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The Zabbalin Community of Muqattam

Community Organization and Development by Elena Volpi

Women at
the Muqattam
Settlement
by
Doaa Abdel Motaal



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CHAPTER ONE

INTRODUCTION

In recent years Third World countries have been the recipients of development assistance. As the number of development programs and projects initiated in the Third World continues to grow, critics of the development process argue that development, as currently conducted, has only resulted in reducing human welfare by causing environmental degradation, by increasing poverty, and by creating unemployment. Some critics argue that most of the present development initiatives stem from the paradigm of economic development, resulting in gender biase. Critics argue that programs allocate greater resources to men than they do to women. As concern for these issues has increased, a call for re-examining the process of development has emerged. This re-examination of development has led to the creation of an alternative paradigm of development: one that adopts a more humanistic approach to the development process while addressing women's needs.

It is frequently argued in Egypt, especially among academics, that the *zabbalin*, a community of private waste collectors, are among the most overstudied segments of the Egyptian population, and that the Muqattam settlement of the *zabbalin* is one of the squatter settlements in Cairo to which most development aid has been directed. Despite these claims, however, little research has been conducted on the development process that was initiated in Muqattam under the *Zabbalin* Environmental Development Program (ZEDP), especially with regard to the wives of the waste collectors who live in the settlement.

This research attempts to assess the way in which women have experienced development at Muqattam while calling for the creation of an alternative paradigm of development. The research reconstructs the development process from their perspective. It draws attention to some of the fallacies on which the most prevalent development paradigm (that of economic development) has been premised, and demonstrates the nature of gender bias and the disempowerment of women that has been a consequence of its application.

The basis for this study stems from two years of fieldwork in Muqattam in which 20 in-depth interviews were held with women at the settlement. Through the eyes of Atiyat and Om Ibrahim, two detailed case studies, the process of reconstruction begins. Their descriptive accounts of their experience with development programs and its process shed enormous light on the differences that exist between the ways in which men and women experience development. Atiyat was selected from among the 20 women because her experience of the development process is representative of that of the majority of women at the settlement. Her story is one of hardship as her quality of life has been reduced by living in Muqattam. Om Ibrahim's experience of development illustrates how a small minority of women (roughly 10%) have come to benefit from the development process and its programs.

CHAPTER TWO

AN ALTERNATIVE PARADIGM OF DEVELOPMENT

Dudley Seers, the Director of the Institute of Development Studies at the University of Sussex, questioned the meaning of development more than 20 years ago: "What has been happening to poverty? What has been happening to unemployment? What has been happening to inequality?... If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result 'development', even if per capita income doubled" (Friedmann, 1992:1).

The Need for an Alternative Development Paradigm

As the twentieth century draws to a close, and millions of women and men around the globe continue to experience extreme hardship in their daily lives, the need to reconsider the process of development has emerged. This need has become particularly important in light of the fact that development, as currently defined and practiced, has been said to reduce the quality of life of many women in the Third World. It has resulted in a call for the creation of an alternative paradigm of development better equipped to improve human welfare.

Among the main problems associated with the current development process is the deterioration of women's living conditions and of their position in society. This deterioration is a result of the gender bias in development. Gender bias is the culmination of socially constructed differences between males and females as well as the different roles and behavior expected of each gender.

Jodi Jacobson explains that gender bias is all that ranges "from the exclusion of women from development programs to wage discrimination and systemic violence against females. In its most generic form, such bias boils downs to a grossly unequal allocation of resources--whether of food, credit, education, jobs, information, or training. And in most cases, because they do not address this bias, the development policies meant to provide

more of these resources to society end up taking more away from women" (Jacobson, 1992:9).

The root causes of gender bias in society, explains Anthony Giddens (1993), are male dominance and patriarchy. The role of women has been largely determined by their reproductive function, and women continue to be relegated to the domestic sphere. With the growth of industrial society and the gradual separation of the workplace (the factory) and the home, women have continued to be associated with domestic values. The idea that a woman's place is in the home has continued to exist.

Housework, as Giddens explains, "in its current form came into existence with the separation of the home and workplace... The home became a place of consumption rather than production of goods. Domestic work became 'invisible' as 'real work' was defined more and more as that which receives a direct wage" (Giddens, 1993:181). He proceeds to explain that although housework was, and in many societies still is, tiresome and exacting, the perception prevails that despite producing such work, women are 'unproductive'.

Jacobson explains, however, that whereas women work a double or even triple shift, economic development paradigms undervalue their contribution to societal welfare.

Women perform the lion's share of work in subsistence economies, toiling longer hours and contributing more to family income than their male relatives, but they are viewed as 'unproductive' in the eyes of government statisticians, economists, development experts, and even their husbands. A huge proportion of the world's real productivity therefore remains undervalued, and the essential contributions women make to the welfare of their families and nations remain unrecognized. (Jacobson, 1992:6)

The need for alternative development stems from a desire to reconsider the ways in which women have been placed in the paradigms of development and to make their contribution more visible and recognizable, leading to a more rewardable experience.

Rethinking Economic Development

Among the main reason behind the call for alternative development has been the lack of success that previous development policies have had in improving the position and living conditions of women. Development programs, undertaken from the standpoint of economic development, have tended to exclude women, further reducing their quality of life. Examples of development projects that have had negative impacts on women prevail. For instance, although women are the main producers and procurers of household food supplies in the subsistence economies of Africa, Asia, and Latin America, conventional agricultural development has actually shifted resources away from female farmers.

The proponents of alternative development have based their call for a new system on the idea that the paradigm of economic development does not allow human beings to achieve greater welfare. The current paradigm causes gender bias, unemployment, and inequality.

Friedmann, for instance, states that economic development needs to be re-examined because: (1) economic growth and development, despite conventional usage, are not equivalent concepts and should be separated analytically; and (2) national income accounts are misleading indicators, so that policy decisions that are based on them are more likely to aggravate than to alleviate problems (Friedmann, 1992:38).

Friedmann continues to argue that while economic growth and development are frequently used interchangeably, they are not synonymous concepts. It is to this interchange in terminology that he attributes the fallacies that exist regarding the development process. He explains that while national income accounts provide data on aggregate production growth, they do not offer any insight or meaning into the concept of development. He states that in defining development, people need to be consulted. If such consultations are to take place, it is unlikely that the people would select economic development as the only form of development. In defining development with citizen participation, the development process would come to reflect more of what people actually hope to achieve in their lives.

In criticizing how national income accounts are constructed, Friedmann draws attention to how they fail to account for environmental degradation, the activities of the informal sector, and household production. He argues that national income accounts are constructed using market prices, and as the cost of environmental degradation does not have such a price, it is excluded from the accounts. Moreover, whereas the informal sector covers a broad spectrum of production activities and is responsible for the livelihood of an estimated 30 to 60 percent of the urban population of poor

countries, it is not accounted for in national income accounts. Such production, therefore, remains invisible to the official eye. In addition, according to neoclassical economics, households are seen to be units of consumption. As a result, the productive work that takes place within the house remains unreported. In failing to account for the costs of environmental degradation, the activities of the informal sector are outside the range of the market; national income accounts provide only a distorted view of the welfare of households and communities (Friedmann, 1992;43).

In calling for alternative development, Jacobson also makes the argument that economic development needs to be reconsidered. She criticizes the paradigm of economic development on similar grounds as Friedmann but points to the way in which it reinforces gender bias. She explains that implicit in the theory and practice of conventional economic development are three assumptions: (1) economic growth is gender blind, and both men and women benefit equally from it; (2) the traditional western model of a household, in which a father, mother, and children share common interests and work towards common goals, is applicable to all societies; (3) within households the burdens and benefits of poverty and wealth are distributed equally regardless of gender (Jacobson, 1992:10).

Jacobson (1992) continues to argue that these three assumptions, that have been the cornerstones of economic development, do not reflect the situation of many Third World countries where economic growth reflects more on men than on women (with women frequently being the poorest of the poor), where the income obtained by the male heads of households is often siphoned off towards meeting their personal expenses rather than those of their families (and it is the women who are primarily responsible for securing the goods needed for household consumption), and where women share more strongly in the burdens of poverty (working longer hours than men according to several time-use studies), Jacobson She then calls for the construction of an alternative paradigm of development that does not lead to gender bias.

Poverty, Development, and Empowerment

In constructing an alternative paradigm of development, John Friedmann, Vandana Shiva, Guy Gran, Anisur Rahman and Abraham Maslow have made useful contributions. These contributions are used below to improve

the Disempowerment Model of Poverty (DMP) put forward by Friedmann. In order to understand the model, the issue of poverty must be carefully examined.

As Friedmann and Shiva explain, among the greatest fallacies of development has been the fact that "we think that we know about poverty, and that all that remains" to be done is to "eradicate", "alleviate", or "cope" with it (Friedmann, 1992:55). Poverty, however, is not such a clearly defined concept, and warrants careful examination. Friedmann argues that there are the urban poor and that there are the rural poor. For some, poverty may be a chosen way of life. Others, though they might be living poorly, may not conceive of themselves as poor (ibid). What then is poverty?

