

URBAN GREENING PARTNERSHIP PROGRAM

SRI LANKA



FINAL REPORT
(September 17, 2003 – September 17, 2006)



International Centre for Sustainable Cities

General Information

In Sri Lanka, 25% to 9% of the population lives on less than \$1/day – consequently, poverty reduction is a major objective for national and international development agencies. Since urban centres are engines of economic growth, one strategy to reduce rural poverty has been to encourage urban migration. Urban planners and policy makers now face the challenge of creating more livable cities by providing employment and economic opportunities, together with basic amenities and services, with the objective of encouraging 60% of the population to live in urban areas by 2025.

Sri Lanka's economy is broadly based on agriculture. Although this sector provides 35% of employment, it only contributes 17.7% to the GDP. Urban unemployment is higher than the country average and urban poverty tends to be more acute than rural, as the poorest among the poor live in cities. Furthermore, the parks and green spaces in Sri Lankan cities only represent less than 2% of total land use. Unfortunately, these parks are poorly landscaped, and are in degraded or vulnerable areas. Sri Lankan cities have become vulnerable and derelict areas, discouraging urban migration and standing in the way of economic growth.

Although agriculture represents a considerable share of urban land uses, more than 90% of the agricultural land is owned by the private sector. Worse than North America's urban sprawl, the gradual conversion of productive agricultural lands for horizontal residential development has decreased overall food production and damaged the existing eco-systems. Informal settlements or poor migrants seeking a better life have sprung up around most urban centres and also along most of the roads connecting towns throughout the island. Thus urban sprawl is both a ring-expansion around the towns and string-expansion along major roads. The situation has reached a critical stage in many urban areas where lowland paddies have been reclaimed for non-agricultural purposes, despite the objections of planning authorities. Experience from the Thai Urban Greening Project suggests that promoting urban greening through community-based environmental programs would be an effective sustainable development strategy for Sri Lanka that would help address urban poverty, improve the environment, make cities more sustainable and encourage economic growth.

Synthesis

From 2000-2002, the International Centre for Sustainable Cities (ICSC) conducted an Urban Greening Project in Thailand that successfully applied urban agriculture as a strategy to address poverty and environmental degradation in the Bangkok region. Based on the success of the Thai project, ICSC submitted a funding application to CIDA proposing to increase the scale of the Urban Greening Project and transfer it to Sri Lanka. This application proposed to incorporate the lessons learned from the Thai project by:

- Encouraging communities to sell the fruits and vegetables produced in the green spaces;
- Attaining private industry and government involvement;
- Encouraging youth involvement in workshops and urban greening activities; and
- Communicating the benefits of urban greening to gain community support and participation.

In 2003, ICSC was awarded funding to conduct the three-year Urban Greening Partnership Program in Sri Lanka. ICSC served as the overall project managers, providing technical assistance,

facilitating peer exchanges and training activities, and assisting in the dissemination of the lessons learned. A local NGO, the Sevanatha Urban Resource Centre, delivered the project at the community level, while the Clean Development Mechanism Study Centre (CDM) at the University of Peradeniya provided critical agricultural training and expertise to the project team, communities and municipal councils. The Thailand Environmental Institute (TEI) was also invited to Sri Lanka on an annual basis to provide training and share the lessons learned from the Thai experience in urban greening.

Initially, the UGPP was envisioned as part of a three-pronged capacity building and poverty reduction program aimed at supporting public and NGO sector development in Sri Lanka. The two remaining components of this approach were expected to be funded by the International Development Research Centre (IDRC) and the Dutch Development Aid Agency.

In 2003 support was received from IDRC, enabling the UGPP team to conduct extensive two-year monitoring and evaluation on the UGPP. The methods applied were based on IDRC's "Outcome Mapping" design. The results of this evaluation are included in this report.

In 2006, ICSC was awarded a project valued at \$1.78 million from the Canadian International Development Agency (CIDA) to implement the "third prong" – an initiative directly aimed at improving the livelihoods of the poor, particularly women. Initially, this part of the program was envisioned as a means of improving the livability of cities through urban landscaping, urban agriculture and solid waste management. However, since the initial UGPP proposal was drafted in 2003, the lives of many Sri Lankans changed after falling victims to the tsunami of 2004. With the tsunami came changes in priorities for Sri Lanka. As a result, ICSC's application to CIDA was re-focused to include centering women in governance.

