



## **URBAN GREENING IN BIDARA CINA**

*Jakarta, Indonesia*

**Darrunduno**

### **ABSTRACT**

The Greening Program at Bidara Cina is aimed at upgrading the quality of the urban environment while generating employment and income generation opportunities. The successful cultivation of vegetables and other economically valuable plants has proven the feasibility of this approach to simultaneously addressing poverty and environmental problems in slum areas: first, it is a community-government partnership, through the mediation of an independent quasi-public agency; and, second, community management of local implementation and income generation have insured community participation. Currently, the program covers a densely populated area of about 126 Ha, and directly involves a population of about 44,000.

### **PREFACE**

The intersection between environmental issues in low-income urban settlements and broader metropolitan environmental policy constitutes a unique environment/poverty dynamic operating in the world's largest cities.

In Jakarta, the Greening Program at Bidara Cina is upgrading the quality of the urban environment while generating employment and income generation opportunities. The successful cultivation of vegetables and other economically valuable plants has proven the sustainability of this approach of simultaneously addressing environment and poverty issues. The current project, based on community involvement in a government program, represents a departure from its previous efforts based on high-tech civil engineering solutions to environmental problems.

The case study series was completed in 1994 as a joint project between the Mega-Cities Project, Inc. and the United Nations Development Program (UNDP). Urban Innovations were documented in ten cities by Mega-Cities Project Coordinators, in cooperation with the NGOs and government agencies initiating the respective projects. The case study series includes projects from New York, Mexico City, Rio de Janeiro, Buenos Aires, Accra, Lagos, Cairo, Bombay, Delhi, and Jakarta.



The series examines environmental innovations operating primarily within low-income urban communities, but which are supported and extended through partnerships with government and NGO entities not traditionally associated with grassroots community organization. By supporting environmental programs at the community level and circumventing traditional hierarchies of political and economic support, these innovations address crucial environmental issues beyond the reach of more centralized approaches. The case studies illustrate that the urban environment is a fertile policy arena for the formation of the partnerships, which may redistribute power and control over the urban environment. Decentralized environmental solutions represent an increasingly significant strategy as the challenges of metropolitan governance and management are being redefined in mega-cities.

## **INTRODUCTION**

Like many cities in the developing world, Jakarta is experiencing explosive growth, placing an unbearable strain on the city's traditional infrastructure and service delivery system. Many of Jakarta's newer residents live in informal squatter settlements called kampungs, beyond the reach of most municipal services and devoid of basic infrastructure such as paved roads, proper drainage systems, electricity and an adequate supply of water. Large amounts of people living in such conditions places great pressure on the urban environment, and many kampungs suffer from grave environmental degradation. Furthermore, kampung residents are often the victims of insufficient education and economic opportunity. They seemingly lack the resources, know-how, organization and political power to improve living conditions in their neighborhoods.

Past government programs have attempted to solve some of the problems within the kampungs, generally through infrastructure development projects. Although their programs have met with some success, they have generally relied almost exclusively on centralized planning and financing from the national government. As a result, local governments and communities have had little say in the development process, and have often been unable to maintain projects after they were constructed. To make matters worse, federal funding of development projects began to fall as governmental revenues decreased.

The greening program in kampung Bidara Cina, a low-income settlement in Jakarta, represents a response to this developmental challenge. Local council members have organized and motivated residents to change their waste disposal habits and to engage in small-scale planting and gardening. The program utilized local funds and resources and has resulted in a cleaner and less barren neighborhood environment. More importantly, it has transformed kampung residents from passive recipients of government assistance to active participants in their own development. It has given the community experience in organization



and community action, experience which can serve as the touchstone for further community-led action.