Shiva sheds light on an important distinction between "culturally perceived poverty", and "real material poverty". She writes that

people are perceived as poor if they eat distributed processed foods sold by global agri-business. They are seen as poor if they live in self-built housing made from natural material like bamboo and mud rather than in cement houses. They are seen as poor if they wear handmade garments of natural fiber rather than synthetics. Subsistence, as culturally perceived poverty, does not necessarily imply a low physical quality of life. (Shiva, 1988:10)

Poverty, therefore, is defined differently by different people. Shiva claims that the concept of poverty has been a troublesome one in the sense that those who have traditionally defined it have been "the social superiors of the poor." The notion of a "poverty line", for instance, has been constructed by elites to facilitate their ability to stereotype the poor (Friedmann, 1992:55).

As the debate on alternative development progressed in the 1970s, there was a growing tendency to define poverty in terms of basic needs. Some perceived poverty as the lack of food, water, shelter. To others who paid greater attention to the issue of sustainability, it was increasingly recognized that what is needed is to enable the poor to meet their own basic needs. Increasingly, poverty came to be seen as the inability of people to meet their basic needs and was associated more with the inability than with the deprivation. Poverty was no longer seen as a material condition.

The DMP created by Friedmann is based on "the assumption that poor households are ones that lack the necessary social power to improve the condition of their member's lives, and it does not see poverty as a material condition" (Friedmann, 1992:67). In the following section a modified

version of Friedmann's DMP is presented based on the contribution of other thinkers. An attempt is made to devise a model that is reflective of the course that a successful process of development should take.

Poverty according to the modified DMP is a situation in which people are unable to organize to meet their basic needs. Empowerment and Development in the revised DMP, therefore, are processes in which the poor organize in order to achieve social power. In acquiring the basis of such power, the poor then begin to meet their basic needs. What, then, are the bases of social power? According to the revised DMP they are essential elements that must be made available to households for the production of their livelihood. Friedmann includes the following:

- (1) Defensible Life Space: This comprises the "local space" in which households cook, eat, sleep, and secure personal possessions. Defensible life space includes gaining a secure foothold in a friendly and supportive neighborhood and environment.
- (2) Surplus Time: This includes the time that is available to a household over and above the time that is required for gaining a subsistence livelihood. Without the existence of surplus time, the ability of household members to upgrade themselves and their households is seriously constrained, and their lives become ones of drudgery.
- (3) Knowledge and Skills: This includes both education and technical training.
- (4) Appropriate Information: This refers to the degree to which households find accessible reasonably accurate information on issues of direct bearing on their well-being. These issues include, for instance, sanitation practices, household production, etc. Without access to information, knowledge and skills can be rendered useless.
- (5) Instruments of Work and Livelihood: This includes the tools of household production, such able-bodied and healthy individuals, access to water, productive land, etc. They also include domestic technology,

such as the stove and kitchen implements. For farmers, this could include water for the irrigation of land.

- (6) Financial Resources: This refers to the monetary income of households, as well as to their formal and informal credit arrangements.
- (7) Equal Rights: This refers to the ability of women to be treated as equal to their male counterparts. Women face double disempowerment in society as members of poor households (lacking access to the basis of social power) as well as due to gender. Women's strategic claims address the systematic disempowerment of women that is encoded in social institutions (i.e. discrimination against them), and it is these claims that they attempt to resolve through acquiring equal rights. (Friedmann, 1992:67-69)

The basis of social power are to be acquired through the social organizations and networks that the poor form. Without acquiring these basis, the poor cannot begin to improve their situation and to meet their needs. But what do people need? Maslow's hierarchy of human needs remains timely in that it continues to shed light on what the end-goals of the development process are and on the types of needs that people continue to experience. According to Maslow, humans grow through a progression of needs (first material needs, such as need for water and shelter, and then higher needs, such as need for justice and perfection), and it is these needs that they can begin to fulfill after acquiring the basis of social power (Gran, 1983:155). In acquiring financial resources for instance (a basis of social power), the poor can purchase food and clothing (a material need). Similarly, in acquiring added surplus time (also a basis of social power), the poor could invest more time in searching for justice and meaningfulness (self-actualization needs).

In the alternative paradigm of development presented above, poverty is to be seen as a condition in which there is a lack of access to the basis of social power. Poverty can only be alleviated by enabling the poor to organize and form social organizations in order to access these basis. In defining poverty this way, the model provides a practical definition of the term with useful applications. The inability of people to meet their basic needs is the main problem that development attempts to resolve. Such

deprivation cannot be addressed on a sustainable basis through providing the deprived with free food and shelter, but rather the poor must organize to provide these on a sustainable basis for themseleves.

In fact, many third world governments have attempted to address poverty through such an approach but have failed to alleviate the conditions of deprivation to which many are exposed. This has been due to the fact that governments, like all other organizations, have finite resources, and cannot distribute all of their resources among the poor. The definition of poverty provided in the model is based on the belief that the problem of deprivation can be effectively addressed only through enabling the poor to alleviate their own conditions of deprivation. For the poor to address their own problems, they must form their own social organizations to lobby for their needs and to acquire the bases of social power necessary to meet those needs.

But how can the poor form social organizations and networks to acquiring the basis of social power? Rahman and Gran explain that a process of people's mobilization involving the help of external agents or development catalysts is needed for the creation of social organizations and networks. The term mobilization, states Rahman, refers to "the simultaneous engagement of large masses of people in activities that have a predominantly social or collective objective." He explains that the need for collective action is the result of the benefits that accrue to people from devising collective solutions to common problems. He further argues: "The case for mobilization as a development strategy, and as a matter of fact as a very way of life, has arisen historically from the failure of the individualist (pursuit of private gains) ethic to alleviate human misery and bring fulfillment to man in large parts of the globe" (Rahman, 1993:17).

After mobilization is achieved, Rahman and Gran recommend a participatory approach to the process of development and empowerment. For example, they suggest acquiring the basis of social power through social organizations and networks. A participatory approach is needed to allow people to identify for themselves what it is that they hope to achieve through the development process. In identifying their goals of development for themselves, they begin to acquire the basis of social power that are needed to achieve these goals. The participatory approach, therefore, prevents the imposition of development paradigms and their associated goals from above. The people then are allowed to decide whether or not, through

increased social power, they wish to acquire increased prestige rather than food and clothing.

CHAPTER THREE

DEVELOPMENT AND THE ZABBALIN

In Cairo there is a total of seven different *zabbalin* settlements, the largest of which is the Muqattam settlement located at the foot of the Muqattam mountain. The settlement was founded in 1970 after the *zabbalin* community that currently inhabits Muqattam was evicted from its Imbaba settlement. The *zabbalin* are always being evicted and deported to the outskirts of the city because government authorities claim that they are a source of pollution and social disgrace to the governorate. The *zabbalin*, a Coptic Christian community that migrated to Cairo from Upper Egypt, engage in waste collection, sorting, and sale to recycling dealers. They are employed by a group known as the *wahis*, who migrated to Cairo before them and who have formed contracts with building owners to collect their waste (Abdel Motaal, 1994:22).

While the *zabbalin* collect waste and own it, the monthly fee that is paid by the various apartments they service is given to the *wahis*. The Muqattam *zabbalin* live under difficult conditions at the settlement as both the physical and social infrastructure (i.e. schools, health centers) there is insufficient. The Association of Garbage Collectors for Community Development (AGCCD), otherwise known as the *zabbalin* gam^ciyya, is among the largest community organizations in the settlement. It helps the *zabbalin* manage their trade in terms of acquiring licenses from governorate authorities and deal with the *wahis*.

Women at the Muqattam Settlement

Approximately 78% of the women at the Muqattam settlement were not born in Cairo but migrated from Upper Egypt in their childhood years (EQI, unpublished data). The process of migration has not been an easy transition for most women at the settlement, who have typically had to leave behind the rural settings that they had been accustomed to and the social networks that they depended on in order to marry and to relocate with husbands selected for them. Being primarily a Coptic Christian community, settling in the Muslim capital city has been difficult for most women as it has

reinforced their sense of isolation. Pig rearing in a city where pig meat is tabooed, has also contributed to their feeling of isolation.

Several of the women at the settlement migrated to Cairo not knowing the conditions of the settlement and their husbands' trade. While some had relatives in the Imbaba settlement of the *zabbalin*, others did not, and had migrated with the hope of finding employment and of making a decent living. In arriving in Cairo, the women participated actively in the construction of the Imbaba and Muqattam settlements. Through the rigorous sorting of the waste materials, they selected waste components suitable for use as construction material for their dwelling units and furniture. The recovered waste items used for this purpose included wood, tin, and textiles. In addition, they extracted re-usable items, such as empty bottles and tin cans to use in their homes.