Identified Needs

- In 1997, the Colombo Metropolitan Region (CMR) identified a need for urban agricultural initiatives in its CMR Structural Plan. As a result, the Sevanatha Urban Resource Centre recommended building community capacity with respect to urban agriculture and that programs target regional townships, where poverty and environmental problems tend to be more severe. At the same time, CDM emphasized a need for urban agricultural training so that such initiatives could be carried out.
- During an Exploratory Mission to Sri Lanka in June 2003, solid waste management and waste water were also identified as problem issues by the local governments and communities. The rapid conversion of agricultural lands and continuous destruction of the existing ecosystem in Sri Lanka had generated concern regarding storm water drainage in urban areas. In addition, the poorest of the poor, who were found in urban areas in the Colombo Metropolitan Region (CMR) were suffering from chronic hunger (low daily caloric intake).

In an attempt to address each of these issues, the Urban Greening Partnership Program was developed.

Project Description

The advancement of urban agriculture has been an effective sustainable development strategy applied by ICSC and the Thailand Environmental Institute (TEI) to help Thai communities address poverty and environmental issues. In Bangkok, representatives from ICSC and TEI worked with poor urban communities to establish citizen-working groups to address local environmental problems. Upon identifying problems, these groups established and enacted plans to address them. Throughout this process, NGO staff also worked with local governments, building bridges between community groups and elected officials. In addition to improving the local environment, this project developed a framework that other communities could follow to establish their own urban green programs. This framework was adopted and replicated in 50 communities by the Bangkok Metropolitan Administration.

The Thai experience demonstrated that environmental goals, economic and social goals can be met at the same time. The participants improved their own livelihoods at the same time as improving their neighborhood. Women were active participants and benefactors and more participatory decision making processes were accepted as a legitimate way of doing business. The Thai framework for urban green programs was adapted to the Sri Lankan context and in 2003 the Urban Greening Partnership Program began.

In the first year of the UGPP, three neighborhoods in the following municipalities were selected to participate in the program: Matale, located in the central region of Sri Lanka, north of Colombo; Moratuwa, located in the wet coastal zone with a flat landscape and sandy soil; and Badulla, located 230 km from Colombo. Badulla is located up-country in a dry, climatic zone.

The selected communities covered different agro-ecological, socio-economic and environmental conditions, and all suffered from poverty. On average, the amount of green space in each of these neighborhoods was less than 2.7%. Further, the neighborhoods shared the following problems:

- Insufficient waste and wastewater handling facilities
- Wastewater contamination and dumping of solid waste in vacant lands, canals and stream reservations

In the second year of the UGPP, the project team remained in the same three municipalities, but increased the scale of the project by adding new neighborhoods. In fact, by the second year of the UGPP, there were three new neighborhoods in Matale alone that had placed requests to their municipal council, asking to be involved in the UGPP.

Project staff from ICSC traveled to Sri Lanka 4-5 times per year to meet with the local staff and visit the demonstration sites. A project coordinator and three field officers from Sevanatha were responsible for the day-to-day management of the UGPP and spent a considerable amount of time within the communities, meeting with the residents and also spending time meeting with the local authorities within the municipal councils.

CDM's contribution to the UGPP was invaluable. In the initial project application to CIDA, ICSC had proposed to bring agricultural experts from Canada to Sri Lanka to implement the local green

plans. It quickly became apparent that the agricultural expertise already existed within Sri Lanka and was at the disposal of the project team. CDM, located within the Faculty of Agriculture at Peradeniya University, did a wonderful job of working with the communities and local authorities to provide the essential training on how to “do” urban agriculture. In particular, how to effectively deal with some of the challenges, such as limited land space, salty soils, etc.

At the same time, the UGPP provided training for the staff at CDM. Given that most academic research is conducted in isolation, CDM was not accustomed to working at the community level. The staff at CDM admitted that, while at times challenging, working with communities was extremely rewarding.

CDM also facilitated very useful meetings and links to the government’s Department of Agriculture. The Department was very enthusiastic about the UGPP and provided the communities and councils with training and planting materials.

The overall goal of the program was to introduce community initiatives in urban greening as a strategy to reduce poverty and enhance the environment in urban areas in Sri Lanka. This goal was realized by increasing the capacity of low-income communities, NGOs and government institutions. (For more information, please refer to sections on “Outcomes,” “Outputs” and “Overall Impact.”) The following objectives were set for the UGPP:

- Improve the status of the poor (particularly women) by increasing family income and savings through increased food production (which reduces household food expenditures and may be sold to generate supplementary income), while increasing community capacity to address environmental problems;
- Improve the capacity of the partner organizations through technical assistance, training and facilitating south/south/north multi-sector exchanges to share learning about urban agriculture and overcoming environmental degradation; and
- Develop improved links between communities and local governments, as was clearly demonstrated in the Bangkok Urban Greening Project. Such liaisons and linkages were lacking in the Sri Lankan locations.