## CONTEXT

The city of Jakarta has a long and dynamic history. Situated in an alluvial plain, at the mouth of several rivers, it was already an important harbor for surrounding Javanese kingdoms when the Dutch established an outpost in 1618 (see Map 1). At that time, the indigenous community near the Dutch fort numbered around 10,000, while between one and two thousand Dutch and Chinese lived within the fort's walls. During the ensuing colonial era, Jakarta slowly grew into a bustling city of 600,000 inhabitants. Since independence in 1945, Jakarta's population has exploded, growing to 8.2 million people in 1990. This figure does not even include the one million people who live outside the administrative borders of Jakarta, but who nonetheless conduct their daily activities in the city. The functional "sphere of influence" of the city has indeed become vast, covering the entire urbanized region of Jabotabek (Jakarta and four neighboring local governments) and extending in a circle roughly seventy kilometers from the city center.

Obviously, the unprecedented and explosive growth of the last fifty years has created great challenges for Jakarta's provincial government. The current size and scope of the city is far beyond what was planned for in the past, and the demand for municipal services and infrastructure development has far outpaced the government's ability to provide them.

This problem is exacerbated by governmental financial arrangements wherein the central government obtains the largest portion of the national income from exports and taxes. Thus, the capacity of any local or provincial government in Indonesia to mobilize funds for their own development programs is limited. Even Jakarta, considered one of the richest provincial governments in the country, is constantly short of funds and always faces the problem of trying to catch up with the demand for infrastructure services. For example, from 1980 to 1985, the city government of Jakarta was only able to increase the length of existing roads at about 4% per year, while the number of vehicles rose at the yearly rate of about 15% (Fahmi 1992).

Since the central government has access to most of the development resources, local and provincial governments are heavily dependent upon the subsidies and programs created at higher levels of government. Often, the designers of such programs and the distributors of such subsidies are out of touch with local needs and customs, and the programs do not necessarily meet the real needs of the people at the grassroots.



The lack of resources for infrastructure development and basic services leaves the poor of Jakarta marginalized and vulnerable. Most of the migrants moving to Jakarta settle illegally on government land in informal squatter settlements. These settlements, called *kampungs*, continue to grow, often on riverbanks or in swampy alluvial lowlands. As a result many *kampung* residents are the victims of recurrent flooding, a problem compounded by the lack of an adequate citywide drainage system. *Kampung* residents also suffer from a host of other problems familiar to the urban poor worldwide, chief among them being a lack of potable water, inadequate basic services and local environmental devastation.

The problems of Jakarta's *kampungs* are not new, and efforts to alleviate them extend back to pre-independence times. In the early part of this century, the Dutch colonial government agreed to pay half of the total cost of improving the quality of urban *kampungs* (Abeyasekere 1987, 121-2). However, this program was mainly motivated by Dutch self-interest; the Dutch sought to appease Indonesian Nationalists and to prevent diseases and fires from *kampung* settlements to reach their own places of work and residence. During the depression of the 30s, these *kampung verbetering* programs were decreased to only 1.25% of the city budget (Abeyasekere 1987, 122), further eroding their effectiveness.

After independence Ali Sadikin, the governor of Jakarta from 1966 to 1977, introduced a *kampung* improvement program similar to the Dutch colonial one called the Mohammed Husni Thamrin (MHT) Project<sup>1</sup>. However, Sadikin pursued the program on a larger scale. MHT was designed to upgrade the quality of the physical environment and provide the necessary infrastructure (roads, footpaths, drainage canals, water supply, sanitation, solid waste disposal, schools and clinics) to the *Kampungs*. By 1984, MHT has completed the improvement of some 612 *kampungs* covering a land area of 13,317.15 hectares.

Studies (Devas 1980; Darrundono 1985) show that compared to other conventional approaches to urban development, the KIP approach has the following advantages:

- The program improved the quality of life and increased life expectancy for those living in *kampungs*, all with minimum investment from the government. Over half of the cost, direct and indirect, is covered by the people themselves. In return, they gain the legal right to occupy state-owned land.
- The program gains a high degree of political support, guaranteeing its continuity and replicability.

---

<sup>1</sup>The MHT is a part of the nation-wide KIP or *Kampung* Improvement Program.



- Unlike many other urban renewal projects, once improvements are made, the poor are not displaced by more affluent new residents.

