

Women's Perceptions of Environmental Change in Egypt

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Eman El Ramly

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WOMEN'S PERCEPTIONS OF ENVIRONMENTAL CHANGE IN EGYPT

Eman El Ramly

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CHAPTER ONE

ENVIRONMENTAL ISSUES IN EGYPT

The Current State of the Environment in Egypt

The major environmental problems facing Egypt are overpopulation, pollution, depletion of resources, and the inability to bring population growth down to a rate that can be sustained by available natural resources. In effect, Egypt is currently undergoing tremendous environmental stress which seriously threatens the quality of the country's scarce natural resources. This is attributed to a magnitude of factors, including: high population density concentrated in the narrow Nile valley, absolute reliance on the Nile for water supply, expansion of industry, change in people's consumption habits owing to higher standards of living among certain sections of the population, the continuing rise in the number of vehicles on the streets and their use of leaded gasoline, use and abuse of pesticides and fertilizers in agriculture, and loose governmental control over the dumping of hazardous waste materials. Almost all pollutants detected in Egypt's water and air exceed international standards (Nasralla et al.1984 and 1986).

The problems of soil pollution and degradation of Egypt's land resources stem mainly from the use and abuse of chemical pesticides and fertilizers, the irrigation of agricultural land by water contaminated with civic or industrial waste, and desertification. In addition, the management of solid waste poses a serious problem, given the current population growth trends and the changing habits and behavior of the population which result in higher generation of solid waste (Hafez 1992). The disposal of solid waste and sillage is more of a problem in poorer urban neighborhoods and the numerous villages of Egypt.

Water pollution is basically the result of domestic activities, industries, and navigation. Lack of treatment of sewage and industrial emission are two major sources of depletion of Egypt's scarce water resources. On the other hand, air pollution, especially in Cairo and Alexandria, has reached hazardous levels, caused mainly by the emissions of pollutants from industries, vehicle exhaust, and the uncontrolled emissions of dust, gaseous

and metal particulates in the air. The situation is further worsened by the inefficient combustion processes in some stationary sources and the high content of sulphur in heavy oil and lead in gasoline (Hafez 1992).

Excessive environmental degradation and the depletion of Egypt's valuable and scarce natural resources are not only ecological threats, but pose economic and serious health hazards as well. For example, it has been calculated that almost 19 per cent of all deaths occurring in the heavily air-polluted industrial suburb of Helwan are due to lung diseases. It has also been suggested by Osman Farrag (1991) that the relatively high rate of mental retardation in Egypt may be associated with the high lead content in the air. Also, the use and abuse of chemical pesticides and fertilizers in rural Egypt poses direct threats to the health of villagers as well as indirect threats to consumers of agricultural products.

Rapid expansion of urbanization and means of transport has become a serious ecological driving force in Egypt. As in many other parts of the world, increased urbanization in Egypt has not only adversely affected the quality of land, water and air, but has also resulted in the unprecedented redistribution of human population. Among the environmental effects of increased urbanization are loss of land and disruption of natural and agricultural ecosystems by urban infrastructure; a significant increase in water and energy requirements; the generation of massive amounts of solid and liquid waste which are much larger than the absorptive capacity of terrestrial and aquatic ecosystems; and risks associated with industrial activities.

Although poor rural areas are often the ones suffering most from the effects of environmental destruction, and although people living in urban areas may not have the same close relationship with the natural environment as those in rural areas, urbanites are still greatly affected by environmental degradation. They have to cope with poor housing, overcrowding, inferior air quality, and inadequate water supply and appropriate sanitation (Rodda 1991). This situation is more of a problem in developing countries in general and in Egypt in particular, given the alarming increase in population and the inability of the government, with its limited financial resources, to satisfy the needs of rural migrants to the capital and major cities.

The Rise of Concern for Environmental Problems in Egypt

At present, there is increasing concern with the state of the environment in Egypt. Senior Egyptian scientists, government officials and professionals urge that the depletion of the country's scarce resources should be halted. This concern, however, has only recently developed into an issue involving legislature and political activity, both inside and outside the government. It was only during the 1980s that environmental concern in Egypt started to mount.

Unlike in the West, where the environmental movement was a grass-roots one directed at influencing decision-makers, in Egypt it was the government that showed initial interest in environmental issues in the form of concern about rapid population growth. Later, this concern broadened to include other issues, such as pollution and depletion of resources. This culminated in the establishment of the Egyptian Environmental Affairs Agency (EEAA), which is the institutional framework for environment affairs in Egypt (Gomaa 1992).

Research on environmental consciousness in the West has mainly attributed the growing concern for environmental issues to changes in mass belief systems. These led to a shift from an emphasis on material values to greater concern for the quality of life, and the exposure of people to tangible environmental hazards. Gomaa argues, however, that both explanations are inapplicable within the Egyptian context, given that Egyptians have a long way to go before satisfying their basic material needs, and that broad awareness of environmental hazards among them has not yet been attained. She argues that, in Egypt, those who are least likely to be exposed to environmental hazards are the ones who are mostly concerned with the environment. This is related to variables such as socio-economic status, education and concern with public issues.

The rise of concern for environmental problems is regarded as resulting from the interplay of three factors, namely: pressure of foreign donors on the government to meet certain environmental standards and their financial support for environmentally-conscious projects; the government's desire to attain a sustainable model of development which creates a balance between population and scarce natural resources; and the government's desire to set a model for other developing countries and the Arab World (Gomaa 1993).

While it is generally acknowledged in scientific and professional circles in Egypt that broader environmental issues, such as global warming, the preservation of bio-diversity, the conservation of the ozone layer, and the like, have an influence on people's opinion in Egypt, Egyptians' main preoccupation is with pollution and the depletion of the country's scarce resources. Associated with this is a concern with the behavioral patterns that contribute to such pollution and depletion.

Similarly, the print media's coverage of environmental issues shows greater concern for local problems than for broader global ones. Analysis of the governmental and opposition press during April 1993, indicates quite a high level of awareness of environmental problems among governmental and national elite circles (Tewfik 1993). Issues such as renewable energy sources, water supply and shortage, solid waste and sewage disposal, the effect of environmental degradation on human health, destruction of agricultural land, the overuse of chemicals in agriculture, desertification, water pollution, air pollution (particularly caused by industrial emissions), noise pollution, and nuclear pollution have been tackled. Water shortage, however, is viewed as the most threatening environmental problem facing Egypt.

Various non-governmental organizations in Egypt have tried to mobilize people around a sense of risk (Gomaa 1992), but they have not really succeeded in that task. Experts, officials and national activists often stress the need to raise "public awareness" of environmental problems, the need to involve "the public," and the necessity of eliciting more "participation." However, very little is actually known about how the "local people" perceive environmental changes, nor of what action they may take to cope with these changes.

In order to help fill this gap, this research aims at exploring women's perceptions of and social responses to environmental change in urban Egypt. Before outlining the research objectives and specifying the concepts to be studied, the following chapter will provide the theoretical context within which the research problem has been conceptualized.

CHAPTER TWO

THEORETICAL FRAMEWORK

Theories Addressing the Notion of Risk Perception

Various theories have attempted to explain the notion of risk perception. The knowledge theory entails that “people perceive technologies and other things to be dangerous because they know them to be so” (Wildavsky and Dake 1990:42). As such, perception of risk is seen as being in accordance with the knowledge about it. The personality theory basically attributes “risk-aversion” and “risk-taking” to certain personality traits.

The economic theory provides two sets of explanations for the perception of risk. The first maintains that the rich are more willing to take risks associated with technology because they benefit directly from it and are, in a way, protected from its unfavorable consequences. Post-materialist theory, on the other hand, argues for the opposite. It contends that, with higher standards of living, those who have newly-acquired wealth “become more interested in what they used to have than what they actually have” (ibid: 43). Maslow’s theory of “stages of wants,” for example, asserts that once people have become rich and have satisfied their material wants, they can afford the “luxury of environmental conscience” (Douglas and Wildavsky 1982).

Political theory mainly attributes risk perceptions and people’s actions which are based on these perceptions to struggles over conflicting interests. Cultural theory, on the other hand, regards individuals as “active organizers of their own perceptions;” they select what to fear and regard as risky and what to ignore. It considers risk perception to be a selective process which “corresponds to cultural biases; to worldviews or ideologies, entailing deeply held values and beliefs defending different patterns of social relations” (Wildavsky and Dake 1990:43).

Research has shown that there exists a minimal relationship between self-rated knowledge and risk perception. Evidence indicates that risk perception and knowledge do not necessarily coincide. Similarly, there is no evidence to suggest that there is a personality structure that is risk-taking or

risk-averse. The assumptions on which the economic theory is built do not justify how, in non-industrialized societies, no matter how poor, there appears to be quite a high level of environmental awareness. Thus, advanced technology and wealth are not sufficient explanations for environmental concern. In addition, Maslow's theory does not illustrate how people go about selecting particular risks from an array of prevailing risks that could be selected for attention. The political theory of risk selection also has its shortcomings.

The Cultural Perception of Risk

The cultural theory has shown greater power than alternative theories in predicting risk perception and the driving force behind it. Its strength is derived from its recognition of the "individual differences in cultural biases" and its comprehension of the major underlying determinant of risk perception; that is people's "worldview" (ibid:57).

The writings of Douglas and Wildavsky (1982), and Johnson and Covello (1987) stand out in the increasing literature on the cultural perception of risk. Douglas and Wildavsky argue that most people cannot be aware of most dangers all the time, that they cannot calculate precisely the total risk to be faced, and that different people worry about different risks. They also maintain that in the absence of complete knowledge and in the presence of disagreement between scientists and ordinary people alike, the conception of risk becomes a social process, where social principles that guide behavior influence people's judgement of which dangers should be feared and which are to be disregarded. Thus, because every society generates its own selected view of the natural environment and the risks affiliated with it, the different characteristics of social life of each society have to be comprehended in order to understand how the various responses to danger are elicited (Hopkins 1992). Finally, they believe that risk is not an objective reality which is out there waiting to be perceived. They say "the perception of risk is a social process" which relies on social, cultural and moral acceptability; that "the public perception of risk and its acceptable levels are collective constructs" (Douglas and Wildavsky 1982:3); that the "different social principles that guide behavior affect the judgement of what dangers should be most feared, what risks are worth

taking, and who should be allowed to take them" (ibid:6); and that "only a cultural approach can integrate moral judgments about how to live and what the world is like" (ibid:10). Within this context, to grasp how specific dangers come to be regarded by a certain community as worthy of concern, one has to appreciate the social forms in such a community. The choice of risk and way of life are intricately interconnected so that "each form of social life has its own typical risk portfolio" (Hopkins 1992: 8).

It is further argued that the selection of risk for attention does not occur simply to protect health or the environment. Neither does it coincide with solid scientific evidence. For example, the risks chosen for concern could be the least likely to affect people, and vice versa. People's selection of risk is derived from their beliefs, social institutions, and moral behavior. Douglas and Wildavsky stress that a collection of variables intervenes in the selection process, including people's familiarity with the risk in question, the local context in which it is embedded, the way information about the risk is presented and credibility of such information, the way the risk is handled, the catastrophic potential of the risk, and the nature of prevailing social, cultural, economic, scientific, and political institutions. Social networks, family and friends also play a crucial role in this equation. People usually admit concerns that are relevant to their everyday life experience while ignoring those which are irrelevant or which could disrupt their life style. For example, people tend to disregard alleged risks if they have not actually had personal and physical encounters with them and if no unusual illnesses or health effects can directly be attributed to them. Also, at the community level, an overall public perception of risk seems to emerge and filter individual perceptions, thus surfacing over the diverse individual or group perceptions (Johnson and Covello: 1987).

Research on Risk Perception in Egypt

To get a sense of how Egyptians define the environment and pollution, what they believe to be the major environmental problems in Egypt, their causes, and proposed solutions, a pilot exploratory research was carried out by the American University in Cairo in the summer of 1993. A number of people representing various walks of life were interviewed. The research indicated that those in direct contact with environmental pollution were the ones most

aware of the prevalence of environmental problems, since they spoke from direct experience and were most affected by them. Generally, a strong correlation was found between people's perceptions and responses to environmental problems on the one hand, and their first-hand experience with those problems on the other. The next source of information, after experience, came from the mass media. More abstract issues such as global warming or ozone depletion were regarded as quite irrelevant to Egypt (Hopkins et. al 1994).

The pilot research also indicated that environmental degradation was regarded as the responsibility of the government, the people, or both. There was some kind of consensus that the government should do more and that the people needed to become more aware of environmental issues. Although environmental degradation was not directly related by those interviewed to those in business, industry was recognized as a source of pollution. In addition, there seemed to be some kind of recognition of people's own responsibility, especially in the matter of solid waste disposal (ibid).

Research Problem within the Context of Global Literature on Risk Perception

Viewing risk selection and perception as "dynamic processes" which are continuously being changed and reinterpreted through people's "worldviews," this research aims at exploring the underlying forces influencing urban Egyptian women's perception of environmental degradation and pollution in their communities. Because "Whether or not something is perceived as hazardous may be related at least as much to social factors as to quantified estimates of risk" (Wolfe 1988:4), the research will analyze how, within the Egyptian context, culture, ideology, and the institutional base of society shape perceptions and actions related to environmental issues.

The goal of the research is to examine how the community's self-image, as reflected in the women's attitudes towards the presumed source(s) of pollution or environmental degradation, contributes to a better understanding of how perceptions are formed. The research probes into how pollution and a decline in environmental conditions, once recognized,

become regarded by Egyptian women as risky, as well as the mechanisms they devise in order to cope with perceived risks or hazards.

This research focuses on the perceptions of women, as the primary health care managers of their families. They are the first to recognize that something is wrong with the health of their children and to seek health care and treatment for them. Women hold themselves responsible, and are held responsible by others, for ensuring the well being of their children. It thus follows that, for women, health and environmental issues are closely related.

Given the links between environmental degradation and pollution on the one hand, and health hazards and diseases on the other, “environmental problems become health problems because there is a continuity between the earth body and the human body through the processes of maintaining life” (Shiva 1992:5). Moreover, the health hazards associated with environmental degradation and pollution are considerably magnified in poorer rural and urban areas, and it is the women and children who suffer the most from their devastating effects.

CHAPTER THREE

DESCRIPTION OF RESEARCH SITES

The overall research objective was to examine women's perceptions and social responses to environmental change in three urban districts in Greater Cairo. It specifically aimed at exploring women's culturally and socially generated understandings of environmental degradation and the risks associated with it. This involved analyzing the correlation between actual environmental change, women's perceptions of that change, and the mechanisms which they devised in order to cope with the consequences of the perceived change. The research also involved comparing the macro-level conception of environmental problems; i.e. the "objective" reality believed by scientists and officials to represent the facts as such, with the micro-level community-shared understandings of environmental problems; i.e. the "subjective" or social reconstruction of reality.

The research aimed at addressing the following questions:

1. The extent to which women's perceptions of environmental change matched with the actual degradation and pollution prevailing at the three research sites;
2. The extent to which women's perceptions of environmental change were attributed to their own experiences and observations of the changes taking place in their communities, and in what way their opinions and attitudes were influenced by other factors, such as information transmitted through the mass media;
3. The effects of background factors, such as age, education, income, occupation, place of residence, social class, and exposure to pollution or environmental hazards on the level of awareness of environmental problems among urban Egyptian women;
4. Who women considered responsible for environmental degradation: the government, the people, or both;
5. The factors which elicited women's involvement in community-based action aimed at improving environmental conditions, and the circumstances more likely to encourage women to organize themselves and respond collectively to perceived environmental problems.

In doing so, the research sought to explore the impact of pollution and environmental degradation on the lives of the residents of the three research sites in Greater Cairo, as well as the mechanisms by which women coped with the perceived health risks and hazards associated with environmental degradation and pollution.

In this cross-sectional study aiming at both exploring and explaining women's perceptions and responses to environmental change, individual women were the units of analysis and their characteristics and orientations were the focus of the research. Although the research's primary interest was in the cultural construction of risk and not in individual perceptions *per se*, individual perceptions first had to be grasped in order to comprehend the cultural construction of risk by the community at large.

Research Sites

In-depth individual interviews were conducted with 44 women in three research sites in Greater Cairo: 15 in Dar al-Salaam, 15 in Kafr al-Elw, and 14 in Maadi. The fieldwork was implemented over a period of two and a half months during the summer of 1995.

Dar al-Salaam is a low-income popular district with a predominantly working-class population and with sewage and solid waste disposal problems. Kafr al-Elw, is a former agricultural settlement (Fakhouri 1972), which has been urbanized over time and which is heavily polluted by exhaust emitted by the Portland cement factory. Maadi is a middle to upper class residential area, the air of which is also polluted by emissions from the Tura cement factory, as well as dust blown from the Muqattam area. Maadi, however, is characterized by an abundance of greenery in the streets. Since its foundation, Maadi had been regarded as the "unrivaled garden suburb of Cairo" (Raafat 1994:31). These sites were selected because they represented structurally different urban settings, with different levels of exposure to pollution, and different socio-economic standards of their residents. Given such diversity of the selected sites, the research was expected to generate an account of the similarities and differences between them, as well as an analysis of what these anticipated similarities and differences implied.