To meet these objectives, the project consisted of the following components:

- **Creation of Women’s Groups** – in many neighborhoods, such groups were already in existence. However, in other neighborhoods, the project team worked with the communities to create these informal groups. Through extensive training provided by the UGPP, women were equipped with the “know how” related to urban greening and therefore assumed a large part of the responsibility for the initiative. More than 50% of the participants at all of the project meetings were female.
- **Community Gardens/Green Space** – new and existing community groups worked together to convert unused, derelict areas into gardens and green space (trees, flowers, etc). Any produce/herbs cultivated in these spaces were shared amongst the participants.
- **Residential Green Space** – many of the participants chose to conduct urban greening on their own land. Because many of these residents had very little land, the project team provided them with training on unique planting methods, such as vertical crops. Many

participants with home gardens told the project team that they would use what vegetables/fruits they could, and would then either share the remainder with friends and family or sell it.

- **School and Temple Programs** – in the final year of the program, the project team added two more target beneficiary groups, the schools and temples. While these programs involved many participants, it was difficult to determine the strength of their impact, given the short amount of time that was available to work with these groups.
- **Recycling Programs** – in year one, solid waste management was identified as a challenge within all of the project communities. In response, the project team worked with the communities and councils to implement recycling programs. While many of these neighborhoods were already recycling in a very informal fashion (ie: people picking through waste to collect plastics, glass, etc for re-sale), there had been no attempt to organize recycling and make it a priority. Through the UGPP, the municipal councils provided the project communities with small separation centres in which the local residents would drop off their recyclables.
- **Composting Programs** – by the end of the UGPP, most of the project communities had implemented composting programs of different scales. Staff from CDM provided training on “how to compost.” Sevanatha, who also makes concrete composting bins, sold bins to the communities. Normally these bins would be relatively expensive for the residents within the project communities, however because the local authorities agreed to subsidize the cost of the bins, they were affordable.

The first year of the project was spent generating awareness within the communities and municipal councils; the second year focused on scaling the project out into new communities; and the third year focused on disseminating the lessons learned locally, nationally and internationally. Overall, the project methodology and design has been successful in achieving the project objectives. While few families decided to sell their produce, many reported that by growing their own vegetables, they were saving money. The total amount of savings was not reported. At the same time, the community residents and municipal councils received training on environmentally sound solid waste technologies, and many of the trainees are currently practicing composting and separating their recyclables.

Throughout the Project, the partner organizations received a significant amount of training, both externally and internally (eg: IDRC and the Department of Agriculture provided training to the team. At the same time, CDM trained the communities, local governments, ICSC and Sevanatha). South-South-North exchanges were particularly useful in providing ideas and sharing lessons learned in implementing both urban greening/agriculture and solid waste management programs.

ICSC was pleased to see increased cooperation between the local governments, communities and NGOs in Sri Lanka. While the local NGOs had a history of working with the Project communities, the local governments did not. Now that these communities have received training and information on becoming part of the governance process, the residents have become empowered to do so.

The UGPP has exceeded the project’s expectations – it has resulted in the creation of community working groups (*Kalyana Mitra Samaja*); the formation of community micro-credit groups; and it has resulted in the creation of community composting programs and establishment of community

recycling centres. In Matale and Badulla, urban greening is now a line item in the municipal budgets. Urban greening techniques are being shared amongst communities, which is critical to the sustainability of the program. Finally, through significant CIDA funding that ICSC levered to conduct post-tsunami reconstruction, urban greening activities will continue in new communities within Sri Lanka; the original project communities will continue urban greening activities through the funding that each municipal council allocated within its budget for greening.

Outcomes

This program established community demonstration projects that incorporated urban greening, solid waste management and community empowerment. Through organizing citizens to develop local green plans and establishing market gardens and other urban greening projects, the UGPP resulted in:

- Increased useable urban green spaces;
- Increased food production through the introduction of appropriate cultivation systems;
- Improved solid and liquid waste disposal through the use of composting technologies; and
- Ensured long-term sustainability by educating communities on how to implement and sustain urban greening initiatives.

