Limited Gains:

Grassroots Mobilization and the Environment in Hong Kong

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Preface

In many parts of the world, and Hong Kong is no exception, environmental protection is seen primarily as a technical exercise in pollution control. The linkages between environmental pollution and broader social, economic and political systems are often poorly defined and, as a consequence, environmental policy making often appears to be made in a vacuum, isolated from the real world within which problems evolve and within which they must be resolved.

In recent years, however, it has become increasingly recognized that many environmental problems are not susceptible to "technical fixes". The causes of our present environmental dilemmas permeate society and their resolution will require a response that goes well beyond the purely technical. At the same time, it has also been recognized that one of the most significant factors contributing to environmental degradation is poverty, whether it be in rural areas or in the rapidly growing urban centres of the developing countries.

The idea of compiling this book arose from our involvement in an international comparative research project on the environmental problems of low income urban communities involving academics from a number of neighbouring countries in the region. While Hong Kong's environmental problems may appear relatively tractable when compared to the situation in cities such as Bangkok, Manila and Jakarta, there are nonetheless some persistent problems associated with low income communities in the territory. These problems, and community responses to them, have rarely been documented, partly because academic interest in the Hong Kong environment is a relatively recent phenomenon anyway and partly because much of the research that has been carried out to date has been of a technical rather than social nature.

While seeking to identify potential contributors, we were struck by the diversity and number of community-based environmental initiatives that have been launched in Hong Kong since the early 1980s. A selection of these we felt, should be documented, in part for academic reasons but also because they may provide valuable reference material for practitioners in such fields as social work, urban planning and environmental management as well as individuals and groups contemplating community mobilization efforts. Clearly, it is difficult to write for such a potentially diverse audience. We have, however, attempted to avoid an excessively theoretical approach and have tried to use the case studies reported in the book as a means of illustrating the kinds of factors that influence the effectiveness and success of mobilization efforts among ordinary grassroots people in Hong Kong.

The experiences reported in the chapters that follow suggest that the contribution of grassroots mobilization on environmental protection in Hong Kong has been relatively limited. Local communities have tended to make only very modest gains as a result of their own efforts. Similarly, low income communities of the types described in this book have often failed to benefit from the territory-wide environmental policy initiatives launched by government. The areas occupied by these communities are often scheduled for redevelopment in the near term and government is typically unwilling to upgrade the environment of such areas given the short term nature of the benefits. This double-edged situation largely explains our choice of title for the book.

Clearly, direct gains in terms of improved environmental quality represent just one measure of the utility of community mobilization efforts. Even though these efforts do not often result in significant environmental improvements, they do nonetheless produce other benefits which are perhaps less tangible and more difficult to measure. Most notably, mobilization efforts provide a basis for developing greater community awareness and identity and these may prove invaluable in future efforts directed to achieving objectives in other areas of public concern. Community mobilization certainly has an important role to play in environmental protection and even if it may not always produce a successful outcome, its potential value should not be underestimated, particularly in the changing political culture of Hong Kong.

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Chapter 1

The Context

Cecilia Chan and Peter Hills

Introduction

Each day, Hong Kong produces more than 12,500 tons of solid waste, 16 tons of floating refuse and 2 million tons of sewage and industrial waste water. In addition, the territory produces 100,000 tons of chemical wastes each year (EPD, 1990: 21,25). Landfill sites in Hong Kong are rapidly being exhausted and the Environmental Protection Department (EPD) is experiencing increasing difficulty in identifying appropriate new sites to deal with the territory's waste disposal problem. Floating refuse in Victoria Harbour is an eyesore. Untreated sewage pours into the harbour and is a serious potential hazard to public health. Typhoon shelters and bathing beaches contaminated by sewage are particular pollution blackspots.

Sulphur dioxide and oxides of nitrogen emitted by power stations and factories are another major problem. Chronic respiratory tract infections and asthma are common among the population. Noise, from piling operations on construction sites, industrial and commercial activities, as well as motor vehicles and aircraft, is another major environmental nuisance that has a serious negative impact on the living environment of many local inhabitants. Urban environmental management in Hong Kong is undoubtedly a very challenging task.

Since Hong Kong is a highly congested city with serious pollution problems and substantial income disparities, low-income communities in squatter areas, temporary housing areas and resettlement estates are the most appropriate foci for the study of urban community-based environmental management issues. These communities face various problems associated with sanitation, water supply, fire hazards, access, drainage, geotechnical safety, as well as noise and air pollution from adjacent industrial zones and highways.

Hong Kong has adopted various multi-disciplinary approaches in tackling environmental problems and deprivation: environmental planning by central government, departmental and district coordination, as well as grassroots mobilization. This book is an attempt to consolidate the experiences of community-based environmental management at various levels, especially within

low-income communities, and to examine the impact of grassroots mobilization in Hong Kong in relation to technical issues of environmental protection.