MHT has also evolved over time. In its first phase (MHT I, implemented 1969-1984), the project was targeted at improving the physical environment and providing necessary infrastructure. Between 1984-1989, a second phase was implemented to improve the urban drainage system and to develop multi-story houses in response to overcrowding. Since 1989, MHT has tried to turn to local communities for development ideas and resources, an approach described more fully below.

### **Kampung Bidara Cina**

This case study chronicles a program in Bidara Cina, a kampung along the Ciliwung River. In 1990, 44,294 people lived in Bidara Cina's 126.1 hectares. The average population density was 350 persons per hectare; however, in parts of the kampung, especially along the bank of river, it was much higher, sometimes over 600 persons per hectare. Since most of the buildings are single-story buildings, this high population density make for incredibly cramped and packed conditions.

Bidara Cina is divided into fifteen community organizations (RWs), and the main subject of this report is RW 14, located just along the bank of the Ciliwung River. The residents are illegally squatting on government owned land, and RW 14 has long been known for its deplorable physical conditions, its high crime rate, and its poor quality of life. There is frequent flooding in RW 14; substantial floods can occur as often as 20 times a year. This is an especially serious problem since, due to lack of space, some houses are erected on stilts over the river itself.

A majority of residents in RW 14 are poor and poorly educated, lacking salable skills and economic opportunities. A survey conducted in June 1993 observes that the average per capita income of the residents is US\$ 204, a considerably low figure in comparison to the national per capital income which is US\$ 570.

In Bidara Cina, and in RW 14 in particular, structural poverty and environmental devastation come together in ways that are especially problematic for its residents. With little access to economic and political power, and vulnerable to the effects of a devastated environment, residents face almost insurmountable obstacles to improving their communities.

As indicated above, per capita income in RW 14 is less than half of the national average. Since prices in Jakarta tend to be higher than in any other part of the country, their real income is even less. With low levels of education and a lack of access to power, residents have a difficult time bettering their economic situation and gaining sufficient income to meet their families' most basic needs.



Environmental problems in RW 14 are a direct result of this cycle of poverty. Because of a lack of suitable and affordable housing, families are forced to squat in densely packed, one story, semi-permanent dwellings close to the river. Frequent flooding is a major problem, as is insufficient air circulation. Lack of adequate services, including waste disposal and drainage, contribute to local pollution, and the top three medical problems for residents in the area (accounting for 81.4% of all medical complaints in 1992), are respiratory illness, diarrhea, and intestinal disease, all of which are related to poor environmental conditions. In 1992 RW 14 was a dirty, squalid, unhealthy place to live.

As discussed above, municipal and provincial governments do not have the resources to begin to deal with the problems represented by RW 14. In Jakarta these problems have traditionally been addressed by the federally funded MHT project. However, studies (Gondokusumo 1987; Arifin 1987) show that most of the infrastructure provided by MHT deteriorates quickly due to lack of maintenance. They conclude that the top-down nature of the MHT projects excludes the beneficiary communities and leaves them unprepared to maintain the projects after they are completed; they simply lack the human resources and organization that would enable them to carry out community tasks such as the maintenance of roads and drainage systems.

The effectiveness of the MHT projects has been further eroded by the decrease in the central government's capacity to be the sole agent of development. With the decrease of its main sources of income (revenue from the export of oil and other natural resources), the central government simply cannot afford to fund widespread infrastructure projects.

The problems with KIP and MHT encouraged various actors, especially the government, to look at the process of development in Indonesia. As a result, there has been a policy shift; and the private sector and the community have been encouraged to take a larger part in development activities (Presidential Speech, August 16, 1982). The new role of the government is mainly to provide a climate conducive to development, to adopt an enabler role. Since 1989 the focus of Indonesian development has been enlarged to include not only the physical development of the community, but social and economic development as well, so that communities would be more able to take the lead in planning, implementing, and maintaining development projects on their own. The development of this model of physical, social and economic development is therefore expected to make way for more sustainable kampung improvement. In support of this new policy, local initiatives are highly promoted and supported, and various packages of deregulation and debureaucratization policies have been launched.