Grassroots – Government Collaboration

Uniting the project staff with the local authorities added a ‘human dimension’ to the project. An unexpected outcome of the numerous workshops that were held was the strengthening of relations between the project staff and the local authorities. During each workshop, the participants lodged together, ate together and learned together, which had a significant effect on the way they related to one another. Spending time together outside of the office allowed everyone to become acquainted on a different, more personal level. More importantly, in an attempt to bring low-income communities into the decision-making process and thus improve good governance, the UGPP strived to ensure that both the project communities and their respective municipal councils participated in the project. Their involvement was sought for all stages of the UGPP, from planning, to implementation, to expansion and sustainability planning.

Slowly, the project team noticed relationships beginning to form between the communities and their councils. As trust was established, the communities began to approach their councils themselves with requests for help with community needs. In one instance, a women’s group approached their council requesting funds for a water hose for the community garden.

On a more individual level, community participants shared their personal experiences with the UGPP, noting how the project had improved their communities, not only aesthetically, but also in terms of interpersonal relationships. One family related a story of an on-going feud with another family in the community that was finally resolved once the two families began working together in the community garden.

Since 2003, the project staff and local authorities have continued to work together, and the municipal councils have demonstrated their commitment to the project by contributing time and

financial resources. In June 2006, local authorities and project staff traveled to the World Urban Forum and cooperated in developing the presentation that was delivered by Salinda Kandapola.

South-South Collaboration

On an annual basis, staff from the Thailand Environmental Institute was invited to Sri Lanka to provide training and meet with the local authorities. Having the Thais share their positive experiences with the Sri Lankans provided a huge “boost” to the project. The project team found the South-to-South dialogue to be particularly useful, as it provided the necessary stepping stone to establishing working collaborations between our two southern partners.

Gender Equality

Throughout the three-year period, women actively participated in the Project, representing at least 50% of the participants in most meetings. In the project communities that were primarily Muslim, however, it was noted that fewer women participated in the activities. Through additional IDRC funding, six members of the project team and one community representative attended the World Urban Forum in Vancouver (June 2006) to learn more about urban agriculture – the community representative that was selected was a woman from Badulla.

Outputs

Over the course of the project, there were many outputs, which are listed in the Results-Based Management Chart. Several training materials were produced, from brochures and pamphlets, to posters. The Project was documented in two videos which were narrated in Sinhalese. Sevanatha also published urban greening newsletters. Powerpoint presentations on the UGPP were created, one of which was presented by Salinda Kandapola during a networking session at the World Urban Forum in Vancouver. The proceedings of the regional seminar on urban agriculture (held in Sri Lanka in 2006) have also been published (enclosed).

At the community level, several green spaces were created, including herbal gardens, vegetable gardens, trees and parks. Green space within homes also increased. More households are now equipped with the knowledge and materials to compost organic waste. Communities are now equipped with recycling depots, enabling the residents to dispose of their recyclable materials in an environmentally sound manner and thus reducing the amount of waste in the communities.

At the municipal level, local authorities committed approximately \$5000 to their budgets for greening activities. Municipal councils also demonstrated their support by providing UGPP staff with office space and computers, as well as community space for meetings.

Several workshops, training sessions, meetings and conferences were held over the three year project. With support from IDRC, a total of 22 project staff and local authorities were trained in Outcome Mapping, exceeding the expectations of the project staff.

The results of the Outcome Mapping training workshop were documented in the form of Outcome Journals (see tables 1 and 2). These tables outline the anticipated outcomes of the project and evaluated the UGPP’s progress towards achieving these outcomes, with respect to both the

communities as well as the municipal councils. Additional outcomes have been listed in the Results-Based Management chart.

Challenges

The tsunami of 2004 was the most significant challenge encountered by the UGPP team. One of the UGPP's coastal project communities, Moratuwa, was hit. While there were no deaths reported, many of the residents of this informal settlement lost their homes and were relocated to camps. Those whose homes remained standing had lost interest in the UGPP and their concerns were understandably focused on helping their friends and family and trying to recover from the disaster.

Realizing this, the UGPP team adapted their methodology. Instead of working with people in their homes, the team decided to take advantage of any existing social groups, and then began working in schools and temples. Even this, however, was challenging. Small gardens were planted, but the momentum was never regained within the community.

Initially, obtaining commitment from the municipal councils was a challenge. Accustomed to working with projects of a much larger scale, many of the local authorities were hesitant to participate in the UGPP, given its small scale. Slowly, as the municipal governments saw the value in working with the communities, they became increasingly involved in the project.