Environmental problems in low-income communities

Despite Hong Kong's affluence in terms of GDP (US$10,916 and US$12,069 per capita expenditure in 1989 and 1990 respectively), there are pockets in the population characterized by low incomes and very poor community facilities.

The incidence of tuberculosis (6,704 new cases) and viral hepatitis (1,232 new cases) in 1989 is still high and implies problems with nutrition and hygiene in the environment. There are some 66,288 (4.56%) families on public assistance and 62,720 persons entitled to disability allowance. The majority (82% or 51,727 families) on public assistance have to rely on income maintenance programmes because of old age or ill health (Census and Statistics Department, 1990: 111, 222, 240-1; Asiaweek, 26 July, 1991: 6). This low-income group is likely to increase as the population ages. The poor have to cope with the problems of the environment by themselves and they are the group that are affected most by environmental deterioration associated with urban decay.

The poor are concentrated in temporary housing areas, squatter areas and urban slums. The findings of the 1986 bi-census, showed that there were 101,724 households living in temporary structures in squatter areas and temporary housing areas, 23,520 living in cocklofts and bedspaces, 8,344 living in rooftop squatter huts and 162,554 living in room/cubicle accommodation (Census and Statistics Department, 1990: 187). These 296,142 households, 20.48% of the total number in Hong Kong, are living in substandard housing, without self-contained facilities which the then Governor, Sir Murray MacLehose, promised in his Speech to the territory's Legislative Council in 1982.

Squatter areas

Squatter areas represent a flexible response to pressures within the housing supply system. Squatter areas in Hong Kong expanded with the sudden influx of population to Hong Kong from mainland China in the 1950s, the late 1970s, and the early 1980s. Gang groups were involved in putting up squatter huts and selling them to new migrants who urgently needed to find affordable accommodation when they first arrived in Hong Kong.

Squatter huts are usually constructed on steep slopes without a drainage system and proper access roads. Water and electricity supply, refuse and waste water disposal, hygiene and access are all problems (Chan, 1981; 1984). There was large-scale social action to protest at the lack of electricity supply to squatter areas in the mid-1970s. A community health project in the Mount Davis squatter area in 1980 also found that a large number of children in the squatter

area were infected with worms (YWCA 1980). The Council on Squatter Policy conducted a bacterial count of drinking water collected from squatter areas in 1981 and found that the quality of the drinking water was generally very poor. One of the water samples in Kwun Tong contained 500 times the acceptable standard of bacteria suggested by the World Health Organization. Bone fractures were common, especially for elderly persons who fell easily on the narrow, winding and steep paths to the squatter huts. The collective grassroots actions organized by the Council on Squatter Policy over the past decade are described in Chapter 8 of this volume by Ng Yiu Fai in his discussion of grassroots participation and the environment in squatter areas.

Temporary housing areas (THAs)

In 1989, there were 9,700 persons living in cottage areas and 98,300 living in temporary housing areas managed by the Hong Kong Housing Authority. Temporary housing areas are usually situated in remoter suburban areas where land prices are lower. Low-income families who lose their homes because of squatter area fires or through the demolition of private buildings for redevelopment and who have lived in Hong Kong for less than seven years are relocated to these areas. Each person is allocated a floor space of 24 square feet. Kitchens are outside the living unit and toilet facilities are communal. Hygiene in the toilets and bath areas is poor and rats are common in the highly congested temporary structures.

THAs are typically situated on reclaimed land or newly developed sites which are far from employment centres and community facilities. Shopping and access are the two main concerns of the residents of such areas. Many temporary housing areas are located below flyovers, by the side of container depots, or in the midst of industrial buildings. Pollution caused by the noise, dust, and gaseous emission from trucks and factories is severe. This is a part of life for the residents of temporary housing areas.

As these housing areas are by definition to be 'temporary', infrastructural provision is minimal. The sites are prepared by the Housing Authority with common toilets and baths, drains and refuse collection, space for small neighbourhood shops and community services, as well as water, electricity and telephone services. The huts are built of wood and tin sheets. They are very hot in the summer and the risk of fire is high. Other problems often arise when these areas are occupied for long periods. Many residents find themselves living under falling roofs as termites infest the pillars of their huts. Water often leaks into the huts on rainy days because of holes in the roof. Chui Wing Tak analyses the forms of collective problem-solving strategies adopted by the residents' organizations in temporary housing areas in Chapter 9.

Private tenement housing

With almost 6 million people living in such a small land area (just 1,080 sq. kms) Hong Kong has the world's highest population density. The Hong Kong government has invested substantial resources in the construction of public housing. There are 513,849 households (2,342,900 persons, 43% of the total population) living in Housing Authority rental estates. Some 693,322 households live in private housing blocks. More than a quarter (27.33%) of the households living in private housing share facilities with other households in the same housing unit.