In order for communities to take more initiative in the planning and implementation of development projects, there must be more stress put on human resource development and economic opportunity. Longtime passive



recipients of top-down development, communities such as RW 14 must begin to organize themselves and take responsibility for improving their own living conditions. This necessitates a wholesale change in attitudes and a new vehicle for organization, motivation, accountability and responsibility. It is in the light of this challenge that the program for greening and cleaning in Bidara Cina is an important example of a new kind of development project in Indonesia.

### **THE INNOVATIVE SOLUTION: *The Greening and Cleaning Movement***

The Greening and cleaning movement in kampung Bidara Cina represents an attempt to involve residents in the improvement of their immediate environment without extensive input from the central government. With the help of the Mass-Education section of the Provincial office of the Department of Education and Culture, and supported and encouraged by active local leaders, residents of RW 14 cultivate plants or small gardens in their yards. A locally run public information campaign emphasizes the importance and benefit of a cleaner and greener environment, and local resources are garnered to improve solid waste disposal, enlist respected leaders and provide trash cans to residents.

In addition, the greening movement is a basis for the beginning of the kind of community organization which may, in time, sustain larger and more complex activities such as solid waste management, sanitation, home improvement and integrated riverside development.

### **Objectives**

The main objective of the greening and cleaning movement launched by the RW 14 community council in 1993-1995 is to develop, among residents, habits conducive to creating and maintaining a clean and green living environment. Specifically, the program seeks to:

- improve the environmental quality of the low income settlement through individual small-scale planting and gardening;
- stimulate small-scale urban agriculture and generate income through the selling of produce;
- curtail littering and improve garbage collection;
- expand and strengthen people's activities and initiatives through community organization.



## Implementation

The Greening and Cleaning project in RW 14 grew out of governmental initiatives designed to develop and utilize local resources in an effort to promote community organization and sustainable development. Some of these initial top-down activities are:

- The provincial office of the Department of Education and Culture, Mass Education section conducted education and training programs in order to increase the capacity of the people to participate actively in development activities. Among these programs is the anti-illiteracy campaign, conducted between 1988 and 1992.
- A joint program between MEIP and the provincial office of the Department of Education and Culture on greening, cleaning, sanitation and river cleaning was started in September 1992. The program focuses on training and education, as well as encouraging other environmental activities. Some of the works that have been done through the program are: providing and constructing a drainage network which is connected to the existing system, thus enabling the increase of the flow of water to the river; providing a waste cart to encourage a change from indiscriminate dumping to systematized garbage collection; paving over a lot used for dumping and converting it into a playground; and providing a pilot project of the greening program by planting vegetables in used cans or bamboo containers.
- In supporting the river cleaning program, MEIP encourages the people to remove houses which were built on the river. In order to compensate for the loss of living space, MEIP provides soft loans (Rp 200,000 or US\$ 100) and construction assistance for building two story houses.

In RW 14 the local council took an active part in promoting the cleaning and greening element of the governmental program, in effect turning it into a project which was led, driven and funded by the community itself. In the process, the chairman of the RW council delegated jobs and responsibilities to other council members. Although this process of delegation may not seem very innovative or important, it was actually a crucial innovation, essential to the success of the program. This approach differs from that of the typical RW council where only a few key persons actually do the work, and has made the council more open and accountable. Residents are more aware of how and why decisions are made and actions are carried out. This organizational innovation is a key step towards democratizing and enabling the local community.

The Council organized a comprehensive program of information delivery in order to educate the community about the importance of cleanliness and the benefits of growing plants and to encourage them to plant flowers, trees or vegetables in



their plots. The RW's public relations officer routinely spoke through a loudspeaker about the benefits of cleaning and greening while going through the settlement. Council members approached residents personally to talk about gardening and proper waste disposal. The Council also gave information to the PKK (Pendidikan Kesejahteraan Keluarga, or Family Welfare Education, a women's group), Karang Taruma (the youth wing of a Muslim organization called Majelis Ta'lim), and several agricultural groups. These groups, in turn, became active in the effort to educate the community. Finally, government trainers from MEIP also helped train and inform residents.