Municipal elections were held during the second quarter of Year 3. As a result, some of the project cities now have newly elected mayors and officials. To ensure that the shift in authorities did not affect the sustainability of the UGPP, the project team worked closely with the councils, providing awareness meetings and project briefings, explaining the importance of the work that has been done and justifying why it should be continued. While each of the (previous) municipal councils agreed to allocate approximately \$5000 USD of their budgets to urban greening, the project team worked with the councils to ensure that this funding was sustained.

A significant achievement was made when the municipal councils invited UGPP Field Coordinators to sit on the Housing, Construction and Development Committees (HCDC). These committees meet at the end of each month, and the Field Coordinators would serve as members, representing the Urban Greening Partnership Program. This was an important outcome, as it demonstrated that the municipal councils recognized the importance of incorporating green space into their development (before the UGPP, the concept of integrating green space in new development was not common).

Through disseminating the lessons learned to municipal councils and government representatives throughout Sri Lanka (regional seminar in April 2006), awareness of urban greening/agriculture programs has increased significantly. As mentioned earlier, new CIDA funding will allow the project team to work with new municipal councils.

The project team also experienced a few challenges in terms of staffing. In particular, finding female project officers in Sri Lanka proved to be a challenge. Maintaining the same project staff over the course of three years proved to be a challenge in itself. Fortunately, the project directors

and coordinators remained the same throughout the three year period, providing stability and consistency to the project.

Impact

Through a combination of increased knowledge and strengthened relations between the local authorities and the project personnel, the participation and commitment of the local authorities has increased. With increased commitment among the local authorities, the project is more likely to be sustainable now that the funding has finished. While this impact is at the policy level, it will, ultimately, affect the grassroots communities through an improvement in the local environment and increased food production (improved waste management through composting and recycling were also two outcomes from the UGPP).

With relations between the local authorities and NGO (Sevanatha) having been strengthened, it is more likely that the two will cooperate on future initiatives. Indirectly, this influences marginalized groups - Sevanatha has a history of working with marginalized groups, while the local authorities/municipal councils are the policy makers that have the power to 'make change'. It is anticipated that the strengthened relations between these two groups will bridge the gap that currently exists between the marginalized social groups and local governments. Slowly, we see that the municipal councils are responding to the wishes of marginalized communities. Throughout the duration of the project, marginalized groups expressed the need for improvements in their communities, such as the need for a community playground in Badulla and the need for road improvements in Matale. Their municipal councils have responded positively and are now making these changes.

The increased commitment among the local authorities has had a positive impact on the environment. Each of the municipal councils integrated urban agriculture into policy/budgets. As previously mentioned, some councils subsidized the purchase of compost barrels for the communities. In Badulla, the municipal council initiated an urban agriculture and waste management program in which pre-school teachers are now educating the students' parents.

Throughout the Project, the UGPP team worked in a total of ten communities. In Year 1: Moratuwa - Jayagathapura and Siribaramenikepura; Matale - MC road, Badulla – Kanupallala. In Year 2, six new communities were selected: Badulla – Badulupitiya; Moratuwa - Sanwatsara Niwasa; and Matale - Dola Road, Agalawatta, Vihara Mawatha, and Kaludewala. Within each community, approximately 70 families/households were involved in the Project. Since the average family size was 5 people, approximately 3500 people were directly impacted by the UGPP.

In addition to the community participants, staff and local authorities within the municipal councils were also impacted by the project, having been trained (both in urban greening and outcome mapping) and left with an increased capacity to conduct urban greening within their respective cities. The project team worked with approximately ten staff/local authorities within each municipal council (x3), totaling 30 people.

The school children and monks at the temples were also impacted by the project, having learned the benefits of urban greening, as well as the importance of environmentally sound solid waste

management (composting and recycling). The total number of people in these two groups totaled approximately 500.

Since commencing the UGPP and securing IDRC funding, ICSC has scaled out in terms of its work in Sri Lanka. A contract valued at \$1.78 M has been awarded to ICSC by CIDA, enabling the organization to work in marginalized communities that were affected by the tsunami. Part of this work will engage grassroots communities in urban agriculture/greening activities. Also, ICSC has signed Sri Lankan cities to its PLUS (“Planning for Long-Term Urban Sustainability”) Network, a network of cities around the world who engage in the exchange of best practices. Urban agriculture has been noted as one of these best practices and was recently the subject of an online web dialogue organized by ICSC.