Dar al-Salaam. The 15 interviews in the first research site were conducted in Mansheyet al-Sadat, which is one of the three main neighborhoods of Dar al-Salaam, namely; al-Gezira, al-Malaa, and Mansheyet al-Sadat. Mansheyet al-Sadat is characterized by narrow streets which run parallel to each other, two to three-storey buildings constructed close to each other, the abundance of coffee shops, workshops and small shops selling a wide range of products and items, and a generally modest standard of living.

The 15 women interviewed in Mansheyet al-Sadat lived on two quite similar and parallel streets about 200 meters away from each other. The two selected streets were typical of Mansheyet al-Sadat in terms of the neighborhoods's above-mentioned features. The second street, however, comprised a relatively fancier supermarket and a few taller buildings.

According to the classification of the women interviewed in Mansheyet al-Sadat, the term *umara* (building) was only attached to those buildings consisting of more than three floors and with two flats or more on each floor. Smaller, mostly family-owned and sometimes rented-out buildings consisting of two or three floors with one flat and sometimes two on each floor were termed *buyut* (the plural of *beit*, house). Thirteen of the 15 women interviewed in Mansheyet al-Sadat lived in houses, apart from two who rented flats in a building on the second street.

Kafr al-Elw. The 15 interviews in the second research site were conducted in Kafr al-Elw, which lies about two kilometers south of Helwan. Originally a village where the main occupation was agriculture, Kafr al-Elw has become urbanized over time. As reported by respondents, almost 50 per cent of those who then resided in Kafr al-Elw had previously lived in other Cairene districts, the Delta, or Upper Egypt, whereas the other 50 per cent were originally from Kafr al-Elw.

The larger part of Kafr al-Elw is encircled by two main roads; al-Dayer al-Gharbi from the western side, and al-Dayer al-Sharki from the eastern. The 15 women interviewed were selected from both streets, as well as other smaller roads – or rather alleys – located off the two primary ones. Thirteen of the 15 women interviewed in Kafr al-Elw lived in houses, whereas the other two lived in a building.

Maadi. The 14 interviews in the third research site were conducted in various parts of Maadi; a middle to upper class residential district which lies about 12 kilometers north of Helwan. These various parts could be classified as Maadi al-Sarayyat, Sakanat al-Maadi, New Maadi, and the more recent extensions of New Maadi.

Two women were interviewed in Maadi al-Sarayyat, two in Sakanat al-Maadi, six in New Maadi, and four in the more recent extensions of New Maadi.

Environmental Conditions in the Research Sites

Basic Services. In Mansheyet al-Sadat, all the respondents lived in flats to which electricity, tap water and sewerage were connected. As reported by the respondents, every building in the neighborhood had its *taransh* (septic tank) until seven to 10 years before. These septic tanks had to be emptied as often as twice a month, at a price. Thus, residents cooperated among themselves and covered the cost of installing a sewage system connected to the main sewage pipes provided by the government on the main roads. The system installed by the residents, however, had not been working efficiently and leaked and flooded frequently.

The government was carrying out an overall sewerage upgrade scheme in Mansheyet al-Sadat, where the sewage pipes originally installed by the residents were being replaced by larger ones. This process had not been carried out until the time of the implementation of the research in the first street selected for study, while it had been completed in the second street and had since been working efficiently.

Most of the houses in Kafr al-Elw had electricity and tap water, but some still did not. Only one of the 15 women interviewed in Kafr al-Elw did not have tap water connected to her home. She attributed this to the poverty of her family and their inability to provide the funds required for covering the cost of pipe installation.

Whereas some houses in Kafr al-Elw were connected to the sewage system installed by the government, other houses still relied on septic tanks, while a third group drained into canals. Those houses which relied on septic tanks or canal drainage were either located farther from the government-installed main sewerage pipes, or inhabited by low-income families who

could not afford to pay for the necessary connection pipes and installation costs.

The sewage system had been judged to be inefficient in some parts of Maadi. In Sakanat al-Maadi and in an apartment buildings complex situated in the more recent extensions of New Maadi, the sewage pipes sometimes leak and flooded.

Solid Waste Management. The accumulation and burning of solid waste was a frequently observed phenomenon in Mansheyet al-Sadat. *Kharabat* (plural of *kharaba*, a plot of land on which no buildings are constructed and where solid waste is dumped and burnt) were also widespread. There was a garbage dump on each of the two streets where the interviews were conducted in Mansheyet al-Sadat. The accumulation of solid waste in the garbage dump on the first street, however, was much greater than in that on the second.

In Kafr al-Elw, there was no system of solid waste disposal and management. The women who baked their own bread and raised poultry at home tended to dispose of less solid waste than those who did not. However, both ended up dumping solid waste in either a canal or a garbage dump, whichever was closer to the place of residence and more convenient to use.

Whereas a reliable and efficient system of solid waste collection and management was available to the Maadi residents, in the more recent extensions of New Maadi the accumulation of solid waste on the streets and in garbage dumps posed a serious problem.

Outstanding Environmental Problems. In Mansheyet al-Sadat, the inefficiency of the sewage system and the unreliability of the solid waste collection and management system accounted for the major environmental problems prevailing in the neighborhood.

The proximity of Kafr al-Elw to the Portland cement factory resulted in a serious problem of air pollution. Heavy clouds of cement emissions covered the skies of Kafr al-Elw, causing several inconveniences and health complications for the inhabitants. These hazardous living conditions had been revealed to the public through quite an extensive coverage by the Egyptian media. Yet, despite the exposure of the reality to both the public

and the government, and the numerous complaints that the inhabitants had made, no profound measures had, so far, been taken to improve environmental conditions in Kafr al-Elw.

Although everyone in Kafr al-Elw knew that the installation of filters to the cement factories should solve the problem of air pollution there, a lot of people did not really know whether these filters were actually installed but not operating, or had not been installed at all. Some people thought these filters had been installed but had not been put into operation because the plant's administration was worried that they would not be able to replace them if they broke down since the spare parts were not available in Egypt. Others thought the filters had actually been installed but had broken down. A third group of people thought the filters were not yet installed, and that the plant's administration was still trying them out. There was also a belief among some people that operating the filters would reduce the plant's productivity and that was why they were not used even though they might have been already installed.

Canals represented another hazardous source of pollution. Both sewage and solid waste were dumped in Kafr al-Elw canals.

Given its relative proximity to the Muqattam hills and Helwan, Maadi's air is polluted by dust blown by winds from the Muqattam area, as well as cement exhaust emitted by the Tura cement factory. While these two sources of pollution are general to all of Maadi, there were certain pollutants specific to the various parts of Maadi where the interviewed women resided. These included noise, solid waste, and sewage.

Research Questions

These interviews focused on the following issues:

1. Background information on each respondent and her family; including the respondent's age, education, occupation, present and previous place of work, marital status, number and age of children (if any), mother's and father's education and occupation, husband's education, occupation, present and previous place of work, how the respondent and her family spent their spare-time, and whether she was a member of any club or association.

2. Hours of television viewing and listening to radio by the respondent and her husband (if married), whether their viewing had increased or decreased compared with five years before, respondent's favorite television programs, newspapers and magazines read by the respondent and her husband (if married), and how often these newspapers and magazines were read.

3. The size, condition, and standard of the place of residence of the respondent, the way it was furnished, the number of years the respondent had been living in that residence, previous place of residence, and the reason for moving to the current place of residence.

4. The respondent's opinion on the positive and negative attributes of her neighborhood, desired improvements and needed services, and who should provide them.

5. The respondent's opinion on the general environmental conditions of her neighborhood throughout the year, pollution problems in the neighborhood and their causes and consequences, the ways in which these problems were dealt with by the respondent, whether the respondent regarded these environmental problems as hazardous, whether environmental conditions in the neighborhood were improving or getting worse, the prevalence of flies and mosquitoes in the neighborhood and the respondent's use of pesticides, and prevalent diseases in the neighborhood and the reason for their occurrence.

6. The general health of the respondent and her family, and whether she or a family member had or had complained of any disease or health problem that could be related to pollution.

7. The nature and efficiency of the basic services connected to the respondent's place of residence (electricity, tap water, and sewerage), whether the respondent was satisfied with these services, and whether she formally complained (if unsatisfied with any of these services), to whom, and how her complaints were answered.

8. The respondent's opinion on the quality of drinking water, whether tap water had improved or become worse compared with five years before, and whether the respondent used any mechanisms for filtering tap water or substituted tap water with bottled water for drinking.

9. The way in which the respondent disposed of solid waste, whether any recycling of solid waste took place, and the availability and efficiency of solid waste collection and management in her neighborhood.

10. The respondent's understanding of the meaning of the words "environment" and "pollution," the causes and consequences of pollution, the relation between pollution and health, the ways in which food, water, and air could become polluted, the most dangerous pollutants of water and air, and whether the respondent perceived noise as pollution.

11. The respondent's knowledge of and opinion on environmental issues of national concern, such as depletion of resources, use and abuse of chemicals, polluting industries, and pollution caused by vehicles.

12. The respondent's knowledge of and opinion on broader environmental concerns such as the depletion of the ozone layer, global warming, and nuclear radiation.

13. The respondent's knowledge of and opinion on environmental protection laws in Egypt, governmental and non-governmental environmental institutions, and television programs and advertisements addressing environmental issues and problems.

14. The sources of the respondent's information on environmental issues, and whether – in her opinion – Egyptians in general, residents of her neighborhood, and women in particular needed to become more aware of environmental issues and concerns and why, and who should

be in charge of spreading awareness about the environment and its problems.

15. In the respondent's opinion, who was to blame for the deterioration of environmental conditions in Egypt, who should be responsible for protecting the environment; whether the government had done enough in that concern and, if not, what more should the government do; the role the Egyptians, women, women living in her neighborhood, herself, and the younger generation should undertake to improve environmental conditions in Egypt.

In addition, direct observation yielded data on the scope and nature of environmental degradation and pollution in the three research sites, the sources and agents which contributed to such degradation, as well as the hazards and health risks resulting from degradation and pollution.

Although the time framework of the study did not allow for measuring actual environmental change in the research sites, the question of change was dealt with through examining women's opinions, attitudes and memories on one hand, and accounting for the present environmental conditions in the research sites and the prevailing sources of pollution on the other.

The time sequence of events and situations was a critical element in determining causation. Although this was an explanatory cross-sectional study which depended on observations made at one given time, the data generated by the research allowed for drawing approximate conclusions about processes that had taken place over time by means of simple logic. Such logical inferences were feasible whenever the time order of variables was clear.

However, changes in perception may be constructed at a broader level than the community, as for example through formulations offered by the mass media. Thus, it was essential to evaluate the role of the mass media in spreading and raising awareness of environmental problems and in setting public risk agendas in order to see to what extent they influenced women's perceptions and responses to environmental change in the selected research sites.

Respondents' Profile

The 44 women interviewed at the three research sites represented different walks of life. They varied in age, education, occupation, and socioeconomic background. Age of respondents ranged from 14 to 63 years; some of them had not received any formal education while others had completed post-graduate studies; some did not work outside their homes, while others occupied a wide range of jobs; and some came from low-income families while others enjoyed a remarkably high standard of living. The following three sections will provide the profile of each group of interviewees.

Table 1 illustrates the distribution of respondents in the three research sites by age, education, work outside the home, and marital status. Table 2 illustrates the distribution of the married respondents' husbands by education and occupation. Table 3 shows the distribution of respondents' parents by education and occupation. Table 4 deals with the respondents' preferred spare time activities, duration of television viewing and listening to the radio, newspaper and magazine readership, and club and/or association membership (refer to Appendix for all tables).

When exact figures are not provided, the words "most" and "majority" stand for 70 to 80 per cent, while "some" stands for almost 30 per cent.

Dar al-Salaam Respondents. In Mansheyet al-Sadat, interviews were conducted with women aged 15 to 60 who shared a comparable standard of living. This was judged by the size of their flats, the way they were furnished, and the electrical appliances they had available. Two of the 15 respondents, however, enjoyed a slightly higher standard of living. One of these two better-off women had a husband who had worked in Saudi Arabia for a number of years.

Two of the 15 women had not received any formal education, five were studying at schools and colleges, and eight had been to school.

Only three of the 15 respondents worked outside their homes; two of whom were government employees and one worked as a housemaid. Ten respondents were married and had children in school, while the five students were still single and lived with their parents.

With regard to the 10 married respondents, two of their husbands had not received any formal education, while eight had been to school (three had completed the primary stage, two the preparatory stage, and three the secondary stage). Three of the respondents' husbands worked for the government, one was a hairdresser, one ran a carpentry workshop, one was a guard, and the rest were workmen.

The majority of the respondents had uneducated mothers and fathers, mothers who did not work outside their homes, and fathers who worked mostly as workmen, guards, and bakers.

Most of the respondents spent their spare time watching television, preferring television to radio and favoring movies, television series, plays, and musical programs. They read newspapers irregularly, but also read magazines which cover news of movie stars and entertainment. They only listened to the radio when there was nothing worthwhile to watch on television, or to listen to the Qur'an. *Al-Akhbar* was the newspaper they bought most often. There was only one student who read it daily. Respondents in Mansheyet al-Sadat were not members of any clubs or associations.

On the other hand, respondents' husbands spent their spare time either watching television or socializing, mainly at a coffee shop. Like their wives, they did not listen to the radio except occasionally or to listen to the Qur'an. They did not buy magazines, but read newspapers--mostly *al-Akhbar*--more often than their wives did.

Male children mostly played on the streets. Girls, on the other hand, were encouraged by their mothers to spend most of their time at home. Older girls were expected to help in the house. They also watched television, which was mostly viewed during school holidays--television was restricted in most homes on school days. Some women in Mansheyet al-Sadat carried out some of their household chores on the doorstep outside their homes.

Respondents in Mansheyet al-Sadat had occupied their present homes for periods ranging from five to 17 years. Almost a third of the respondents moved to these homes on marriage. Before that, they lived with their parents in other relatively nearby districts such as Old Cairo, al-Malik al-Saleh, and al-Sayeda Zeinab. Younger respondents, on the other hand, had lived in their current homes almost all their lives. Six of the 15 respondents had

lived for a number of years in al-Gezira--a relatively less fortunate neighborhood in Dar al-Salaam where many homes consist of only one room--before moving to Mansheyet al-Sadat.

For those living in rented flats, the move was made when a bigger flat was found and afforded. For those respondents who lived in family-owned houses the move was made when the construction of the house was completed. Most of the respondents lived in family-constructed and owned houses, seven of the 15 lived in two-room flats, six lived in three-room flats, and two lived in four-room flats. All 15 flats had kitchens and toilets.

Sometimes respondents compared their neighborhood with the places where they had resided previously. One of the respondents longed for her old neighbors, friends, and the social relations she valued there. Another woman, originally from Old Cairo, took Old Cairo as her point of reference and hoped to "move out of Mansheyet al-Sadat and live somewhere clean like Old Cairo, which has many clean and nice neighborhoods."

The buildings in which the respondents resided were constructed 12-20 years before. At that time, respondents recalled, all the land in Mansheyet al-Sadat was cultivated and was "bought cheap" with the purpose of building houses.

Kafr al-Elw Respondents. The 15 women interviewed in Kafr al-Elw ranged between 20 and 55 years old. Their living conditions were quite comparable, except for the two who lived in a building, rather than a house, and seemed to enjoy a slightly higher standard of living.

Nine of the 15 respondents had received no formal education, whereas one had completed the primary stage, two the preparatory stage, and three had completed the secondary stage and were then working outside their homes. One of the three working women was a teacher, the second was a day care center supervisor, and the third a secretary at a government office. Other than these three, the rest of the women did not work outside their homes. All the 15 respondents, except two, were married and had children. The two single women still lived with their parents.

Except for a husband who had completed the preparatory stage of education, and another who had a B.A. degree in commerce and was working as an accountant in a private sector company in downtown Cairo, the remaining 11 husbands either had no formal education or could just read

and write. They were mainly workmen either at one of the cement factories within the vicinity of Kafr al-Elw, or in other factories such as the iron and steel plant or the weaving factory.

Most of the respondents had uneducated parents, mothers who did not work outside their homes, and fathers who were either factory workers or farmers. Almost 50 per cent of the respondents had a husband and/or a father working in one of the cement factories.

Most of the women spent their spare time socializing with neighbors, friends, or relatives. Two women engaged in vending activities in front of their houses, and only two mentioned television viewing as their favorite past time. The majority of the respondents either did not watch television at all, or watched it only for a limited period of time. Their television viewing had always been limited.