Residents received this information enthusiastically, and many obtained seeds from the MEIP trainer or the council. Even more bought seeds with their own money to plant flowers or small gardens. Government trainers and youths from the Karang Taruma actively assisted local gardeners in planting and maintenance. Residents who wanted to grow plants, but whose plots were too small were granted permission to plant small gardens on top of drainage channels.

The council has been effective in promoting widespread participation among community residents, and many people were influenced by the information campaign. Especially effective were personal approaches by council members. In a poll of 50 participants in the program, over fifty percent responded that they had heard of the program from council members directly; 40% had heard of it from community groups (see table 1).

The enthusiasm with which the residents participated in the program is further evidenced by the number who joined out of their own motivation and interest and by the large proportion who were willing to spend their own money to purchase seeds for their plants (see tables 2 and 3).

Although participation in the project is high, table 4 shows that the majority of species planted are decorative plants like flowers. In addition, most people limit their planting to only one species (see table 5). Often, plant selection is limited by lack of space; decorative plants can easily be grown in flowerpots while vegetables, healing plants and fruits are usually grown directly on the land. Also, the prevalence of decorative plants suggests that most residents are interested in the program's environmental benefits as opposed to its economic ones.

In addition to encouraging the planting of flowers and gardens, The council attempted to improve the physical environment of RW 14 through a public anti-littering campaign and the improvement of waste disposal services.

The Council integrated messages about cleanliness and pollution in its information campaign, educating the residents about the importance of keeping the environment clean and trash-free. The Council also recognized the importance of role models in reversing entrenched habits of littering and waste disposal in the street and the river. The youth were encouraged to become role



models for younger kids. The participation of community and religious leaders was actively sought, and the leaders have become known to always pick up trash whenever they find it on the street and to put it into a garbage can.

In order to have a place to put garbage, the Karang Taruma also produces simple garbage cans from used cans of 25 kg, and sells them to the residents at a reasonable price, and people are encouraged to use trash cans rather than the street or the river for litter and household garbage.

In an effort to improve disposal service, the council raised the monthly wages of the two garbage collectors from Rp 15,000 to Rp 30,000. This increased wage was accompanied by increased service, so that now garbage is collected once or twice daily.

The cleaning and greening movement also gained support and momentum from favorable publicity and outside recognition. When President Suharto declared a national program to “plant one million trees” in 1993 and encouraged local groups to take the lead, he gave a national impetus to locally driven environmental projects. In January, 1993, during the early stages of the program, it was publicized and chronicled in several newspaper articles. In March, 1993, RW 14 was named the winner of a cleanliness competition among RWs in the area, and a high government official presented a prize. Several high level government officials such as the Mayor of East Jakarta, the Governor of Jakarta, and the Minister of Social Affairs, have visited RW 14 to learn more about the project.

## **Results**

In just one year the program markedly raised the community's awareness of the importance of the environment. The information campaign has made people more willing to make efforts to improve their living conditions through positive action, and has enhanced their ability to do so by making garbage cans available at reasonable prices, increasing trash collection, and providing encouragement, training and sometimes even physical assistance and raw materials to households wanting to grow flowers and other plants. This has resulted in a noticeably cleaner and greener environment. Although there is not yet a qualitative analysis, the improved environment has positively affected the health of the residents. There is less trash on the street and in the river and RW 14 was officially recognized as the cleanest area in the sub-district. Large numbers of residents have planted flowers or other plants in their plots; of the fifty households chosen at random for a field survey, all were growing at least one type of plant in their lots.

The community's awareness of the environment's importance has made the cleaning and greening project sustainable. Their newfound understanding has made them willing to buy seeds with their own money and to plant the seeds



themselves. The use of these local resources and funds (estimated at Rp 30 million, or US\$ 15,000, for the 4000 households in Bidara Cina) has enabled residents to improve the environment on their own, without depending on outside leadership, expertise, or money. The program has also lasted through a change in local administration, and the new council has continued to support it, further underscoring its sustainability.

Beyond providing sustainable improvements to the local environment, the cleaning and greening project has begun the process of community organization and empowerment. In successfully improving the appearance and conditions of RW 14, residents discovered a pride in their work and their community. They began to identify problems which affected their lives and to see themselves as capable of solving them. Local leaders opened up the decision-making processes of the council and began to democratize community action and development.