Today, the women at the Muqattam settlement live under extremely difficult conditions. With only a maximum of two room dwelling units, the houses in Muqattam are extremely overcrowded. Living in extended families, and with an average of 5 to 10 children, life in Muqattam is suffocating to its residents. This situation is further exacerbated by the fact that each household in Muqattam raises an average of 40 to 50 pigs. While the pigs live in the backyards of the residences, they share a common entrance to the dwelling units with the residents, constantly roaming in and out of them.¹

Most of the dwelling units do not receive running water, electricity and do not have latrines. The vacant lots of the settlement and backyards allocated to pig rearing are used as latrines; this deteriorates the conditions of living in Muqattam. It is the women and children of Muqattam who pay the costs of this situation, since they are confined to their homes and to the settlement for housework, child and animal care, and the sorting of the refuse collected by their husbands. The women are more frequently the victims of the rapid spread of disease at the settlement due to the sorting of waste, to the transmission of diseases from the animals to the women, to

¹ The above and subsequent material was obtained from field observation and interviews.

their role in nursing the sick, and to the high accident rate that is the result of overcrowding.

At the settlement women are required to perform a variety of duties. They are expected to cook, clean, take care of the extended family members, raise their children, and raise 40-50 pigs, and sort all incoming waste material. As the *zabbalin* make their daily rounds of waste collection, all the material that is collected is transported to their dwelling units and is dumped either within them or in the courtyards immediately outside them to be sorted by the women and children. A time allocation study undertaken on a typical household at the settlement indicates that women work between 10 to 12 hours per day, as opposed to the only 6 to 8 hours that are worked by their male counterparts. In addition to the time that the women spend on the activities listed above, they spend significant portions of their time securing water for their homes.

With the lack of water supply within the homes, the purchase of water from the local church is primarily the responsibility of women. The women of Muqattam walk long distances and carry heavy buckets to have water in their homes. Within the dwelling units, the women recycle water several times. Clean water is first used for cooking, drinking, and bathing. Wastewater from bathing is used to wash clothes and kitchen utensils. The floor is then swept with the grey water that is left over, and the wastewater from this activity is in turn collected to serve as drinking water for pigs.

Once every two to three months, women are assigned the task of digging the pig styes. This includes removing their top layer of earth that consists of animal manure and food residues trampled on by the pigs, which becomes poisonous if left unremoved. In finding themselves charged with a large number of duties, the women of Muqattam often perform two to three tasks all at the same time. At the settlement, many women can be observed sorting waste while breast feeding children, cooking food, and watching their other children.

Women play an integral role in the waste management process at Muqattam. This role has led them to acquire many specialized skills in the sorting of waste. A woman's workday in Muqattam typically revolves around the waste collection activity undertaken by her husband. On average the men collect two to three rounds of waste per day, transporting it to their settlements for the women and children to sort. The waste material is usually dumped into their individual dwelling units. In between the

preparation of meals, the feeding and supervision of children, and pig rearing, the women sort all incoming waste.

Waste material is immediately screened by the women for its re-usable items, such as empty bottles, old clothes, and shoes. Women also for waste material that they can use for furniture construction and for home construction. Wooden remains are frequently used to produce small tables and beds for the dwelling units. Tin is often used for the construction of ceilings and indoor partitions.

After the initial screening of waste for re-usables, the refuse is separated into its organic and inorganic components. The process of separating these items is rather arduous because both are usually meshed together. The separation of waste into two different piles, however, is only a preliminary step towards its full-fledged sorting. Organic waste is carefully examined to ensure that it is suitable for the pigs to feed on. Inorganic waste, on the other hand, is further subdivided into separate piles of glass, metal, paper, plastic, cloth, and bone.

Through their long years of experience in the sorting of waste, women immediately recognize in the waste material what can and cannot be mixed together in the recycling process. With plastics, for instance, the different grades of plastic have become recognizable to them by sight, and are subdivided into polyethylenes, polypropylenes, and polystyrenes. Glass is similarly sorted out with enormous skill, and subdivided into the colors that can and cannot be recycled in unison.

The specialized skills acquired by women in the sorting of waste boost the overall income of the *zabbalin* and are beneficial to the recycling process as a whole. In the first instance, the expertise acquired by women in the sorting of waste enables them to do so at great speed and allows them to sell large quantities of refuse to the recycling dealers. In the second instance, the accuracy with which the women sort waste significantly increases its recovery potential and enables their families to earn greater revenue from the collected waste. In the third instance, the ability of women to separate out the different grades of plastic and to prepare all waste types for immediate recycling increases the willingness of the recycling dealers to pay more for the waste. Moreover, the specialized skills acquired by women in waste management have a positive environmental impact on the city as a whole.

The difficult housing conditions of the women at Muqattam, the arduous housework that they perform, and their involvement in the sorting of waste, all contribute to the significant deterioration of their health. Living in overcrowded settlements, where pit latrines overflow, where wind blows dust from the mountain onto their living grounds, and where reject waste material is burned in the open air, women suffer from a variety of skin diseases, lung diseases, and eye irritations. The lack of latrines, the domestication of animals within the homesteads, the sorting of waste, and the overcrowding, all contribute to the deterioration of women's health. Basic hygiene is a main problem.

Due to the nature of the work that the women perform in the sorting of waste, serious illnesses are prevalent at the settlement. Such illnesses, such as leprosy, are carefully concealed by the women for fear of ostracism by community members. The health problems are exacerbated by the long working hours and the overall drudgery of their lives. For instance, for young girls, reproductive ability is damaged by carrying heavy buckets of water up the mountain to their homes.

Malnourishment contributes to the poor health conditions of women at the settlement. A typical diet at the settlement is based primarily on carbohydrates and incorporates very little protein. Dietary staples include fava beans (the traditional Egyptian dish of *fool medamis*), lentils, and bread. Most of the poorer *zabbalin* families cannot afford meat consumption more than once every one to two months. Moreover, as the men generally eat first, they typically consume all available protein, leaving very little of the nourishing food for their wives. Since women at Muqattam are overworked, they often skip meals. As pregnancies deplete their nourishment reserves, their health is weakened.

With an average of five to ten children each, women at Muqattam become trapped in the recurrent cycle of pregnancy, miscarriage and abortion. Resorting to the assistance of dayas (local midwives) for delivery and for general medical assistance rather than soliciting the help of the health clinics at the settlement, the women are frequently given poor medical advice and are unhygienically operated on. The women resort to the dayas because they charge less, they are available at all times both night and day, and they can perform local birth rituals.

There is a large number of women who must financially provide for their households even though they live in abject poverty. In Muqattam, women are frequently left to stand on their own when married to non-providing husbands (those husbands who are either unemployed or who spend family income on their individual expenses alone) or when widowed. The local Coptic Church of Father Samaan reports that the incidence of alcoholism and drug use at the settlement among men is extremely high, although it has been decreasing in recent years. With the pressures of migration and difficult working conditions, many of the men at Muqattam do not provide for their families and use family income to consume drugs and alcohol. In addition, the large age difference between men and women at marriage contributes to the high incidence of widowhood at the settlement.

Most women, however, cannot find the means to cater to the needs of their large families. Women frequently find themselves restricted to marginal and low paid jobs because of illiteracy as well as having no record of birth necessary for a proper identification card. many of the families supported by women are therefore on the verge of starvation. The main source of survival of female headed households is the food given to them by the Christian charity organizations that are active in the settlement.

The Zabbalin Environmental Development Program

The Muqattam settlement of the *zabbalin* has been the object of several development projects in recent years. This has mainly been due to the fact that donor agencies have found the recycling process undertaken at the settlement intriguing and worthy of assistance and support. Many also argue that the settlement has received the large magnitude of foreign assistance because of the presence of a primarily Coptic Christian community. In 1980, the largest development project was initiated at Muqattam, under the name of the *Zabbalin* Environmental Development Program (ZEDP). The principle sponsors of the program were the World Bank and the Ford Foundation. The private environmental consultancy firm, Environmental Quality International (EQI), operating under contract with the World Bank and other funding agencies, was assigned a major role in the development and execution of many of ZEDP components.

The aims of the program, according to Marie Assaad and Nadra Garas who have been active at the settlement, are the following: improving "the squalid living conditions in what had been an impoverished and

deteriorating squatters' settlement", and incorporating the "existing *zabbalin* garbage collection services into a more efficient overall solid waste management system for Cairo" (Assaad and Garas, 1994:1).

