economic freedom as well as their choice of production system that includes modern aspects for greater efficiency.

An example of an AMAP: 'Lapereaux des Thermopyles'

This AMAP was created in Paris at the end of 2006 by a team led by Jérôme Dehondt and is supported by a regional network. The AMAP's farmer is Jacques Frings, whose farm is located about 50 km east of Paris. On a weekly basis, the farmer delivers food in baskets to the Châteaux Ouvrier, an old building devoted to social activities. The 90 AMAP members are mainly higher-educated people, who are strongly motivated to promote sustainable development and tighter social linkages. Its name - which can be translated as the 'Rabbits of Thermopyles'is highly symbolic: in the same way that some hundred Greek soldiers gloriously resisted the huge Persian army in 480 BC, which allowed further development of Greek civilisation, the small rabbits of this AMAP will put up a fight to allow a sustainable future!

The farmer is a fruit-arboriculturist who adopted an organic farming system in 1975. He was the first farmer to sell his products at the wholesale market of Rungis, the biggest in Europe. However, he gradually shifted to selling his products on the farm. He has increased his product range (vegetables, eggs) and introduced new marketing channels, such as 'pick your own', and is also selling products from other organic farms in the Ile-de-France region (beef) or other areas of France (nuts from Grenoble, wines from southern France). In effect, he sells two different kinds of products: (1) local products that are grown in Ile-de-France, which have low environmental costs and high nutrition, and (2) so-called terroir products from different parts of France and Europe, which are strongly linked to local and regional identities and have a cultural value. The farmer started selling his products through an AMAP only a couple of years ago, but this has been successful as he now serves three of them



Mr Gilbert, market gardener, shows city dwellers his fields

Refitting agriculture in the urban environment Another recent development in periurban agriculture has been the disappearance of agricultural functions from the city due to urban pressure. This development has not only been witnessed in France but in many urban regions in Europe. However, more and more city dwellers are aware of the benefits of having agricultural space nearby, as this allows them to enjoy rural amenities and observe and understand the food processing process. They increasingly recognise that farmland represents an essential infrastructure for the quality of their urban environment. Consequently, they have embarked on initiatives to restore periurban farming by integrating it into the management of their land. In France, this has resulted in an initiative called the Agri-Urban Project, or AUP.

AUP originated from a civil-conscious initiative aimed at maintaining open areas (around 1,000 to 2,000 ha), farming (often between 10 and 30 farmers) and natural spaces in urban environments. To achieve this, demographic growth must be under control (the city must not grow by more than a few tens of thousands). The initiative bears great resemblance to E. Howard's Garden City in which agriculture was to be part of a green belt encompassing "rurbanisation" and ensuring food autonomy. Agriculture is maintained close to the city because of its landscape but also its historical values. Additional benefits for the city are the availability of fresh produce as well as the possibilities for educational, leisure and social

activities and the creation of a buffer zone that counteracts the negative impacts of external influences such as floods, highways and illegal human settlements.

In order to ensure sustainable land development projects, such as AUP, a clear-cut legal framework is necessary. Hitherto, nature conservation has been the main argument in France, which however, in its truest form, was found inappropriate for open spaces located too close to the cities. This resulted in open urban fringes that did not fall under any management programme and from which farmers were moving away. Fortunately, environmentally conscious citizens came up with a local public farming policy.

The main challenge for AMAPs in France is in recruiting producers

Planning action

The local public farming policy was initiated through the formulation of the Agricultural Charter, which is based on a participatory approach. The charter is signed by the different stakeholders involved and highlights each stakeholder's role; for example the city council is in charge of city planning, while the farmers are expected to ensure that their activities are performed in a sustainable manner and do not harm the space used. The charter is concretised in a programme of action, which shows that agriculture is really supported by the communities involved. This programme defines the

different actions to be taken and facilitates their implementation. In this stage of the planning process, the focus has been on the farmers and on enabling and stimulating them to perform their activities without the possible constraints of being close to a city (e.g. transport and distribution difficulties due to traffic, land insecurity). In a following phase, the entire community (farmers included) should set up a new policy, which enhances farmers' abilities to benefit economically, e.g. by improving their links to local markets. This could contribute to finding more people willing to take on farming as a profession.

Current challenges

Currently the Agri-Urban Project faces quite a number of challenges, an important one being the instability of local land policies. This instability poses a serious threat to local agriculture, as farmers need a clear long-term vision. So far, the AUP has remained subject to local electoral preferences; its sustainability would be greatly enhanced if a general framework, which includes regulatory and financial arrangements, would be created by political entities at higher levels (from district and regional councils to national and European governments, see box).

A dimension of the European Common Agricultural Policy (CAP) to be changed

The CAP policy is reputed to have set up hindrances to competition, which several member countries of the WTO are endeavouring to dismantle. The Commissioner in charge of agriculture alleged on 29 December 2006 that: (1) many European farmers shall have to look for a second source of income; (2) almost all the market imbalance measures will be abolished; (3) public funds shall be reserved for agro-environmental measures. To oppose this development, PURPLE (PeriUrban Regions Platform in Europe) was created in 2004 as a lobbying association of European major cities to promote a common periurban agriculture policy, bringing especially point 3 up for discussion in order to support the inclusion of the living environment and landscape issues as priorities for a new CAP.

Another challenge faced by AUP is the continuous search for public support and therefore public financial means. In this effort, it is important that the multifunctionality of periurban agriculture for a local community be highlighted: not only does it lead to increased local food production, but also to the enhanced organisation of space, creation of opportunities for leisure, etc. In order to develop in a sustainable way, each local community needs its own agriculture, i.e. agriculture managed by a new governance system that recognises farmland as a common good used by farmers for their economic activity and by city dwellers to enhance their urban lifestyle. It is therefore also part of the community's task to defend its agricultural interests and ensure the development of the space for sustainable agriculture. The next box describes the example of the Green Triangle of Hurepoix.

Strengthened linkages, strengthened communities

The examples portrayed in this article highlight how communities are strengthened by improving citizen awareness and responsibility at the local level. The community members join forces and in so doing positively affect their living environment and its sustainability. AMAPs restore relationships between and among producers and consumers despite their different roles in the community, and enhance mutual understanding. AUP adds a new concept of common belonging to the local land: two groups share one unique territory. Through the AUP concept, agriculture is producing more than just foodstuffs, as it provides a development infrastructure for agriculture itself and for other urban and periurban functions.

ENDNOTE

1. Ecole Nationale Supérieure du Paysage, 10 rue Maréchal Joffre, F.78000 Versailles Tel. 33 1 39 24 62 73. Equipe agriculture urbaine (André Fleury, Roland Vidal), member of LAREP.

The Green Triangle of the Market Gardening Cities of Hurepoix (www.trianglevert.com)

Five communities south of Orly, France, have organised themselves to defend their agricultural space for the benefit of their living environment. The project owes its name to: - its location: within a highway triangle encompassing 4,000 ha, 40 percent of which is either agricultural or forest land - its history: the market gardening activity dates back to 1,800 and the area used to be seen as the open countryside of Paris - its continuing agriculture.

Farmers were taken on board right when the project was initiated in 2001. At that time,

five farmer representatives were elected along with ten other representatives. Their election granted them the right of veto. The Charter has now reached completion and is to be signed in the spring of 2007. The communities pay the salary of a specialised worker, Christel Stacchetti, who has been trained in urbanism and urban agriculture at ENSP.

- Actions underway include:
- A strict demarcation of the territory (Agricultural activity zone)
- Events (strawberry festival, etc.)
- Establishment or enhancement of short agricultural chains
- Educational activities.

This sign shows Triangle Vert city-dwellers they are entering farmland





For over 30 years, The Stop Community Food Centre has been working to end hunger and build a healthy and strong community in the Davenport West neighbourhood of the city of Toronto. The Stop strives to increase access to healthy food in a manner that maintains dignity, builds community and challenges inequality.

One of The Stop's inner-city community gardens

Promoting Urban Agriculture through the Community Food Centre Model

s a grassroots, non-profit organisation, The Stop is committed to continuing to try to meet the need for emergency food support while developing innovative new food programming and sharing it with others. The Stop's programmes and services focus on the ways food can bring people together and break down social isolation while improving overall quality of life. All of The Stop's efforts are based on the belief that food is a basic human right. Current programming includes community kitchens and dining, urban agriculture, a food bank, drop-ins, civic engagement and pre- and postnatal nutrition and support.

CONTEXT

The neighbourhood we serve, Davenport West, is one of the poorest communities in Toronto. According to census data and surveys conducted at The Stop, over 66 percent of The Stop's programme participants spend well over one-third of their income on rent compared to 29 percent of the Toronto population as a whole.

> Rhonda Teitel-Payne, The Stop Community Food Centre www.thestop.org Image the stop.org

This is largely due to stagnant and decreasing incomes (social assistance rates that do not reflect the cost of living, a low minimum wage and a loss of wellpaying jobs) and increasing costs (high rents and rising food prices). While there is a significantly larger unemployed population among Stop users (37 percent) than among the general population of Toronto (7 percent), 38 percent of food bank users hold jobs.

The impact of poor food access is undeniably an increase in poor health. In our community, as across Canada, there is growing evidence of widespread child obesity and increasing accounts of dietrelated illness. According to Toronto Public Health figures, 71 percent of deaths in the province of Ontario have "strong associations with diet" and one-third of Ontarians cannot afford a healthy diet. More and more research is linking food additives to higher incidence of cancer. Insufficient income affects people's access to healthy food on two levels: the individual (inability to afford healthy food) and the community (fewer retail outlets, reduced variety of foods and less fresh, unprocessed food). This is occurring in a larger context of threats to local food production from the farm income

crisis and loss of prime agricultural land in the Greater Toronto Area due to urban sprawl.

Many recent immigrants in our programmes express frustration because they can no longer find or afford the pesticideand preservative-free produce that they were used to eating at home. Traditionally populated by Italian and Portuguese families, Davenport West is now home to a mix of people from Latin America, the Caribbean and some South and South East Asian cultures.

Low-income community members are also impacted more severely by environmental contaminants than people living in more economically stable neighbourhoods. Residents of poor neighbourhoods (such as Davenport West) with industrial facilities and a high proportion of poorly maintained, aging housing units have a higher rate of exposure to environmental toxins and a greater susceptibility to the resulting negative effects because the generally poor nutrition associated with poverty is a risk factor for greater uptake of contaminants. A diet low in calcium and iron, for example, will result in more efficient absorption of lead (Cooper, 2005).

It may be a mixed blessing that many of the original industries have moved out and are being replaced with infill housing. While the hope is that pollution levels will drop, the immediate reality is that many jobs have been lost and the new housing is priced beyond what most community members can afford. Davenport West remains a neighbourhood geographically divided by railway tracks and awkward public transit.

THE COMMUNITY FOOD CENTRE MODEL

The Stop recognises that, in order to confront hunger, we must go beyond handing out food to people struggling on low incomes and find long-term, sustainable solutions. Our Community Food Centre model brings together a number of approaches in the field of food security, melding respectful emergency food delivery with community development, social justice and environmental sustainability. At the heart of this project is the promotion of community food security. This refers to a strategy where all members of a community, regardless of gender, race or social class, have access to adequate amounts of safe, nutritious and culturally appropriate food produced in an environmentally sustainable way and provided in a manner that promotes human dignity.

Traditionally hunger has been viewed as an issue of charity. The Stop is working hard to reveal the systemic causes of food insecurity that marginalise certain individuals and groups and to reduce that marginalisation through community development, food programming and systemic advocacy. Many personal accounts show that passively receiving food is not only demeaning to recipients but also perpetrates structural inequality.

Sunflower garden in Toronto



When people become actively involved in creating solutions to food insecurity in their community, they feel less stigmatised. They also develop their skills further, feel less isolated, build support networks and learn how to have a greater influence in making change. In the Community Food Centre model, food security efforts fall into three interconnected areas: food and income (inade-



Adapted from Hancock, Labonte and Edwards, 1999

quate income leads to hunger and food insecurity), food and health (lack of access to adequate, healthy food leads to dietrelated illness and poor mental health) and food and agriculture (the way we grow, manufacture and distribute food has an enormous impact on food security and the environment). Solutions to food insecurity must be wide-reaching and take all three of these areas into account. This conviction is vital since most failed food security approaches tend to focus only on one or two of these issues, missing the important ways in which they interconnect.

URBAN AGRICULTURE – THE MODEL IN ACTION

The Urban Agriculture Programme has been a way to accomplish many integrated and mutually reinforcing goals, including healthy food production in the city, environmental protection, education on environmental and social issues, engagement of diverse community members and the development of strong social networks in the community.

In 1998, at the suggestion of a local city park supervisor, The Stop Community Food Centre joined with local schools and the Toronto Public Health Department to plant a vegetable garden in Earlscourt Park, just a ten-minute walk from The Stop's main location. On a plateau that served as the shore of Lake Iroquois many thousands of years ago, Earlscourt Park was never used for industrial purposes and was thus very hospitable ground for growing food. It now contains a 9,000square-foot vegetable and native plant garden that provides approximately 1,100 kilograms of fresh produce to The Stop's food programmes.

We estimate that 2,500 people experience our programme annually, either as volunteers, visitors, students or participants in festivals. This does not include the number of people who take the produce home from the food bank or eat vegetables prepared in our community kitchens! Volunteers include neighbours, people who use The Stop's services and children from local schools. In the winter, volunteers continue to grow greens and herbs in greenhouse space donated by a public school.

While all forms of community gardens provide marginalised people with agricultural opportunities, our collective approach to growing is particularly effective for people who cannot commit to tending a plot of their own for an entire season. There are many barriers to maintaining an allotment in a community garden, including the need to work multiple jobs to meet basic costs, unstable housing situations that force people to change location and physical or mental health concerns. Participants value the ability to drop in to a garden session as their time, health and outside commitments permit and learn about ecological growing methods from staff and other gardeners.