Another important outcome of this movement is the interest it has raised in other neighborhoods. It has been publicized as an alternative to expensive, top-down development programs, and leaders from the central government and from other communities have visited RW-14 to see the movement for themselves.

## **Obstacles**

In spite of the cleaning and greening project's success, there are still some obstacles that stand in its way. The small space available on every plot limits the greening effort to small plants. In addition, this lack of land has made one of the original goals, the generation of income from growing and selling vegetables and healing plants, unattainable thus far. Residents, have not been able to cultivate such plants on a large enough scale to make it economically feasible.

Although residents have been ready to contribute their own money and energy to the project, lack of funds continues to be a problem. With more funding, the community could provide even better facilities for garbage collection and further raise garbage collectors' wages.

Some of the obstacles the project has had to overcome are cultural in nature. For instance, some residents feel that the garbage cans, made from stainless paint cans and produced and distributed by the Karang Taruma, are "too good" for garbage. These people then use these cans as water buckets instead of as trash cans. Such misunderstandings have reminded the council members that the socio-economic conditions of the residents have to be carefully understood and taken into consideration.

Other cultural obstacles arose during the public information campaign. People had difficulty changing their habits and views of themselves. To get residents to realize the importance of the environment and to change the way they dispose of



waste demanded much effort from the council and community groups. Changing entrenched methods and attitudes is difficult.

## **Funding**

The main funding for the greening and cleaning movement comes from the community itself. Most residents who raise plants in their plots cover their own expenses, and a field survey shows that participants spend from Rp. zero to Rp 150,000 (US\$ 75, the approximate cost of a permanent garden on top of a drainage channel) on their gardens. It is estimated that the total amount spent informally by households on their plants and gardens is Rp 30 million (US\$ 15,000), an amount far greater than what could be collected from external agencies and formal donations. This widespread financial commitment indicates that people are willing to pay for development if they can see themselves directly gaining from it.

In addition to paying for their own plants, each household agrees to pay Rp 1000 per month to the RW council. The council uses this money, along with Rp 100,000 (US\$ 50), to provide security measures, pay for garbage collection and create a public fund for any resident who has an accident or who loses his or her family. Interviews with RW council members reveal that more than 60% of the collected fund are spent on garbage collection and security measures. In brief, the following table shows the monthly cash flow of the RW council.

## **Diffusion**

As a successful, innovative approach to community development which has avoided many of the problems of earlier governmental development programs, the greening and cleaning movement can serve as a model for other development initiatives in urban settings. In an effort to spread information about the project to other communities and relevant leaders, as well as to enhance the participation of the residents, the program has been accompanied by a fair amount of publicity from the start. The early stages of the program were covered extensively by newspaper accounts, and the competition for the cleanest area in the sub-district brought the success of RW 14's approach to the attention of many people.

This publicity resulted in considerable interest from government officials and leaders from other neighborhoods. The mayor of East Jakarta, the governor of Jakarta Province, and the national minister of social affairs have all visited RW 14 to express their appreciation. Officials from other communities have shown an interest in the program, and many have come to visit RW 14 to learn more about it, with the intention of beginning similar programs in their own communities.



In addition, the success achieved at this stage will be expanded through programs arranged by the MEIP and the RW council. They plan to initiate a citywide “kampung greening movement” through competition, information, and public awareness campaigns. Using Bidara Cina as an example, the Kampung Greening Movement is also designed to foster a democratized and community-led process which will eventually provide more comprehensive and sustainable improvements in low-income settlements.