According to Mounir Neahmatellah, the president of EQI, the program was launched as "the amount of solid waste generated by such a rapidly growing population rendered the *zabbalin*'s donkey-drawn carts inadequate" and as a result of the fact that "the survival of the *zabbalin* themselves was threatened by the harsh environmental and health conditions of their settlements," as well as the "absence of a shared vision about the future of the community and the potential of their trade" (ICLEI, 1992:16). The objectives of the program, therefore, revolved around improving the conditions of living of the *zabbalin*, and upgrading the waste management process. To achieve these objectives, the following projects were devised (ICLEI, 1992:17-18):

- 1) The Community Upgrading and Infrastructure Extension Project was developed to improve the quality of life of the *zabbalin* at the settlement, through the provision of basic infrastructure, health and educational services. It was intended to address maternal and child care needs, as well as animal health care and breeding problems. Two subprojects eventually emerged from it, including the Animal Health and Production Project and the Mother and Child Health Care Project.
- 2) The Internal Clean-up of the Main Zabbalin Settlement Project was also designed to improve the quality of life of Muqattam, but instead focused on the clean-up of the settlement. It was designed to provide regular waste collection services to the zabbalin settlement and to remove the large quantities of reject waste material that had accumulated there over the years.
- 3) The Small Industries Project was designed to provide the *zabbalin* with new business opportunities related to their trade. The main objectives of the project were to establish community-based small scale recycling workshops and to maximize the resource value of the waste. The program extended the *zabbalin*'s technological knowledge as it relates to waste recycling. It also had a credit extension component.

- 4) The Route Extension Project was designed to extend the *zabbalin*'s waste collection services to the new low-income residential districts of Cairo. The new routes created as a result of the project are operated on a commercial basis; the community residents pay the *zabbalin* for the services that they receive.
- 5) The Zabbalin Mechanization Project was initiated in response to a decree issued by the governor of Cairo in the 1980s banning the use of donkey-drawn carts. It set out to modernize the zabbalin collection system in order to meet government requirements to upgrade the waste management process and delivery standards in Cairo. Many donkey-drawn carts were replaced with motorized vehicles, and the wahis and the zabbalin encouraged to form private waste collection companies in order to enter into formal arrangements with the local government.
- 6) The Zabbalin Composting Plant Project established a composting plant at the settlement to convert organic waste residues and animal manure from the pigs and other animals raised at the settlement into useful fertilizer. As a result of the project, a plant was established with a daily production capacity of 160 tons.
- 7) The Women-Headed Households Project was designed to provide income-generating opportunities for the women who are the principal breadwinners in their families. A revolving fund was established at the settlement and has provided many of the women with small loans (ranging from LE 100 150) for the promotion of enterprise among them.
- 8) The Institution Building of the Zabbalin Gam^ciyya (AGCCD) Project was initiated with the objective of supporting the zabbalin gam^ciyya in the daily business of maintaining the waste collection trade, through assistance in acquiring licenses, dealing with the wahis, and communicating and negotiating with recycling dealers. A board of directors for the association was also created (Assaad and Garas, 1994:14) but does not include any women. It is through the AGCCD that most of the ZEDP projects have been launched.

As can be noted from the large number of projects cited above, the ZEDP intended to be in many ways comprehensive. Today, many of its projects have been fully implemented, and EQI has almost completely phased itself out of the settlement. The ZEDP continues to allow for an accurate evaluation of its successes and failures. This evaluation is funded by the Ford Foundation.

CHAPTER FOUR

RECONSTRUCTING DEVELOPMENT

Atiyat

Atiyat is a 28 year old woman, and her account of the development process at Muqattam is representative of over eighty percent of the women at the settlement with the only exception that she was more of a latecomer to Muqattam than many of the other women.

Originally from Upper Egypt, Atiyat begins the descriptive account of her life with the Governorate of Assiut. She explains that both she and her elder brother, Ishak, were orphans who lived with their aunt in Assiut and grew up in her home. Atiyat was not educated, and is illiterate because her aunt did not see the need to educate girls as she felt their future lay in marriage and housework. Her aunt's meagre resources were therefore saved up to send only the boys to school and to provide them with the necessary uniforms and textbooks. In Assiut, Atiyat's daily life consisted of helping her aunt with housework: cooking, cleaning, purchasing vegetables, and feeding the chickens. Occasionally, she was also sent out with her cousins to help in the harvesting of the small piece of land owned by her aunt's husband.

Atiyat's aunt lived a modest life, although Atiyat believes that her aunt's husband made more money than he let the family know. She claims that he spent his income on what she considers the "habits that have no reward," such as cigarette smoking. As a result of the limited income allocated to family expenditure, both Ishak and Atiyat grew up with the feeling that they overburdened the family. It is as a result of this situation that Ishak dropped out of school at only 15 to seek employment and that Atiyat found herself married at 14 years to a landless agricultural worker. The marriage was arranged by her aunt's husband. Only one month after her marriage, Eid, Atiyat's husband, made the decision to migrate to Cairo where he had a relative working with the *zabbalin*. Torn between her attachment to her aunt and cousins and her new family commitments, Atiyat traveled north for her first time with a husband who was still a stranger to her. It was only when

her brother decided to come along that Atiyat began to feel the excitement of traveling to Cairo. Atiyat describes her situation:

He married me when I was still a little girl, and I didn't know what traveling to Cairo meant. All I could think of at the time were the cinemas that one would see, and the famous actors and actresses like Shadia and Shoukri Sarhan. I wasn't very sure what the zabbalin did for a living. When Ishak told me, I thought it was disgusting, especially in comparison to how my aunt always kept her house clean. But despite what Ishak told me, I didn't visualize what lay ahead and hadn't imagined what the garbage and this suffocation would be like. How was I to know what this would be like?

Arriving to Cairo, at the Muqattam settlement of the *zabbalin*, Eid and his new wife and brother in-law were invited to stay with a distant relative of his until they had time to construct their own home. Being unable to afford existing rents in the few one to two story apartment buildings that had gone up in the 1970s, Eid and his brother-in-law found immediate employment in order to afford constructing dwelling units of their own. Atiyat, on the other hand, was assigned the task of helping the relative's wife in the sorting of the waste material that was brought in and was instructed to set aside all the material that could be used for the construction of her home such as wood and tin.

Eventually Eid found employment as a *zabbal* with one of the existing *wahis* and was allocated a collection route. Together with Atiyat he built a one room dwelling unit in Muqattam with a backyard for pig-rearing. In agreeing to contribute towards the capital cost of establishing the pig sty and purchasing pigs, Eid and his relative became partners in the *zeriba* (aminal pen) established at the back of Atiyat's house. When around 1980 Eid and Atiyat were fully settled down in Muqattam, Eid arranged for his mother and some of his extended family members to join them in Cairo. Their dwelling does not have running water or electricity. Atiyat comments about her dwelling:

It was extremely difficult work at first to build this room. I was treated poorly by the women that had already lived here for 10 years. I was very young and had never sorted waste before, and they ridiculed me for this. This used to upset me. But now I

understand that they were jealous because I had never had to sort waste, while they had been doing so for years before I came.

After moving to Muqattam, Atiyat had to adjust to several new situations. She had to adapt to married life, to living with her mother-in-law, to living in Cairo, to her new role in waste management, and to adjust to her life with the women of the Muqattam settlement. As a result of being away from her aunt and the healthier environment of the Upper Egyptian countryside, her health deteriorated considerably. Gradually, however, she became accustomed to life at Muqattam, and set out to impose her own rules within the house and among her neighbors. Atiyat describes her situation:

The women around here were not helpful at first. As you can see, we all sort waste in the space in front of our homes. When Eid used to place our waste in front of our dwelling, the neighbors would never complain about this when he was around. But as soon as he'd leave for his next round of waste collection, the women would come up to me and complain that our waste takes up too much space and that we have to put it in our home. For many months I would cry when this happened, and my mother-in-law was of no support. She had a very bad temper, and I'm glad she passed away. But one day I woke up and decided to show my neighbors who I am. I told them if they bothered me, I would set their waste on fire and that Eid would have words with them. They respected me more when I said this, and gradually we became friends. But every once in a while I had to take a stand again. I also gained more respect in the settlement when I gave birth to my first child, the son that Eid had been dreaming of. So many women at the settlement have not been able to provide their husbands with sons.

Almost as soon as Eid found employment as a waste collector, Atiyat set out to prove her fertility to her anxious mother-in-law and to her neighbors who treated her poorly. At 16 she delivered her first born child, the long awaited son. Within a couple of months, however, her son died, and the *daya* told her that she was too weak. Convinced that she needed a child, a boy who would grow to become an income earner and to support his parents in their old age, Atiyat entered into a cycle of pregnancies and miscarriages. She gave birth to five girls before receiving another son, whom she proceeded to call Farag, the Arabic term for the end of crisis.

Atiyat leads a difficult and hectic life. She wakes up every day a quarter of an hour before her husband to prepare his breakfast before he

makes his first round of waste collection at 4 a.m. Between 4 a.m. and 10 a.m., she prepares breakfast for her children, her mother-in-law (before she died), and her husband's two extended family members. In order to feed the animals, she carries all the organic waste material disposed of in front of the house, to the pig sty at the back. Preparing breakfast and feeding the pigs usually takes Atiyat a minimum of one to two hours.