The programmes are structured so that volunteers and programme participants can develop the networks that link them to information, resources and social support. We actively promote the sharing of diverse backgrounds and experiences, where participants find commonalities and affirmations of their culture. Simply growing callaloo, a Caribbean vegetable also used in South Asian cooking, in a public park provides an opportunity to break down stereotypes by showcasing the positive contributions and knowledge of immigrants. For many recent immigrants with agricultural backgrounds but no access to land, The Stop's community garden is an opportunity to learn about agriculture in the Toronto climate and experiment with introducing crops that are familiar to them.

Work sessions, focused educational activities and public celebrations are all venues for talking about sustainable food systems with children, youth and adults who are marginalised by economic, social and health issues. Through educational activities integrated into urban agriculture programming we:

- show how environmental concerns (reducing waste, contaminants and fossil fuel use) can be linked to personal health through healthy food production (composting, organics, beneficial organisms and reduced food miles)
- make participants aware of the importance of maintaining healthy ecosystems through a subject close to their hearts and experiences: food
- incorporate information on every dimension of how food is produced, distributed and consumed
- provide hands-on learning that leads to active engagement in creating local alternatives to the existing food system.
 The challenge of The Stop's education programme is to infuse each teaching moment with the powerful interconnections that come from addressing food from all dimensions of health, production, environment and income, and to do so in a way that both inspires action and leaves participants with the skills and resources to create change in their community.

BREAKING NEW GROUND -THE GREEN BARN

The Stop will be taking its Urban Agriculture programme to a new level in 2008 with the opening of the Green Barn, a sustainable food systems education centre that will actively engage people to grow, eat, celebrate, learn about and advocate for healthy, local food. The Green Barn will be part of a larger urban redevelopment initiative at a former Toronto Transit Commission streetcar repair barn led by Artscape (a Toronto-based non-profit organisation that specialises in creating affordable housing for artists). What was once an abandoned industrial site in a neighbourhood adjacent to Davenport West will become a vibrant community space with artists' studios, space for environmental and arts groups and a public park. Artscape aims to make the site one of the first heritage buildings in Canada to be certified by Leadership in Energy and Environmental Design (LEED). The Stop will be a vital part of this creative hub with a greenhouse for organic produce,

commercial kitchen, compost demonstration site, sheltered garden for extended-season growing and an outdoor woodfired bake oven.

The Green Barn will be a place where everyone from children to seniors can learn about growing organic food in their own neighbourhood as well as hear about good food policies and innovative

ideas from across the city and around the world. These new growing spaces will make it possible to stretch our idea of what we can grow locally and to extend the season for tender fruits and vegetables in protected outdoor beds. A year-round farmers' market will highlight the best of local produce, increasing connections between rural producers and urban consumers. The mix of incomes in the neighbourhood will make a market financially viable for farmers while making fresh produce more readily available for low-income residents. An indoor Covered Street will also make it possible to operate a market year-round, providing opportunities to educate about seasonality and preserving local produce.

Just as at The Stop's main site, a commercial kitchen and outdoor bake oven will bring people from diverse backgrounds together to cook meals and learn from each other. Social enterprises such as a café, produce sales to chefs and fees for educational materials and tours will support the long-term sustainability of Green Barn programmes. The Green Barn will also be a local hub for organising around food access and anti-poverty issues, where participants can learn about and become engaged in advocacy initiatives from local to international levels. We are excited about the possibilities for the synergies between food, education, community, environment, social justice, art and heritage that this unique project will create.

The Green Barn project is generating much excitement internally and externally, yet it will also present some interesting challenges. Obtaining funding for such a sizeable expansion of our work requires a shift in fundraising strategies. The Stop has been successful at funding its current



The Green Barn at the beginning of its re-development

programmes through a mix of individual donations, government funding, grants from foundations and special events. To raise money for both capital and operating funds for the Green Barn, The Stop will, for the first time, undertake a campaign to raise money. Our sense is that the compelling, innovative nature of the Green Barn will attract the support needed.

As a neighbourhood-based organisation, The Stop will need to do some careful thinking about what it means to operate a satellite site in a neighbourhood that is quite different from Davenport West. The St. Clair/Christie area, where the Green Barn is located, looks considerably more affluent than our current catchment area, although there are also many people living in housing co-ops, shelters and assisted housing. The challenge will be to balance our focus on those marginalised by poverty and social inequities while maintaining the Green Barn as a resource for the whole community.

With its balance of social justice, healthy food production and innovation, the Green Barn will be a powerful magnet in the neighbourhood and city. We hope to see that it attracts a wide range of people working together on solutions to hunger and poverty and building a more sustainable and just food system – an ideal extension of our current community food centre model.

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Migrant children may grow up confused

Emerging Migrant Farmer Communities in Periurban Beijing

s the capital and one of the biggest cities in China, Beijing is one of the most favoured destinations for migrants. A one percent sampling population survey in 2005 found that there were nearly 3.6 million migrants in Beijing, 80,000 of whom were directly involved in agricultural activities, and up to 524,000 of whom were engaged in related activities.

Research was undertaken in four villages in Chaoyang and Shunyi district as part of the RUAF Cities Farming for the Future programme. Chaoyang district is close to the built-up areas in Beijing, and has various types of land use. Shunyi district is located about 40 km away from the city centre. It is the area's traditional bread basket, with relatively stable land use. The number of migrant farmers is higher in Chaoyang than in Shunyi.

Livelihoods

Migrant farmers encounter a number of difficulties after they arrive, for example in building a dwelling and in finding their place in the production chain. The first and most important problem they

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encounter is access to land. Farmland in Beijing is owned by village committees. The only way for a migrant farmer to get access to land is to rent it directly from the local village committee or through one of the local farmers. Since June 2004, the Beijing government has been promoting "the transfer of the contractual right of land" to make it easier for migrants to lease land. In reality, though, migrant farmers' right to land is not clear, and most often control remains with the land owner. Also irregularities in contracts create problems. This limits the flexibility of migrant farmers in planning and thus in their development (competition capacity). Also, irrigation water is still provided by canals, which is not efficient and highly wasteful.

Access to financing is also difficult for migrant farmers. Most farmers rely on informal private loans, which have been affected by the reform of the rural banking system in China (which has further weakened the uncertain position of migrant farmers). Both in buying inputs and in selling their products, migrant farmers are almost always at a disadvantage, because of their lack of money and information. Initially, the city had a restrictive registration policy for migrants, but this situation has improved considerably.

Other major problems migrant farmers (and other migrants) now face include the high cost of education and the relatively low quality of schools. The living conditions of migrant farmers are also poor. They usually build their humble dwellings beside the rented farmland or greenhouses. Their homes are small, usually only 20-40 square metres, and barely furnished. Kitchens and toilets are very simple and usually located outside. The homes have no heating devices, and many residents use firewood and coal (out of tradition or because of low costs). The survey revealed that one of the reasons for these poor living conditions is that many migrant farmers initially do not see this "city lifestyle" as a long-term situation. But as their incomes improve, they start investing in their homes (for example, by adding LPG and electricity).

Agricultural cooperatives

Migrant farmers sell their grains, vegetables and fruits in the following ways: (A) door-to-door, which is the most popular way; (B) directly at wholesale markets; (C) to re-sellers or restaurants; (D) through farmers' organisations; and (E) through agro-tourism arrangements (field picking). For instance, migrant farmers in Dongjiangying in Shunyi sell their grains directly to the nearby grain storehouse. In some cases, migrant farmers organise themselves in a cooperative, as in Xiaodian, in Chaoyang, where the migrant farmers jointly acquired access to farmland and distributed it among themselves. Such cooperatives also organise their production and seek marketing channels.

There is a noticeable trend among migrant farmers to develop and organise themselves from the first stage of selling their products directly to the consumers, through the next step of using intermediaries and finally to selling through cooperatives, thereby consistently increasing their profits and saving time. In this way migrant farmers are connected to the city and contribute to the building of communities.

Migrant farmers' social network Though they work and live in the city, migrant farmers do not have formal connections to the city. The ties with their home towns are quite close and most of the migrant farmers go back home one to two times each year, have regular contact with their relatives, and send home remittances. Because of the high education costs in the city, some children attend school at home and are taken care of by their grandparents.

The incomes of most migrant farmers are higher after migration to the city (increasing on average from 350 to 500 euros per person per year), but still lower than the average of local farmers (800 euro). The cost of living in the city is higher than in the rural areas, and in addition migrant farmers are responsible for houses and land both in their new city and in their home towns. The average "daily-life" expenditure per year is about 400 euros, which is substantially lower than the average expenditures on production (1,500 euros) and savings/ remittances (1,000 euros).

Usually migrant farmers send a big part of their earnings back home (and are thus able to save very little for their own expenses in the city). The resulting lack of funds makes it difficult for them to buy inputs in the growing season. Migrant farmers have three main sources from which to borrow money:

- People living in Beijing who come from the same region. This is very common since migrant farmers' social networks (as defined by Chinese rural tradition) are based on and strengthened by familial and local ties.
- Other migrant farmers. This is possible because the farmers live in close communities (and are often rather isolated from the local community).
- Local farmers. This is only an option if the borrower and lender know each

other well and trust each other, i.e. after the migrant farmer has been in Beijing for several years (and is thus more integrated).

Migrant farmers have strong links to their home towns and only gradually develop connections to other migrants and to local communities in the new city. Some older migrant farmers go back home, but young people mentioned in the survey that they would like to continue farming in the city. Migrant farmers develop a relationship with local communities initially only through the market, as it is difficult to develop new social contacts. Although the migrants share some of the same needs as other residents, the sometimes hostile environment keeps them isolated from the local community. It can also be difficult to build relationships among each other, as they may quarrel over such things as the order of watering land. However, the farmers often sell products jointly and generally collaborate to a high degree.

BUILDING NEW COMMUNITIES

After coming to the city, migrant farmers face the challenge of building a new social network. They are often prepared to take up agriculture, while the local farmers increasingly find new jobs in the city. This relieves the tension between local and migrant farmers to some extent. Migrant farmers gradually adapt to the new city. Most of them come to Beijing through relatives or countrymen who have been in Beijing for a period of time. After arriving in the city, new migrant farmers need to build a network to protect themselves and strive to earn profits in an unknown environment. This includes uniting with other migrant farmers from different provinces, compromising to satisfy local stakeholders and strengthen their original networks.

Education is an important issue for migrants. Migrant farmers acquire a higher income in the city, but suffer from a lower quality of life. Some of them do not stay very long, but the children of those who do remain grow up in the city and their feeling of community and identity is based there. However, it is difficult for these children to get access to high-quality education. They risk disappointment in life and subsequent psychological problems or negative attitudes are relatively high for this group.

The role of urban agriculture

Since the mid-1980s, township and village enterprises have developed rapidly in Beijing, as local farmers in periurban Beijing turn more and more to nonagricultural activities. This leads in turn to a lack of agricultural labour and deterioration of urban farmland. Villages in periurban Beijing have therefore gradually imported migrant farmers from Hebei, Henan, Shandong provinces, etc., who are introduced to the area by their relatives and friends. At present Beijing periurban agriculture is undertaken mainly by migrant farmers. This benefits both migrants and the local population.

So gradually the living and production style and experiences of migrant farmers change, that is, from rural agriculture to urban agriculture. This not only improves their own incomes, but also guarantees productive use of periurban areas, supplies of niche products to the city market, the development of other land use functions (recreation and leisure), and the building of new communities. Developing multi-functional urban agriculture could be a way of developing periurban land, maintaining green spaces, developing recreation and providing education for children. If migrant farmers fulfil these needs through organising themselves in a cooperative, they will acquire a stronger position in bargaining with policy makers and integrating in the community.

Increasingly migrant farmers play valuable roles in the development of urban and periurban agriculture, and new migrant farmer communities continue to emerge. Under current government policy, it is possible for innovative migrant farmers, in cooperation with local existing farmers' cooperatives, to develop the relatively weak ties among migrant farmers into strong cooperatives to strengthen the process of integration and as such facilitate the migration of more farmers to Beijing.

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The Development of a Women Producers' Cooperative in Istanbul

Istanbul is an old, but rapidly modernising city. Large-scale migration from throughout Turkey into Istanbul and the integration of Turkey into the regional and global marketplace have been changing metropolitan patterns of household livelihood, food security and environmental conditions since the 1950s.

s immigration pushes Istanbul's population beyond 15 million (12 million officially), it is becoming progressively more difficult for people to find work, receive health and education services, and meet their household food needs. The expanding area of metropolitan Istanbul now exceeds 1,500 km² and threatens the watersheds upon which the city relies for its fresh water. According to recent surveys, Istanbul may have close to a million unemployed. Many people, amongst them most of those who recently migrated to the city, work at or below the official minimum wage (of USD 250/ month), which is insufficient to satisfy minimum food needs for a family of four (which is USD 350/month). With annual rural to urban migration of over 300,000 per year, the social and environmental pressures are mounting and already exceed the formal sector's ability to absorb and manage the growth.

City officials are exploring ways to cope with urbanisation and increasing poverty and seek to integrate economic, social, spatial and ecological programmes with land use planning and national and regional policies. In the presentation of its Master Plan, the city of Istanbul showed interest in multi-functional urban agriculture as a productive use of open spaces and green belts around the city. Partnerships are being developed in identifying meaningful and workable ways to meet the city's goals and commitments while targeting poverty alleviation and the integration into sustainable urban development planning and policy making.

Pilot Project in Gürpinar

Under the title "Contribution to Improve Employment Opportunities and Provide

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Food Security of Groups Under Risk Through Urban Agriculture", a project in Gürpinar, Istanbul, started in 2005. The project, which was executed by the urban agriculture group of UYD (see box below), targeted local poor women for education, empowerment and employment. The project was financed by the EU (Ankara) through the governmental institution (ISKUR).

The NGO Toplumsal Kalkınma Gönüllüleri Derneği (TKGD) aims to show urban authorities that agricultural production has social, economic and environmental dimensions, relating to such urban issues as food security, poverty, health, unemployment, micro-enterprise development, waste recycling, leisure and recreation, and the building of communities. Until 2005, TKGD was part of Ulaşılabilir Yaşam Derneği (UYD). At UYD, the TKGD team was responsible for the project in Gürpinar and was supported by ETC-UA.