More respondents preferred the radio although, except for two women who turned it on all day long, most did not listen to it often. Women's programs and the Qur'an were the most listened-to radio programs. Most of the respondents did not read magazines. The four women who read newspapers did not buy them regularly, except for one whose husband read *al-Ahram* and *al-Akhbar* daily.

The husbands' spare time was also mostly spent in socialization. While two of the husbands preferred to spend their spare time watching television, the majority either did not watch television at all or watched it only for short periods. Most of the husbands did not read any magazines, but 50 per cent of them bought *al-Ahram*, *al-Akhbar* or *al-Gomhoreya* either daily or occasionally.

Only one of the respondents was a member of a club or association. This woman originally came from Helwan, where her family had membership to a sports club. Otherwise, the respondents' male and young female children played on the street, or male children played football at Kafr al-Elw club, beside the primary school. Mothers preferred that their older daughters stayed at home.

Respondents had occupied their current homes for a period ranging from nine to 55 years. They were either born in the same house, or moved there when they married. All but three of the women interviewed were originally from Kafr al-Elw. Of the three, one was originally from Fayoum, one from the Delta, and the third was from Helwan. The first two were

married to men who were born in Kafr al-Elw, while the third woman's husband was, like her, from Helwan. The third couple had rented a flat in Kafr al-Elw, given its proximity to the husband's work place and its being affordable compared with rents in Helwan.

Except for two women who lived in rented flats, Kafr al-Elw respondents lived in houses built between 10 and 30 years before and owned by their husbands or their husbands' families. Some were upgraded from mud to concrete. Most respondents had toilets and kitchens in their residences, which consisted mainly of two to three rooms. Two respondents, however, lived in flats consisting of only one room, and three others lived in flats with four rooms.

The houses were typically one or two stories high. The only exception was a building in which two of the respondents lived, which consisted of six floors. This building was the highest in Kafr al-Elw and was mostly occupied by families originally from outside Kafr al-Elw.

Outsiders were referred to by Kafr al-Elw women as *sokkan* (tenants), while they referred to themselves as *ahali* (natives). The notion implied by the tenants versus natives was "them" versus "us."

Two native women clearly showed their detestation of the "tenants" by asserting that what they liked most about their neighborhood was that: "It is inhabited all by natives, no tenants." The "tenants" were mostly viewed as a source of trouble and pollution. "Because they do not bake or raise poultry like us, they generate a lot of garbage," one woman explained. Another said: "The tenants living in the building next to our house are terrible; they dump a lot of garbage at the corner of the street and they never bother to clean it up. We go out and clean it instead; we are not ashamed to do that." A third respondent said: "These working women who go by 'etiquette' dump a lot of garbage; they are educated but they do not have any manners."

On the other hand, a "tenant" who previously lived in Helwan regarded Kafr al-Elw as *aryaf* (countryside), and its people as *fellaheen* (peasants) who "do not know anything about anything." She was waiting impatiently to move out of Kafr al-Elw and was indifferent towards its environmental problems. When asked what she herself could do to improve the environment, she said: "There is nothing I can do, and even if there were I would not do it because I hate this place."

Maadi Respondents. The women interviewed in Maadi could roughly be classified as belonging to the middle, upper middle and upper classes. Variables such as knowledge of a foreign language, education, occupation, and standard of living were used to locate the different respondents within these social class categories. Standard of living was mainly judged by the location of the place of residence within Maadi, its size, the way it was furnished, and the use of luxury facilities such as air-conditioning, satellite, cable television, and the services of housemaids.

The 14 women ranged between 16 and 63 years old. One respondent was a secondary student, one had completed the preparatory stage, one had completed the secondary stage, 10 had completed university education, and one woman had a Masters degree. Ten of the 14 women interviewed in Maadi spoke at least one foreign language.

Whereas two of the respondents did not work outside their homes and another two had retired, the rest of the 14 interviewees were working women. Their occupations included teachers, a social worker, a beautician, a pharmacist, an artist, government employees, an accountant, and two who worked in the field of tourism. Eleven of the respondents were married, while the remaining three were single and lived with their parents.

With regard to those who were married, all husbands had completed their university education and one had a Ph.D. degree. The husbands worked as army officers, accountants, auditors, engineers, doctors, an agricultural consultant, and in the field of tourism.

Three of the respondents' mothers had completed the primary stage of education, three had completed the preparatory stage, another three had completed the secondary stage, and the remaining five had completed university education. Most of the mothers of the respondents did not work outside their homes. Fathers, on the other hand, had B.A. or B.Sc. degrees, except for four who had completed secondary education and one who had a Ph.D. degree. Fathers' occupations included army officers, senior government employees, engineers, doctors, an ambassador, a lawyer, and a university professor.

Most of the Maadi respondents spent their spare-time at a club (mostly the Maadi Club), playing sports, reading, socializing with friends, listening to music, or watching video, cable or satellite TV. Only one respondent preferred watching local television and listening to radio programs in her

spare time. Two of the Maadi Club members were also members of other sports clubs, and one was also a Lions' club member.

The majority of the respondents in Maadi watched little television or a maximum of two hours a day. They either did not favor any television programs in particular, or preferred to watch foreign films and series. Whereas seven respondents watched television less than they had done in the past, four watched television more, and the duration of television viewing remained the same for three respondents. Almost 50 per cent of the respondents did not listen to the radio at all, while the 50 per cent who did listened mainly to music and European channels.

Fifty per cent of the women interviewed in Maadi read newspapers daily, while the other 50 per cent read them irregularly. *Al-Ahram* and *al-Akhbar* were the newspapers read most frequently by the women interviewed. Ten of the respondents--the majority--also read magazines, however irregularly.

Similarly, respondents' husbands spent their spare time with friends at the Maadi Club, playing sports and reading newspapers. Whereas some husbands watched little television, others spent as long as four or five hours in front of the television everyday. Most husbands read newspapers daily, but did not buy magazines, and seldom listened to the radio. For the husbands, *al-Ahram* and *al-Akhbar* were the most widely read newspapers. Only one of the husbands also read opposition papers regularly.

Respondents' children mostly spent their spare time at the Maadi Club, playing sports, meeting friends, practicing a hobby, or working with computers.

Respondents had occupied their current homes for a period ranging from six months to 25 years. Whereas some of them had moved to their present homes when they married, others had made the move when a better and/or bigger apartment was possible. Fifty per cent of the respondents lived in Maadi before they moved to their present residence. Most respondents lived in apartments which they own, while the rest lived in rented flats.

Whereas two of the respondents lived in three-roomed flats, the rest lived in flats consisting of five, six, or seven rooms with a kitchen and at least two bathrooms. The buildings in which respondents resided were constructed three to 30 years before, depending on their location within Maadi al-Saray, New Maadi, or the extensions of New Maadi.

How Women Viewed Their Neighborhoods

Dar al-Salaam. Except for one woman who did not like anything about her neighborhood and two who did not mention anything in particular, the respondents attached various positive attributes to Mansheyet al-Sadat, such as its being safe and close to downtown and their places of work. The abundance of shops and the availability of everything women needed to buy were considered other favorable features. Respondents also valued the social relations they had established with their neighbors over the years, the friends they had made, and the fact that the neighborhood had become *amaar* (inhabited and lively) compared with 15 to 20 years earlier when it was mostly agricultural land.

On the other hand, there were several things that respondents disliked about Mansheyet al-Sadat, including the frequent shutting off of water, sewage flooding, garbage dumps and the accumulation of solid waste on the streets, flies, bumpy and dusty roads, and the proximity of the buildings to one another. Crowding, noise, fights, and bad neighbors were also considered negative features.

Women who lived in Mansheyet al-Sadat affirmed that priority should be given to upgrading the sewage system, cleaning the garbage dumps, cleaning the streets, providing a reliable solid waste disposal system, and paving roads. One respondent went further and argued that the garbage dump should not only be cleaned, but also converted into a garden so that greenery could purify the air that people breathed. Except for three respondents who believed that the people themselves should cooperate to bring about desired improvements in the neighborhood, the rest maintained that it was the central government and/or the local government's responsibility to do so.

Kafr al-Elw. Except for a "tenant" who disliked everything about her neighborhood and was waiting impatiently to move out of it, the rest of the respondents had an emotional attachment to Kafr al-Elw. They referred to it as *baladna* (our hometown), where they were born and raised and where they belonged. They valued highly their relationships with their neighbors. "All the families here know each other," one woman said. Another said:

"The people here are good, they always ask about each other." Respondents also regarded Kafr al-Elw as being safe and quiet.

Cement emissions were what respondents disliked most about living in Kafr al-Elw. In addition to the health complications associated with air pollution, cement emissions increased the cleaning and housework burden of women and obliged them to close their windows as much as possible to prevent *al-torab* (cement dust) from ruining their houses. They also complained that the cement dust soiled their washed clothes when they hang them out to dry. "Before we wash the clothes we try to figure out in which direction the wind will blow the cement dust," one woman said.

The accumulation of solid waste in the streets and canals, and the garbage dumps, were the second most cited disadvantages with living in Kafr al-Elw. Both were regarded as a breeding source for flies, mosquitoes, and disease.

Almost all the respondents said that to improve environmental conditions in Kafr al-Elw, filters should be installed at the cement plant. The women referred to filters as *falater* or *fanater*. Other desired improvements mentioned by the women included cleaning the canal by al-Dayer al-Gharbi Street and blocking it, installing sewerage, providing a solid waste collection and disposal system, and setting up cultural and sports clubs and activities. Whereas two respondents maintained that the inhabitants of Kafr al-Elw should cooperate to bring about desired improvements, the rest believed it was the government's duty to do so.

Those women who thought priority should be given to cleaning the canal all lived either in al-Dayer al-Gharbi Street, which directly overlooked the canal, or in great proximity to it. The problem of the canal was not mentioned by any of the women who lived in al-Dayer al-Sharki Street and its surroundings.

Similarly, the women who would like to have sewerage installed in their neighborhood all lived on al-Dayer al-Gharbi Street. Women who lived on or close to al-Dayer al-Sharki Street, on the other hand, did not regard sewage as a problem. This was because the government's main sewage system had already been connected to the eastern side of Kafr al-Elw, but not yet to the western side. Most of the women living in the al-Dayer al-Sharki neighborhood either had sewerage connected to their homes or relied on septic tanks. Those who still relied on septic tanks agreed that,

as long as the government's main system had already been installed in their neighborhood, it was feasible to make the necessary connections to their homes once the residents agreed to come together, contribute, and carry that out.

The three respondents who thought Kafr al-Elw lacked cultural and sports clubs and activities were the same women who worked outside their homes and who had completed secondary education.

Maadi Respondents. Except for two women who did not like anything about their neighborhood, most of the respondents valued the quietness and the abundance of greenery in Maadi. Respondents attributed several other positive qualities to their neighborhoods, such as "being used to it," cleanliness, not being crowded, having good neighbors or resident foreigners, and proximity to shopping facilities, parents' residences, children's schools, and to convenient means of transport.

One of the respondents liked her neighborhood because it was *raqia* (civilized), while another woman regarded it as *chic* (classy). Three other respondents who valued their privacy liked their neighborhood because the buildings there were not too close together and did not allow people to overlook each other.

However, six of the 14 women interviewed in Maadi complained that their neighborhoods were more crowded and more noisy than they had been in the past. Two respondents were particularly bothered by the inefficiency of solid waste management, while another two complained about sewage problems in their neighborhood. Respondents who were disturbed by noise or by the proximity of neighbors resorted to closing windows and "turning the air conditioner all the time" for quietness and privacy.

Most respondents--10 in all--thought the local government should concentrate on more cleaning or maintaining the cleanliness of the streets and on expanding green areas and planting more trees. Respondents who had a problem with solid waste management felt priority should be given to providing an efficient solid waste collection and disposal system, while those who lived on main roads thought traffic should be reshuffled one way or another. One woman thought the construction of high buildings should not be allowed because "villas are nicer," and another respondent, who was

highly offended by the "Maadi al-Arab" district, would have liked to see the whole area improved and cleaned up.

Respondents' Appraisal of the Services Provided in Their Neighborhoods

This section discusses respondents' appraisal of the services provided in their respective communities, namely for drinking water, sewerage, solid waste disposal and management, and other basic services such as schools, hospitals and transport. Table 5 (see Appendix) reflects the respondents' opinions in regard to these. Throughout this section, when exact figures are not quoted, "most" or "the majority" stands for 70 to 80 per cent, while "some" stands for about 30 per cent.

Drinking Water. All the women interviewed in Mansheyet al-Sadat were satisfied with the quality of the tap water. Almost all of them, however, mentioned the incident when drinking water became mixed with sewage during the upgrading of the sewage system. Whereas four respondents thought the quality of tap water had improved compared with five years earlier, the rest maintained that it was just the same.

On the other hand, respondents seemed to be more bothered by the frequent shutting off of water, both for the inconvenience it caused and the quality of the water running through the taps afterwards. They complained that, after the water ran back in the taps, it looked *meghabara* (unclear)--they judged this by its color. The water was thus not used until it had been left running long enough to clear. Some women also complained that sometimes the water contained excessive *chlor* (chlorine), which they detected by both odor and taste. One respondent claimed to have smelled pesticide in the tap water. However, they did not formally complain about water being shut off, either because they did not know who to complain to, or because they assumed that, once repairs to the system were completed, water would be back in the taps. Only one respondent had complained to the water authority.

All the women interviewed in Kafr al-Elw were similarly satisfied with the current quality of tap water, except for one, who was unhappy with the status of the Nile as a whole and thought the only solution was to protect the

river from pollutants. That respondent had actually seen solid waste being dumped in the Nile near Maasara.

Whereas one respondent in Kafr al-Elw maintained that tap water quality had worsened, others believed it was just the same as ever. Nevertheless, women complained that sometimes the water tasted "bitter" or "bad." This was attributed to the excessive *chlor*, *shabba*, or *agza* (different terms used by respondents to stand for chlorine). To overcome that, almost 50 per cent of the women either used a *zir* or a *qolla*--pottery containers used for cooling, storing, and filtering drinking water--although some of them had refrigerators in their homes. Two of the respondents, however, favored refrigerators over traditional methods of cooling water.

In contrast to Mansheyet al-Sadat and Kafr al-Elw, nine of the women interviewed in Maadi were dissatisfied with the quality of tap water, and described it as "unclean," or "full of residues." One respondent claimed that it "smelled bad." While some thought tap water had always been that "bad," others said it had become worse. One of the respondents believed that tap water caused kidney problems, another maintained that it caused stomach upsets and diarrhea, while a third thought it was "not appropriate for human consumption."

Most respondents had filters installed to their taps, used to have filters installed, or planned to use filters. Some of those who used filters complained that, even with the use of filters, the water still contained residues. A few others drank bottled water, and two used to boil tap water but stopped because boiling changed the taste of the water.

In this respect, twelve women were alarmed by the pollution of the Nile, which they attributed to the dumping of industrial waste, solid waste, and dead animals in the water. Most women believed it to be the main cause of the inferior quality of tap water. Some respondents also thought the quality of drinking water could be improved if the main *khazanat* (main water storage facilities) were cleaned more often.

Sewerage. Nine of the 15 women interviewed in Mansheyet al-Sadat were dissatisfied with the efficiency of the sewage system, while the remaining six were satisfied. Those dissatisfied lived on the first street, where the sewerage has not yet been upgraded and still flooded frequently, while the satisfied respondents lived on the second street where the

sewerage had already been upgraded and was working efficiently. Most of the respondents living on the first street thought the sewage system was just as inefficient as before, while those who lived on the second street said it had improved considerably.

All respondents in Mansheyet al-Sadat, except one, had never formally complained about the flooding of sewage, either because they did not know to whom to complain, or because they knew it would take time before it was the turn of their street to be upgraded as part of an overall sewerage upgrading scheme then taking place in Mansheyet al-Sadat. The one respondent who had previously complained lived on a ground floor flat, so that when the sewage flooded it leaked inside her home and she was most often the one who collected money from the street residents to get it fixed. She had complained to the engineers responsible for the sewerage-upgrading project on the work site.

When the sewage flooded in Mansheyet al-Sadat, one of the street residents collected money from the rest and hired a sewerage worker to clear the blockage causing the flooding. The worker brought his equipment with him, typically long metal sticks, and charged LE10 to 15. Most residents cooperated willingly. The person who collected the money might be a man or a woman, but in most cases was a woman because women spent more time at home and were always there when the leakage took place. Usually, ground floor flats suffered more from sewage problems, especially if the buildings were below street level. Respondents attributed sewage blockages to objects thrown into the system by "careless" women.

In Kafr al-Elw, six of the respondents' houses still relied on septic tanks. The sewage of three drained into a canal, while the remaining six houses were connected to the governmental sewage system. The women whose houses still relied on septic tanks had two main problems: the financial burden of emptying the ditches as often as three times a month, and having to dispose of water used for cleaning outside the house in order to avoid the rapid filling of the tanks. The women whose sewage drained into the canal were also dissatisfied. Both groups wanted to have their houses connected to the governmental sewage system. Both groups lived on the western side of Kafr al-Elw, where the system had not yet been installed by the government.