Along with her eldest daughter, Atiyat travels daily to the distant end of the settlement where she takes water from a friend of hers who has installed a water tap in her home. Together they carry heavy buckets of water back to their dwelling unit. Since water is extremely difficult to obtain, Atiyat supervises the recycling of water very carefully within the home. She describes the lack of water:

I miss having water very much, and my aunt was very sorry to hear of my living conditions in Muqattam. It is difficult when you have to sort waste to not have water, when you cook to not have water, when you clean to not have water. It is also impossible to extinguish fires. The fires spread before we have time to fetch enough water to extinguish them. In fact, the settlement was burned twice because of this reason I used to stand in line in front of the church to get water for my family, but the women there are very aggressive, and the lines are very long, so I no longer do that. A friend of mine, to whom God has given good fortune, has installed a water tap in her home and has connected herself to the water pipes using her own resources; she lets me use the water tap daily.

Atiyat is responsible for the cooking and cleaning. The extended family members who live with her do not contribute to housework, and when her mother-in-law was still alive, she expected to be served. Atiyat purchases her vegetables before 10 a.m. from nearby food stores within the settlement and the vegetable market in Manshiet Nasser (an adjacent neighborhood). She then cleans the *zeriba* of the organic food residues that are not eaten by the pigs. Collecting manure for her oven is another time-consuming task that she performs. In addition, once every two to three months she digs the sty to remove manure and food residues trampled on by the pigs.

At 10 a.m. when her husband returns, Atiyat begins sorting waste. As Eid brings in more waste throughout the day, she spends most of her daylight hours sorting it and breast-feeding her son. At 2 p.m. she quickly prepares lunch for the family. Her husband is accustomed to receiving a hot

meal after his second round of waste collection at 4 p.m. As her husband returns, Atiyat serves lunch and feeds the household for a second time. She continues to sort waste while Eid either takes his afternoon nap or walks over to the nearby cafe for a smoke. As soon as it gets dark, she begins to prepare dinner. By the time she puts the children to bed, Atiyat is too exhausted to stay awake past 8 p.m. She comments about her situation:

Sometimes as I walk to the market in the morning I feel that I don't want to go back. Walking away is a good feeling, and I like the vegetable market in Manshiet Nasser on the main road. It is then that I really feel that I am Cairo. I like the main road, but it also scares me because beyond it I get lost. I have in fact gotten lost several times on my way to El Attaba to purchase clothes for the children.

Over the years Atiyat explains that her work has become more difficult to perform. She argues that this has been especially the case as the quantity of waste that she receives on a daily basis has increased. Atiyat no longer has enough time or capacity to sort waste material by herself. She frequently keeps the children home from school to help her with sorting. The increase in the quantities of incoming waste is attributed to her husband's motorized vehicle which can make his collection time more productive. With the motorized vehicle, Eid now makes a minimum of three waste collection rounds per day, and with each round he is able to transport increased quantities of refuse. The sorting activity has also become more complex. Eid now urges Atiyat to sort out organic waste material with greater accuracy, arguing that the dealers only pay for it when it is completely segregated from other waste components. Atiyat does not know why the dealers have suddenly become more picky. She comments about the volumes of waste:

The space in front of our home is no longer sufficient for the waste that Eid brings in. He now dumps the waste in our room, and when necessary in the pig sty. I hate having waste in our room because it is already very tight in here. Also, when I cook in the room the waste can catch fire. With so much waste, and with Eid's insistence that the organic material come out clean, I sometimes keep Samia and Samira from school (her two eldest daughters). I don't like to do this of course, but Eid yells when I get slow.

With increased quantities of incoming waste, Atiyat states that it is more painful now to not have water. The children get dirty quicker when waste is accumulated in the dwelling unit. Also, there is more of a chance of fires spreading with the increased amount of waste. The most significant problem due to the increased quantities of waste that Eid has been bringing in, and his purchase of a motorized vehicle, is the greater sense of prestige that this has given Eid. She argues that he has become conceited and more bossy around the home, and she explains that the weekly allowance that he gives her has not increased despite his sale of increased quantities of waste.

One day Eid came drunk and started to insult me. He made me so angry. I yelled at him and told him that I don't need his money. This upset him and he began to beat me in front of the children until my eyes got swollen. He told me to give him whatever money I had. Sometimes I save some money from the gam^Ciyya (credit circle) that I have begun with some of the other women. I only became part of the gam^Ciyya because the children don't get enough to eat. At first I refused to give him what I had, and then when I felt that I could go blind, I gave him my money. He took the money and ripped it into pieces. He said he would teach me how to behave because obviously my aunt didn't do that. The next day I put the ripped money into a plastic bag and went to Father Samaan so he could help me. In two days, he had taken the money to some bank and fixed it so that it's as good as new.

Atiyat says that she has not heard of the ZEDP but says she knows many people with yellow hair come to Muqattam to do research. She heard of only a few of the component projects of the ZEDP, but she does not know that they are in any way interrelated. She also resents the AGCCD, and argues that it is corrupt and does not help the residents of the settlement. The AGCCD, according to Atiyat, is only out to serve its own interests. It is the Church that helps the settlement, argues Atiyat. She states that it is Father Samaan's wife who always reaches out to the women to support and assist them morally. Moreover, the Church distributes cooking oil and lentils every once in a while, especially on special occasions and feasts. She comments on the AGCCD:

The only good thing that the gam^ciyya (AGCCD) has done took place some years ago when it had two big trucks collect reject waste from the settlement. But even then, we saw the trucks once

or twice and never saw them again. The gam^Ciyya is only out to serve the interests of its own people. Gam^Ciyya members are too embarrassed to show their faces around here, and don't come to these houses here anymore.

Atiyat is most aware of the Small Industries Project, which she refers to as the "small workshops project." Due to this project, several of Eid's friends have left waste collection to open up recycling workshops or to work in one. Atiyat sees in this project some hope for her son Farag. If he does not make it outside of Muqattam, she says, then maybe someday he can have a workshop of his own. She hopes, however that through educating Farag he will be able to leave the settlement altogether and become an important person. She considers employment for women:

Some men were given training in workshop work. I would also like to be given training, and this is not my feeling alone. Many women, and not just me, would like to go away from 9 to 5 someplace, and to come back to the house afterwards. There is no sewing factory at the settlement for women.

Atiyat explains that a year ago her husband was conscripted by the military; she now supports the family. As Eid was in the process of having his birth certificate reissued, the authorities took him to perform his military service. Atiyat is now the breadwinner in the family and is having enormous difficulty with this responsibility. While her brother provides her with some of the waste he collects to sort and sell, Atiyat has found herself unable to provide for her children. Atiyat finds it difficult to continue with the waste management trade since Eid has left. She does not know the name of her husband's wahi, the recycling dealers, or the pig dealers. She obtained a loan from the Female-Headed Households Project through the Association for the Development and Enhancement of Women (ADEW). The association was established to administer loans. With the loan, she has purchased a metal chopper to use in processing tin cans and other metal items. Her brother collects the waste material that she sorts and the metal that she chops, selling it to the dealers to pay her for it. She describes her frustration:

I can't sell the pigs without Eid's knowledge. He would be very angry if he came back in a year and found out that I did that.

Women here never sell the pigs on their own. I am also scared of being cheated if I sell them because the pig dealers around here are not honest. I can't read the scale to see if my pigs weigh as much as they tell me that they do, and I am sure that in seeing that I am a woman living alone they would underprice them. With a loan from ADEW I bought the chopper, but it was difficult to find two women to join a group with me so we could get the loan. The two women live around here, but we don't trust each other very much.

ADEW introduced the concept of the credit group in Muqattam, stipulating that women form groups of three to qualify for loans. This mechanism has been devised to help women who do not have collateral to obtain loans. In forming groups of three, the women are requested to guarantee each other. In the event that one of the women defaults on her loan, the others are required to pay. It is as a result of this situation that the women in the credit groups typically check on each other and that there is some distrust among them. Atiyat would have liked to obtain a job outside the settlement until Eid gets back, but she has no place to leave her children. Needless to say, she lives in abject poverty and desperately awaits her husband's return. She describes her poverty:

My birth certificate, like Eid's, was burned in one of the fires that erupted here, and I can't read or write, so I can't look for a job. The loan helps as well as the gam^Ciyya (credit circle) that I have started with the women, but sometimes the children and I don't even have enough to afford dinner at night

Umm Ibrahim (Mother of Ibrahim)

Umm Ibrahim is uncertain of her age but believes she must be around 40. Born in the governorate of Assiut, she was never issued a birth certificate and has no identification card. Umm Ibrahim's family was poor. Her father worked on agricultural land while her mother was a housewife. She recalls that they lived a difficult life, in which all expenses had to be carefully accounted for. Umm Ibrahim was never sent to school, and since her youth, she has been charged with the responsibility of helping her mother in housework. She has a total of eight siblings: five sisters (only three of whom are still alive) and three brothers. While the boys were apprentices in small workshops at early ages, Umm Ibrahim's parents kept the girls at

home. It was around the mid-1960s that Umm Ibrahim's family made the decision to migrate to Cairo. She was around 10 years old at the time. Since her father was unemployed and found it difficult to find a job in Upper Egypt, .her family migrated to Cairo. Several extended family members joined them in their migration.