The aim of the project was to develop and use a model oriented towards employment and food safety of vulnerable groups in urban regions, using urban agriculture. The project decided to work with unemployed migrant women from low-income households who showed interest in agriculture. Twenty-five participants were selected from a large group of interested women. Most of them reside in the municipalities of Esenyurt, Kıraç and Gürpınar in Istanbul (on the European side of Istanbul). These women cannot make full use of the employment possibilities in the city, because they lack education, skills, and the time needed for cultural adaptation. Agriculture was their main occupation in the rural areas. Practising agriculture in the city gives them the opportunity to use previously attained experience and skills, while learning about and adapting to the city. In addition, their self-esteem improves, their social network expands and their



Women clearing the lands in Gürpinar



Preparing for the first crops

employment chances increase.

Capacity building

The group of 25 women was trained by a team of trainers from UYD and several universities in a wide variety of subjects, form cultivation of different vegetables, composting and food processing, to marketing, management and organisation. The women received USD 10 per day of training. Twelve of them worked permanently in the gardens and earned about USD 250/month on the shared profits from vegetable sales. In this way they enhanced their household food supply by as much as 30%. For some of these families, the total amount of money earned represented Turkey's average income per family. In addition, all 25 women satisfied their summer vegetable needs with the produce from the gardens, which off-set their family food budget by another estimated 25%.

In the project, which lasted one year (2005-2006), two cropping cycles were

realised. The focus in the first period was on the production of a wide variety of crops and on various practices. Most of the yield was used by the women and their families, but some of the produce (especially tomatoes and parsley) was sold at the local bazaars. The second period focused more specifically on processing, sales and marketing of selected crops (again tomatoes and parsley), and the formation of a cooperative. Additional training in "small entrepreneurship" was organised with support from Ankara University (Faculty of Agriculture). In this training, the roles of the women in the agriculture cooperative, financing, and the development of an efficient and transparent institution were dealt with. Basic management information such as cost analysis, income and expenditures analysis and profit calculations were also provided to the trainees.

Now in its second year, the Gürpinar project is self-sustaining and currently employs six women from the original group (three full-time and three on a parttime basis). The full-time workers earn between USD 300-375 per month plus additional compensation for transportation and meals. The part-time labourers receive about USD 15 per day. The cooperative was never established due to limited income for the full group, but the farm is operated by the small team of three women and supported by a TKGD volunteer who also works full-time in the garden. Produce is also sold two times a week at the local market in Gürpinar. The project managed to change the lives of the participating women and provided a good example to the neighbourhood, but it also showed the municipality of Gürpinar and other institutions in Istanbul an alternative way of using available open spaces.

Municipal support

The municipality of Gürpinar made the land available and provided access to water for the project, but it also supported the project in other ways as needed (such as by providing meeting facilities). The project was attractive to the municipality, because in addition to facilitating the temporary use of open spaces in the newly developed areas and providing an employment opportunity, the project included the re-use of organic waste collected from urban areas. The compost not only represented a source of nutrients for the organic farm, but also assisted in raising awareness among visitors. The community building aspect of the project was especially valued. The creation of opportunities for cooperation between citizens with a low income level and unemployed citizens, and the development of alliances with the local authorities were seen as tremendously important. The pilot project maintained regular contact with the municipality and other actors and used the media as much as possible to show that urban agriculture contributes to employment and food safety. This proved to be a very important asset. In addition, the project organised several visits to the farm and a seminar in Istanbul in August 2005 to publicise its experiences. In addition to a number of municipalities in Istanbul and elsewhere in Turkey, the neighbouring municipality of Büyükçekmece showed interest and requested TKDG to develop a similar initiative.

Practising agriculture in the city improves their self-esteem

Büyükçekmece

Based on the experiences obtained in Gürpinar, and supported by a small contribution by UNDP, TKGD started a similar project in mid-2006, in cooperation with the municipal government in Büyükçekmece. In this new project, this time on a 60-hectare plot, 50 women were selected by TKGD for the urban agriculture poverty alleviation projects, based on information and suggestions from neighbourhood leaders. Again they received a number of training sessions on agricultural and project management. The women indicated that they would like to be part of the initiative on a parttime basis. Several winter vegetables were planted in late summer 2006 for training purposes, but in early 2007 the decision was made to focus on the organic production of herbs for the Istanbul market.

The significance of this project goes further than the one in Gürpinar, as the plot is in the green belt surrounding the Buyuk Cekmece Lake – which provides Istanbul with 17% of its drinking water and is being threatened by encroaching development. Regular agricultural production (using high amounts of inputs) and construction is not allowed in this area. Beyond setting an important example for urban agricultural techniques, contributions and household/ community welfare, the project includes extensive planning and negotiation with local and greater municipal government officials on the further development of the multiple functions of urban (organic) agriculture. These scenarios show a need for multi-stakeholder planning, with active participation of the various stakeholders, in joint visioning, development of criteria, decisions on and implementation of activities, and assessment of outcomes and impacts.

The challenge is to establish a viable urban farm with income from the sale of (organic) agricultural produce. But both TKGD and the municipality see the potential for this farm to further develop educational, recreational and capacitybuilding facilities and activities, like waste recycling and water saving (techniques). Alternatively, bike and walking paths, for example, can be made part of urban agricultural green corridors to provide alternative transportation systems and exercise opportunities to city residents. What is currently needed is commitment of the parties involved, the development of a proper business plan and support in designing an urban farm that is adapted to the urban situation (with its specific environmental, social, economic, and aesthetic factors).

Both experiences in Gürpinar and Büyükçekmece demonstrate that open spaces in the city can be turned into productive areas that may have a wide range of public benefits, like leisure, recreation and education, and even serve as community gathering spaces in the event of emergencies like earthquakes. By creating the context in which urban agriculture is allowed to thrive, the benefits multiply.

During one of the trainings



Yilmaz Korkn

Asset-Based Community Development in Urban Agriculture: experiences from the southern Philippines

In recent years, the Asset-Based Community Development Approach (ABCD) has been recognised as an innovative strategy for community-driven development in urban and rural areas and as an alternative to the traditional needs-based approach applied by national government agencies, NGOs, and institutions such as the World Bank and the Organisation for Economic Cooperation and Development (O'Leary, 2007).

sually, community development work starts with the process of identifying needs and gaps within the community, and in most cases, this list tends to be very long. The focus on the community's problems, however, conveys negative images of the community and the residents begin to accept these images as the only guide to the reality of their lives. As a result, communities often believe their situation can only be improved through outside assistance, and, thus, they remain passive. In contrast, the ABCD approach seeks to uncover and highlight the strengths within communities as a means for sustainable development. ABCD is applied for successful community building across continents and cultures ranging from neighbourhood development in Seattle (Diers, 2004) and youth work in Egypt (El Hadidy & Mathie, 2005) to micro-credit projects in India (Lee, 2004). The basic tenet is that, although there are both capacities and deficiencies in every community, a capacities-focused approach is more likely to empower the community and therefore mobilise citizens to create positive and meaningful change from

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Periurban Vegetable Project, Xavier University College of Agriculture, Philippines Image: rholmer@xu.edu.ph Anselmo B. Mercado Southeast Asia Rural Social Leadership Institute (SEARSOLIN), Xavier University College of Agriculture, Cagayan de Oro City, Philippines Image: boym@xu.edu.ph

within (Kretzmann & McKnight, 1993). The appeal of ABCD lies in its premise that communities can drive the development process themselves by identifying and mobilising existing but often unrecognised assets, thereby responding to and creating local economic opportunities. In particular, ABCD draws attention to social assets: the gifts and talents of individuals, and the social relationships that fuel local associations and informal networks (Mathie & Cunningham, 2003). Focusing on the positive assets will help build the community and give residents hope and a positive view of themselves. It recognises that everyone in the community, including individuals, organisations and businesses, has skills, abilities, talents and experience that can be utilised to make their community a better place to live. Additionally, communities may have natural and physical resources. The process starts with what is present in the community and not what is problematic or absent. ABCD is a positive strategy, which sees the "glass" representing individuals and the community as half full rather than half empty, or, in other words, a place half full of residents with skills, capacities and gifts to give and share rather than a half-empty place of residents with needs or deficiencies that they expect to be filled from external sources (Central Coast Community Congress Working Party, 2003).

The following table summarises the basic differences between the traditional needsbased development approach and the capacity-focused ABCD approach:

Traditional Development (needs-based paradigm)	ABCD (capacity-focused paradigm)
top-down approach and outside-in (solutions come from outside, dependent on agencies)	bottom-up approach and inside-out (solutions come from inside, community fabric is built)
focuses on needs, deficiencies, problems	focuses on capacities, assets, dreams, strengths
projects a negative mental map	projects an optimistic mental map
creates client mentality	fosters citizen participation
undermines local leadership	builds local leadership and confidence
creates dependency	enhances empowerment
divides community	builds connections

THE CAGAYAN DE ORO EXPERIENCE

Urban agriculture related community projects using the ABCD approach have been introduced in the past four years to five urban poor communities and two elementary schools in Cagayan de Oro, Southern Philippines. These pilot projects were initiated following the completion of agronomic, health and socio-economic studies conducted in cooperation with universities and local government units from Europe and Southeast Asia (Holmer & Monse, 2006). Located on allotment and school gardens, the projects focus on ecological sanitation and basic hygiene practices in combination with health promotion, food security and environmental sustainability within the WHO frameworks "Healthy Cities" and "Health Promoting Schools & Communities".

The internal and external resources of the pilot communities were first defined and consequently utilised as follows: (1) Many of the urban poor have skills and knowledge related to farming, welding,

bert Holm



Joint pig raising Mount Carmel Allotment Garden

carpentry, masonry and many other activities. However, these "assets" are often not fully harnessed due to the lack of access to resources such as land and appropriate technologies. During the setting up of the allotment gardens, these skilled members of the community became the driving force for change. Whole families were ploughing the fields, hauling materials, digging wells and constructing the necessary tool sheds, nurseries and ecosan toilets.

(2) Although Cagayan de Oro City is booming economically, many lots within its urban and periurban boundaries are still idle and unproductive. The local government representatives approached the private land owners to negotiate the temporary use of the lots for vegetable production by groups of urban poor. The landowners' fear that their land would be illegally squatted was addressed by a memorandum of agreement signed by all stakeholders, which stipulated that the land would be used for agricultural purposes only. Conversely, this agreement also enabled the legal access of the urban poor to land for a specified period of time (Holmer et al., 2003). To further ensure security of tenure, a city ordinance is presently being finalised that will give tax breaks and other incentives to landowners who make their plots available for allotment gardens.

(3) Knowledge of integrated crop management practices, composting and ecological sanitation is available in scientific publications and presented during international conferences but is often not accessible for poor communities. By linking the academic community with the local communities and the local government, this knowledge came into actual use and was further adapted and improved by the continuous exchange of experiences between the stakeholders (Guanzon & Holmer, 2003).

(4) Biodegradable solid and liquid wastes from the community households (including human wastes) can cause environmental and health hazards if treated inappropriately. With access to technologies such as composting and ecological sanitation these "misplaced resources" suddenly became assets since they can be used as nutrients and soil amendments to sustain and improve crop production.

Each allotment garden is therefore now equipped with a compost heap where biodegradable wastes from the garden as well as from the neighbouring households are composted, thus also contributing to the local government's integrated solid waste management programme. Further, all gardens are equipped with so-called urine-diverting dehydration toilets (Holmer & Miso, 2006), which further contribute to improved sanitation in the community.

In summary, the urban agriculture activities in Cagayan de Oro using the ABCD approach stimulated the further strengthening and building of neighbourhoods by improving food supply, increasing income as well as enhancing the community spirit of marginalised groups and enabling them to become reconnected to other sectors of society. The city government's role was to facilitate the community organising including the formation of associations with corresponding constitutions and by-laws, while the academics shared their technical know-how and the community provided skills and labour. This approach contributed strongly to the local ownership of the project, which is in stark contrast to the traditional "dole-out" projects. These are still very popular in many parts of the Philippines, where poor communities receive goods and services from politicians in exchange for nothing, except, perhaps, their votes during the next election. However, most of these projects are only short-lived. The ABCD approach, thus, was initially something of a "culture shock" to some community members, but the sustainability of activities over a period of more than four years without outside financial assistance proved that it was the right way to go.

CONCLUSION

As demonstrated by the pilot projects in Cagayan de Oro, successful community development is asset-based, internally focused, and relationship-driven. Although some resources from outside the community are often needed, the key to lasting solutions comes from within. The gifts and skills of residents and the assets of the physical community should always be the starting point. Asset-based community development is about finding ways in which to create connections between gifted individuals. Making these connections and building relationships are the heart and soul of community building. Community-based gardening in particular offers an important niche in an increasingly urbanised world "by fostering care for the earth, nurturing human relationships, and supporting a vision of a liveable future" (Wang, 2006).

ACKNOWLEDGEMENT

The authors want to thank Dr. Bella Monse (City Schools Division of Cagayan de Oro), and PUVeP staff Yvette B. Guanzon, Clarito A. Santos, Glenda Y. Sol, Stephen O. Lee, Angelito A. Montes and Rafael A. Oclarit for their valuable contributions.

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A Response to a Growing Crisis: urban food gardening in South Africa's townships

hirty years after the 1976 youth uprising which signalled the inevitable end of apartheid, the lives of children growing up in Port Elizabeth remain constrained by the threat of disrupted, unstable families and severe poverty. Today the barrier faced by families to providing a supportive, nurturing environment for children is no longer a brutally oppressive and racist government, but the crushing burden of a population besieged by HIV/Aids and unemployment on a massive scale.