The six women in Kafr al-Elw who had sewerage installed to their houses, on the other hand, were more satisfied. Compared with the septic tanks they had before, they were relieved of disposing water outside their houses and of the frequent emptying of the tanks. One of the respondents (who had secondary education) says the process of emptying the septic tanks in itself was polluting. Another maintained that the waste disposed of in the septic tanks ended up being dumped in the canal after all. Women complained, however, that the sewage pipes were sometimes blocked, and this was attributed to the behavior of careless women who threw objects into the drains.

All the Maadi respondents, except two, were satisfied with the sewage system in their neighborhoods. The two unsatisfied respondents lived in a complex of buildings in a more recent extension of New Maadi, where the sewage of some buildings leaked and flooded owing to the poor quality of the sewage pipes installed by the construction company. Another respondent whose grandparents lived in Sakanat al-Maadi complained that sewage also sometimes leaked and flooded there.

Solid Waste Disposal and Management. Eight of the nine women interviewed in Mansheyet al-Sadat who lived on the first street were dissatisfied with the solid waste disposal and collection system, while five of the six who lived on the second street found the system satisfactory. Women living on the first street had two main problems with solid waste: the unreliability of solid waste collection, and the accumulation of solid waste in garbage dumps. They complained that the *zabbal* (garbage collector) did not come regularly. Some of them left the garbage at the door of the house until he showed up, and some dumped it in the garbage dump. One of the women raised chickens on the roof of her house and fed them the food remains, while disposing of the rest of the garbage in the dump.

Women living on the first street in buildings next to or facing the garbage dump were the most dissatisfied. They complained that the garbage dump was the most dangerous source of flies, mosquitoes and disease in their neighborhood. Those women said they did not dispose of their own garbage in the dump, but left it by the door until the garbage collector picked it up, and that only women living further from the dump disposed of solid waste in it. One woman complained that after some residents,

including herself, raised money among themselves and hired two workmen to clean up the dump, it piled up again. It was mostly women and children who dumped garbage there. Another respondent complained that sometimes even the garbage collector, after collecting the garbage from the houses, disposed of it in the garbage dump. This took place in the very early morning so that nobody would find out.

On the other hand, almost all the women living on the second street, on the other hand, said the garbage collector came on regular basis--every day or, at least, every other day--and collected the garbage bags in a donkey cart. None of the respondents knew where the garbage was then disposed of. The garbage collector charged LE2 per month, for which he handed out a receipt. This sum was regarded as reasonable by respondents. None of them knew whether the garbage collector worked privately or for the government.

The dump on the second street was much cleaner than that on the first. Respondents said the street residents cooperated to keep it clean. The general conviction, however, was that the problem of garbage dumps could not be solved until the owners of the land used them for building. Respondents also quite agreed that while it was the duty of the residents not to dispose of solid waste in the streets or in dumps, it was the responsibility of the government to provide an alternative and reliable solid waste collection system. One respondent, nevertheless, believed that if the residents cared enough, they should be able to identify a reliable garbage collector and reach an acceptable deal with him.

Apart from the two "tenants," almost all the respondents in Kafr al-Elw baked their own bread at home and/or raised poultry, and thus generated less solid waste than those who did not. Dry matter was used by women for firing ovens, and food remains were fed to the chickens. Some of the women who baked and raised poultry maintained that they did not dispose of any solid waste at all, since they reused all of it, while others admitted that they disposed of only dust and limited amounts of solid waste in either a canal or a garbage dump, whichever was closer to their place of residence and was more convenient to use.

Respondents who lived on al-Dayer al-Gharbi Street disposed of their solid waste in the canal there, while those living on or in the vicinity of al-Dayer al-Sharki Street disposed of it either in a dump close-by or in a canal

at the outskirts of Kafr al-Elw. Respondents generally maintained that their neighbors behaved like them in regard to the disposal of solid waste.

Except for one woman who seemed indifferent, the remaining 14 respondents in Kafr al-Elw were dissatisfied with solid waste disposal and collection. They agreed that the government should provide some kind of system whereby solid waste was collected on a regular basis, or else the accumulation of garbage would lead to the spread of disease and health complications. Women did not formally complain about the problem of solid waste management, either because "there is no one to complain to in Kafr al-Elw," or because "complaining is no good."

One of the respondents, however, was trying to solve the problem in her own way by cleaning the bank of the canal in front of her house and planting trees there. "We have paid the operator of the *kassaha* (loader) LE20 several times not to unload the garbage in the canal onto the bank facing our house," she said. "We have cleaned it several times, but people, specially the tenants, keep dumping their garbage there. This time we are determined to watch them and forbid them from doing that so that the trees don't die. We paid LE30 for these three trees."

All the women interviewed in Maadi, except two, were satisfied with solid waste collection in their respective neighborhoods because garbage collectors collected solid waste daily. They were paid LE2 to 3 a month by each household, which was considered reasonable by most respondents. Some women, however, thought that such a modest sum was too little and should be increased to up to LE20 a month. The garbage collectors who serviced Maadi mostly used donkey carts, and this highly bothered most of the respondents, who said trucks should be used instead.

Those respondents who lived near garbage dumps or on the outskirts of Maadi were also dissatisfied with the disposal of solid waste in their neighborhoods. Solid waste was dumped there by both residents and garbage collectors.

Other Basic Services. Nine of the women interviewed in Mansheyet al-Sadat maintained that their neighborhood lacked adequate schools, hospitals and transport. The problem of schooling, however, was expected to be partially solved once the new schools complex in Dar al-Salaam--then under construction--was completed.

Similarly, most of the women interviewed in Kafr al-Elw (11 out of 15) believed more schools should be built and more medical services provided. Almost 50 per cent of Kafr al-Elw respondents had to go to Helwan for treatment when one of their family members or themselves became sick. They largely agreed that the government should provide these services.

Whereas nine respondents in Maadi thought services available in their neighborhoods were sufficient, those who lived in the more recent extensions of New Maadi said additional transport services should be provided, two respondents thought that medical services were deficient, one respondent would have liked more restaurants because, "one cannot go for a decent meal in Maadi," and another young woman thought Maadi needed more bookshops.

CHAPTER FOUR

PERCEPTIONS OF ENVIRONMENTAL ISSUES AND CONCERNS

This chapter focuses on exploring women's perceptions, views, and attitudes on various environmental issues. It examines how women perceive the environment, pollution, causes and consequences of pollution, and the relation between pollution and health. It also illustrates the respondents' opinions on local, national and global environmental concerns, as well as their degree of awareness of Egyptian environmental protection laws and institutions.

The chapter then proceeds by probing into how women acquire their knowledge of environmental issues and problems and whether they think that more awareness of environmental concerns should be spread, by whom, for whom, and why. The chapter ends by examining respondents' opinions on the role of they themselves, the government, Egyptians, residents of their respective neighborhoods, women in particular, and the younger generation should play to preserve the environment and improve the environmental conditions in Egypt.

Perceptions of Environmental Issues and Concerns

Perceptions of the Environment

Whereas a 60-year-old uneducated respondent in Mansheyet al-Sadat could not provide a response to the question of what the word "environment" meant to her, the rest of the respondents gave a range of definitions. Six of the 15 women interviewed understood the word "environment" to mean the neighborhood, the district or the place where they lived. One equated the environment with society, while another equated it with the family. Two women preferred to elaborate on what the environment should be like--healthy air, no garbage--instead of explaining what it was. Students tended to give schoolbook definitions of "the environment." The most often-cited

definition by students was: "The environment is all that which surrounds man ... it affects man, and he affects the environment, too."

While three women in Kafr al-Elw could not explain what the "environment" meant to them, for the remaining 12 respondents the environment stood for the neighborhood, the place where they lived, society, the people themselves, and the way people were raised. One respondent argued that "people have to take care of the environment and clean it," while two others thought the environment should be "nice and clean." A 20-year-old respondent with a secondary education gave a similar definition of the environment to that cited by Mansheyet al-Sadat students.

In Maadi, five of 14 respondents perceived the "environment" as all that surrounded them, while others equated it with the neighborhood, society, the street where they lived, the home, or with cleanliness and greenery. A third group, however, understood the "environment" to mean traditions and culture, the behavior of people, their manners, their social class, and how they treated one another.

Relation Between Religion and the Environment

Whereas almost half the respondents in Mansheyet al-Sadat could not identify a link between religion and environmental issues, the rest could see a link. Some women believed religion preached cleanliness which was, in turn, connected to the wellbeing of the environment. Another group of respondents thought that, if a person were a true believer, his or her conscience should prevent him or her from polluting the environment, which belonged to all. The example often mentioned was disposing of solid waste in the streets and garbage dumps as a source of pollution and cause of disease, especially among children.

Similarly, only 50 per cent of the respondents in Kafr al-Elw could identify a link between religion and environmental concerns. Drawing on their social perception of the environment, one woman said: "I have to be good and teach my children their religion," while another said: "It is good to teach my children to pray." The rest of the respondents argued that religion called for cleanliness. One of them said: "If I am really religious, I have to take care of the environment and of my neighborhood the same way I care about my own home."

As opposed to Mansheyet al-Sadat and Kafr al-Elw, almost all Maadi respondents were able to see a relationship between religion and its teachings on the one hand, and the environment and its problems on the other. Most of them argued that religion called for cleanliness, and that those who were more religious tended to be cleaner. One of the women interviewed in Maadi maintained that "God created nature clean and people dirtied it."

Perceptions of Pollution

When asked about what pollution was, almost 50 per cent of the women interviewed in Mansheyet al-Sadat associated it with environmental problems in their neighborhood, including sewage, accumulation of solid waste, garbage dumps, and the smoke resulting from the burning of garbage and tires. The remaining respondents understood pollution to mean dirt, uncleanness, microbes, and diseases carried by flies, insects, and mice.

When the concept of pollution was further probed, vehicle exhaust was the source of pollution most often mentioned by Mansheyet al-Sadat respondents. This was followed by pollution caused by factories and noise. One respondent also mentioned disposing of animal and human waste in the Nile, and another one regarded cigarettes as air polluting.

As in Mansheyet al-Sadat, all respondents in Kafr al-Elw related pollution to environmental problems prevailing in their physical surroundings: cement followed by the accumulation of solid waste and the canal by al-Dayer al-Gharbi Street. Most of them also associate the word "pollution" with dirt, flies, mosquitoes, cockroaches, sewage and diseases.

In Maadi too, when asked about what pollution was, most respondents associated it with pollution problems in their respective neighborhoods, such as noise, car emissions, dust, accumulation of garbage, and sewage. According to most Maadi respondents, car and factory emissions represented the most threatening source of pollution, followed by solid waste, waste dumped in the Nile, noise, dust, and sewage. Bad odors, insects, microbes, and manure were also regarded by some respondents as polluting.

Air Pollution. Almost 50 per cent of the respondents in Mansheyet al-Sadat mentioned that air pollution caused chest and lung diseases. These were the same women who cited factories and vehicle exhaust as sources of pollution. Women with no formal education and others with various levels of education were equally aware that factories caused air pollution, most of them citing the cement factories in Tura and Helwan as examples of pollution-causing industries. Some of them had seen these factories, while others knew about them from television. Similarly, women with different levels of education were equally aware that vehicles' exhaust polluted the air.

Seventy per cent of the respondents in Mansheyet al-Sadat believed that it was the accumulation and burning of garbage that polluted the air. However, most respondents also referred to vehicle and factory exhaust as dangerous air pollutants. One third of the respondents in Mansheyet al-Sadat were convinced that factory exhaust was the most hazardous air pollutant.

Air pollution in Kafr al-Elw was clearly linked by all respondents to cement emissions. "Cement dust does not only ruin our health, but it kills the plants too," one of the respondents said. In addition, bad odors, garbage, burning of tires and contagious diseases were also regarded by some women as air polluting. Two respondents also suggested that spraying pesticides polluted the air, although people had to use them, they said.

When asked what pollution meant and what the possible sources of pollution in general were, only one respondent in Kafr al-Elw mentioned car exhaust. When the issue of air pollution was further probed, two more respondents identified car emissions as polluting.

Maadi respondents, on the other hand, largely concurred that vehicle and industrial emissions were the most hazardous air pollutants. Dust blown from the Muqattam area was also regarded by 50 per cent of Maadi respondents as air polluting.

Food Pollution. Polluted food was defined by almost all the women interviewed in Mansheyet al-Sadat as that exposed to flies and dust, unwashed and uncovered, not cooked at home and sold on the streets.

According to Kafr al-Elw respondents, polluted food was also that which was exposed to flies and insects, unwashed, and sold on the streets. Dust was identified by four respondents in Kafr al-Elw as food polluting. A "tenant" said she did not buy any fruit or vegetables from Kafr al-Elw because she knew they had been irrigated with water from the polluted canal in which both sewage and solid waste were dumped.

Similarly, polluted food, according to most Maadi respondents, was that which was exposed to flies, dust and insects, unwashed, or sold uncovered on the streets. However, some of the women interviewed in Maadi also mentioned chemicals, hormones, and radiation as food polluting, while others asserted that restaurant food, preserved food, and expired canned food was also polluted.

Water Pollution. While some the women interviewed in Mansheyet al-Sadat attributed the pollution of drinking water to microbes, flies and insects, almost 75 per cent of the respondents singled out sewage as the most dangerous water pollutant. Two respondents were concerned about the status of the Nile and claimed that dumping garbage and dead bodies in the Nile was more hazardous.

Three respondents in Kafr al-Elw thought that water could not be polluted, especially if "it is running from the tap." The remaining 12 respondents, however, agreed that water could also, like food, be polluted, and they attributed such pollution largely to dust, worms, insects, mice, sewage, dirt, and garbage. One of the women interviewed in Kafr al-Elw thought polluted water was "that which is not sterilized," another maintains it was "that which has residues," and a third judged water to be polluted if it "looks unclear." One of the women explained: "I can tell the water is polluted when there is excessive chlorine in it. They put so much chlorine in it to purify it from microbes."

One of the respondents in Kafr al-Elw regarded rusting water pipes as the most dangerous source of water pollution, while two argued that disposing of waste, particularly industrial waste, and dead bodies in the Nile were the most hazardous. (These two respondents had completed secondary education.) The three working women who had completed secondary education were the most concerned of all the respondents in Kafr al-Elw with the status and pollution of the Nile.

Almost all Maadi respondents believed tap water and its primary source--the Nile--were polluted as a result of dumping industrial waste, solid waste, and dead bodies. Dirt, dust, rusting pipes, and sewage were also regarded by some respondents as water polluting. Seventy per cent of Maadi respondents, however, singled out the pollution of the Nile as the most hazardous cause of the pollution of drinking water, followed by sewage.

Noise as Pollution. Almost 50 per cent of the women interviewed in Mansheyet al-Sadat did not perceive of noise as pollution and did not think their neighborhood was noisy. Others who perceived of noise (or rather excessive noise) as pollution complained that their neighborhood was noisy. Children playing on the streets were the number one cause of noise, followed by crowding, loud voices, fights, motorcycles, and workshops. Most of Mansheyet al-Sadat respondents were bothered by noise.

Most of the respondents in Kafr al-Elw, on the other hand, did not perceive of noise as pollution, did not consider their neighborhood as noisy, and 50 per cent of them were not bothered by noise.

In contrast to the Kafr al-Elw respondents, all but two of the Maadi respondents perceived of noise as pollution and were very much bothered by it. Most of them thought their neighborhoods were quiet, especially in winter. During the summer, the streets were relatively crowded and children and car horns were the main two sources of noise. Three of the 14 women interviewed in Maadi lived on busy streets.

Relation Between Pollution and Health

All the women interviewed in the three research sites agreed that pollution caused health problems and disease. In Mansheyet al-Sadat, women were very concerned with the transfer of disease by flies and mosquitoes which increased the closer one came to the garbage dumps, particularly to children playing on the streets. These diseases and health problems included diarrhea and dehydration, dysentery, and cholera. Respondents were also aware of the adverse effect of air pollution on health. They associated breathing difficulties, eye and throat problems, and chest and lung diseases with air pollution.

The primary concern of Kafr al-Elw women was with air pollution caused by cement emissions, and resulting in various chest diseases and allergies, especially among children. Dirt, garbage, and flies were also mentioned by some respondents as causes of disease.

Maadi women were primarily concerned with air pollution which, they said, caused chest and lung diseases, respiratory disorders, and cancer. Some respondents in Maadi also mentioned hepatitis, typhoid, stomach upsets, and vomiting as outcomes of pollution. Two other respondents maintained that air polluted by car emissions made them feel exhausted and unenergetic.