Umm Ibrahim's parents decided to settle down in Imbaba. There they met with their relatives who had traveled ahead of them. According to Umm Ibrahim, Imbaba was not as crowded as it is today, although at the settlement, several families had already settled down. They lived in humble dwellings made of wood, cloth, and tin. Umm Ibrahim recalls, however, that the dwellings were bigger in size than the ones that currently exist in Muqattam.

She explains that her father soon began rearing pigs after settling down in Imbaba. With the help of his relatives who had already established themselves in Cairo, he purchased a large number of pigs. In Imbaba her father was introduced to the *wahis* who collected residential waste. An agreement was reached between her father and one of the *wahis* to purchase waste material for a small amount of money on a regular basis in order to use its organic residues for the pigs to feed on. She comments on the waste material:

Even in Imbaba we would extract many items from the waste to use in our homes or for clothes. Sometimes we would find spoons and other valuables that are thrown into the waste by accident. Once I even found a gold bracelet in the waste, but of course we used to try to return these things.

Umm Ibrahim's move to Imbaba was not too arduous for her family. She explains that her parents and extended family members managed to settle down quickly. Umm Ibrahim did not miss Assiut very much and fails to remember it in any great detail. She has never been back to the governorate since her family made the decision to migrate to Cairo. Even if she wanted to return to Upper Egypt, she could not because of her family's insufficient finances. As she got older, Umm Ibrahim would use whatever extra money she would have on her children instead of on travel expenses. In addition, because she left Assiut at a young age, her sense of belonging to it has never been very strong. Umm Ibrahim does remember that her

family's way of life in Imbaba was very similar to how people today live in Muqattam, with the only exception that it was not as crowded.

In the early 1970s, Umm Ibrahim, her parents, brothers, sisters, and extended family members faced eviction. The municipality wanted to relocate the community to the outskirts of the city; they felt that the Imbaba settlement dirtied the capital. The fires lit at the settlement to burn reject waste material and pig-rearing were the main reasons for the municipality's decision to evict her family and kin group. The decision did not come as a surprise to her family. She recalls that for many years disputes erupted between Imbaba's residents and the authorities. Umm Ibrahim's family dreaded relocating once again. At 15 years old, she vividly remembers the scenes of eviction:

There had always been disputes. Our pigs give the municipality an allergy, even today. We knew that in the end we would be the losers, but many of our relatives insisted on aggravating the authorities. But aggravation is always responded to with more aggravation; the disputes were endless. Some relatives lit more fires than they ever used to, especially when they were sure that we would be told to move anyway. The difficulty in moving was the speed with which the authorities expected us to do so. They would send officers to push us out. The officers would laugh when they would see that my father was keen on taking his wood and tin with him; they would think that we were trying to waste their time. But it wasn't only my father who took his wood and tin, everybody did; we could foresee that we would need it. The officers would also beat our pigs, and as a result many died.

Many residents of the Imbaba settlement moved to Muqattam mountain. At the time, the mountain was still deserted. Umm Ibrahim's nuclear family and extended family members settled at the foot of the mountain. Umm Ibrahim recalls that although it took the community time to resettle, Muqattam mountain was more enjoyable than Imbaba because of the greater land space that it afforded for the pigs to roam and for the families to live. As in Imbaba, the community constructed small tin shacks for their dwelling units, receiving no water supply or electricity. Water had to be purchased from adjacent neighborhoods and transported up the foot of the mountain to the settlement. Within one year, Umm Ibrahim states, a new settlement was constructed that was almost a replica of the one at Imbaba. The construction

of Muqattam was a process, however, in which everybody was expected to take part. Adults and children worked hard for a period of one year.

It was at the newfound Muqattam settlement that Umm Ibrahim's father was approached by the owners of small industrial workshops for the purchase of his waste. Whereas some dealers wanted only the plastic waste, others were interested in metals alone. Hence the sorting of waste undertaken by women and children at the settlement began. The community at Muqattam was gradually transformed from one that purchased waste from wahis, to one that purchased waste collection rights. The community began to engage in the collection process. Umm Ibrahim remembers her father as he set out to collect waste for the first time, and the gradual unfolding of the sorting process as it is currently undertaken by the women and children today:

Sorting waste was not new, we always sorted it for re-usables and pig feed anyway. At Muqattam we just became more regular about it, that's all. You feel waste is dirty, but what is waste? Glass on its own is not dirty, tomatoes on their own are not dirty, but put the tomato on the glass and people suddenly feel it's dirty and it's waste. There is nothing dirty about waste; it's just many useful things combined.

As an increased number of dealers began to approach her father for his waste, Umm Ibrahim explains that her mother and her family were instructed to begin looking for new items: plastic, paper, cloth, metals, and even bone now had to be extracted. This involved longer working hours and more concentration. As waste collection became increasingly profitable for Umm Ibrahim's father, he started to undertake a greater number of waste collection rounds. As a result, the quantities of waste brought to the home increased tremendously. She comments about sorting the waste:

One day we were told that all of the ripped pieces of paper should also be extracted, no matter how small. Today we extract even the needles and tiny wires, those items which you would not be able to spot in the waste, even if you sat staring at it for over an hour.

At age 17, Umm Ibrahim married a relative at the settlement. Youssef, 7 years older than Umm Ibrahim, worked as a *zabbal*. He had migrated from Upper Egypt to Muqattam directly and had not lived in Imbaba. Being

unable to afford the construction of a dwelling unit of his own, Youssef left the relative that he had been living with and was invited by Umm Ibrahim's father to move in with them in their two room home. Youssef brought the waste he collected back to the settlement for Umm Ibrahim to sort. Entering into the typical cycle of pregnancy and miscarriage, Umm Ibrahim soon had several children of her own who helped her with the sorting of waste.

Youssef needed a woman to serve him, so he would come from work and find a clean galabiyya (traditional Egyptian outfit), and something to eat. He also needed a woman to sort his waste, and I knew that he had put his eye on me for a while before he proposed.

It took Youssef several years to save up enough money to construct his own home. In a partnership with a relative, Youssef set out to build a room for Umm Ibrahim, himself and their six children. After her husband constructed a one room dwelling unit with a pig sty from pieces of wood, tin, textiles collected from waste remains. Umm Ibrahim left her family abode. Through Youssef's joint partnership with his relative, he purchased a large number of pigs, and Umm Ibrahim was at once responsible for housework, child and animal care and the sorting of waste. Her new dwelling lacked running water and electricity. She did not complain about this situation, however, having been accustomed to it all her life.

It was around the mid-1980s that Umm Ibrahim's husband began to receive technical training at the settlement for the establishment of his own waste recycling workshop. He would leave home early for his first round of waste collection, returning in the early afternoon for training. His postponed second round of waste collection until the afternoon. Even though the schedule changed Umm Ibrahim's pattern of life, she lived in the hope of one day receiving an increased income. Gradually Youssef was able to establish a recycling workshop of his own to recycle, producing plastic hangers. Selling his share in the *zariba* and obtaining a loan from the Small Industries Project, Youssef was able to purchase the necessary recycling equipment. Umm Ibrahim tells of her apprehension to Youssef's decisions:

I was scared when Youssef let go of the zariba to his relative, and I didn't know exactly what was happening. But thank God he knew what he was doing. We constructed an additional wall in our dwelling to separate the pig sty, as it was no longer ours. Youssef set up his workshop very close to our home. Many people also

started to build workshops in this area. The only problem was the black smoke filled our lungs and made my children continuously cough. But it was even worse for Youssef in the workshop itself. His health is so weak that we have consulted several doctors. Between you and me, I always worry about the 'bad' disease (cancer).

Despite his establishment of a recycling workshop, Youssef continued to collect waste and Umm Ibrahim continued to sort. She was relieved, however, of her duties in pig-rearing. Gradually, Youssef became prosperous enough to sell their small dwelling unit and to rent an apartment in one of the informal apartment buildings that had gone up in Muqattam in the mid-1980s. The informal buildings had been connected to the water pipe and electricity grid on the main road through a local initiative of the building owners. Umm Ibrahim describes the change from the one room dwelling unit to the apartment as one of the most significant events of her life. She continues to sort waste with several other women in front of the building. At night she moves her waste into the staircase of the building. She comments about her new change:

Water is a gift from God, and electricity is also a gift from God. The women here are jealous of me sometimes because I have water, but they are also jealous because my husband tries to comfort me. Youssef is a man who knows his God, and he helps out Father Samaan on small errands on Sundays.