School-based food gardens

In response to the communities' needs, Ubuntu launched a food gardening project to address the effects of poverty. In January 2004 Ubuntu piloted the concept of intensively managed, low-input/highyield food gardening at three primary schools. It began with five-day hands-on training workshops, in which groups of unemployed parents, teachers and students were empowered with the skills necessary to establish and maintain productive organic food gardens. HIV is so pervasive in our communities that the reality is most guardians of children at our schools are actually grandparents as nearly an entire generation has been wiped out by the virus¹.

The gardeners began harvesting crops approximately three months after establishing the gardens, which range from $1/_2$ to 1 acre in size (which equals 2,000 - 4,000 m²) and are located on the grounds of the primary schools. Soon after the first harvest, with support from the

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Mothers and children working together in the garden

Matthew Lie

teachers and Ubuntu, the parents began serving a daily hot meal to three hundred of the most vulnerable learners at each school. The learners were predominantly orphans, individuals living in homes with no source of income, and quite a few children living with HIV. They were selected using data collected by Ubuntu counselors, case workers, and life skills educators. The stew contains beans, garlic, Swiss chard, carrots, sweet potatoes, onions, and culinary herbs from the gardens supplemented with vegetable stock and meaty bones provided through the generosity of local businesses. Relationships have been established over time with wholesalers, butchers, and supermarkets. Ubuntu staff will typically visit the owners or senior staff at these businesses and explain Ubuntu's work to them in order to get their support for the project. A key selling point to these merchants in partnering with Ubuntu is that many of their own staff are living in the townships.

Ubuntu soon found that because it was serving only the 300 most vulnerable children at each of the schools a stigma arose around the feeding programme, whereby other learners made fun of those benefiting from the soup and even went so far as to refer to the soup as "AIDS soup". At this point the programme was scaled up to feed the entire student body at each school. Two of the schools are on the smaller side with approximately 500 learners and one is quite large with 1200 learners. We also upgraded the feeding programme to include rice and other starches. These strategies have eliminated the stigma completely and are a policy which is going to be carried forward to all schools Ubuntu expands to in the future. Within the first six months of instituting the lunch programme at these schools, teachers were reporting that learners no longer passed out from hunger, and attendance had improved dramatically.

Clinic garden

The next expansion of the food gardening project was to a local health clinic in order to support a broader clinical partnership Ubuntu was in the process of forging. In 2005, Ubuntu began providing comprehensive voluntary HIV counselling and testing ("VCT") and access to antiretroviral therapy and treatment ("ART") services at KwaZakhele Day Hospital, a busy outpatient clinic located in the middle of an informal settlement. Building on the model developed at the primary schools an intensive training course was carried out and a large (1 acre) community food garden at the clinic was established. In this endeavour, Ubuntu worked with the local community and members of a support group for people living with HIV/Aids. While at schools

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the gardens primarily benefit vulnerable children, at the health clinic the garden provides nutritional and economic support to individuals on ARV therapy. Ubuntu has found that serving a hot meal at support group meetings is a good practice which ensures regular attendance as well as providing psycho-social benefits associated with groups eating together. The support group members who maintain the garden have also been able to create an income for themselves through on-farm sales to hospital staff and community members.

Approximately 60 percent of the garden's yield is directly consumed by the hospital patients or taken home by support group members, while the remaining 40 percent is dedicated to individual plots for the gardeners to either consume or sell. Together the gardeners have generated approximately R 7,000 (about USD 1,000) in on-site sales since the project's inception 24 months ago. 15 percent of this money has been ploughed back into the project with the rest of the money going directly to those individuals maintaining the garden.

Backyard gardens

In 2006 Ubuntu piloted a new phase of the food gardening activities targeting clients in Ubuntu's Case Management system. Case Management provides orphaned and vulnerable children ("OVC") and people living with HIV/Aids with comprehensive care and support services including counselling, access to treatment/health services, and assistance/advocacy in applying for income grants. Following on the success of the school and clinic gardens it was decided to assist the case management clients in creating productive backyard gardens. In the pilot phase three households living near each other were selected and began training and developing gardens at the households one by one. These households were selected based on several criteria:

- One or more members of the household were living with HIV.
- It was an orphan-headed household or one or more orphans were being cared for in the household.
- There was enough space, soil, and sufficient fencing to establish a garden.
- The household had the desire and ability to create and maintain a garden. Each of the three pilot households was present to assist and support during



development of the other two gardens, thus creating a cooperative gardening network amongst the neighbours. Since September 2006 the backyard gardeners have successfully harvested multiple crops including tomatoes, broccoli, runner beans, carrots, and a wide variety of herbs. Of the three homes currently benefiting from this project, two are orphan-headed households and the other is an individual living with HIV and caring for several orphans. These households now harvest fresh vegetables and herbs on a daily basis, for their own consumption and for sale to their neighbours. Through ongoing surveys carried out by Ubuntu staff it has been witnessed that on average households in this programme have been able to earn an average minimum of R350 (USD 50) from produce sales and one of the more productive and motivated individuals reported sales of as much as R700 on a monthly basis. As far as subsistence from the gardens the households harvest Swiss chard (a very popular crop in South Africa where it is referred to simply as spinach) and culinary herbs on a daily basis, with other crops such as beans, peas, carrots, broccoli and cauliflower being harvested every two months.

Most recently Ubuntu has expanded its backyard gardening programme to a 15-member home-based HIV support group. Ubuntu has helped the support group members to establish a productive backyard garden at the household where the support group is hosted. They use this garden to supplement a feeding scheme they are carrying out at a local clinic. This feeding scheme serves soup and bread to ARV patients. Currently the groups feeding programme is funded by Ubuntu, however the group is now in the process of applying to the Department of Health, which has funding available for such ventures.

MAJOR CHALLENGES

Working in schools

The South African public school system, particularly in the townships in which Ubuntu works, is drastically underserved, both in terms of funding and human resources. The few teachers who are highly motivated and capable become overburdened and prone to burn out. The teachers who would be ideal to work on a project such as Ubuntu's food gardens are the same ones involved in all other extracurricular activities. Ubuntu has found working with schools to be a great challenge, especially in areas such as:

- getting teachers to bring learners to the garden for educational purposes and to lend a helping hand to the parents who maintain the plots
- supervising learners while they receive their lunch
- receiving adequate communication from teachers.

The most effective means of addressing the challenges surrounding the work in schools is by communicating with the teachers and administrators in a very open and transparent way - making clear exactly what Ubuntu expects from them in terms of partnership. Ubuntu has begun to focus the efforts in schools with teachers and principals who have demonstrated a commitment to establishing a meaningful partnership with Ubuntu. At these schools Ubuntu has placed fulltime orphaned and vulnerable children specialists. These OVC specialists are available at all times to provide vulnerable learners with counselling and referral into the case management programme. The OVC specialists also provide a higher level of communication between schools and Ubuntu, allowing a greater level of control and efficiency in projects such as feeding and food gardening. The goal is to utilise schools as nodes of care and support ("SNOCS") for the vulnerable learners and the surrounding communities. This means creating a complete package of care and support at schools including food gardening, feeding programmes, and counselling/referral services.

Ubuntu is currently developing 5 schools into SNOCS while it works in a total of 22 schools where we provide life skills lessons, counselling, computer labs and libraries are provided. These schools as with all of Ubuntu's programmes are located in a cluster of townships on the outskirts of Port Elizabeth known as Ibhayi. Funding for the salaries of OVC specialists, as with all of Ubuntu's 50 full-time staff members, is raised from a variety of sources including individual donors, foundations, corporate social giving programmes, the Canadian International Development Agency, and the United States PEPFAR programme.

Stigma placed on people living with HIV/Aids

In the early stages of developing a food garden at the health clinic, there were problems with community members working on the project, gossiping and generally behaving inappropriately toward garden project members from the HIV support group. This problem was addressed by holding meetings where members could openly voice their opinions. Several open working days were also hosted, with the goal of team building amongst community volunteers and members of the support group. As the various constituents of the garden project have spent more time working together and socialising instances of stigma-related remarks have dropped off significantly.

MAJOR IMPACTS

Food security and income generation The obvious and most tangible impact of this project is that vulnerable individuals are taking their health and food security into their own hands. Unemployed parents are earning money and preparing food for vulnerable children. Childheaded households are putting food on their own tables and money in their pockets through small backyard plots. Individuals undergoing ARV therapy are feeding themselves and their fellow support group members.

Social inclusion Though food and income are essential to human survival, people also need the satisfaction of working and a strong social network to achieve lasting wellness.

School gardeners As mentioned before, most of the unemployed parents working on our school gardens are actually grandmothers, caring for their orphaned grandchildren. Since this project started, these women spend their days making a valuable contribution to the health of their grandchildren and the children of the rest of the community. Their work in the gardens keeps them physically active, and they have formed tightly knit social circles with the other grandmothers involved in the project. Often during holidays and after hours the parents will work alongside school children offering guidance and mentorship. Besides empowering these children with valuable food production skills, these women are offering extremely vulnerable children the type of caring and supportive adult attention they so often lack in their lives. The benefits of these working groups are truly reciprocal as grandmothers naturally thrive on this type of nurturing relationship.

Orphaned and vulnerable children

For the majority of children in our feeding programme their school meal is the only balanced one they will eat throughout the day. Before this project got off the ground, many of these children did not attend school regularly; they spent their days trying to seek out food in whatever way possible or were simply too weak to make the journey to school. School attendance records indicate that since the start of this project overall attendance has increased by as much as 25percent in the three pilot schools. Clearly a hot meal is a strong incentive for these children to attend school. Support group members Since the development of a food garden and regular hot meals at the clinic, the numbers attending Ubuntu's support group for HIV-positive individuals have swelled. As in the case of schools the hot meal acts as a motivator for individuals to show up on a regular basis. Beyond increasing attendance, the meal creates a strong social cohesiveness amongst the group as they sit together and share a healthy meal on a regular basis. Studies suggest that eating together can actually improve individuals overall health and wellbeing (Eisenberg, 2004). Many of the support group members work together in the garden with people who are not support group members. After issues of stigmatisation were addressed the entire group began working together as a cohesive unit. When new members are introduced to the garden, the original members are paired with them and act as mentors. This type of mentorship relationship allows the original members to truly take pride and ownership of their project and the agricultural skills they have developed; while taking on the leadership role also enhances their self-worth and selfesteem

Social inclusion in Ubuntu's overall strategy

Beyond gardening Ubuntu has incorporated social inclusion into its greater strategy through creating, assisting and fostering growth and independence in a variety of support groups. At schools and at Ubuntu's township headquarters the foundation has created a number of concurrently running support groups for teenage mothers, aggressive young boys, and victims of sexual abuse hosted by OVC specialists. At these support groups the members are empowered with skills to improve their lives while at the same time they are able to establish meaningful relationships with others in similar situations in a safe environment.

Working together in a garden and then sharing a hot meal together has proven to be an extremely effective means of fostering socialisation amongst support group members. In light of our observations, Ubuntu intends to extend food gardening as an essential element to more of its support group members, both at schools and clinics.

Continued on page 42

On a seven-acre site tucked out of sight behind a retail dairy operation, seven immigrant and refugee families this spring prepared for another season as some of Massachusetts' newest farmers. The site in Dracut is one of four multi-user training farms sponsored by the New Entry Sustainable Farming Project (NESFP).



Asian squash (Thon)

Immigrant Farming in the Northeast United States: what makes sense?

he United States is a country of immigrants, and historically they have been a key to the sustainability and expansion of US farming. Not only did they settle the heartland, but they also had a constant presence in the ever-changing face of farming across New England. Nonetheless, the Northeast today is not what it was a century or two ago when a large share of the population lived in rural areas. Today's farmers represent only about one percent of the population; their average age is 55-60; and they are struggling to pass their family businesses on to the next generation. The result is fewer farms and less land being cultivated year after year.

Yet agriculture today is still big business, sustained through innovative strategies that have allowed farmers to specialise their production, marketing, and valueadded enterprises. Net income per acre in this region is the fourth highest in the country. With over 125 farmers' markets, dozens of CSAs, hundreds of farm stands and expanding wholesale customers, Massachusetts is a leading state for direct marketing; and that creates opportunities for small producers. A typical new farm start-up here is a part-time operation that relies on niche products and

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direct marketing – an ideal model for immigrants in urban environments that allows a scaling-up approach to building sustainable farm enterprises.

The NESFP was started in 1998 as a training and technical assistance programme to promote economic opportunity and food security for capable and energetic immigrants who wanted to farm here but lack the initial resources and expertise. It was felt that if they were able to produce high-quality crops with limited assistance, some might want to earn a living from farming - in essence, they would be investing the passion and skills they brought from their homelands into new commercial operations here. NESFP now offers a 4-year intensive Beginning Farmer Program designed to get start-up producers up to a point at which they can farm independently. To do this cost-effectively, the project relies on the assistance and participation of more than 50 partners social service providers, community groups, immigrant organisations, farming agencies, and other farmers.

For the first five years of the project, participants were primarily Cambodians and Laotian Hmong residing in smaller cities that surround the Greater Boston – Lawrence, Lowell, Fitchburg and Worcester areas. For the most part, they spoke little English and had limited education and literacy Africans joined in subsequent years. Though more literate, few had significant. Resources to invest in a new farm operation. It was recognised that it was counter-intuitive to encourage them to become new producers when very capable mainstream producers have been giving up farming right and left. But the project staff was swayed by their dedication, commitment to working hard, and love of the land. Many held other jobs and farmed around busy work schedules and family commitments to sustain their production. The quality and variety of crops they grew was impressive – usually varieties native to tropical settings that could also do well in the local climate. Items such as pickling spice, water spinach, bitter melon and Asian cucumbers were popular in their communities and easy to sell to Asian restaurants and retail grocery outlets. But this was also where the romance of farming left off and the more challenging production and marketing realities set in. Some key hurdles described here are common to many new immigrant farmers.

Where's the farm?

Once settled in urban communities, immigrants do not want to move in order to access land to begin a farming operation, nor does it make sense from a risk-reward perspective for them to do so. Fortunately, there is unused farmland in the communities surrounding Lowell, Fitchburg, and Worcester that belongs to other farmers, land trusts and institutions. But urban farmers have to commute to these sites, which costs time and money and requires a reliable vehicle sturdy enough to transport farm supplies, equipment, and products.