Health Condition of Respondents and their Families. Only one respondent in Mansheyet al-Sadat complained of illness--she said her daughter suffered from a "chest allergy"--while the rest of the respondents and their family members were generally in good health. None of these respondents attributed any health problems to pollution, except for one who thought it was pollution that caused her sister to have dysentery a few months before.

Nine of the 15 women interviewed in Kafr al-Elw complained that either they or one or more of their family members suffered from chest, eyes, nose and/or throat allergies. This was clearly attributed to air pollution caused by cement emissions. Another three respondents complained that their children were often sick with diarrhea and vomiting as a result of the pollution caused by the canal and the accumulation of garbage. Another woman believed that, although she did not at that time have any health problems that could be associated with pollution, she was certain that, with time, her health will be adversely affected.

The majority of the women interviewed in Maadi also attributed health problems which either they or their family members complained of, or had complained of, to pollution. Such problems included breathing difficulties caused by car emissions, allergy to dust, kidney problems caused by polluted water, hepatitis, stomach upsets, and vomiting caused by polluted food and food injected with hormones.

Prevalent Diseases in the Research Sites. No prevalent diseases were reported by the women interviewed in Mansheyet al-Sadat other than diarrhea and dehydration among children. The two women who cited diarrhea and dehydration as widespread in their neighborhood believed these diseases could not be avoided, since it was very difficult to control what went into to the children's mouths.

Respondents in Kafr al-Elw reported that chest, nose, throat, eye and skin allergies were the most prevalent health complications in their neighborhoods, especially among children, because "their bodies are still weak." Breathing difficulties, liver diseases, and kidney failure were also mentioned.

Some Maadi women mentioned that many people complained of hepatitis. Another respondent cited skin and eye infections as more prevalent during the summer because of sporting clubs' swimming pools.

Opinions on Local Environmental Conditions

Seasonal Considerations. While some respondents in Mansheyet al-Sadat maintained that environmental conditions in their neighborhood improved during the summer season, others felt they were better in winter. Those who thought environmental conditions improved in the summer seemed to be more bothered by how the winter rains wet and messed up the streets, given that they were not paved. Other women preferred winter because there were fewer flies and less noise since children, who were reported to be the number one source of noise in the neighborhood, were in school and off the streets. Still, almost a third of the respondents in Mansheyet al-Sadat contended that environmental conditions were just as bad all year round.

Summer was preferred by Kafr al-Elw respondents because winter winds blew more cement dust, winter rains messed the unpaved roads, and because when the roads became sodden they dried up faster than they did in winter. Winter, on the other hand, is favored by other women in Kafr al-Elw because it was easier for them to keep their windows closed, thus preventing cement dust from coming inside. Most women found it hard to use this strategy during the hot summer months. Other women also preferred winter because of the relative decrease in mosquitoes.

Most of the Maadi respondents thought environmental conditions in their respective neighborhoods improved in winter because there was less dust in the air, fewer mosquitoes, because "rain cleans the trees," and because there were fewer people on the streets and, accordingly, less noise.

Respondents' Use of Pesticides. The majority of the women interviewed in Mansheyet al-Sadat were bothered by flies, which they attributed to garbage dumps and the accumulation of solid waste. However, they were not so bothered by mosquitoes. Most of the respondents in Mansheyet al-Sadat did not often spray insecticides. Instead, they applied stronger cleaners (e.g. Finik and Gasoline) when washing floors, and tried to close their windows as much as possible. Except for one woman in Mansheyet al-Sadat who spent LE10 a month on them, the respondents did not buy many insecticides.

Almost all the women interviewed in Kafr al-Elw were similarly bothered by flies and mosquitoes, attributing their prevalence to garbage dumps and polluted canals. There were several mechanisms by which respondents in Kafr al-Elw combated flies and mosquitoes. These included using strong household cleaners, spray pesticides, powder pesticides and pesticide tablets; closing windows and using fans to increase air circulation in closed rooms; and installing screens on windows.

Most of the respondents in Kafr al-Elw used pesticides, but some women used more than others. Those who used them most were the ones who lived close to the canal, spending as much as LE50 a month. One of the respondents thought insecticides were essential. "My children and I cannot sleep at night because of the mosquitoes. I'd rather buy pesticides than food," she said.

Most of the women interviewed in Maadi, on the other hand, were not bothered much by flies and mosquitoes because they had screens installed on their windows. Some women thought mosquitoes, in particular, did not pose a problem either in their neighborhoods or in the rest of Maadi. Some of the respondents thought mosquitoes had decreased since nearby canals were filled. All the respondents used few insecticides in their homes.

Hazardous Environmental Problems. All the women interviewed in Mansheyet al-Sadat who lived on the first street thought the garbage dump

and the flooding of sewage posed a dangerous environmental threat to their neighborhood. On the other hand, the women who lived on the second street did not share these fears. Yet, most of the respondents in Mansheyet al-Sadat, maintained that, as a whole, environmental conditions in their neighborhood were improving. Only three thought environmental conditions had further deteriorated.

Almost all respondents in Kafr al-Elw regarded cement emissions as the most hazardous source of pollution and as a dangerous threat to health. The canal and the accumulation of solid waste in the streets and garbage dumps were also regarded by some women as threatening. Two respondents said the pollution resulting from the canal and solid waste was just as dangerous as that caused by cement emissions, while one woman who lived right by the canal thought pollution resulting from the canal was even worse than air pollution. Two of these three women did not complain about health problems related to air pollution.

Respondents in Kafr al-Elw contended that environmental conditions there were either as bad as before or were further deteriorating. Two of these respondents said that in the past the canal was much cleaner, and the cement plant produced fewer emissions. Another said environmental problems were worsening as the population increased.

Vehicle exhaust, emissions from the Tura cement factory, and dust blown from the Muqattam area were regarded by respondents as the three main pollutants in Maadi. Sewage and solid waste were also regarded by some of the women interviewed in Maadi who lived near garbage dumps or in neighborhoods where sewage flooded as environmentally threatening. None of the respondents, however, regarded environmental problems in their respective neighborhoods as dangerous. The majority of these respondents also thought environmental conditions in their neighborhoods were either improving or were the same as before.

National Environmental Concerns

Depletion of Resources. Building on agricultural land and the misuse of water were suggested to the women interviewed as two examples of depletion of national resources. They were asked what they thought about this.

Four respondents in Mansheyet al-Sadat linked the reduction of agricultural land to the decrease in agricultural produce and, in turn, the food available to Egyptians at large; five women agreed that these were harmful trends but could not elaborate; while six could not provide an opinion on the issue.

Two women in Kafr al-Elw believed water was a blessing and its abuse was “wrong” and “*haram*” (forbidden by God); one said “greenery is important because it helps people breath clean air”; and a third respondent maintained: “In the past, Egypt was self-sufficient, but now everything has to come from outside.” One respondent in Kafr al-Elw put the blame on the government for buying up farm land to build factories, while another put the blame on the people themselves for building on agricultural land when Egypt possessed vast deserts. However, almost 50 per cent of the women interviewed in Kafr al-Elw sympathized somewhat with those who constructed houses on agricultural land. “They do not have an alternative,” and “Housing has become a problem these days,” were two comments.

All the Maadi respondents regarded the reduction of agricultural land as “wrong,” “*haram*,” or “dangerous.” One thought this phenomenon was caused by “people’s greed for material benefit,” another maintained it was because of “people’s poverty and ignorance,” while a third respondent thought the problem was a result of “people’s lack of awareness,” and a fourth said: “This is all because nobody cares.” There was a general agreement among respondents in Maadi that agricultural land should be saved and expanded, rather than reduced, and that it was the government’s responsibility to enforce the laws in that regard.

Use and Abuse of Chemicals and Pesticides. Fifty per cent of the women interviewed in Mansheyet al-Sadat agreed that the agricultural abuse of pesticides and chemicals was bad for the health because they contained “poisons” and caused such problems as liver diseases and kidney failure. The rest of the respondents either could not provide an opinion on the issue, or discussed the issue in ways other than in relation to human health. For example, one woman said: “Pesticides are what make the plants ripen well.” Another said: “They make the plants ripen before their time.” A third said:

"Everything should have a limit, because too many pesticides and fertilizers can burn the plants."

Similarly, only 50 per cent of the respondents in Kafr al-Elw were aware that the use and/or abuse of pesticides and chemicals in agriculture was "bad for the health" and "caused diseases" such as diarrhea and stomach upsets. Five respondents, on the other hand, held no specific opinion on the issue; one thought "pesticides make the fruit and vegetables tasteless," another believed that "they make the produce ripen before its time," and a third maintained: "Pesticides are expensive so it does not make sense for people to overuse them."

All Maadi respondents, on the other hand, agreed that the abuse of pesticides was "wrong," "dangerous," and "harmful," and that it caused several diseases, such as liver failure and cancer. Several respondents in Maadi could detect the overuse of pesticides in fruit and vegetables from both their taste and odor. One mentioned that she could smell "cockroach powder" in potatoes; another was very alarmed by the possibility that the food she bought might be injected with hormones, while others soaked vegetables in vinegar for some time before they were cooked or eaten raw "in order to sterilize them."

Polluting Industries. All the women interviewed in Mansheyet al-Sadat agreed that factories which emitted pollutants should be constructed far from residential areas, away in the *gabal* (mountains) and in the desert. Women were asked what should be done about such factories already in operation close to residential areas. Seven respondents said they should be moved by the government, five did not know what could be done about them, and only three maintained that some kind of modifications should be made to these factories so they would stop polluting the air. Of these three, one woman mentioned the installation of filters as a solution. Respondents in Mansheyet al-Sadat who thought air pollution by factories could be altered one way or another had various educational backgrounds.

Half the respondents in Mansheyet al-Sadat either did not know what those who lived close to factories which emitted pollutants could do about it, or thought there was nothing that could be done. The other 50 per cent contended that those living near such factories should complain to *almasouleen* (officials).

All the Kafr al-Elw respondents suggested such factories should install filters, and that any new ones should be built away from residential areas. Furthermore, one of the respondents emphasized that the drainage of factory waste into the Nile should also be prohibited. Most respondents in Kafr al-Elw, judging by their experience, felt there was nothing that people who lived near polluting factories could do except complain, even though complaining had been found to be "no good."

All the women interviewed in Maadi agreed that factories which polluted the atmosphere should be built away from residential areas. They said factories which operated close to residential areas should either be moved, or should have filters installed. Most respondents thought there was nothing people who lived close to such factories could do, since they could not move. One woman, however, thought those people should move, another maintained they had to keep their windows shut, a third respondent suggested they use air conditioners, and a fourth thought they had no alternative but "die."

Polluting Vehicles. Most of the women who linked vehicles to pollution in Mansheyet al-Sadat either did not know what could be done to prevent vehicles from polluting the environment, or thought there was nothing to be done about the problem. Only three respondents in Mansheyet al-Sadat maintained that regular maintenance of run-down vehicles would help.

Similarly, respondents in Kafr al-Elw who thought vehicles polluted the air either did not know what could be done about it, or believed that there was nothing that could be done. Only one respondent in Kafr al-Elw replied: "Maybe cars could use gas or water instead of gasoline," while another said: "Vehicles must always be well maintained, especially buses."

Although all the Maadi respondents agreed that vehicles polluted the air, five either did not know what could be done, or thought nothing could be done to change the amount of air pollution. The rest, however, said regular maintenance, the installation of filters and the powering of vehicles by natural gas would solve the problem. Only one respondent in Maadi cited lead as being "very dangerous for one's health."

Knowledge of Egyptian Environmental Protection Laws and Institutions

Seventy five per cent of the women interviewed in Mansheyet al-Sadat had never heard about Egyptian environmental protection laws, the Egyptian Green Party, the Egyptian Environmental Affairs Agency (EEAA), or environmental NGOs. Many respondents in Mansheyet al-Sadat confused environmental NGOs with benevolent, religious and community development associations. On the other hand, most of the respondents in Mansheyet al-Sadat were familiar with the Nile Protection Law. In the case of the women of Mansheyet al-Sadat, their knowledge of environmental laws and institutions did not rise in correlation with their level of education.

Almost 80 per cent of the women interviewed in Kafr al-Elw were similarly unfamiliar with the roles of the EEAA, the Egyptian Green Party, or environmental NGOs. Only three respondents had heard of the EEAA and only one respondent, who worked at the Ministry of Social Affairs, knew about environmental NGOs. More women in Kafr al-Elw, however, were familiar with Egyptian environmental protection laws, especially the Nile Protection Law.

On the other hand, most of the women interviewed in Maadi knew more about environmental protection laws and institutions than did respondents in the other two research sites. They were most familiar with the Nile Protection Law and with environmental NGOs, particularly the Maadi Tree Lovers Association. However, they tended either to confuse environmental NGOs with benevolent and community development associations, or to identify them with the Maadi Tree Lovers Association, which they mostly knew about through Maadi Club. Most respondents were also familiar with the EEAA. Most of the women interviewed in Maadi, nevertheless, had never heard of the Egyptian Green Party.

Perception of Broader Environmental Issues

Broader environmental issues were discussed with respondents to assess their level of awareness and concern. Almost 80 per cent of the women interviewed in Mansheyet al-Sadat had never heard about such everyday issues as global warming or nuclear radiation. Only one respondent in

Mansheyet al-Sadat knew what was meant by global warming, and four respondents knew about nuclear radiation. More women, however, had heard about the problem of the ozone layer.

Most of the respondents in Kafr al-Elw were also unfamiliar with global environmental concerns. Only two of the 15 women knew what the ozone layer was, while only one knew about global warming; and only one respondent had heard about nuclear radiation.

Contrariwise, eighty per cent of the women interviewed in Maadi, on the other hand, were more concerned about and more knowledgeable of the problems of the ozone layer, global warming and nuclear radiation. Most were also familiar with the causes and consequences of these global problems.

How Women Know

In both Mansheyet al-Sadat and Kafr al-Elw, women's information on broader environmental issues was largely derived from television, supplemented by school curricula for younger respondents and newspapers for the few who read them. Television was cited as the primary source of women's knowledge of Egyptian environmental protection laws, institutions, and national environmental problems and concerns.

Maadi respondents, by contrast, acquired their information on broader environmental issues from newspapers, followed by television, discussions with friends, reading, and CNN news. Here too, school curricula were an important source of information on environmental issues for younger respondents. The Maadi women's knowledge of local environmental laws and institutions was also derived from newspapers and television.

However, the perceptions of the three groups of women on the environment remained shaped largely by their personal experience and the problems they encountered in their everyday lives. The respondents' specific environmental concerns were linked to the hazards to which they were exposed in their immediate surroundings, and the way in which these hazards affected their wellbeing and the health of their families.

Most of the women interviewed in the three research sites had seen environmental programs and advertisements on television, and rated them as generally "good" and "beneficial." A program on the state of the Nile and

its pollution, another on the complaints of people living near factories which emitted pollutants, and a third which discussed problems relating to sewerage and deficiencies in other basic services were cited by respondents in both Mansheyet al-Sadat and Kafr al-Elw.

Three respondents in Kafr al-Elw, however, thought environmental programs on television were ineffective in the sense that they did not influence people's behavior. By contrast, some Maadi respondents thought these programs were "especially useful" for the uneducated, the lower classes, and the *fellaheen* who had the time to watch a lot of television. One of these women thought such programs would be more effective if they featured an actual problem being solved by those in charge, while another respondent thought environmental programs were too scientific and too advanced for the uneducated. A third, enthusiastic young respondent was encouraged by environmental programs on television and said they did something to help save the environment, although she still did "not know what could possibly be done."

It was found that respondents' awareness of environmental programs on television was not related to the duration of television viewing. In the three research sites, women who had seen environmental programs and advertisements on television and who cited some of them were not necessarily the ones who watched television for longer periods, or the ones who watched it most.

In Mansheyet al-Sadat, almost 50 per cent of the women interviewed said they did not normally discuss environmental issues, and those who did talked mostly about environmental problems prevailing in their neighborhood. They discussed these with their neighbors, relatives or family members. In Kafr al-Elw, on the other hand, all the respondents frequently discussed their environmental concerns with their neighbors. Some of them, however, "got bored," and "got tired of talking about these problems because nothing changes anyway."

Most of the respondents in Maadi did not discuss environmental problems, and those who did talked about them only if the issue was raised or if a certain environmental problem evolved. When Maadi respondents did discuss environmental problems and issues, it was usually with neighbors, family members, or work colleagues.

Respondents' Opinions on the Future of the Environment in Egypt

Awareness of Environmental Concerns. About 80 per cent of the respondents in both Mansheyet al-Sadat and Kafr al-Elw agreed that Egyptians, in general, needed to become more aware of environmental issues and concerns. The same applied to people living in their respective neighborhoods, and to women in particular because they were the ones responsible for the cleanliness of their homes and their surroundings, as well as for the wellbeing of their children.