Umm Ibrahim's financial situation has improved over the years. Wearing six gold bracelets, however, she continues to sort waste, and still sees this as the family's main source of income. Re-usables continue to be extracted from the waste and sold to the dealers. The only difference today is that all the plastic waste is put aside for Youssef to carry to his recycling workshop. Although Youssef works both day (in waste collection) and night (in the workshop), Umm Ibrahim does not complain. She can now afford to buy new clothes for the children every once in a while. She does not see the need to educate them, however. Her three sons are being apprenticed in Youssef's workshop and help him in waste collection. The girls, on the other hand, help her with housework and sorting waste. She hopes that one day they will marry men who will be as good to them as Youssef has been to her.

With the exception of the Small Industries Project, Umm Ibrahim has not heard about ZEDP projects. She does not know of the ZEDP and the projects that have emerged from it. In general, she also appears to have a negative view of the AGCCD. She argues that the members of the gam^ciyya (AGCCD) are corrupt and that they only protect the interests of a selected few. While the gam^ciyya has helped Umm Ibrahim in vaccinating her children, she believes that the members of the AGCCD are disconnected from the realities of the settlement. She calims that

the gam^Ciyya was trying to convince us of a project for the separation of waste. Its members wanted to separate the waste and then give it to us. I don't understand exactly what it is they wanted to do, but they are crazy and are out to destroy our source of income. Members of the gam^Ciyya were trying to convince the women of this idea, claiming that it would be good for the women. They don't know what's good for us. If they sort our waste, then what will we do and from where will we live? Obviously they want to take our waste so they can sell it and make money from it.

Umm Ibrahim also believes that much of the health education that is given by the gam^ciyya is unrealistic and inapplicable to the lifestyle of the settlement. She does not know, however, that the advice is given within the framework of the Mother and Child Health Care Project. She believes that it is an initiative of the gam^ciyya to educate women about health care. While the women on occasions assemble at the gam^ciyya for advice on the subject of health and hygiene, Umm Ibrahim believes that the women of the settlement would do well to invest their time in other activities.

Once we were sitting in the gam^Ciyya and the lady who teaches us said that we should wash our children's faces and hands everyday, and that in looking after ourselves we should not forget about our children. I got up and said, "your words are poetry, my love, but where are we to find the water?" And the rest of the women laughed. The lady comes in western dress and tells us we are dirty. I told her to give us water and to watch how we will not stop washing. Another time, she suggested that we wear gloves while we sort waste and asked us why we refused. I told her to get up and to look out the window. I said, "see how the women are sitting in the waste, what gloves are you talking about? We live in the waste." I don't go to the gam^Ciyya anymore, and I don't think that the people of the gam^Ciyya like to see me there.

Umm Ibrahim continues to live in Muqattam today. The wives of the other waste collectors look up to her for the upward social mobility that she has been able to achieve, and they live in the hope that someday they will be able to do the same. Her life, however, is not representative of that of the other women at the settlement. Only a small percentage of the *zabbalin* have been able to ameliorate their living conditions to this extent. It is not the garbage collectors that live in the apartment buildings in Muqattam. Rather, it is newcomers to the settlement who live in them, people who engage in different occupations. The *zabbalin*, however, continue to live in terrible conditions.

CHPATER FIVE

EMPOWERMENT OR DISEMPOWERMENT?

The Assumptions of the Zabbalin Environmental Development Program

Based on the two case studies presented above, the ZEDP is a program that uses the paradigm of economic development. The program is based on the following assumptions: one, that economic growth is gender-blind; two, that the Western model of a household where the father, mother and children share common goals and interests is the model prevalent at the Muqattam settlement; and three, that the burdens of poverty and wealth are equally shared and distributed within households. In addition, the ZEDP has used measures similar to national income accounts that fail to assess the environmental degradation resulting from the project's components. The program also fails to recognize the work that is undertaken within the homes.

It is important to distinguish between two different types of projects initiated within the framework of the ZEDP. While some projects were devised as being "gender neutral" (a benefit to all community members regardless of their sex), others were intended to be "gender specific" (a benefit to only one of the sexes). The majority of projects initiated within the ZEDP, such as the Route Extension Project and the Mechanization Projects, fall under the first category.

The first assumption on which the program was based is a false one. The economic growth achieved in Muqattam through the ZEDP has not been gender blind. Through the Mechanization Project, it is the men who were given soft loans for the purchase of mechanized vehicles. Through the Route Extension Project, it is the men who received increased income by owning greater amounts of waste from the additional residential area that they serviced. Similarly, through the Small Industries Project, it is the men who were given technical training to establish recycling workshops. The men, therefore, reaped the increased financial rewards of the recycling activity.

The two cases of Atiyat and Umm Ibrahim clearly demonstrate that the economic growth achieved at the settlement did not affect women, and if it did, it has only done so through their husbands. The income of Atiyat did not increase over the years as a result of any of the "gender neutral" projects that were initiated. She did, however, benefit from the loan she obtained from the Female Headed Households Project.

Umm Ibrahim's income did increase over the years but not because of the projects initiated. Rather, it was her husband's willingness to share his increased financial resources with her that she was able to reap the benefit of a greater income. This situation is seldom the case in Muqattam and is largely premised on the good will of the husband. Her case is thus exceptional and is reflective of the way in which only a small minority of women have benefited from the development experience at Muqattam.

The second assumption used on the ZEDP has also been false. It is not the case at the settlement that all household members work towards similar objectives. The increased income that the men earn through the various projects initiated is frequently used to purchase cigarettes, alcohol and drugs. Families rarely receive benefits that lead to a higher standard of living. The Coptic Church at the settlement indicates that the incidence of alcoholism and drug abuse among men at the settlement has significantly increased over the past 10 years.

Although Atiyat's husband has come to earn increased income through the Mechanization Project, he has turned to alcohol. As a result, Atiyat has struggled to save money for her children and herself through the formation of credit circles. Her husband abuses her, however, as he tears her money to pieces when drunk. With insufficient financial resources, and only a greater work load as a result of her husband's increased income generating opportunities, Atiyat continuously complains that the children do not get enough to eat. Premised on the assumption that households share common interests and work towards common goals, many of the component projects of the ZEDP have resulted in gender bias.

The third assumption on which the ZEDP was founded is also false. The burdens of poverty and wealth are by no means equally distributed within households. Studies that evaluate time allocation in Muqattam indicate that women work longer hours than men, eating only a small portion of the food left over by their male counterparts. This situation is especially visible in the case of Atiyat. While her husband was earning a

greater income from the Mechanization Project and his sale of increased quantities of waste, Atiyat's physical quality of life and financial situation did not improve. Her persistance in forming credit circles with her female counterparts at the settlement has saved her. Moreover, while her workday extends to 8 p.m., her husband finishes his work by 4 p.m. Atiyat and Eid have not, therefore, shared equally in the burdens of poverty and material benefits.

In their evaluation of the ZEDP, development planners have typically employed measures that have not reflected the environmental degradation that are a consequence of their activities; their measures fail to account for the work undertaken within the homes. The measure that has been most frequently used in the evaluation of the ZEDP has been income growth, based largely on the paradigm of economic development that dictates the path of the development process in recent years. Development agencies have not considered the environmental degradation that has occurred at Muqattam: air pollution has increased due to the Small Industries Project, and reject waste material has increased as a result of the Mechanization and Route Extension Projects.

The increased quantities of waste collected due to the latter two projects have caused the following: waste material rapidly accumulates at the settlement, the incineration of reject waste at Muqattam needs to occur more often, and an increase in the likelihood of the eruption of fires at the settlement. It is the women who have been the prime bearers of the costs of environmental degradation at Muqattam. Confined to their homes for housework and sorting activity, they have had to live with more polluted air, with greater quantities of waste within their homes. Atiyat complains of the increased quantities of waste transported to her home over the years, the increased likelihood of fires, and the need to wash the children more often. Umm Ibrahim, on the other hand, complains of air pollution and fears disease among her children and husband.

The projects launched by the ZEDP that have been presented as "gender neutral" are in fact geared more towards the men than the women of Muqattam. The definition of the term "gender bias" put forward by Jacobson is clearly evident here. "Gender bias", she writes, "is mainly manifested in the exclusion of women from development programs" (Jacobson, 1992;9). The majority of ZEDP projects that were presented as gender neutral have excluded women from the process of development.

The Disempowerment of Women

The ZEDP, a development program designed for the *zabbalin* Muqattam has not addressed many of the pressing problems women experience in their day to day lives. Although the program had as its declared aim the development of the settlement as a whole, the water problem, the difficulties experienced in the sorting waste, and the health hazards described by Atiyat and Umm Ibrahim, are problems that were hardly tackled at all by the program. In fact, both Atiyat and Umm Ibrahim do not appear to have heard of the ZEDP as many of its component projects are entirely unknown to them. More disturbing, however, is that while many of the projects have not addressed women's needs at the settlement, they have actually contributed to reducing their quality of life and by increasing their workload.