Having access to land is not the same as living on one's own farm. The land in question generally does not come with a farm house, barn, equipment, irrigation and other facilities such as toilets and washing stations. The project negotiated leases with the landowners and took responsibility for providing infrastructure for shared use by multiple farmers. Supported by a variety of grants, irrigation and storage, purchased equipment were installed, and arranged for plowing and other necessary land preparation each year in return for modest rents from users. These preparations turned out to be far more expensive than initially anticipated, and would certainly have been beyond the financial reach of most of these beginning farmers. Farmland prices in Eastern Massachusetts are prohibitive, so farmers ready to farm on their own have to consider moving to another part of the state or region where land is more affordable. The alternative for those who want to stay is to rent larger acreage on their own, if they can find sufficient resources to manage a more sizable operation.

An independent operation requires infrastructure investments and often more helping hands, further complicating access logistics and making it more difficult to balance farming with other work commitments.

Sustainable production practices On an acre or two, most beginning immigrant farmers rely on small equip-

Hoop House: Rechhat's season extension



ment and a lot of physical labour. Our tractors take care of the initial plowing and harrowing, and sometimes the laying of raised beds, but after that, planting is done by hand, as is much of the weeding and all the harvesting. Over time, these farmers have come to appreciate the benefits of using mulch and small tillers, but often their unique inter-cropping strategies and trellising practices limit the suitability of machinery to manage many crops.

Two of the biggest production challenges encountered are watering and pest management. These farmers grew up in tropical countries where daily rain is common, and some crops like water spinach need moist soil. However, it is not uncommon for us to see farmers watering on a daily basis, whether it is rainy or dry outside, warm or cool. As a result, shallow root development makes the crops more susceptible to wilting during hot and dry periods, as well as more prone to diseases and certain pests.

Immigrants who gardened or farmed in the US before starting with the project also got accustomed to using pesticides without any professional training. They bought insecticides at retail garden stores and applied them to inappropriate crops. Many farmers lack a basic appreciation of pesticide safety and health risks. The project's staff made proper use of pesticides and the promotion of alternative pest management strategies its highest priority, but often unsafe practices were still being repeated year after year. When farmers cannot read labels or other instructions, and cannot communicate effectively with English-speaking technical assistance providers, these kinds of challenges can persist. The farm sites were eventually converted to organic production as this proved to be the best response to this problem and because it was a better way to exemplify the project's name and mission.

Earning a decent income

While there is local demand for the specialty crops favoured by immigrant and refugee farmers, the prices received in their communities are often rock-bottom. A visit to an Asian grocery store is a boon for shoppers and a bust for producers. Working-class customers cannot afford the premiums that higher-end shoppers are willing to pay. Farmers were encouraged to instead sell at higher-end farmers' markets where they got much better prices. However, many have struggled with the additional time commitment involved. Some have language problems as well. Most would rather stay on the farm and let somebody else do the selling. A marketing cooperative was organised to do just that, focusing now on a CSA and wholesale accounts – not an easy or quick solution, but necessary to optimise marketing opportunities.

Is commercial farming the right strategy for urban-based immigrants?

Over the years, we have come to realise that passion, commitment, hard work, and the ability to produce high-quality crops is not enough for most immigrants to develop viable farm enterprises. Even with considerable assistance, it is challenging for them to develop a farm operation up to the level at which it can provide the producer with a decent living or at least substantial added income. Moreover, their children do not seem to be very interested in farming, further diminishing the sustainability of these operations. It seems that farming for a living is the right choice for some immigrants, but not for most.

Yet many immigrants want to grow traditional foods, love to get out on the land, and enjoy farming as a means to maintain their overseas heritage. Perhaps a more practical approach for most of them is market gardening – something between gardening for home consumption and commercial farming. At Curran Park outside of Providence, Rhode Island, dozens of Asian immigrants tend small plots of 1/10-1/4 acre in size. The state makes the land available to them, but otherwise they are on their own. Many have been there for years. Land like this is available within a short drive from many immigrant-rich communities. If a basic infrastructure such as access to water can be provided, the growers seem pretty much able to take care of the rest. This can be a self-supporting operation requiring modest fees to sustain it, and it is a model that more immigrant communities could benefit from. It can keep more farmland in production, yet does not require the extensive investments of resources needed to train new commercial producers over a multi-year period. And it can contribute to food security where it is often needed the most.

More info: www.nesfp.org

Growing Home and the Emergence of Urban Agriculture in Chicago

Growing Home, located in Chicago, Illinois, was founded in 1992 by the late Les Brown, then Director of Policy for the Chicago Coalition for the Homeless. The Growing Home programme is designed to provide entry into the job market via the experience of urban agriculture.



rry Rhodes

lthough Growing Home (GH) was founded originally with a focus on urban agriculture, it immediately ran into difficulty establishing its urban presence. Les Brown was able to secure two parcels of land from the United States government; one urban site at Navy Pier and a rural site in LaSalle County about 75 miles southwest of Chicago. The plans for the urban agricultural site were delayed because of political and environmental issues, until another opportunity arose to partner with the Su Casa Catholic Worker House, which was started as a shelter for Central Americans seeking asylum in the USA due to civil unrest in their counties of origin. The arrangement with Su Casa provided an opportunity to develop an urban agricultural site of about ¹/₄ acre (1,012 m²) that works in conjunction with the rural site. These two farms have served as the main sites for the job training programme and the social enterprise created by GH that creates new jobs in urban agriculture, and employs low-income Chicagoans in a transitional jobs programme.

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Currently the social enterprise of GH obtains most of its produce from the rural farm. The rural farm will remain an important aspect of GH operations, although the organisation is currently also developing a one-acre urban site, and with plans to develop another one-acre site in spring 2008.

The GH's social enterprise includes sales of organic produce to consumers through a sustainable farmers' market, the Green City Market, and through the organisation's 80-member Community Supported Agriculture (CSA) programme. Additionally, GH has a few restaurant clients for whom the organisation also supplies organic produce. Chefs in Chicago are very interested in urban agriculture, and committed to using produce that has been produced locally. In spite of the success and evolution of GH during the past five years, the goal to establish a year-round urban agricultural operation has not yet been realized.

THE QUEST FOR POSITIVE REDEVELOPMENT IN ENGLEWOOD

In 2005 Growing Home was contacted by Teamwork Englewood (TE), an organisation in the Englewood community on the south side of Chicago, to assist in developing an urban agriculture district. The plans for creating an urban agricul-

Growing Home trainee at Green City Market

tural district were compatible with GH's plans to expand its urban operations. The Englewood Quality of Life Plan (QLP), a document outlining the community's redevelopment goals, emerged through a series of community-based planning discussions and meetings during which the community identified urban agriculture as part of the QLP.

GH was brought into the process of creating the urban agricultural district with the Center for Urban Transformation (CUT) in an arrangement that now includes the Angelic Organics Learning Center and the Shed Studio architectural firm. The development of urban agriculture in Chicago has thus been dependent on the joint work of community organisations, together with municipal entities.

BUILDING COMMUNITIES THROUGH URBAN AGRICULTURE PROJECTS

The process of acquiring a site suitable for creating the initial urban farm as part of the urban agriculture district is proceeding nicely in partnership with a local elected official, several municipal agencies and the project partners. Although the process of acquiring the property was not complete at the time this article was written, GH was given permission to begin development of the site. So far three hoophouses have been constructed on the approximately one-acre site, and once a redevelopment agreement is secured and the ownership of the property is transferred to GH, a greenhouse, office and classroom building will be constructed. Additional processing, cooling and storage facilities will be constructed as well. A small market stand is being organised for the site that will begin operation during the summer of 2007. One unique feature of the market stand is that it will include farmers of African descent from the Pembroke community about 75 miles southeast of Chicago in Kankakee County. This is an example of an urban-rural partnership that GH has initiated.

The Pembroke community has been home to farmers of African descent for several decades. This unique arrangement is vital as the population of the Englewood community is 98 percent of African descent and culturally appropriate products are vital to the success of the market. GH is committed to growing and selling culturally appropriate products for local consumption as well as products for the farmers' market, CSA or restaurants.

In the immediate future GH has plans to open at least one other approximately one-acre site located close to the site under development. The site being considered is owned by the Chicago Public School (CPS) system and GH wants to use it to increase its capacity and operate a garden for students.

The Englewood community, like so many communities of predominately African descent, suffers from lack of food access and food security. Other projects related to the urban agricultural district and GH are also being planned. Plans currently under development by the Center for Urban Transformation (CUT) include the creation of several produce markets or small grocery stores, the creation of at least one large farmers' market and a public market.

Another proposed project will include the development of a subscription community kitchen for local entrepreneurs interested in starting or expanding businesses such as catering services. The kitchen will also include a bakery that will operate as a wholesale and retail bakery business. These enterprises will utilise green building strategies. The urban agriculture district will include both large-scale and small-scale commercial projects creating a vibrant mix of entrepreneurial entities that will solve the problems of food access and food security in underserved communities.

Perhaps the most important aspect of the programmes being planned by GH and its partners is one that was unintended: GH and all of its partners in the development of the urban agriculture district are well positioned to provide technical assistance to communities wishing to replicate various aspects of the projects in the urban agriculture district. To this end, instruction manuals for the development of greenhouse and hoophouse operations will be compiled in conjunction with regional academic institutions and researchers. The development of urban agricultural economic theory and practice will help make urban agriculture a viable way to grow, distribute and sell a large percentage of local communities' daily food requirements for years to come. No one knows what the potential crop yields are, nor the number of jobs that can be created through the development of a sophisticated system of urban agriculture particularly one that has room for diversity and fairness for sole proprietors, nonprofit organisations, socially responsible corporations and financial institutions. It is known that urban agriculture creates jobs that pay a living wage, allowing people to raise families. The public health benefits of a widespread, large-scale urban agricultural system are widely anticipated by those of us involved in the development of the next generations of urban agriculture. This is important because of the loss of manufacturing and industrial jobs to other parts of the global community.

Lastly, the importance of reducing environmental problems related to the transportation of food over long distances cannot be over-emphasised, particularly when the issue of global warming must be confronted and solved.

SUMMARY

Although Growing Home started as a humble job training and social enterprise, it suddenly finds itself together with its partners in the position of becoming the catalyst for a revolution in agriculture through the creation of various programmes and projects related to the various aspects of urban agriculture (multiple functions) and related enterprises. The potential for urban agriculture is huge and the opportunity to shape the next generations of urban agricultural systems cannot be lost. Organisations such as Growing Home, the Center for Urban Transformation, the Angelic Organic Learning Center and others, not only in the United States but elsewhere, must recognise this potential and evolve into entities critical to the development of new urban communities. Chicago is at the forefront of the urban agriculture revolution. Non-profit organisations and individual urban farmers have together initiated a network to promote urban agriculture called Advocates for Urban Agriculture. This network works closely with the City of Chicago, and has received a pledge from Mayor Daley and city officials that they will support the efforts.

As demonstrated by communities such as Englewood on the south side of Chicago, urban agriculture is a practice that can create green space, new economic and community development opportunities and redevelopment options for inner city communities. This is particularly true in Chicago, a city that has an estimated 70,000 to 80,000 vacant lots, numerous flat top roofs and abandoned or underutilised commercial buildings. Many of the vacant lots are in minority communities and they provide an opportunity for inclusive economic development integrated with urban agriculture. While it is intriguing to think of the new opportunities presented to organisations such as Growing Home, their original mission cannot be forgotten. Providing opportunities to create a new generation of job-ready people and new entrepreneurs must continue through the design of new and better training programmes for those who have been disenfranchised. Growing Home and its partners are the bridge into a new age of urban life and must always aim to assist people in reaching the highest level of their human potential.



Guided tour at the Growing Home Urban Farm

The Effectiveness of Urban Agriculture as a Survival Strategy among Gweru Urban Farmers in Zimbabwe

The Nyanga Declaration signed by municipal authorities in 2002 represented a turning point in Zimbabwe as its accommodation and official recognition of urban agriculture heralded a change in the attitude of municipalities. Urban agriculture has great potential to improve household food security and survival, but as long as municipal initiatives only officially accommodate it without providing proper facilitation, like rearrangement and reallocation of resources, urban agriculture will continue to face many challenges.

a ther than serve as a strategy for social inclusion and poverty alleviation on behalf of the disadvantaged and vulnerable groups, it might then just be a new form of exclusion of the same groups. This discussion is based on research carried out in Gweru between September 2003 and November 2004 through in-depth interviews, questionnaires, observations, cases studies and life histories.

Why Gweru residents practice urban agriculture

The reasons for engaging in urban agriculture are influenced by one's economic status. The poor engage in urban agriculture to ensure that their families are at least ensured of three meals a day and a variety of cheap and fresh, quality food. Those who are better off see farming as a hobby or as having some cultural value. Data gathered in the above-mentioned study revealed that the majority (65 percent) of farmers in Gweru engage in farming because it ensures household survival. The remaining 35 percent either farm in order to sell the products or for cultural reasons. The reasons for practising urban agriculture are also related to the types of crops grown and field size. For example, flowers are grown to be sold, and if maize is grown on a plot larger than about five acres, the surplus is also sold.

Chipo Hungwe, Human Resource Management Department, Midlands State University, Gweru Selsesedhungwe@yahoo.com Increasing poverty (almost 90 percent of the population lives below poverty level) has fuelled interest in agriculture. This supports the general belief that urban agriculture is likely to increase because of persisting unemployment, retrenched civil servants. the influx of migrants and newcomers, sheer population growth, unemployed women, and a growing demand for abundant, regular and cheap supplies of good-quality food (Mougeot, 1994). The economic hardships have rendered mealie (maize) meal and bread beyond the reach of most households, which have resorted to growing maize as a way of ensuring a secure supply of sadza (thick porridge), a staple food for most indigenous Zimbabweans. In order to ensure household food security and a balanced diet, urban farmers also grow round nuts, groundnuts, beans, pumpkins, okra, cucumbers, rapoko, paprika, sorghum, watermelons, sweet potatoes, onions, carrots, fruit and other vegetables. With the scourge of the HIV/ Aids pandemic, more and more people will have to turn to urban farming as an alternative. Grandparent-headed households find urban agriculture the cheapest survival strategy.