## KEY ELEMENTS

The greening movement at Bidara Cina is a significant advance over previous models of Kampung improvement. In response to the decreased availability of federal funds and the inability or unwillingness of local communities to maintain federal infrastructure projects, the greening movement represents a step towards sustainable grassroots development and environmental improvement. As such, it is in line with the movement at the national level for communities to take responsibility for their own development. The success of this particular innovative program is dependent on the following key elements:

- *Local Initiative and Funding*  
The main difference between the greening and cleaning movement and former KIP projects is that the greening and cleaning movement is a local initiative that relies on community input and resources. It has shown that communities and individual households can be incredibly motivated to work and spend money if they have control over the project and can see results. The residents' willingness to improve their environment, and their sustained energy and motivation were the basis for the movement's success. By pooling modest funds, the community was able to improve garbage collection service, an important aspect of the overall effort. Residents also spent their own money and did the work to plant flowers or vegetables in their plots, and consciously changed their habits in an attempt to eliminate dirty streets and litter.
- *Leadership*  
Local leaders were important to the success of the movement. Their efforts to encourage participation and their willingness to serve as role models for community members helped gain legitimacy for the project. The RW council, in particular, gave enthusiastic support to the project and helped insure its continuity and the participation of the community.
- *Openness and Democracy*  
The openness of the RW council's decision-making process eliminated skepticism and suspicion, and contributed to the movement's wide acceptance. By distributing and delegating jobs and responsibilities to all council members, the RW chairman encouraged them to work together



and gave them all a sense of control and power over the project. The design of the program, allowing individual households control over what they spend and what they plant, also empowered residents and opened up the process of change to a large group of people. This decentralization democratizes development, and gives residents a stake in the project and a voice in their communities. It becomes a tool which can grow into a vehicle for the community to identify its problems and work together to forge community solutions.

- *Responsiveness to Local Conditions*  
The greening and cleaning movement took advantage of several local conditions to enhance its likelihood of success. The rural background of many of the residents made them especially willing and able to plant flowers and put in small gardens. Leaders enlisted the support of existing groups, such as the PKK and the Karang Taruma. The mistaken use of many newly made garbage cans as water carriers underscores the continuing need to understand and respond to local conditions in order to be effective.
- *Recognition and Outside Support*  
Publicity, recognition, and timely outside support helped give the movement impetus and helped sustain its momentum throughout its implementation. Support from MEIP in the form of trainers and initial encouragement, the President's program of "Planting One Million Trees" declared for the year 1993, and the national push for community development initiatives created a favorable atmosphere in which to begin the program. The extensive publicity in the press during the initial stages of the program helped impress its importance upon the residents and encouraged participation.

Public rewards for the community gave participants a sense of tangible results that were valued by others and helped sustain energy and enthusiasm for the program within the community. Winning the "cleanliness competition" among RWs in the kecamatan (or sub-district) Jatinegara in East Jakarta Municipality, visits from high government officials, and interest expressed by leaders from other communities have illustrated and contributed to the program's importance and success.

### **Key Actors**

- *Government*  
Officials from the government gave essential recognition and support. MEIP, a government agency helped the RW council deliver information, provided trainers and some seeds, and is helping to start a city-wide greening project. The national government also gave the impetus for a new model of development based on local resources and initiative.



- *RW Council*  
Through an open political process, the council designed and implemented an effective information campaign, encouraged community involvement, coordinated the efforts of other community groups and leaders, and increased garbage collection service. They provided much of the initial energy and leadership necessary to get the project going and maintain its momentum.
- *Local Leaders*  
Local leaders endorsed the program, encouraged community participation and served as highly visible and respected role models for new attitudes and behavior.
- *Community Groups*  
Community groups helped distribute information and provided forums for discussion. Karang Taruma provided physical assistance to gardeners and produced and sold garbage cans to residents at reasonable prices.
- *Residents*  
Residents provided the primary source of funding and labor for the project. They paid for and tended flowers and gardens, pooled resources to pay for better garbage collection service, and changed their behavior as a community to make for a cleaner, less barren, and healthier environment.

## **TRANSFER**

At first glance transfer of the Bidara Cina Greening Project appears simple. The project itself does not involve new complex alliances and partnerships, political maneuvering or a complicated administrative structure, but takes advantage of existing, underutilized structures. There is no need for extensive outside funding, technical expertise or utilization of scarce resources. Indeed, the project seems to involve very little institutional change, thus avoiding many obstacles and much opposition.