Maadi respondents also agreed that Egyptians needed to become more aware of environmental issues and problems. Nevertheless, the spread of awareness should be targeted at the "illiterate," the "ignorant," and the "uncivilized" because the more aware they became, the more likely it was that their behavior would change for the better. It was generally held by Maadi respondents that those living in popular and low-income areas, such as Maadi al-Arab and al-Basateen, were the ones who most needed to be educated with regard to environmental concerns.

While agreeing that women, in particular, needed to be more aware of environmental issues, given their primary responsibility for the care and health of their children and for teaching them good manners and habits, most of the women interviewed in Maadi said people living in their own neighborhoods did not need to be more aware of environmental issues and concerns because they were "good," they lived in "high class" neighborhoods, and they were "already aware." The few respondents in Maadi who thought their neighbors should also acquire more awareness of environmental issues felt that those neighbors, although financially well-to-do, belonged to an inferior social class.

Educated respondents in both Mansheyet al-Sadat and Kafr al-Elw shared the Maadi women's view that education was an important means of spreading awareness. None of them, however, described the uneducated as "illiterate," "ignorant" or "uncivilized." Only one uneducated respondent in Mansheyet al-Sadat believed that she herself and other women like her needed education to raise their awareness of environmental issues and concerns.

Most respondents in the three research sites agreed that television was the best medium through which such awareness could be raised. In Mansheyet al-Sadat and Kafr al-Elw, respondents believed television should be backed up by the efforts of social workers, whereas in Maadi women thought television should be backed up by the printed media.

In Mansheyet al-Sadat, only one respondent--a student who read *al-Akhbar* daily and regarded it as her primary source of information about environmental issues after school books--thought the printed media was the best way of increasing people's concern about the environment. Another respondent in Kafr al-Elw cited the radio, while a third--a supervisor in a day care center operated by a community development association--believed NGOs should also play a role towards that end.

Awareness and information about environmental issues were valued by several women in Kafr al-Elw for their own sake. One respondent said: "It's always beneficial to know," another one said: "It's important that people understand such important things," and a third said: "It's essential that women are clear about what is harmful and what causes pollution."

The Role of Government and People

When asked about who to blame for the deterioration of environmental conditions in Egypt, some respondents in both Mansheyet al-Sadat and Kafr al-Elw did not know the answer. Those who did either put the blame squarely on the government, including the Minister of Health and the President, or the people themselves, while a fourth group blamed both sides equally. In Maadi, on the other hand, 11 out of 14 respondents put the blame on the people themselves, mainly because they were "ignorant," "uneducated," and "illiterate." Lack of awareness, poverty, overpopulation, and difficult living conditions were also been cited by Maadi women as reasons for the deterioration of environmental conditions.

Almost 85 per cent of the respondents in the three research sites claimed the government had not done enough to protect the environment, and said there was a lot more that it should do. They thought the government should upgrade basic services, especially sewerage and solid waste management, enforce environmental protection laws, levy fines on people who defied the law, and spread more awareness of environmental

issues. In addition, Kafr al-Elw respondents said the government should enforce the installation of filters at cement factories. Maadi respondents, on the other hand, said the government should also raise children's awareness vis-à-vis environmental issues and concerns at school level, dealing first with the problem of population explosion and concentrating its efforts on low-income neighborhoods, as well as encouraging and fostering community work aimed at protecting the environment.

In Mansheyet al-Sadat, 75 per cent of the respondents thought the government should lead the environmental protection movement. In Kafr al-Elw, while some respondents similarly thought that this responsibility fell entirely on the government, others believed it fell on the people themselves, while a third group said it should be shared by both the government and the people. In Maadi, respondents generally felt the leadership of the environmental protection movement should be shared by the people, the central government, the local government, the mass media, community leaders and NGOs.

Most of the respondents in Mansheyet al-Sadat, Kafr al-Elw, and Maadi thought that in order to protect the environment, Egyptians should become less careless and more serious about observing general cleanliness. In Mansheyet al-Sadat and Kafr al-Elw, in particular, the emphasis was put on observing cleanliness inside and outside the house, and not disposing of solid waste in the streets and garbage dumps. One respondent in Mansheyet al-Sadat said people should not block sewage channels, another added that Egyptians should not dump waste in the Nile, and a third respondent in Kafr al-Elw said Egyptians should formally complain about environmental problems prevailing in their immediate surroundings to those in charge. Several respondents in Kafr al-Elw, however, felt there was nothing Egyptians could do to protect the environment, or that there was nothing they themselves could do.

In Maadi, respondents also believed that, in order to preserve the environment, awareness of environmental issues and concerns should be spread and that people should cooperate with the government in that regard. In the opinion of some respondents, the biggest responsibility fell on the educated, given that the "ignorance" of people was the source of most of the current environmental problems.

The Role of Women

Generally speaking, respondents in Mansheyet al-Sadat and Kafr al-Elw did not identify a separate, additional, or a unique role that women at large, women at the community level, or they themselves could play which could contribute to improving environmental conditions. The role of women was largely limited to observing cleanliness and not disposing of solid waste in the canals, streets or garbage dumps, particularly after an alternative for solid waste disposal had been provided.

A few exceptions stood out. An uneducated woman from Kafr al-Elw in her mid-30s, who was proud of being a *fellaha* (peasant woman) said: "I am willing to do whatever it takes to clean this place; to sweep and remove garbage. We *fellaheen* are not embarrassed to do anything." A young, educated working woman believed the inhabitants of Kafr al-Elw should be given a small remuneration in return for performing cleaning projects, and a third respondent in Mansheyet al-Sadat showed interest in contributing materially to "clean-up" projects.

Like the women in the first two research sites, Maadi respondents believed women's primary responsibility was to observe cleanliness, care for the health of their families, and teach their children good manners and habits. However, most of them claimed defensively that both they themselves and the women living in their neighborhoods were well aware of environmental issues and problems, did not contribute to the deterioration of environmental conditions, and were doing enough, in their own way, to protect the environment. A Lions member said Maadi women raised funds for environmental projects, another maintained that they planted trees, and a third respondent thought the only thing Maadi women could do was to expand the green areas and plant more trees in the streets.

The Role of the Younger Generation

Respondents in both Mansheyet al-Sadat and Kafr al-Elw did not distinguish a specific role that the younger generation could play. Even the younger women interviewed did not perceive of themselves as capable of taking part in protecting and upgrading the environment.

Maadi respondents, on the other hand, believed that although the younger generation was more educated than previous ones, they were careless, selfish, and helpless, given the harsh living conditions they had to face. Only one younger respondent in Maadi thought the younger generation should join in social work activities and was enthusiastic about doing something herself. "I very much want to do something for Egypt, but I don't know what. I am willing to do anything if somebody guides me," she said.

Whereas all the women interviewed in Mansheyet al-Sadat and the majority in Kafr al-Elw were optimistic that environmental conditions, in general, would improve, Maadi respondents showed more pessimism. One of them explained:

Environmental conditions could improve in high-income districts such as Maadi, Heliopolis and Mohandessin, but the same is not true for lower-income districts where people's ignorance, the lack of awareness, and overpopulation only perpetuate pollution problems.

CHAPTER FIVE

REAEARCH FINDINGS AND CONCLUSIONS

This chapter explores the implications and underlying meanings of women's perceptions, views, and attitudes on the environment. It analyzes respondents' perceptions in relation to their socio-economic backgrounds and their exposure to environmental hazards and in relation to actual environmental degradation in the research sites. It also discusses how far women's perceptions of environmental degradation correspond with actual degradation, as well as how women respond to and cope with environmental change. The chapter then proceeds to provide an account of the language, classifications, assumptions, and discrepancies associated with the women's expression of their perceptions before drawing the final conclusions of this research.

Women's Perceptions in Relation to Their Socio-economic Background

Data generated by the research indicated that differences existed between the research sites, rather than within them.

Within each of the, both the differences in age and educational levels among each group of respondents were found not to be influential variables in shaping women's knowledge of and opinions on environmental concerns. In Mansheyet al-Sadat, those who had completed higher levels of education were not found to more knowledgeable about environmental issues and concerns than those with little formal education. The same applied to Kafr al-Elw and Maadi respondents.

Despite this fact, younger respondents who were still pursuing their education or had just completed the secondary stage constituted an age group that seemed to have significantly benefited from what they had learned at school. Almost all valued the information they had acquired about the environment and its degradation, and cited school curricula as their primary source of knowledge of environmental issues and concerns as they provided schoolbook (or close to schoolbook) definitions of the environment and pollution. In addition, in Mansheyet al-Sadat, the only two

respondents who showed concern about the status of the Nile and who cited the disposal of waste and dead animals as the most dangerous source of water pollution were students. In Kafr al-Elw, a young woman who had just completed her secondary education was the only one who was able to define clearly and elaborate on what pollution was, instead of what it did.

Also, within each of the three research sites, the employment of women outside their homes was not found in itself to be significant in influencing women's views and attitudes with regard to environmental concerns and problems. Certain occupations, however, seemed to affect how respondents regarded issues related to the environment. This pertained particularly to the field of social work. For example, in Kafr al-Elw the three respondents who worked with socially oriented institutions were the ones who showed the highest awareness of the general causes of pollution, Egyptian environmental institutions, and broader environmental concerns. Two of these women worked at the day care center operated by the local community development association, while the third was an employee at the Ministry of Social Affairs. Furthermore, a Maadi social worker highly advocated community work and social responsibility with regard to environmental problems. She believed that any desired improvements in her neighborhood should be carried out by the residents themselves, that people should spread environmental awareness among themselves, that they were to blame for environmental deterioration in Egypt, and that individuals and NGOs should lead the environmental protection movement.

While variation in the respondents' age, education, and work outside the home within each of the three research sites did not reflect on the women's perceptions and attitudes vis-à-vis the environment, differentiation occurred between the research sites. When analyzing and comparing the responses of the three groups of interviewees, Maadi women--who shared a higher educational level and socio-economic standard--were found to be more knowledgeable about environmental issues and problems, more articulate in their reflection on and discussion of these issues and problems, and more concerned about the state of the environment and its degradation than both the Mansheyet al-Sadat and Kafr al-Elw respondents. In addition, more respondents in Maadi perceived the environment in an abstract form and as an all-encompassing notion. They also saw a wide range of causes of environmental degradation, and were more aware of national and global

environmental concerns. For example, pollutants such as pesticides, chemicals, food coloring, preservatives, hormone-injected food and radiation were cited and discussed by some of them, whereas they were not mentioned by any of the respondents in the other two research sites. Moreover, the only woman who talked about the hazardous effects of lead on human health was a Maadi respondent.

Perceptions in Relation to Exposure to Environmental Hazards

The specific and local environmental problems and hazards that women encountered in their everyday lives in the three research sites largely shaped their perceptions of and opinions on more general environmental issues. For example, when asked what pollution was, most of the women interviewed associated it with problems prevailing in their respective neighborhoods.

In Mansheyet al-Sadat, respondents associated pollution with sewage, accumulation of solid waste, garbage dumps, and the smoke resulting from the burning of garbage and tires. They mostly defined polluted air as that which was found in places where there were sewage floods, garbage and garbage burning. When asked about the sources of pollution in general and the effect of pollution on human health, one respondent in Mansheyet al-Sadat said: "On my way to school, dust bothers my eyes and the smoke from the burning garbage hurts my throat." Furthermore, the incident when sewage appeared in the drinking water in Mansheyet al-Sadat greatly influenced respondents' perception of pollution. This was reflected in how the majority of them singled out sewage as the most dangerous water pollutant. One respondent further explained that polluted food was "that which was cooked in water mixed with sewage."

When women in Mansheyet al-Sadat were asked what Egyptians in general, the residents of their neighborhood, women in particular, and they themselves could do to improve environmental conditions in Egypt, the most often-mentioned response was not disposing of solid waste in the streets, getting rid of garbage dumps, and not blocking the sewage system. This reflected how women's very particular problems were magnified to represent--in their opinion--not just the problems of their own neighborhood, but those of the country at large. One of the respondents said:

“Women will only care more about environmental problems if these problems directly affect them.”

In Kafr al-Elw, too, respondents associated pollution with environmental problems prevailing in their direct surroundings. They mostly equated pollution with cement emissions, and pollution-related health problems with those resulting from air polluted by cement exhaust. This further exemplified the way in which experience shaped general perceptions and attitudes. Whereas most of the respondents in Mansheyet al-Sadat singled out sewage as the most dangerous pollutant of water, only three women in Kafr al-Elw regarded sewage as a water pollutant. However, while all the women interviewed in Kafr al-Elw considered cement emissions to be the most hazardous air pollutant, very few women agreed with that in Dar al-Salaam.

In Maadi, too, respondents who complained about the inefficiency of solid waste disposal and sewage systems in their neighborhoods instantly associated the notion of pollution with solid waste and sewage, while those living on busy streets associated it with noise. Respondents who were satisfied with sewage and solid waste disposal and management in their neighborhoods, however, did not mention them as a source of pollution except after the notion of pollution and its causes was further probed and discussed at length. Furthermore, when asked about air pollutants, the only respondents who thought solid waste and sewage could pollute the air were the same two women who had sewage and solid waste disposal problems in their neighborhoods. They were also the same women who believed that, in order to improve environmental conditions in Egypt, Egyptians should not dispose of solid waste in the streets.

Although most of the women interviewed in Maadi perceived the Helwan and Tura cement factories as polluting, only one respondent regarded this problem as dangerous. The rest of the interviewees did not perceive of the cement factories as dangerous, since “they are located relatively far from Maadi” and because “there are no industrial plants in Maadi itself.” By contrast, all Kafr al-Elw respondents viewed the cement factories as hazardous and a very dangerous cause of air pollution. This further illustrated how the extreme physical proximity of women to the cause or source of environmental degradation greatly influenced and shaped

their overall perception and appraisal of environmental issues and problems at large.

The interviewees' responses also revealed that they ceased to be concerned with environmental problems and hazards in their immediate physical surroundings once these problems were resolved. For example, respondents in Mansheyet al-Sadat who lived on the street where the sewage system had been upgraded and the garbage dumps cleaned up ceased to identify sewage and solid waste as problems in other streets located only 200 meters away, although these problems still prevailed there. Similarly, those Kafr al-Elw respondents who had sewerage installed to their houses stopped perceiving septic tanks as problematic; and those who lived further away from the polluted canal did not complain of it as a source of pollution.

Relation between Perception and Direct Experience

This indicates that although about 70 per cent of the respondents cited the mass media as their primary source of information about certain environmental issues, and despite the fact that almost all of respondents in the three research sites agreed that the mass media--mainly television--was the best medium through which awareness of environmental issues and concerns could be spread and raised, when asked directly about their principal source of knowledge on more general environmental issues, personal experience was rated top. In this context, public risk agendas set by the mass media did not match with the risks perceived by the women interviewed, particularly in Mansheyet al-Sadat and Kafr al-Elw. For example, the deteriorating status of the Nile, depletion of national resources, and the gradual erosion of the Delta were not found to be overriding concerns of the women interviewed, especially in the lower-income strata to which a large majority of the Egyptian population belongs. Instead, these women wanted a sewage system that did not leak and flood their houses, a reliable solid waste management system, clean air to breathe and a healthy environment where their children could grow up in safety.

In Mansheyet al-Sadat, 10 of the 15 respondents, and in Kafr al-Elw 12 of the 15 respondents, clearly attributed their knowledge of environmental issues to personal experience. They had come to grips with environmental

problems, “from living,” “from the difficulties of life,” “from what [they] see with [their] own eyes” and “from the problems [they] encounter.” By contrast, only two Maadi respondents regarded their personal experiences as the primary source of their knowledge about environmental issues and concerns. The rest maintained that the printed media was their number one source of information. However, what they said did not quite correspond with what their responses to the research questions implied.

Although they did not say so directly, most of the Maadi respondents also appeared to derive their attitudes, knowledge, and perceptions of environmental issues and concerns from personal experience. This was quite clearly demonstrated by evidence generated by the analysis of their responses. Examples which illustrate this point are legion. One Maadi respondent smelled pesticides in the potatoes she bought; another saw residues in her filtered water; a third was annoyed by the white dust (cement dust) which accumulated on her car; a fourth complained that her house became dusty when the wind blew from the Muqattam area; a fifth saw cement clouds on her way to Helwan; a sixth knew that polluted food was what caused her daughter to catch hepatitis; a seventh was allergic to dust and sprayed pesticides; an eighth lived on a busy street where the noise, in her opinion, was “unbearable;” and several other respondents mentioned breathing difficulties when they stopped at traffic lights because of vehicle exhaust ... and so on and so forth.

Women's Social Responses to Environmental Change

On being asked how they reacted to environmental change and coped with environmental hazards, respondents in Mansheyet al-Sadat associated pollution mainly with dirt and uncleanness. The two main forms of pollution they perceived of, and were primarily concerned with, were food pollution and water pollution, not disregarding air pollution caused by solid waste, garbage dumps, burning of solid waste; and also sewage. Cleanliness, not allowing children to eat exposed street food, thoroughly washing fruit and vegetables before they were served, not leaving food uncovered, and letting tap water run for some time to clear after it had been shut off were the main mechanisms by which Mansheyet al-Sadat respondents tried to

fight pollution and prevent members of their families from catching pollution-related diseases.