The study reveals that while the men have a diversity of reasons for agriculture, and many of them farm to get a variety of foods, the majority of women farm for subsistence and because of economic hardships. For most women farming is not only a source of livelihood but their main job, while for most men it is not their prime source of income.

Positive impact

Household food insecurity grows with the share that purchased food takes of the household budget; and the fewer the household's alternatives in buying food are, the more serious its insecurity will be (Mougeot, 1994). The high inflation rate that has characterised Zimbabwe in the past 10 years has meant that a bigger share of household budgets has been taken by purchased food, which most cannot afford to sustain. Urban agriculture has therefore positively helped to ensure food security in urban households. Almost 10 percent of the sample argued that with urban agriculture they are ensured three meals a day, which had been difficult to maintain previously because of economic hardships. Those who did not perceive a change in their diets were those who grow either flowers or crops to feed their animals. Some others cannot produce enough food in their urban gardens because the land is just too small.

Effective survival strategy

Almost 70 percent of the respondents maintained that urban agriculture is important for them as they use all the produce for household consumption. They also highlighted that the crops provide them with fresh supplies and a variety of food cheaply. Almost the same number of people produces less than 6 bags (50 kg) of maize yearly. About 18 percent produce 7-15 bags while the rest could not quantify their produce. Some rear chickens and pigs for sale and grow crops in order to feed their animals. The end result in all cases is improved food security since the money from sales can be used to buy household needs and provide extra cash. It can be argued that city farming has been effective in ensuring household survival though this is dependent on the resources commanded by different households in practising urban agriculture.

Challenges faced by urban farmers

Urban agriculture is not yet included in Gweru's Master Plan. However, the city has responded by looking for areas that can be allocated temporarily for urban farming. With the help of its engineers, councillors, department of housing and welfare and police, the municipality allocates pieces of un-serviced and nonurgent land yearly to residents who have registered/applied for it. These pieces of land only give usufruct rights that can be terminated when housing/industrial projects on the sites are pending. The land can belong to different people in different seasons.

The pieces of land, called Zvimunda zvedollar, are usually 70x70 metres. The rent paid per year ranges from USD 150 to USD 280. Although almost everyone can afford to pay this fee, the relatively poor, who are usually older people, are less likely to gain access to the land than the younger and relatively richer (and thus less deserving) applicants. This situation is fuelled by bribery and corruption among council officials.

The study revealed that to be considered for a piece of land in Gweru, applicants need to profess membership to the ruling ZANU (PF) party and attend meetings arranged at local levels. Even on the rare occasions when the government wants to allocate seed, individuals must register with their local councillor, who is always a staunch member of the ruling party. What this means is that anyone with a different political persuasion cannot get land. This then either forces people to belong to the ruling party or encourages pretence among farmers as they pretend to be supporters of the ruling party.

Another problem faced by urban farmers in Gweru is theft. Half of the respondents complained of theft of produce from their fields. They said it is useless to report the matter to the police, because the police say they cannot guard forests (fields). Officially there is no law for the protection of crops. Farmers are therefore left to deal with theft using their own methods, some of which can be fatal. In one such incident recalled by one respondent, a woman was shot dead by a farmer after being caught on the spot stealing some maize cobs. 70 percent of respondents do not do anything about the theft while 4 percent of the farmers reported that they

use "other" methods to deal with theft. Such methods include juju (traditional medicine) or scarecrows to scare away thieves, birds, donkeys and wild pigs. One woman reported that as a way of curbing theft, she harvests her yields quickly starting from the centre and progressing outwards so that thieves do not readily see that she has begun harvesting.

Another challenge faced by farmers is the inaccessibility of farming inputs. The poor who are lucky enough to get farming land might not be able to afford to buy treated seed and must therefore resort to recycled untreated seed, which drastically reduces the yield. This coupled with absence of fertilisers and organic manure means that the urban farmers do not achieve optimal yield.

With the scourge of the HIV/Aids pandemic, more and more people will have to turn to urban farming

Urban agriculture is also characterised by competition for land, which determines who gets land nearer to their homes and the size of land. Because of competition the most desperate farmers are those who have to travel the longest journeys (up to 8 km or more) to their allocated fields. These journeys are so physically demanding that the elderly who are supposed to benefit from the land end up forfeiting their allotments. The majority of those who farm far from home are older than those who farm in their backyards. These elderly people also usually work alone, which makes clearing land, tilling, planting, weeding and harvesting even more demanding. This drudgery can sometimes be alleviated by working in groups or co-operatives.

Facilitating urban agriculture

Urban agriculture is a viable activity that must be promoted through the protection of farming land and the crops of urban farmers. Currently urban agriculture is mostly benefiting the relatively rich, while the poor suffer from theft and lack of resources. Therefore, more must be done to formulate policies that will directly increase opportunities for the poor. The by-laws and regulations related to urban agriculture need to be facilitating (for example provision of machinery, seed and title deeds, which would establish some permanency and security for farmers) rather than directive and controlling in a negative manner, as currently is the case.

The study shows that most farmers want more land (an extension of current farms or allocation within the city) for their farming activities. Some (31 out of 146) also argued that the government should provide seed, tractors and fertilisers at subsidised rates for the convenience of urban farmers. Thirteen farmers argued that they should receive extension support for the sustainable use of their land and another 7 farmers mentioned access to water (irrigation). Of interest is the small number of farmers (8) who mentioned that they want access to (rural) government farms. This demonstrates the reluctance of urban dwellers to relocate to distant areas for full-time farming. Also a small number (5 farmers) recommended marketing support, which is a reflection of the small quantities and little surplus produced.

CONCLUSION

Urban agriculture is already improving the food security status of households in every social class. It therefore has great potential to sustain livelihoods, if farmers are provided with enough resources and a sufficient legal framework (see the box on Bulawayo on page 42). Urban agriculture is not a temporary relief strategy but a permanent food security measure because it protects households from food insecurity. Realisation of this fact will lead to more serious and genuine support to urban agriculture and its role in alleviating urban poverty.

References

Gefu, J. O. 1992. Part time farming as an urban survival strategy: A Nigerian case study. In: Baker, J. & Pedersen, P.O. (eds.) The Urban - Rural Interface in Africa. Uppsala: Nordiska Afrikainstitutet Mlozi, M.R.S. et al. 1992. Urban agriculture as a survival strategy in Tanzania. In: Baker, J. & Pedersen, P.O. (eds.) The Urban - Rural Interface in Africa. Uppsala: Nordiska Afrikainstitutet Mougeot, L.J.A. 1994. Leading Urban Agriculture into the 21st Century: Renewed Institutional Interest. In: Egziabher et al. A.G. (ed.) Cities Feeding People, Chapter 6. Ottawa: IDRC (http://web.idrc. ca/en/ev-42938-201-1-DO) Nyanga Declaration on Urban and Peri-urban Agriculture in Zimbabwe 2002. Published by City farmer, Canada's office of urban agriculture (cityfarm@interchange.ubc.ca) Interviews with Senga (Gweru) councillor in 2004 Interviews with Gweru municipal administrator Gweru Master Plan (1994)

Continued on page 42

Urban Agricultural Experiences from the Perspective of Social Responsibility

The Atocongo Association is an organisation that has grown out of the corporate social responsibility efforts of Cementos Lima SA. It is committed to carrying out capacity-building and human development programmes and projects which help to create opportunities for marginal urban groups seeking to improve their quality of life. One strategy used by the association to achieve this goal is urban agriculture.

he association is assisted in this effort by the Small Grants Program of the United Nations Development Fund (UNDP) and the Global Environmental Facility (GEF). Within the framework of this alliance, the "Innovative and Participatory Initiatives to Conserve the Environment" programme is being implemented, which manages an Award Fund exclusively aimed at grassroots community organisations located in the southern cone of Metropolitan Lima. To date, three calls for submissions have taken place, and 19 projects have been selected, about half of which are related to urban agriculture, specifically in the districts of Villa Maria del Triunfo and Villa El Salvador. The Atocongo Association and the Small Grants Program support the projects by (1) providing advice and assistance with regard to the technical and practical aspects of growing produce, medicinal plants, or aromatic plants, as requested by the project itself and (2) assisting with the management tasks of the project.

THE ACTORS INVOLVED IN THE PROJECTS

Many of these projects are directly linked to food security and are led by women's organizations, such as mothers' clubs, soup kitchens, community centres, etc., made up of women who experience poverty on a daily basis and who do not have jobs which allow them to support their families with dignity. It is clear that in most cases, it is the women who assume the leading role in the quest for better living conditions, which will eventually

> Communications and Public Relations Department Atocongo Association Lima, Perú

make it possible for them to overcome the social exclusion they currently face. As such, most women not only assume a central role in their own households, but also act as presidents or coordinators, chosen by the members of their organisations in general assemblies.

IMPACTS OF CORPORATE SOCIAL RESPONSIBILITY

The urban agriculture projects, which originally sprung from corporate social responsibility efforts, have had many different impacts, both on the level of the women involved as well as on the level of the communities they live in. Most of the organisations find that this activity is a way to improve their ability to prepare and provide food through their community kitchens. On the other hand, a space for dialogue and learning is opened up, and new collective commitments are forged for continuing the activity, which then gets replicated in the households and turns the bio-gardens into an opportunity to generate household incomes, in addition to stimulating their accomplishments as micro-entrepreneurs.

This multifaceted impact is also demonstrated by the testimony of Ms. Honorata Huaman (53), a housewife and local leader who is very concerned about improving the quality of life in her community: *"Having obtained a project like this has been a great accomplishment for my community. It has led to improvements in different areas, especially in terms of nutrition. We are continuing with the learning process so that we can sell the products we grow and earn an income that will enable us to cover the basic necessities like water and electricity bills."*



Water is a scarce resource in the community gardens of Lima

Impacts on the women

Through participation in the projects, the women have increased their skills. They can now write reports, provide good leadership and use the internet as a medium for information and consultation, which enables them to learn about innovative solutions that can be adapted to their own local situation. They have strengthened their abilities to programme and facilitate workshops, and thus to guide the organisations' internal processes. In addition, most projects have resulted in the women learning how to plan, assume commitments and periodically address their fellow members in order to inform them of progress made and to establish a more dynamic relationship characterised by integration and solidarity. These newly acquired skills greatly enhance their community work.

The women are now not only well aware of the fact that there have been problems,

and that their performance is often criticised, but they also recognise that all of these obstacles serve to strengthen them, as they constantly receive recognition for their efforts and their desire to progress and help the community. Their families support them and see that their new attitude means that they will not stay at home all of the time, and that by "getting out" of the household as well as the community, they have opened up new spaces which provide them with valuable experiences. The progressively increasing participation of the men (generally the husbands) is a clear sign of increased family support, as they help out with the tasks of planting and harvesting, and get involved in the different activities proposed by the projects.

Impacts on their organisations and communities

The increased capacities of the women are clearly reflected in their organisations. Through applying these newly acquired skills, the women have managed to foster increased responsibility and commitment on the part of other members of their organisations, who are now participating more actively in the different activities that take place. In addition, their organisations have also been strengthened as they take on new responsibilities through the creation of commissions for making purchases and for selling produce, with special attention to the bio-gardens and training activities, among other initiatives. Decision-making capacities have also been enhanced and negotiation skills have been developed, which in turn strengthen the internal democratic functioning of their organisations.

The enhanced functioning of the organisations is not limited to internal successes only, but is also mirrored in the results that they have achieved in building alliances externally. The members of the organisations have been introduced to other institutions and professionals and as an organisation they actively seek contact with other stakeholders through activities such as awareness-raising campaigns and drawing contests. Some alliances have, for example, enabled the organisations and their communities to participate in local farmers' markets, where they can sell their products. Also, the organisations' members now see knowledge as a tool that makes them stronger and that can be transmitted to their communities. For example, know-how is exchanged through apprenticeships and the systematisation of experiences. In this way, everyone learns from each others' experiences. The impacts achieved have not been limited to the social realm of the communities, but have also extended to their environment as the organisations are helping to reduce pollution through organic farming; local ancestral customs and practices are revalued; native species in danger of extinction are cultivated; and soil is preserved by using organic fertiliser.

CONCLUSION

The story of the Atocongo Association shows us that corporate social responsibility can be an important and successful vehicle for community building through urban agriculture and that empowering socially disadvantaged groups such as women can start significant social, economic and environmental development processes in communities.

HARVESTING UNDER HIGH-TENSION WIRES

A good idea, a great challenge

The Peru Energy Network (REP), a company owned by the ISA Group Colombia, operates and provides maintenance for the national power transmission grid, through a concession granted by the Peruvian government. REP, as part of its community relations programme, maintains constant communication with the community members who are directly influenced by its activities. Three years ago, as a result of this dialogue, the idea emerged to convert the sandy fields of Villa Maria del Triunfo (located in the southern periphery of Lima) into gardens for urban agriculture. For this, REP brought together three institutions: the Municipality of Villa Maria del Triunfo, the NGO IPES and the local residents, who together with the company achieved significant synergies. Today, Villa Maria del Triunfo has three market gardens (huertas), which generate income for the direct beneficiaries.

Turning this ambitious project into reality was not an easy job. Villa Maria del Triunfo's geography is irregular, with sandy hills, rocks and a humid climate with little rainfall. On terrain like this, implementing the project was a big challenge, as in essence it meant farming the desert.

United efforts

The park and gardens staff of the Municipality of Villa Maria del Triunfo took charge of identifying interested people in the communities, in order to later train them in issues directly related to urban agriculture. With 95 percent of the participants being women, they truly stand out, even more so as they assumed ownership of the project from the beginning. The engineers of IPES took care of selecting the plots, which had to be prepared for this activity, since they were levelled landfills or uncultivated land. Using the labour donated by the population and tractors provided by the municipality, the terrain was levelled or terraces were built.