However, this apparent simplicity is deceptive. In the absence of any extensive structure, the success of the Greening Project, or any attempt to replicate it, is determined by its principal actors within their particular cultural context. Without many specific program elements the Greening Program becomes, in essence, an extremely effective community education and motivation program, highly dependent on the energy, enthusiasm, and dedication of well-respected local figures and the willingness of local residents to follow their lead. As such, it is implemented in a culturally specific way. The personal, door to door information and motivation campaign carried out by respected village council members, the enlistment of local religious leaders and groups, and the symbolic recognition and support from important government figures was an extremely effective way to promote participation in Javanese communities which are marked by



traditional hierarchies. A more individualistic and egalitarian culture would require a very different approach.

In the absence of important and determining structures and in light of such great cultural specificity, this case study serves less as a specific, highly replicable and transferable model than as a successful example of a particular type of innovation. The crux of this innovation is the way a traditional community organization, in this case the community council, took on a new role in the implementation of an environmental and developmental project. Instead of inventing a whole new structure to implement the project, and imposing both the project and the administrative structure on the community, the government acted as the catalyst for a particular initiative, integrating the Greening Project into a pre-existing community structure to promote local control and utilize local resources. The Greening Project shows the great potential within local organizations for administration and implementation of development programs, and the effective use of local administrative and cultural resources.

There are many advantages to integrating environmental and development projects into existing community organizations. Setting up new administrative structures is expensive, and all too often the designers of such structures are out of touch with the needs and dynamics of the communities they are supposed to be serving. Local organizations are often able to avoid these problems; they have already proved their effectiveness in working within the community and are already accepted, credible, and representative of community interests. Local leadership is cheaper, and it increases the likelihood of culturally appropriate implementation, high participation rates, and community trust and support. Indeed, the enthusiastic endorsement of a trusted local leader or organization can often be the key to the local participation that is essential to a project's success. Community-based project leadership also represents a movement towards democratization of the development process, with beneficiaries having a more direct say over how projects are implemented and how resources are utilized.

Given the administrative and leadership potential of under-utilized organizations within a community, the question becomes how to identify which groups have this potential, which community needs could be met by these groups, and what kinds of projects could such groups implement. The experience of Bidara Cina illustrates the following points:

- *Nature of the Community Organization*  
Previous experience with development or environmental work is not necessary; indeed, the innovation lies in the adoption of such a role by an organization which had not previously undertaken development or environmental initiatives. However, the openness of the organization's activities and decision making process and the sharing of power within the organization enhances the community's trust, gives the organization's



members a higher stake in the project and creates a larger group of project advocates.

- *Nature of the Project*  
A project's technical simplicity makes the community less dependent on outsiders and lessens the likelihood of conflict between technical experts, community leaders and residents. Likewise, the utilization of local labor and money from the recipients themselves helps prevent political struggles over the control of outside resources.
- *Nature of Governmental Involvement*  
In this model, in order to allow local organizations to implement projects, the government must relinquish control of the administration and implementation process. Its role is to act as catalyst and cheerleader, perhaps giving an initial idea, and providing ongoing symbolic support without seeking to take control of the process.

All communities, even the most fragmented and disorganized, have some kind of active organization. Although these organizations may be formed to meet any number of local needs, social, religions, athletic, professional, they have the potential to act as agents of environmental regeneration, political development and social change. The Greening Program in Bidara Cina shows the capacity for development often lies within the communities themselves, in already existing but under-utilized groups. By adopting a new role and becoming community organizers, these groups can make development a more responsive and inclusive process, make projects cheaper and more successful, and expand and strengthen the role of an emerging civil society among the poor.

#### **List of Acronyms**

KIP: Kampung Improvement Program

MCK: Mandi Cuci Kakus – bathing and washing facility

MEIP: Metropolitan Environmental Improvement executed program to assist large Asian cities to arrest and reverse environmental degradation

PKK: Pembinaan Kesejahteraan Keluarga – family welfare education, usually a section within a community organization (RT, RW)

RT: Rukan Tetangga – community organization of approximately 50 households

RW: Rukun Warga – community organizations of approximately 300-500 households; an RW usually comprises 5-15 RT's