In Kafr al-Elw, the above-mentioned methods by which Mansheyet al-Sadat respondents coped with pollution and the health risks associated with it were also adopted by the women interviewed. Furthermore, a Kafr al-Elw respondent did not buy any fruit or vegetables cultivated there because she knew they had been irrigated by water taken from the polluted canal in which solid waste and sewage were disposed of. The overriding concern of most of the Kafr al-Elw respondents, however, was with air pollution caused by cement emissions. After formally complaining in vain to *al-masouleen* (those in charge), women had come to believe that environmental conditions would never improve no matter how persistently and aggressively they complained.

Although the majority of Kafr al-Elw respondents indicated their optimism that environmental conditions in general would improve, they seemed to share a sense of despair concerning the state of the environment in their own area. Most of them had grown "sick and tired" of complaining about the problems of pollution. "We complain in vain," one woman said, while another said: "We even complained to the minister, but nothing changed," and a third respondent said: "They talked about our problem a lot on the radio and in the newspapers, and it was even shown on television, but all this is no good."

Women felt that nobody listened to them. Two of the respondents said: "They only make promises during election time, and as soon as the elections are over all the promises evaporate into thin air." Another said: "There is no one here to complain to, when all is said and done." Kafr al-Elw women were, thus, left with few alternatives by means of which to protect the health of their children. These means were limited to closing their windows as much as possible, and sending children with severe allergies and medical complications to live with relatives, far away from Kafr al-Elw.

Maadi respondents were equally concerned about noise, water, food, and air pollution. Those respondents living on busy streets resorted to keeping their windows closed and instead using air conditioners so they could enjoy some quiet. Most respondents boiled tap water, drank bottled water, or installed, or planned to install, tap filters. Some respondents soaked vegetables in vinegar to "sterilize" them, while another bought only

a brand of fruit and vegetables not cultivated with chemicals. As they were highly bothered by vehicle exhaust, respondents closed car windows at traffic lights. Another avoided driving in downtown Cairo unless she absolutely had to.

Perceptions of Environmental Degradation as Compared to Actual Degradation

In the three research sites, women's perceptions of environmental degradation, pollution, and health hazards corresponded, with a few exceptions, to the actual degradation, pollution, and hazards prevailing in their communities. Respondents living in Mansheyet al-Sadat, Kafr al-Elw and Maadi were equally aware of the environmental problems and associated risks in their respective neighborhoods. Differences in levels of education and socio-economic standards between Mansheyet al-Sadat and Kafr al-Elw respondents on the one hand, and Maadi respondents on the other, did not reflect on women's perceptions of the environmental risks prevailing in their immediate physical surroundings.

In Mansheyet al-Sadat, respondents clearly perceived of solid waste and sewage as the two most threatening environmental problems. In Kafr al-Elw, respondents identified cement emissions as the most hazardous air pollutant, not disregarding pollution caused by the accumulation of solid waste, sewage, and the polluted canal. In Maadi, women perceived of the three main air pollutants there namely, dust blown from the Muqattam area, emissions from the Helwan and Tura cement factories and vehicle exhaust especially in busy streets and squares. While these pollutants were general to all of Maadi, respondents were just as aware of the other pollutants which were specific to their neighborhoods, such as solid waste, sewage, and noise.

While women's perceptions, particularly in Mansheyet al-Sadat and Kafr al-Elw, might not have encompassed every single source or cause of environmental degradation, pollution and health hazard prevailing in their communities, they did have a clear vision of the ones that were the most threatening and hazardous. Pollutants became regarded as threatening after a risk-rating process had taken place in the women's minds. This process was shaped mainly by the women's experiences, their exposure to specific

environmental hazards, and the pollution-related problems and health complications which they or their family members encountered.

Language, Classifications, Assumptions, and Discrepancies Associated With Women's Expression of their Perceptions

Social Perception of the “Environment”. In the three research sites, the word *biaa* (environment) had a social dimension embedded in the understanding of many of the women interviewed. In Mansheyet al-Sadat and Kafr al-Elw, respondents perceived of the environment as being the “family,” “society,” “the people themselves,” “how people were raised,” and “whether the people were good or bad.”

This social dimension was reflected in the responses of women when asked about the relationship between religious teachings and the environment. One woman in Mansheyet al-Sadat said: “We have to follow the instructions of religion and raise our children right.” Another said: “We have to teach our children good manners in accordance with religion.” A third said: “People should treat each other well, because this is what religion preaches.” Furthermore, in Kafr al-Elw, one respondent said: “I have to be good and teach my children their religion,” while another said: “I have to tell my children to pray.”

When women in Mansheyet al-Sadat were asked about the role of the younger generation in improving environmental conditions, one said: “They have to teach their children well, the way we taught them.” Two other respondents said: “They have to take care of their parents in their old age.” These responses revealed how the notion of the environment had become equated with society, the family, social relations, and the raising of children. They also revealed the moral dimension embedded in these women's understanding of the environment.

In Maadi, while some respondents were able to express their perceptions of the environment in quite an abstract form and as an all-encompassing notion, other women's perceptions were as socially oriented as those of respondents in Mansheyet al-Sadat and Kafr al-Elw. In addition to putting the “environment” parallel with “society,” “people's behavior,” “how they dealt with each other,” and with “people's upbringing, conduct and manners,” some of the women interviewed in Maadi also understood

the word “environment” to mean “social class,” and to include “culture and traditions.”

Pollution as Dirt. Women, particularly those in Mansheyet al-Sadat and Kafr al-Elw, tended to associate pollution with dirt and uncleanness. Hence, a defensive attitude was assumed by some respondents when discussing environmental issues, the community's responsibility vis-à-vis the environment, and, especially, when probing the relation between pollution and health. For example, one of the respondents in Mansheyet al-Sadat said women in her neighborhood did not need extra awareness of environmental issues because “they were clean and aware enough about cleanliness;” another maintained “they were clean and good” and a third said: “The women here keep the street clean, they are good.”

When respondents in Kafr al-Elw were asked about the health status of their family members and themselves, and whether any of them complained from health problems that could be related to pollution, one of them said defensively: “My children get sick often because of the flies, although I wash the *zir* (water jar) twice a day.” Another said: “Polluted food causes diseases, but I wash the vegetables very well before I serve them to my children.” A third said: “I bake my own bread because the food sold on the street is polluted.”

In Mansheyet al-Sadat, women's responses were similar. “We never get sick because of pollution because we are clean,” one said. A second added: “My sister got dysentery a few months ago because of all the pollution which surrounds us, although we always keep our house clean.”

When women were asked what they could do to improve environmental conditions, several women in the three research sites assumed the same defensive attitude and made statements such as: “I always keep my house clean,” “I never leave any food uncovered for the children,” and “I even clean outside my house.” As such, the concept of pollution and a safe environment was reduced to cleanliness versus dirt.

Classifications Drawn By Respondents. The women's expression of their attitudes and opinions on environmental change in their respective communities revealed several classifications that they made in the process of ordering and categorizing their social worlds. Some of these

classifications were implicit, while others were expressed explicitly. In every classification the women drew, there was "us" versus "them." In certain instances, "them" were members of the same community (or a subgroup within the community), whereas in other cases "them" stood for a group from outside the classifier's community.

Although women in Kafr al-Elw did not overtly admit it, they tended to classify people as those who worked in the cement factory and those who did not. That this concealed classification of "them" versus "us" was reflected in several statements and remarks the women made. For example, one of the respondents said: "When we blame the cement factory for all our problems, the people who work there get angry because it provides their bread." She added: "Of course, the more the factory works and blows dust on us, the more they are paid!" With reference to the relatively well-paid workers employed by the cement factory, another respondent in Kafr al-Elw said sarcastically: "Some people gain its gold, and others get only its dust." A third woman said: "My husband used to work at the cement factory but at that time the pay was not good. I wish he'd stayed; the people who work there now are making a lot of money." None of these three women had a husband who worked at the cement factory at the time the research was conducted.

Some women in Kafr al-Elw held another implicit classification of "them" versus "us." They divided people into two groups: "them" who live in nice neighborhoods and "us" who live "here." One of these respondents thought Egyptians should acquire more awareness of environmental issues and problems so that "them" who lived in nice neighborhoods and had no pollution problems "could learn about how we are living here." Another woman thought television programs about pollution problems were good because, as she said: "They let people know how much we suffer."

Several Maadi respondents, by contrast, distinguished between Maadi, as a *manteqa raqia* (upper class district), and low-income neighborhoods, *manateq shaabeya* (popular districts). One of the women interviewed in Maadi was annoyed by the poor living conditions prevailing in Maadi al-Arab, and thought the whole neighborhood should be totally replanned. "It is not acceptable to have such a *manteqa shaabeya* in Maadi," she said. Another remarked: "If you look at the people from Maadi al-Arab, you know for sure that they are not Maadi residents but have been planted in it."

A third respondent was dissatisfied with the management of the government school close to her home. "Children who study at this school come from Dar al-Salaam and al-Basateen, and because of them the whole neighborhood has been transformed into a *manteqa shaabeya*," she said.

Most Maadi respondents also differentiated explicitly between the residents of Maadi (us) and those who lived in lower-income neighborhoods (them). One of the women interviewed said: "One can always tell the difference between the residents of Maadi and those of Maadi al-Arab; they don't observe personal cleanliness."

Another said: "It is 'them' who live in areas like Arab al-Maadi and Basateen; the illiterate, ignorant, and uncivilized, who need to become more aware of environmental problems and pollution, but the people here in Maadi know all that." A third respondent maintained: "People dump garbage in the streets in other areas, but not in Maadi; people who live here have learned cleanliness from the foreigners."

Assumptions Held by Respondents. There were two main assumptions that the women interviewed in the three research sites generally held: (1) The educated know better than the uneducated; and (2) Knowledge corresponds with behavior.

(1) The educated know better. Some respondents assumed that educated women knew more about environmental problems and acted upon such knowledge better than the uneducated. This assumption was largely held by those who had received a formal education. "Educated women know right from wrong, while uneducated women do not know anything; education is very important," one respondent in Mansheyet al-Sadat maintained. Another thought that: "To improve environmental conditions, educated women should spread awareness of environmental issues among uneducated women and advise them concerning what is right and wrong."

In Kafr al-Elw, too, educated respondents said it was the uneducated among whom awareness of environmental issues and concerns should be spread. For example, when asked whether people living in Kafr al-Elw needed to become more aware of environmental issues and why, one woman with preparatory education said: "Because they do not know about anything," another with secondary education said: "Because most of them

are uneducated and they do not know or read," while a third with secondary education said: "Because many of them are uneducated," and a fourth respondent, also with secondary education, said: "Because the uneducated simply don't know."

Maadi respondents, who were mostly holders of bachelor degrees, did not only aggressively express their views concerning the uneducated, but went as far as blaming them for the deterioration of environmental conditions in Egypt. One of the respondent thought that, for example: "Depletion of resources is caused by the poor and the ignorant." Another said: "Television programs addressing environmental issues should be simplified so they can be grasped easily by the uneducated." A third believed that: "The ignorant, the uneducated and the illiterate do not know anything about pollution and the causes of pollution." A fourth respondent thought: "Social workers should pass by people's houses in places like Boulaq and the *fellaheen* (countryside) and give them lectures because they are ignorant."

(2) Knowledge corresponds with behavior. Women equally assumed that people's behavior corresponded with their knowledge; that if their awareness of environmental problems and concerns were raised, their conduct would improve to match their acquired learning. They said more information about environmental issues should be disseminated because: "If people know that something is wrong, they will stop doing it;" "If they know, they will care more about protecting the environment;" "If they know, they will stop disposing of garbage in all the wrong places;" "If they know, their standard will be raised;" and because: "More awareness should change people's behavior." These statements illustrated how, in the opinion of the majority of the women interviewed regardless of their educational level and socio-economic standards, environmental awareness and dissemination of knowledge were expected automatically to lead to significant changes in people's conduct.

Observed Discrepancies. In the three research sites, certain discrepancies were observed between what women said they thought, did, and should do on the one hand, and what they actually did on the other. In Mansheyet al-Sadat and Kafr al-Elw although many respondents perceived

of polluted canals and/or garbage dumps as serious environmental hazards and said the accumulation of solid waste in the streets, dumps, and canals caused disease fly-and mosquito-blown, they still disposed of solid waste in them. In the meantime, those same women asserted that there was nothing they could do to improve environmental conditions in their respective neighborhoods except through spreading awareness, advising others, observing cleanliness, and not disposing of solid waste in the wrong places.

The same discrepancy was also observed in Maadi. For example, one of the respondents with a university education and a high socio-economic background perceived of garbage dumps and burning of solid waste as two main sources of pollution. She claimed that the lower classes were the ones among whom awareness of environmental issues and concerns should be spread, and believed that in order to improve environmental conditions in Egypt people in general, and women in particular, should observe cleanliness. However, the solid waste generated by her household ended up in a nearby garbage dump.

Degree of Respondents' Identification with Their Communities

In each of the three research sites, the respondents' degree of identification with their community was viewed as both a reflection of the community's self-image at a broader level and as an indication of the women's loyalty to their community. Identification with the community was regarded as a reflection of the community's self-image because women's views, attitudes, and perceptions could not be reduced to merely individual responses; instead, they were regarded as a parameter of the perceptions of the community at large. Loyalty to the community, on the other hand, was the "infrastructure" on the basis of which local initiatives, grass-roots efforts, and community action targeted at improving environmental conditions could be elicited, fostered, and expanded.

Of all the women interviewed, the Kafr al-Elw respondents showed the highest degree of identification with and loyalty to their community. Whereas the notion of the "neighborhood" was reduced by the women interviewed in Mansheyet al-Sadat to stand only for the street in which they

lived, the boundaries of the neighborhood were extended by Kafr al-Elw respondents to include all of Kafr al-Elw.

Besides their concern for the specific environmental problems prevailing in their immediate surroundings, the women interviewed in Kafr al-Elw were highly preoccupied with the broader degradation problems pertaining to Kafr al-Elw as a whole. When respondents were asked to express their views on environmental conditions in their neighborhoods, they often went beyond the "neighborhood" to talk about Kafr al-Elw as a community. This might be due to the fact that cement emission was perceived as the most hazardous source of pollution and as the overriding environmental concern for the largest majority of Kafr al-Elw inhabitants.

The high level of loyalty to Kafr al-Elw applied to the respondents who were born there, as well as to those women who had come from the Delta and Fayoum and settled there with their husbands at least 10 years before. Kafr al-Elw was referred to by many respondents as *baladna* (our hometown). "Every one treasures his or her hometown," one of the respondents said. Another, who originally came from Fayoum but had moved to Kafr al-Elw 18 years before, said: "My husband and I would like to build a house here in Kafr al-Elw for the children because this is *baladhom* (their hometown), where they were born and raised."

To the respondents, Kafr al-Elw was not merely a place of residence; but rather a community and a place where they were born and raised and where they belonged. Its people were not strangers, but rather families who all knew and cared for one another. Neighbors were not just people who lived next door, but rather friends with whom space, time and problems were shared.

This feeling of loyalty was also reflected in the defensive attitude assumed by some women when discussing pollution problems in Kafr al-Elw. For example, one woman said: "No, we do not have any prevalent diseases here. Kafr al-Elw is a good neighborhood." This despite her reporting that her son had breathing difficulties caused by cement emissions. Another woman said, with a touch of romance: "Other than cement, nothing can pollute the air here. In *baladna* the air is clean, and on a clear night we can count the stars one by one." Two other respondents said there was absolutely nothing that they disliked about living in Kafr al-Elw.

Only when the issue of pollution was further probed did they express their dissatisfaction with several environmental problems in their neighborhood.

In the perception of the women interviewed in Mansheyet al-Sadat, however, the neighborhood did not stand for a district or a group of streets. Rather, the majority understood the "neighborhood" to mean the street on which they lived. When asked about what they disliked most about their neighborhood, for example, all the women interviewed on the first street cited the inefficiency of sewage and solid waste disposal, whereas those living on the second street did not, and seemed quite satisfied with environmental conditions in their neighborhood, i.e. their street.

Women living on the first street felt the problems of sewage and solid waste posed serious environmental hazards. Thus, solving these problems came first on their list of desired improvements to their neighborhood. Almost all the respondents living on the second street, by contrast, did not perceive of such environmental hazards. They thought that what their neighborhood needed most was the general cleaning and paving of roads and a club for the children, a luxury that women living on the first street could not afford to consider or aspire to as long as sewage was flooding their homes and the dumps piling up with garbage and dirt.

Furthermore, all the respondents on the second street thought environmental conditions in their neighborhood were improving, while all those who either believed that environmental conditions in their neighborhood were just the same as ever or were getting worse lived on the first street. Only one respondent of the six who lived on the second street in Mansheyet al-Sadat thought differently, holding a broader perception of the neighborhood which extended beyond her own street.