In one of the gardens, baptised Machu Picchu due to its form, rocks transported to the site to serve as the foundation for the terraces had to be broken with picks and clubs by the residents themselves.

At the beginning of the project, the municipality facilitated the water supply and throughout project implementation, IPES provided professional assistance. REP was in charge of supervising and monitoring the project, in addition to providing the necessary support to overcome any difficulties that arose.

Luis Pérez Egaña

Currently, the municipality organises farmers' markets where the farmers can offer their products for sale, thereby earning an additional 50 soles per month (about USD 20). In economic terms, the project gives the beneficiaries greater autonomy with respect to their household spending; and in terms of nutrition, these gardens supply vegetables to the community kitchens of the area, providing nutrients and enriching the diets of hundreds of indirect beneficiaries.

The Julian Cadavid, Machu Picchu and Indo-America gardens are the result of joint efforts between the public and private sectors, civil society and the community, and these efforts have made it possible to farm land underneath high-tension power lines.

Looking toward the future

Currently, an area for training is under construction for the southern cone on a 4,000 m² plot, thanks to joint financing by REP and RUAF Foundation. Luis Perez Egaña, a specialist in social responsibility for REP, looks toward the future with a great deal of enthusiasm and hope, saying that *"The future vision of this project is that by the time the concession contract ends, all land under the high-tension wires will be green, with people working and earning an income on it."*

From page 33



School children at work in the school-based food gardens

The future

In the next year Ubuntu will be adding 12 new households to our backyard gardening project including a garden at the site of a 20-person home-based HIV support group. Two new schools will become school nodes of care and support, complete with food gardens and feeding programmes, bringing the total number of learners fed on a daily basis to over 2000. Ubuntu will establish a partnership with another local health clinic where food gardening and feeding will integrate with comprehensive HIV services. We are now working very closely with the Department of Health in our clinic partnerships. The DOH has been instrumental in giving us a mandate to work in clinics and recently in contributing funds and infrastructure. We also hope that our support groups will receive funding from the DOH to continue with feeding at clinics. This would be a great step towards financial sustainability for these support groups.

An Urban Farm Emerges

Beyond clinics, backyards and schools, Ubuntu has secured a 1.5 hectare plot, which will be developed in partnership with the local municipality as an urban micro-farm. The municipality will provide water, electricity, tractors when needed,

and some inputs such as manure and seedlings. Ubuntu will supply trainings, funding for employing a farm manager and seasonal labour, and the bulk of the inputs. The farm, whose primary focus will be vegetable crops and vegetable seedlings to be used at other Ubuntu sites, will be maintained by a seven member coop of individuals currently gardening at the site. The co-op will employ and train on a seasonal basis many unemployed individuals from Ubuntu's case management system. In the medium term it is planned to develop a wood-fired bakery on the farm to provide our school-based feeding programmes with healthy fresh bread for breakfast, as well as to increase on-farm sales. The farm will make fresh organic vegetables, herbs and seedlings available to the residents of the surrounding townships at an affordable price. It will also be used as a centre for sustainable agricultural skills development in the area.

References

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ENDNOTE

Intake surveys at Ubuntu's holiday camps, afterschool programmes and life skills lessons indicate that at least 40 percent of the children worked with have lost one or more parents to HIV/Aids.

BULAWAYO

Since the introduction of the RUAF CFF project in the city in 2005, the Bulawayo City Council has implemented a number of activities on urban agriculture. The city of Bulawayo had worked on developing guidelines for urban agriculture until 2000, but they were never really effectuated. Since 2005 these guidelines have been used in allocating land for garden allotments and other urban agriculture projects in the city. Also since then, the council has revisited its policy on urban agriculture to streamline it and to come up with a policy that addresses current issues. The activities that have been embarked on include the following:

- An Urban Agriculture Multi-stakeholder Forum has been established, to guide the development of an UA agenda for the city.
- A team of experts has been engaged to identify pilot projects. The Gum Plantation has been identified as the site for the pilot that is going to concentrate on wastewater use.
- Periurban land on the edge of the city has been identified. The land has been demarcated into 200 square metre plots for use by households. Other open land within the city has also been demarcated and is being used for agricultural purposes.
- Over 30 boreholes have been resuscitated and the land around them is being used for urban agriculture.
- A city UA strategic agenda is being finalised and will guide the development of urban agriculture.
- Several training activities have been conducted for the farmers and other stakeholders to facilitate the implementation of UA projects.

Currently the city council operates 12 garden allotments scattered throughout the low-income areas. These allotments have been parcelled out to the elderly, widowed and other disadvantaged members of the community so that they can earn a living and are properly integrated into the community. The city council provides treated wastewater for free to the farmers. It also provides extension services for the farmers.

Legislation, Policies and the Practice of Urban Farming in Nakuru, Kenya: an addendum

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Dick Foeken

With a loan from ECLOF, the owner of this premise was able to expand his pig-raising activities and improve his butchery

he Urban Agriculture Magazine no. 16 (October 2006, pp. 41-44) contained an article written by me entitled "Legislation, policies and the practice of urban farming in Nakuru, Kenya: Contradictions abound". Shortly afterwards, I received a reaction from the Nakuru Municipal Council stating, on the one hand, that the article contained "some good materials which could be considered by us as urban agriculture policy formulators", but, on the other hand, that it contained "some misinterpretations on a number of facts which should be corrected". The latter concerned a few things I had written about the Nakuru by-laws dealing, in one way or another, with urban farming. Generally speaking, the reaction in itself is a positive sign that policy makers are taking notice of what is published in the UA-Magazine. It is moreover proof that the magazine is fulfilling its primary objective of serving as a discussion platform.

Although the Municipal Council's reaction actually shows that local legislation can be

confusing to outsiders (including perhaps many urban farmers), it is, of course, unfortunate that some of my statements regarding these by-laws were not entirely correct (any more). This was mainly because, first, I had to use initial drafts of the proposed Environmental Management By-laws 2006 and the proposed Urban Agriculture By-laws 2006, and, second, the period between submitting the article to UA-Magazine and the eventual date of publication was rather long. To put things right, the following corrections should be made to my article:

- The 1994 Public Health By-laws were recently reviewed and were *not* replaced by the Environmental Management Bylaws 2006. In fact, the two sets of by-laws contain complementary provisions and will both continue to be in effect.
- The current Environmental Management By-laws 2006 cover "Beautification and Greening" under Part XV (By-laws 165-176) and none of these by-laws forbid any form of urban agriculture. In fact, all that is required under By-law 172(i) is a municipal permit as a regulatory

measure. The Council has adequate capacity to deal with issuance of such permits.

- Moreover, By-law 177(i) only requires any livestock keeper to obtain a Council permit and does not prohibit livestock keeping in any way.
- The proposed Urban Agriculture By-law 33 controls the height of crops *only* in the residential areas and not in all areas like open fields, etc.
- Just like other statutes, the proposed Urban Agriculture By-laws when approved shall take precedence over any other Municipal Council By-laws in *all* matters pertaining to urban farming. These corrections in fact strengthen the overall conclusion of my paper in UA-Magazine-16, which was formulated as follows: "Nakuru is ahead of many cities and towns in sub-Saharan Africa, where farming is not (yet) accepted as an urban type of land use and where 'laissez-faire' is still the rule".

Books / DVDs

Wates, N. 2000. The community planning handbook: How people can shape their cities, towns & villages in any part of the world. London: Earthscan.

Growing numbers of residents are getting involved with professionals in shaping their local environment, and there is now a powerful range of methods available, from design workshops to electronic maps. This handbook is a good starting point for all those involved – planners and local authorities, architects and other practitioners, community workers, students and local residents. It features an accessible how-to-do-it style, best practice information on effective methods, and international scope and relevance. Tips, checklists and sample documents help readers get started quickly, learn from others' experience and select the approach best suited to their situation. The glossary, bibliography and contact details provide quick access to further information and support.

Tannerfeldt, G. & P. Ljung. 2006. More urban less poor: An introduction to urban development and management. London: Earthscan.

More urban - less poor brings order to the complex and important field of urban development in developing and transitional countries. Written in an accessible style, the book examines how cities grow, their economic development, urban poverty, housing and environmental problems. It also examines how to face these challenges through governance and management of urban growth, the finance and delivery of services, and finding a role for development cooperation. This is essential reading for development professionals, researchers, students and others working on any facet of urban development and management in our rapidly urbanising world.

Wals, A.E.J. (ed.). 2007. Social learning towards a sustainable world. Wageningen: Wageningen Academic Publishers.

This comprehensive volume - containing 27 chapters and contributions from six continents - presents and discusses key principles, perspectives, and practices of social learning in the context of sustainability. Social learning is explored from a range of fields challenged by sustainability including: organisational learning, environmental management and corporate social responsibility; multi-stakeholder governance; education, learning and educational psychology; multiple land-use and integrated rural development; and consumerism and critical consumer education. An entire section of the book is devoted to a number of reflective case studies of people, organisations and communities using forms of social learning in moving towards sustainability.

Wang, D. 2006. A Study of Community Gardens as Catalysts for Positive Social Change, Thesis, Environmental Studies Program, University of Chicago.

This thesis examines how community gardens may act as catalysts for positive social change by conducting an informal case study of a community garden in Hyde Park and by exploring the literature that concerns the social, political, and ecological dimensions of community gardens. The principal conclusion is that the garden in Hyde Park successfully satisfies community needs while minimally catalysing social change as defined for the purposes of this thesis. The particular circumstances of a community have been determined to be highly influential in creating the conditions necessary to support such social change.

Woodward, P. & P. Vardy. 2005. Community Gardens: A celebration of the people, recipes and plants. Flemington, Australia: Hyland House Publishing.

This publication explores the richness and diversity of Australian inner-city community gardens, and presents the



people who use them as guides to: the many fascinating and unusual edible plants they grow and use; their stories, touching on the events that brought these extraordinary people from over 20 different countries to Australia; what their gardens mean to them; what they grew in their homelands and what they grow in Australia; and their simple, homestyle recipes using the vegetables

and herbs gathered from these gardens. It contains tips for successful gardening, such as the use of pine needles for strawberries and chicken manure to warm the soil in winter.

Helphand, K.I. 2006. Defiant Gardens: Making gardens in wartime. San Antonio, Texas: Trinity University Press.

Illustrated with 95 startling archival photographs and illustrations, some from the Gulf Wars, this book examines gardens of



war in the 20th century – a period of the deadliest wars in human history – including gardens soldiers built inside and behind the trenches in World War I; gardens built in the Warsaw and other ghettos under the Nazis during World War II; gardens in the POW and civilian internment camps of both world wars; and gardens created by Japanese Americans held at U.S. internment

camps during World War II. Proving that gardens are far more than peaceful respites from the outside world, this book provides a thought-provoking analysis of why people build and work in gardens.

Warnaars, M. & W. Pradel. 2007. A Comparative Study of the Perceptions of Urban and Rural Farmer Field School Participants in Peru. Paper 4 in the Urban Harvest Working Paper Series, Peru: Centro Internacional de la Papa.

This study uses *Qmethodology* as a tool to investigate subjectivity in order to study the perceptions of rural and urban producers. The aim is to determine whether the perceptions of Farmer Field School (FFS) participants from urban areas differ from their rural counterparts, particularly in reference to time management. Although the study confirms that the social, economic and geographical environments where these two groups are found indeed influence their daily lives as well as their different perceptions, it also states that a clear dichotomy of urban and rural producers does not exist and that it rather

Books / DVDs

speaks of 'urban' and 'rural' style perceptions. http://www.cipotato.org/urbanharvest/documents/pdf/ffs. wp4.pdf

Lawson, L. J. 2005. City Bountiful: A century of community gardening in America. Berkeley: University of California Press.

Since the 1890s, providing places for people to garden has been an inventive strategy to improve American urban conditions. There have been vacant-lot gardens, school gardens, Depression-era relief gardens, victory gardens, and community gardens – each representing a consistent impulse to return to gardening during times of social and economic change. In this critical history of community gardening in America, the most comprehensive review of the greening of urban communities to date, this book documents the evolution of urban garden programmes in the United States. It focuses on the values associated with gardening, the ebb and flow of campaigns during times of social and economic crisis, organisational strategies of these primarily volunteer campaigns, and the sustainability of current programmes.

Balmer, K., A. Rhoads & P. Rosenbloom. 2006. The Diggable City: Exploring the potential for urban agriculture (DVD, 24 min.).

The Diggable City, a PSU Master of Urban and Regional Planning workshop project prepared for the City of Portland, Oregon, introduced a land inventory containing specific sites of publicly-owned properties where opportunities may exist to expand community gardens and other forms of urban agriculture. The DVD serves to educate a wider audience on current trends toward localised food production. Through the lens of various urban farm projects and numerous in-depth interviews, the documentary depicts a compelling story about how the local community is currently engaged with this land use.

Hynes, H.P. 1996. A Patch of Eden: America's Inner-City Gardens. White River Junction, VT: Chealsea Green Publishing Company.

Cities in North America are often portrayed as morasses of drug addiction, brutal crime, and official corruption. However, in every metropolitan area of the country, city dwellers have been planting flowers, vegetables, trees, and herbs – with astonishing results. These community gardens may be modest in scale, but their contributions to the rejuvenation of America's inner cities must not be overlooked. The gardeners of these "patches of Eden" include children and elders, immigrants, and "low-income and no-income people". This book celebrates the achievements of the inner-city gardeners, relating in detail the stories of community gardens in Harlem, San Francisco, Philadelphia, and Chicago.

Kaner, S., L. Lind, C. Toldi, S. Fisk, & D. Berger. 2007. Facilitator's Guide to Participatory Decision Making, 2nd Edition. San Francisco, CA: Jossey-Bass / A Wiley Imprint.