According to the modified version of the DMP, many of the projects initiated within the ZEDP have had a disempowering effect on women. Only a few have had a neutral impact. This disempowering effect has resulted in making women's access to the bases of social power more difficult, as it has moved them further away from these bases. In the first instance, the ZEDP has not attempted to organize women at the Muqattam settlement in order to enhance their organizational skills and capabilities. Whereas the men at the settlement have formed the AGCCD, no comparable association for women was formed. Without such an association at Muqattam, the ZEDP did not succeed in reaching women. With most of its component projects having been initiated through the AGCCD where no women are represented, this exclusion has contributed to the gender bias of the program. Umm Ibrahim's case study is particularly telling of how the women of Muqattam distrust the gam^ciyya and are suspicious of its intentions because they lack representation on its board and rarely have the opportunity to communicate with its members.

To examine how the ZEDP has been disempowering, two stark examples will be provided. The first example reflects how the ZEDP has reduced the surplus time available to women. The second sheds light on how the program has actually diminished their knowledge and skills. While other examples can be provided, it is these two that are among the most significant in the way they have contributed to the disempowering of women.

In terms of acquiring greater surplus time, the ZEDP has had a clear disempowering effect on women at Muqattam. With greater quantities of waste to sort due to the Route Extension and Mechanization Projects, women work longer hours. In addition, as a result of the establishment of the composting plant, they now sort organic waste residues with greater accuracy; this has also increased the total number of hours that they work. By increasing the quantities of waste, the ZEDP has contributed to increasing the workload of women in a number of other ways. The women need to wash and watch their children more than they previously used to. This is the case because, as Atiyat says, the children get dirtier quicker.

In addition, because of the increased liklihood of fires that are likely to erupt, women watch their children more carefully. With less surplus time for leisure, the ZEDP has had a disempowering effect on women in Muqattam. Had women's social organizations existed prior to the initiation of the ZEDP, the women would have voiced their concern regarding the way in which the projects have increased their workload, and mitigation measures could have been devised early on. If women at Muqattam were to organize today, however, it would be significantly more difficult for them to argue for women's greater surplus time because the workload of women has already been tremendously increased.

The ZEDP has done very little to increase women's access to knowledge and skills. As stated earlier, most of the component projects of the ZEDP have had a clear male bias despite the fact that they were presented by development planners as gender neutral. The projects have directed most of the education and technical training towards men. For instance, the Small Industries Project has focused on training men about the recycling process, enabling them to establish their own recycling workshops. Although the Mother and Child Health Care Project enhanced the level of education of women on issues of health and hygiene, it is only one of the few "gender specific" projects that were launched.

Even though the Institutional Upgrading of the Zabbalin Gam^ciyya project was designed to educate and provide technical assistance, the project is seldom mentioned by the women, however, as a result of the fact that the members of the gam^ciyya are all men and that the women have not been part of the project. The knowledge and skills provided to the zabbalin through the ZEDP have been directed towards only the male members of the settlement. The Mother and Child Health Care Project is the only exception

to this case. Had women's organizations existed, however, the women could have played a role in tailoring the Mother and Child Health Care Project to meet their needs as well as voicing the need for more education and technical training. In having had no forum for the expression of their views, women like Atiyat can only lament that no factory has been established for women at the settlement.

In not addressing and building upon the important skills that women have acquired in the sorting of waste, the ZEDP has had a disempowering effect on women at Muqattam. This has been the case because the limited attention that women's skills have been given by the ZEDP has led community members to undermine them and to devalue them socially. While the activities undertaken by the men in waste management, such as collection and recycling, have received tremendous attention, those activities undertaken by women, such as the sorting waste, have received no attention. This attitude diminishes the value and social standing of the work that women perform.

If the women had a forum for the expression of their views, they would have articulated the importance of their daily work. The need to develop women's skills as well as to implement programs designed to help women succeed is best illustrated Atiyat's situation as she became head of the household. Unfamiliar with the details of the waste management trade and her husband's employer, she was barely able to provide for her family.

Many of the component projects of the ZEDP have disempowered women. If women's organizations are to be created today it would become significantly more difficult for them to help women acquire the basis of power than it would have been before. In fact, the ZEDP has contributed to moving women further away from meeting their needs. In failing to acquire the basis of social power through the ZEDP, the women of Muqattam have been unable to rise along Maslow's hierarchy of human needs¹. They are still at the stage in which they need to secure adequate food, air, water, and

¹ Maslow's hierarchy of human needs contains three categories: material needs, such as the need for air, water, food and shelter; social needs, such as the need for love, belongingness, and esteem by others; and self-actualization needs, such as the need for meaningfulness, perfection and justice. These needs must be fulfilled in sequence, with material needs being the most basic of human needs.

shelter. Therefore, according to the modified version of the DMP, the women of Muqattam remain poor. They have not organized in an attempt to acquire the basis of social power, and they have not been able to climb Maslow's hierarchy of needs.

Towards Alternative Development at Muqattam

A new approach to development is needed at the Muqattam settlement to empower women. Such an approach must not be grounded in the paradigm of economic development, but rather from a modified version of the DMP. As Rahman and Friedmann have stated, a participatory approach to development must be initiated. External agents, must help to mobilize women. Women must form social organizations in which they identify their needs and construct their objectives. The development catalysts must then help convert those objectives in order to better meet women's needs.

The chances of erasing gender bias in development will only occur when women are encouraged to identify objectives and goals of development programs that meet their needs. Also, men must be actively involved in meeting their own needs as well. The household therefore will be viewed as a productive atmosphere not one entirely left for consumption.

Once housework, child and animal care, and the sorting of waste are valued, the role of women at Muqattam will become more visible, and they will gradually be valorized for their productivity. The social status of women will be improved. The participatory approach will enable women to achieve equal rights. Through a participatory development approach, the burdens and benefits of poverty and wealth will also come to be more equally distributed, as both men and women come to command resources of their own.

But how, in practical terms, can participatory development be achieved in Muqattam? In order to reach women at the settlement, external agents should seek women in the areas where they usually gather, such as in the Church and the market place. The agents should select leading figures from among the women who command authority in the settlement, whether due to their old age or their wide social networks. They should then begin to explain to the women the need to organize, addressing their material and pressing needs.

While the initial resentment of men to the social organization of women can be anticipated, this resentment could be avoided by having women's organizations maintain a low profile at first. Moreover, by addressing only women's needs in the beginning, the men would be put at ease by being assured that the women will not at any point come to infringe on their domain. It is only gradually, therefore, that women's organizations should come to play a greater role in addressing all aspects of life at Muqattam.

An important step towards gradually increasing the authority of women at the settlement would be to represent them on the managing board of AGCCD. This would at once serve several purposes. Such representation would allow women to play more of a decision making role at Muqattam by working with their male counterparts; the men and women of the settlement would benefit from working together to improve their shared living conditions.

Prior to the representation of women in the AGCCD, however, some awareness among men needs to be addressed regarding the role and contribution of women to life at the Muqattam settlement. This would contribute towards having the men accept the representation of women in their organization. The need to increase the decision-making role of women could be made clear to the men by explaining to them how the improved working conditions of women could lead to the greater sustainability of the waste management trade. Improving women's living conditions would improve men's conditions as well. Hopfully, the men will more willingly come to agree to women organizing.

To help women organize, external agents should initially work towards having women represented in the AGCCD. To form social organizations unique to the women, however, ADEW could be used as a starting point. Even though the association was created within the framework of the Female Headed Households Project to administer loans to the women, the role of the association can be broadened to help women work towards acquiring more knowledge and skills. It is important to note that by expanding the role of an existing organization, as opposed to creating a new one, women would more likely participate and men would less likely aggravate them. The creation of a new organization for women could appear revolutionary at the settlement and could make the men feel challenged; the expansion of an existing one would not be as threatening. Women could

then begin to express gradually their needs and identify the projects that would be of benefit to them.

Finally, it is important to note that even though the case of the ZEDP demonstrates that the Female Headed Households Project has been among the most effective projects in reaching women (based on Atiyat's experience), its results should not be generalized to argue that women are only to be helped through "gender specific" projects. The Female Headed Households Project succeeded in reaching women because it was one of few projects that made such an effort to reach them. Using a participatory approach to development, gender neutral projects can also be devised. Encouraging other men and women to suggest, develop and initiate projects, the project will at no stage become gender specific (as has happened with many of the ZEDP projects).

The participatory approach to development must be used throughout all stages of a project, from the initiation to the evaluation.

It is through participatory development that an alternative development can empower women. The ZEDP, as of many other development programs around the world, are not restricted to only use the model for economic development. The economic model does not always work as is the case with Muqattam women. As millions of women around the world continue to be excluded from the development process, serious attention must now be given to working within the DMP through a participatory process. Women must be empowered so they can begin to address their needs design programs to meet their objectives.