The fact that the boundaries of the "neighborhood" were narrowed down by Mansheyet al-Sadat respondents to stand for only the street, whereas they extended to include all of Kafr al-Elw by Kafr al-Elw respondents, had to do with the history of both sites and the characteristics of their residents. Mansheyet al-Sadat is a recently established residential area, the inhabitants of which came there to live from older and more traditional Cairene districts which had become tremendously overpopulated, with no housing facilities for newly-weds. In older districts, such as Sayeda Zeinab, al-Malik al-Saleh and Old Cairo, community identification was assumed to be higher and social relations stronger. Kafr

al-Elw, on the other hand, is an older, former rural community where the natives in particular have a strong feeling of belonging to and identification with the community.

For most Maadi respondents, the boundaries of the “neighborhood” extended to include the whole of Maadi. Maadi respondents felt that way, however, for reasons other than those relevant to Kafr al-Elw respondents. Most of the women interviewed liked living there and thought highly of the area regardless of the location of their place of residence within Maadi. One of the respondents thought Maadi, in general, was *chic*, another maintained that since it was full of foreigners it made one feel as though one were living in Europe, and several others regarded it as *mantega raqia* (a high class neighborhood). It could, thus, be concluded that Maadi respondents identified with Maadi as a whole because they perceived of themselves as belonging to the upper class, and of Maadi as a prestigious, upper class residential area.

Respondents’ Points of Reference

For every group of respondents, “some other place” was taken as a point of reference; a place with more favorable conditions and superior attributes to which women aspired. For Mansheyet al-Sadat respondents, the point of reference was the older Cairene districts which they had resided in before moving to Dar al-Salaam; for Kafr al-Elw respondents, the point of reference was Helwan; and for Maadi respondents, the point of reference was “Europe,” the “West,” or the “advanced world.”

Those respondents in Mansheyet al-Sadat who thought highly of Old Cairo longed for old friendships, valued the social relations they had established there over the years, and remembered the clean neighborhoods in which they used to live and which had no pollution problems.

Many respondents in Kafr al-Elw preferred to go to Helwan for medical treatment because they thought services there were better than those available in Kafr al-Elw. One of the women interviewed would have liked to have a system of solid waste management in Kafr al-Elw like that operating in Helwan; another thought the canal should be cleaned and turned into a garden “like they do in Helwan,” and a third respondent said: “I would love to live in Helwan. There is pollution there too, but it is less

than in Kafr al-Elw, and there are several parks there where the children could play.”

Maadi respondents who spoke at least one foreign language preferred watching foreign films on television, listened mostly to foreign pop songs and classical music on the radio, traveled abroad, and often mentioned “Europe” or “abroad” as a point of reference. “In Europe, everybody is clean, rich or poor, not like here,” one of the Maadi women said. Another maintained that pollution-causing factories should adopt advanced technologies like they did abroad, while a third said: “To stop vehicles from polluting the environment, the government should levy fines on people who defy the law like they do in civilized countries.”

Moreover, one of the respondent knew only about European green parties; a second thought that Maadi residents observed a higher standard of cleanliness because they were always coming under criticism from the foreigners who lived there, so they tried to be civilized like them; a third said she had more energy in St Maxims, France, where she spent her summer holiday, “because the air is unpolluted there,” and a fourth said: “Thailand is very humid, but I never had trouble breathing there like I do here.”

To conclude, analysis of the research findings indicated that women in the three research sites worried about different environmental concerns and perceived different environmental problems and hazards as being risky. Each group of respondents held a selected view of the natural environment and the risks associated with it.

The selection of which environmental problems should be of concern and regarded as risky and which should be ignored was the product of the interplay of many factors. These factors included women’s beliefs and moral values, the social principles which guided their behavior, familiarity with the risk in question, the information available to the women about the risk and the credibility of this information, personal and physical encounters with the risk in question and the illnesses and health effects attributed to it, and most importantly, the relevance of the risk to the every day life experiences of women.

CONCLUSIONS

Finally, the conclusions of the previous research can be summed up in the following points:

1. The word "environment" conveys a social dimension which was imbedded in the understanding of many of the women interviewed. The environment was equated by these women with the "family," "society," "the people themselves," "people's upbringing, conduct and manners," "social class," and with "culture and traditions."

2. Women, particularly in Mansheyet al-Sadat and Kafr al-Elw, tended to associate pollution with dirt and uncleanness; thus reducing the concepts of safe environment and pollution to cleanliness versus dirt.

3. Women's awareness of environmental threats was linked to a multitude of factors, including their beliefs, familiarity with the source of environmental threat, the hazardous potential of the threat in question, and the relevance of the threat to their own lives.

4. Women's perceptions, attitudes, and views on environmental issues were related to certain socio-economic and background factors. A college education, social class, occupation in the field of social work, and the physical proximity of the place of residence to environmental hazards were found to be the most influential variables in shaping women's knowledge of and opinions on environmental issues and concerns.

5. The specific and local environmental problems and hazards that women encountered in their everyday lives largely shaped their perceptions of and opinions on more general environmental issues. Women's very particular problems became magnified to represent not just the problems of their communities, but those of Egypt at large. Furthermore, women stopped being concerned with environmental problems and hazards once these problems were resolved or ceased to exist in their immediate physical surroundings.

6. While the role of the mass media cannot be understated, women's personal experiences were highly significant in constructing their perceptions, views, and attitudes on environmental issues. Public risk agendas set by the mass media did not match the risks perceived and prioritized by the lower-income strata women interviewed.

7. Women showed a high degree of awareness of environmental issues and problems. Their perceptions of environmental degradation, pollution, and health hazards corresponded, with a few exceptions, with the actual degradation, pollution, and health hazards prevailing in their communities, regardless of the differences between them in the level of education and socio-economic standard.

8. Women saw a strong relation between pollution and degradation on the one hand, and health problems and diseases on the other. For them, environmental issues were health issues.

9. Many educated women assumed that the educated knew about environmental problems more and acted upon such knowledge better than the uneducated.

10. Many women assumed that people's behavior corresponded with their knowledge; that if their awareness of environmental problems and concerns was raised, their conduct would improve to match their acquired learning.

11. There was a discrepancy between what some women said they thought, did, and should do on the one hand, and what they actually did on the other. This observation pertained particularly to the patterns of disposal of solid waste in the three research sites.

12. In the process of ordering and categorizing their social worlds, women made classifications of people. Each classification consisted of "us" versus "them." "Them" could be either a subgroup within the classifier's community or a group from outside her community. Some of these classifications were implicit, while others were expressed explicitly.

13. Whereas women generally concurred that the government had not done enough to protect the environment, not all attributed the responsibility for environmental degradation in Egypt to the government. Some women blamed the people themselves, others blamed the people and the government equally, and some did not know who to blame for environmental deterioration.

14. To improve environmental conditions in Egypt, women believed that the government should upgrade basic services, especially sewerage and solid waste management, enforce environmental protection laws, levy fines on those who flout the law, and spread more awareness of environmental issues.

15. In Mansheyet al-Sadat and Kafr al-Elw, women's information on broader environmental issues and on Egyptian environmental concerns, laws, and institutions was highly derived from television. Maadi women who shared a higher level of education and socio-economic standard, on the other hand, acquired such information largely from the printed media.

16. Generally, women did not identify a separate, additional, or unique role that women at large, women at the community level, or they themselves, could undertake to help improve environmental conditions in Egypt. Women's role--in the opinion of the respondents--was confined to observing cleanliness, caring for the health of their families, and teaching their children good manners and habits.

BIBLIOGRAPHY

- Douglas, Mary and Aaron Wildavsky. 1982. *Risk and Culture: An Essay on the Selection of Technological and Environmental Danger*. Berkeley: University of California Press.
- Fakhouri, Hanna. 1972. *Kafr al-Elw: An Egyptian Village in Transition*. New York: Holt, Rinehart & Winston, Inc.
- Farrag, Osman L. 1991. "Human Resources" in *Building National Capacity for Environmental Sustainable Development in Egypt*. Cairo: UNDP, pp. 74-82.
- Gomaa, Salwa. 1992. "Environmental Politics in Egypt" in Nicholas S. Hopkins (ed.) "Environmental Challenges in Egypt and the World," *Cairo Papers in Social Science*, (15)4:24-40.
- Gomaa, Salwa. 1993. "The Politics Behind Egypt's New Environmental Law." Paper presented at the conference on "Networking Egyptian Development," American University in Cairo, December.
- Hafez, Salah. 1992. "Environmental Politics in Egypt" in Nicholas S. Hopkins, ed., "Environmental Challenges in Egypt and the World," *Cairo Papers in Social Science*, 15(4):4-10.
- Hopkins, Nicholas S. (ed.). 1992. "Environmental Challenges in Egypt and the World," *Cairo Papers in Social Science*, 15(4).
- Hopkins, Nicholas S. et. al. 1994. "Pollution and People in Cairo" in Salwa Shaarawi Gomaa, ed., "Environmental Threats in Egypt: Perceptions and Actions," in *Cairo Papers in Social Science*, (17)4:3-28.
- Johnson, Branden B. and Vincent T. Covello (eds.). 1987. *The Social and Cultural Construction of Risk: Essays on Risk Selection and Perception*. Holland: D. Reidel Publishing Company.
- Nasralla, M. M. et. al. 1984. "Effect of Lead Exposure on Traffic Policemen," *Egyptian Journal of Industrial Medicine*, 8(1):87-104.
- Nasralla, M. M. et. al. 1986. "Spacial and Seasonal Variation of Lead in Cairo Atmosphere," *Environmental Pollution (Series B)* 11:205-210.

- Raafat, Samir W. 1994. *Maadi 1904-1962: Society and History in a Cairo Suburb*. Cairo: Palm Press.
- Rodda, Annabel. 1991. *Women and the Environment*. London: Zed Books.
- Shiva, Vandana. 1992. "Women, Ecology, and Health," *Development Dialogue*, (1-2):3-11.
- Social Research Center. 1994. "Social Responses to Environmental Change in Egypt." A research proposal submitted to IDRC by the Social Research Center, American University in Cairo, February.
- Tewfik, Inas. 1993. "Newspaper Coverage of Environmental Issues During the Month of April, 1993," MS, Social Research Center, American University in Cairo.
- Wildavsky, Aaron and Karl Dake. 1990. "Theories of Risk Perception: Who Fears What and Why?," *Daedalus*, 119(4):41-60.
- Wolfe, Amy K. 1988. "Environmental Risk and Anthropology" *Practicing Anthropology*, 10(4):4.

APPENDIX

TABLE 1

**DISTRIBUTION OF RESPONDENTS BY AGE,
EDUCATION, OCCUPATION, AND MARITAL STATUS**

Variable	Dar al-Salaam	Kafr al-Elw	Maadi
Age			
<=20	4	--	1
21-30	3	3	3
31-40	5	9	5
41-50	2	2	2
51-60	--	--	2
>=60	1	1	1
Education			
None	2	9	--
Primary	4	1	--
Preparatory	4	2	1
Secondary	5	3	2
BA/B Sc	--	--	10
Masters	--	--	1
Occupation			
Works	3	3	10
Does not work	12	12	2
Retired	--	--	2
Marital Status			
Single	5	2	3
Married	9	12	11
Widow	1	1	--

TABLE 2

**DISTRIBUTION OF RESPONDENTS' HUSBANDS BY
EDUCATION AND OCCUPATION**

	Dar al-Salaam	Kafr al-Elw	Maadi
Education			
None	2	6	--
Primary	3	5	--
Preparatory	2	1	--
Secondary	3	--	--
BA/B Sc	--	1	10
Ph D	--	--	1
Occupation			
Worker	4	10	--
Farmer	--	1	--
Clerk/Self employed	6	1	--
Professional	--	1	11

TABLE 3

**DISTRIBUTION OF RESPONDENTS' PARENTS BY
EDUCATION AND OCCUPATION**

	Dar al-Salaam	Kafr al-Elw	Maadi
Mother's Education			
None	10	13	--
Primary	4	2	3
Preparatory	1	--	3
Secondary	--	--	3
B A/B Sc	--	--	5
Father's Education			
None	9	11	--
Primary	4	3	--
Preparatory	2	--	--
Secondary	--	1	4
B A/B Sc	--	--	9
PhD	--	--	1
Mother's Occupation			
Self employed	1	--	--
Professional	--	--	5
Does not work	13	15	9
Father's Occupation			
Worker	9	10	--
Farmer	--	4	--
Clerk/Self employed	6	1	--
Professional	--	--	14

TABLE 4

HOW RESPONDENTS' SPEND THEIR SPARE TIME

	Dar al-Salaam	Kafr al-Elw	Maadi
Spare time spent in			
Watching TV	14	2	1
Socializing	1	10	1
Club/sports	--	1	10
Reading	--	--	1
Others	--	2	1
Duration of TV			
Watching			
Seldom	--	2	--
>=1 hour	3	6	4
1-2 hours	5	4	5
3-4 hours	3	2	4
5 hours +	4	1	1
Listening to radio			
Seldom	9	6	6
Sometimes	6	4	2
Often	--	3	--
5 hours +	--	2	6
Reading newspapers			
Never	9	11	--
Sometimes	5	3	7
Daily	1	1	7
Reading magazines			
Never	11	13	4
Sometimes	4	2	10
Regularly	--	--	--
Club membership			
Member	--	1	12
Non-member	15	14	2

TABLE 5

**RESPONDENTS' APPRAISAL OF THE SERVICES
PROVIDED IN THEIR COMMUNITIES**

	Dar al-Salaam	Kafr al-Elw	Maadi
Drinking water			
Satisfactory	15	14	5
Unsatisfactory	--	1	9
Quality of drinking water			
Improved	4	--	--
Deteriorated	--	1	5
Same	11	14	9
Sewage			
Satisfactory	6	9	12
Unsatisfactory	9	6	2
Improved	8	9	--
Efficiency of sewage system			
Improved	8	9	--
Deteriorated	--	--	--
Same	7	6	14
Solid waste disposal			
Satisfactory	7	1	12
Unsatisfactory	8	14	2
Other Basics*			
Sufficient	6	4	9
Insufficient	9	11	5

* schools, hospitals, and public transportation

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ملخص

أصبحت المشكلات البيئية فى مصر محط اهتمام متزايد من كل من الدولة ووسائل الإعلام والدوائر العلمية والمهنية المختلفة بغرض زيادة الوعى العام بهذه المشكلات وحث الشعب على المحافظة على البيئة. وعلى الرغم من ذلك، لا توجد دراسات كافية عن رؤية الرأى العام للتغيرات البيئية فى مصر. من هنا يدور هذا العدد من مجلة القاهرة فى البحوث الاجتماعية حول رؤية المرأة للوضع البيئى فى مصر وأهم المخاطر البيئية التى تهدد المجتمع ، وذلك بصفتها المسؤولة الأولى عن تربية الأبناء والمحافظة على صحة الاسرة. ويقوم هذا البحث على دراسة ميدانية أجريت فى عام ١٩٩٥ على عينة من أربع وأربعين سيدة فى ثلاث مناطق فى القاهرة تتميز باختلاف المستوى المعيشى لسكانها وتنوع المشكلات البئية التى تواجهها وهى دار السلام وكفر العلو والمعادى.

وقد ركزت هذه الدراسة على وصف المناطق الثلاث ونوعية الخدمات الأساسية المتوفرة بها والوضع البيئى فيها ، الى جانب الخلفية الإقتصادية والإجتماعية لأفراد العينة. ومن ناحية أخرى ، تم سؤال السيدات عن مصدر معلوماتهن عن قضايا ومشكلات البيئة ، وعن أهمية نشر الوعى البيئى بين الناس وأهم الوسائل التى تؤدى الى ذلك ، وأخيراً عن رأيهن فى الدور الذى يجب على كل من الحكومة والناس القيام به لتحسين البيئة.

وبتحليل إجابات العينة إتضح ان رؤية السيدات لمشكلات ومخاطر البيئة تختلف باختلاف المناطق التى يعشن بها وأنه، بالإضافة الى ذلك، هناك العديد من العوامل الأخرى التى تؤثر فى تشكيل هذه الرؤية والتى من أهمها: قيم ومعتقدات هؤلاء النساء، والأسس الإجتماعية التى تحكم سلوكهن ، والمعلومات المتوفرة لديهن فيما يتعلق بالمخاطر البيئية ومصادقية هذه المعلومات لهن ، وأخيراً وليس أخراً معاشة هؤلاء النسوة لمشكلات البيئة من خلال الحياة اليومية وتأثيرها على صحة أسرهن.

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مجلد ٢٣ عدد ٤ شتاء ٢٠٠٠

رؤية المرأة للتغيرات البيئية في مصر

إيمان الرملى

قسم النشر بالجامعة الأمريكية بالقاهرة