This guide is a comprehensive training manual and sourcebook for facilitators, managers and leaders who want to encourage full participation, promote mutual understanding, and help groups build inclusive, sustainable agreements. It presents more than 200 valuable tools and skills and places them in the context of a lucid, realistic model of the dynamics of group decision making. The guide will help all facilitators improve their diagnostic judgment and increase their repertoire of methods and skills for supporting groups to make sounder, saner decisions.

BACK COPIES OF THE UA MAGAZINE

Below you find the list of UA magazines that are published by RUAF in the past 7 years. We have quite a number of copies of some of the issues still in stock (except for no. 8 and no. 15). In case you are interested in receiving some of these copies, please contact us by sending an email to ruaf@etcnl.nl.

No 1. June 2000. Maiden Issue.

No 2. October 2000. Livestock in and around Cities. *No 3. January 2001.* Health and Urban Agriculture. *No 4. June 2001.* Integration of Urban Agriculture in Planning.

No 5. December 2001. Appropriate Methods for Urban Agriculture.

No 6. April 2002. Transition to Ecological Urban Agriculture, a challenge.

No 7. August 2002. Economics of Urban Agriculture. *No 8. December 2002.* Wastewater use for Urban Agriculture. (no longer available)

No 9. April 2003. Financing Urban Agriculture. *No 10. August 2003.* Microtechnologies for Urban Agriculture.

No 11. December 2003. Availability, Access and Usability of Land for Urban Agriculture.

No 12. May 2004. Gender and Urban Agriculture.

No 13. December 2004. Trees and Cities, Growing Together. *No 14. July 2005.* Urban Aquatic Production (with PAPUSSA).

No. 15. December 2005. Multifunctional Use of Urban Land. (no longer available)

No. 16. October 2006. Formulating Effective Policies on Urban Agriculture.

No. 17. February 2007. Strengthening Urban Producers' Organisations.

UAM Special (with FAO). 2001. World food summit – five years later. Special edition. FAO/ETC/RUAF.

UAM Special (with UN Habitat). 2002. Urbanisation, Poverty and Urban Food Security. Special Edition. UN Habitat/ETC/RUAF

As long as stock permits us we can send you a copy.

Web sites / Events

http://www.linkinglearners.net/

Linking Local Learners supports groups of local learners around the world to share both their expertise and their challenges in a virtual knowledge exchange.

http://www.fao.org/docrep/009/a0218e/a0218e00.htm

This online FAO Manual entitled 'Setting up a School Garden' is intended for teachers, parents and communities. It draws on experiences and best practices of running school gardens all over the world.

http://puvep.xu.edu.ph/index.php

The Peri-urban Vegetable Project (PUVeP) is a research and outreach unit of Xavier University College of Agriculture (XUCA), Cagayan de Oro City in the Philippines and provides research, training and education related to urban natural resources management and food production in the city.

http://www.communitygarden.org/

The American Community Gardening Association (ACGA) is a bi-national non-profit membership organisation of professionals, volunteers and supporters of community greening in urban and rural communities.

http://www.foodsecurity.org/index.html

The Community Food Security Coalition (CFSC) is a non-profit, North American organisation dedicated to building strong, sustainable, local and regional food systems that ensure access to affordable, nutritious, and culturally appropriate food for all people at all times.

http://www.foodsecurity.org/list.html

The COMFOOD listserv is run by the Community Food Security Coalition and functions as a primary link between individuals and organisations addressing community food security in the US, Canada and globally.

http://www.new-ag.info/07/02/focuson.php

New Agriculturist online provides an update on the latest news and developments in tropical agriculture for a global audience. The latest issue (February 2007) focuses on horticulture in the city.

For more relevant websites, see www.ruaf.org.

Events

International Conference on Sustainable Sanitation "Food and Water Security for Latin America" (Fortaleza, Brazil) 26-28 November 2007

The International Conference on Sustainable Sanitation is being organised to increase the communication and knowledge exchange. In particular, the conference is meant to provide a forum for Latin American representatives to share their experiences, while having direct exposure to the state-of-the-art in other regions of the world.

For further information visit: http://www.ecosanlac.org/ ecosanlac/default2.php?siteid=html/page58.php

ECOPOLIS Awards Program Deadline October 18, 2007

The ECOPOLIS Awards Program for Graduate Research and Design of IDRC's builds on the experience of the former AGROPOLIS Awards Program, broadening its scope to include the integrated themes of urban agriculture, urban water and sanitation, solid waste management, vulnerability to natural disasters, land tenure, and housing. IDRC's ECOPOLIS Awards Program also includes support to applied research in innovative design within disciplines such as architecture (housing), engineering, urban planning, waste management, and water and sanitation. See:

http://www.idrc.ca/upe/ev-101266-201-1-DO_TOPIC.html

Web2forDev Conference 2007 (Rome, Italy) 25-27 September 2007

The is the first conference on participatory web for rural development. The Conference is a joint venture by CTA, FAO, IICD, GTZ, APC, ACP Secretariat, Université Cheikh Anta DIOP, University of British Columbia Okanagan, Euforic, DGroups, CGIAR, IFAD and will take place on, at the FAO head quarter in Rome, Italy. Soon more information can be found her on how to register at http://www.web2fordev.net/about.html

International Conference on Sustainable Cities and Villages (Dongsheng, China) 27-31 August

International Conference with a focus on Urban and Rural Ecological sanitation, Organic Waste Management and Agricultural Reuse. The conference will have three-and-ahalf days of sessions, both plenary and parallel, plus a day for technical study excursions. The conference will also showcase the new Erdos ecotown. The ecotown, now nearing completion, is the largest urban project of its kind in China and when fully operational, all fractions of waste from the households will be collected and treated onsite using an ecostation and greywater treatment plant. The organic products and water will be reused in agriculture. For more information visit http:// www.ecosanres.org/dongsheng2007.htm

The African Green Revolution Conference (Oslo, Norway). August 29-September 1, 2007

This conference will convene diverse groups of people involved in developing sustainable agriculture for Africa, from farmers and activists to heads of state and senior executives. The community will review progress and build new partnerships. More information at:

http://www.africangreenrevolutionconference.com

28th Annual Conference, American Community Gardening Association, Northeastern University, Boston 9-12 August, 2007

The ACGA Annual Conference brings together hundreds of individuals from across the United States, Canada, and abroad, engaged in all aspects of gardening and greening. The conference includes hands-on workshops, keynote speakers, a film festival, and visits to parks, school gardens, community gardens, urban agriculture sites and other green spaces in Boston and New England.

http://www.communitygarden.org

EVENTS

2007 Rooted in Community Conference (Philadelphia, USA) 18-22 July 2007

Rooted in Community (RIC) is a national grassroots network that empowers young people to take leadership roles in their communities. RIC began as a national conference for groups engaged in community gardening, urban agriculture and community food security, convened by the American Community Gardening Association, The Food Project and Literacy for Environmental Justice. But now RIC has evolved into its own network of groups, focused on positive change, through food and food systems. The Urban Nutrition Initiative is the local host for the event.

http://www.rootedincommunity.org

Towards Global Food Systems: Food Policy for Developing Countries (Wageningen, The Netherlands) 2-13 July

A two-week PhD Summer School focusing on Governance, Institutions and Markets in Global, National and Local Food Systems. The Mansholt Graduate School of Social Sciences (Wageningen) studies social changes and control processes in rural areas and agri- and food chains and their institutional surroundings. Course given by Per Pinstrup Andersen and Arie Kuyvenhoven. For more information visit: http://www.sls.wau. nl/mi/mgs/courses/index.htm

Global Studio Johannesburg 2007 (Johannesburg, South Africa) 25 June - 19 July

Global Studio and People Building Better Cities are now in their third year and focus on the way in which the city building professions can assist in creating more sustainable environments, with and for the urban poor. Global Studio is an on-going research and teaching project which aims to positively contribute to the implementation of the Millennium Development Goals. For more information visit the project website at http://www.theglobalstudio.com or contact Anna Rubbo at rubbo_a@arch.usyd.edu.au.

Horticulture: An economic engine for urban and rural balanced development. Growing Healthy Food and Healthy **Communities in Connecticut**

A Community Gardening Conference in Elm City (Connecticut, USA) 16 June 2007

This conference aimed to provide new insights on how community gardening contributes to the health of people and neighborhoods. For more information, contact: Cordalie Benoit, President, CCGA, +1-203-770-0146; cordalie.benoit@ aya.yale.edu or Diane Wright Hirsch, UConn Cooperative Extension; +1-203-407-3163; diane.hirsch@uconn.edu or visit www.ctcommunitygardening.org

Special side event at FARA General Assembly (Johannesburg, South Africa) 11 June 2007

This workshop aimed at sharing experiences, establishing networking bases and preparing a programme of projects and initiatives like the first International Symposium on Urban Horticulture in Africa (2008). This side event was sponsored by FARA and GlobalHort (the Global Horticulture Initiative) and will focus on issues such as how to highlight the horticultural sector as an engine for urban development, or how to promote horticulture as a link to the other agricultural and economic sectors, and as a link between rural and urban areas.

Food Security Certificate Program

Five courses in Ryerson University's Food Security Certificate Program are being offered through Internet starting 5 May 2007 (to August 11, 2007). Food Security: Concepts and Principles; Food Security: Applied Research Methods and Evaluation; Food Security: Special Topics in Food Security - Field trip to Belo Horizonte Brazil; Nutrition: Nutrition for Nursing Practice; How Safe is Our Food? For details and links to registration information visit http:// www.ryerson.ca/ce/foodsecurity. Course overviews are available at http://www.ryerson.ca/ce/de (click on course overviews and scroll down to the course of interest). Contact Rod MacRae (food@ryerson.ca) for further information.

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Websites:

Periurban Vegetable Project: http://www.puvep.com Southeast Asia Rural Social Leadership Institute: http://searsolin.xu.edu.ph

Urban Agriculture Magazine

We invite your contributions to the next issue of the UA-Magazine: **NO. 19: SUPPORTING INNOVATIVENESS IN URBAN FARMING SYSTEMS** NOVEMBER 2007

DEADLINE FOR CONTRIBUTIONS: 1 SEPTEMBER 2007

Urban farming systems are in constant development. Innovation is continuously taking place. Urban farming systems need to be improved for several reasons:

- Specific urban conditions such as confined space, closeness to urban consumers, special health considerations due to closeness to people, and use of urban organic wastes and wastewater, among others, require specific adaptations.
- The agricultural knowledge of urban farmers who recently migrated to the city may not always apply in the specific urban setting in which they now find themselves.
- The urban poor or entrepreneurs with no background in farming who have taken up farming lack relevant knowledge.

This issue of the UA-Magazine will be a first effort to take stock of a broad range of experiences involving:

- participatory methodologies for promoting innovation in urban farming systems, such as joint experimentation, farmer field schools, identifying farmer innovators, exchange visits, using ICT (participatory radio, etc.)
- new technologies in urban farming that were developed by farmers or together with farmers in response to the specific urban conditions mentioned above.

We are particularly interested in experiences showing the process of adapting methodologies and technologies to the urban setting and indicating how innovation of urban farming systems can be stimulated and supported most effectively.

This issue is a collaborative effort of RUAF (www.ruaf.org); PROLINNOVA, an international learning and advocacy network on promoting local innovation in ecologically oriented agriculture and natural resource management (www.prolinnova.net); and Urban Harvest, a CGIAR system-wide initiative to direct and coordinate the collective knowledge and technologies of the Future Harvest Centers towards strengthening urban and periurban agriculture (http://www.cipotato.org/urbanharvest/home.htm).

Please share the following aspects of your experience (as applicable) in your article:

- a short narrative on your experience (main goal, location, actors, target group, activities)
- the methods applied (What methods were applied and , why were they chosen? Why do they work well?
- With whom does the project maintain links NGOs, farmers' organisations, municipalities, etc.?)
- the impacts achieved (areas, extent, unexpected impacts)
- · problems/challenges faced and solutions found
- · major lessons learned
- the way forward (future plans, new partners, support required from whom, etc.).

Articles on urban agriculture submitted to the UA-Magazine should consist of approximately 2,300 words (for three-page articles), 1,600 words (for two-page articles), or 700 words (for one-page articles), preferably accompanied by an abstract, references (maximum of 5), figures and good-quality digital images or photographs. The articles should be written in a manner that can be readily understood by a wide variety of stakeholders all over the world. We also invite you to submit information on recent publications, journals, videos, photographs (more than 300 kB each), cartoons, letters, technology descriptions and assessments, workshops, training courses, conferences, networks, weblinks, etc.

ISSUES OF THE UA-MAGAZINE PLANNED FOR 2008

The following issues will be produced in 2008 and your ideas and contribution of articles are already most welcome:

- No. 20: Productive Use of Urban Water - April 2008
- Role of Urban Agriculture in Crisis Situations (Emergency and Rehabilitation) -No. 21: October 2008.

Of course, all other suggestions and comments on the UA-Magazine are also welcome. Please take a moment to voice your opinion by sending an e-mail to the editor at ruaf@etcnl.nl, or write us a letter.

Please updat your this UA-Magazine.

Urban Agriculture Magazine

BUILDING COMMUNITIES THROUGH URBAN AGRICUI TURF

ISSN 1571-6244

No. 18, July 2007

UA Magazine is published two times a year by the Network of Resource Centres on Urban Agriculture and Food Security (RUAF), under the Cities Farming for the Future Programme, which is financed by DGIS, the Netherlands, and IDRC, Canada.

UA Magazine is translated into French, Spanish, Chinese, and Arabic, and distributed in separate editions through the RUAF regional networks, and is also available on www.ruaf.org.

The RUAF Partners are • *Latin America:* IPES Promoción del Desarrollo Latin America: IPES Promocion del Desarrollo Sostenible, Lima Peru; email: au@ipes.org.pe; Magazine in Spanish: www.ipes.org/au
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• Coordination and Support: ETC Foundation; email: ruaf@etcnl.nl; Magazine in English: www. ruaf.org

Editors, No. 18 This issue was compiled by René van Veenhuizen (Responsible Editor), together with Joanna Wilbers of ETC-UA and Martin Bailkey of University of Wisconsin-Madison.

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