Urban decay and the rapid deterioration of the infrastructure of pre-war and old buildings in the private market is causing problems of illegal construction, with outer walls, pipes or hanging balconies falling down. There are pre-war buildings without toilet facilities whose residents still have to rely on night soil collection.

The irregular or mixed use of land for commercial, industrial and residential purposes in one building or in one neighbourhood causes problems of noise, safety and security. The lifts may be occupied for loading and unloading leaving no room for residents. Residents living by the side of cement plants, printing factories and textile factories are constantly inconvenienced by flying cement particles, noise and acid smell emissions. The experience of the residents living in 'cage' accommodation is documented by Fung Ho Lup in Chapter 10.

Sources of pollution and mechanisms of control

The environmental problems listed above are largely related to the poor quality of the living environment over which low-income residents have little control. These low-income communities are usually situated in the midst of industrial areas or by the side of highways. Residents suffer pollution problems arising from adjacent industries and from environmental deterioration in the residential neighbourhood. The main source of pollution at the macro-level is industrial pollution. The pollution problem in Hong Kong has been succinctly described by Hills and Barron (1990): '.....many streams are thick with industrial chemical wastes, residential areas are exposed to noxious factory smoke from short stacks, waterways carry untreated sewage, and industries often blatantly disregard existing environmental regulations.' These sources were not effectively controlled until the late 1980s when the government began to take more active steps to enhance the implementation of environmental protection measures.

The mechanisms of environmental protection adopted by the government at the central level, regional and departmental levels, district co-ordination level and grassroots mobilization level are described in the following sections.

Central planning and policy making

At the policy level, the Hong Kong government has enacted a Town Planning Ordinance which provides citizens with mechanisms for objecting to the land use zoning in Outline Zoning Plans. However, the overall Territorial Development Strategy and local Development Plans are non-statutory plans to which citizens cannot gain access. Citizens have no way of reflecting their concerns and objections (Chan, 1988).

Due primarily to the government's laissez-faire stance on industrial growth and development, pollution has developed to an intolerable extent. An Environmental Protection Unit was formed in 1978. In 1981 it was renamed as the Environmental Protection Agency, and in April 1986, the Agency became the Environmental Protection Department (EPD).

The responsibilities of the EPD include policy formulation, implementation and monitoring. In order to develop a comprehensive policy on environmental pollution, a policy white paper was published in 1989 suggesting that the government should deploy 20 billion Hong Kong dollars in the 1990s to protect the environment. The government now employs over 950 staff to work on pollution control, an indication of its commitment to protect the environment. In July 1989, the EPD was integrated into a new Planning, Environmental and Lands Branch of the Government Secretariat. This move reflected the government's desire to link urban planning more closely with environmental protection functions (Hills and Barron, 1990). For the major forms of pollution, planning is now, at least in theory, quite comprehensive, covering, for example, pollution processes, siting restrictions, emission controls, and the treatment and disposal of waste.

In the meantime, the Hong Kong Productivity Council has also been assigned tasks to provide assistance to factories to develop and install affordable environmental protection measures. Such a supportive advisory service is essential when controls on industrial gaseous emissions and waste water discharges from factories are enacted. Factories can be fined for violating standards for gaseous emissions and waste water discharges, although one of the basic problems in terms of policy implementation has been the low level of such fines and the tendency of some polluters to regard fines as one of the costs of doing business in Hong Kong.

A coherent and comprehensive policy framework together with supporting legislation are essential mechanisms for controlling pollution. However, the legislative process is very slow and resistance from industrialists has been intense. Such controls focus on the prevention of further pollution but have relatively little effect on areas which have already been severely polluted. Residents have to live with the pollution especially in old industrial areas such as Kwun Tong, Tsuen Wan and Kwai Chung. The participation of ordinary citizens

in such policy matters is disappointingly low. The historical development of the environmental policies in Hong Kong is reviewed by Pauline Choi in Chapter 3.

Regional and departmental planning

At the regional and departmental levels, responsibility for pollution control and environmental management is distributed among various organizations and government departments. The most influential bodies are the two municipal councils and the Housing Department. The municipal councils (Urban Council and Regional Council) and the Urban/Regional Services departments control hawkers, run markets and inspect public eating facilities. They are also responsible for refuse collection and street cleaning. The general hygiene of the territory depends upon the efficient operation of the municipal councils and urban services departments. Smoke, oily gaseous emissions, and noise from stove and air-conditioning systems are the major sources of pollution from restaurants and cook-food stalls.

The Housing Department also plays a very crucial role in determining the quality of the living environment for the poor in Hong Kong. As a response to a Christmas squatter area fire which created 50,000 homeless in 1953, the Hong Kong government began to build a 'public housing estate' for the population. By 1990, about half (43.72%) of the population and 39.5% of the households were living in public housing estates and 'home-ownership scheme' housing (Census and Statistics Department, 1990:187).

The environmental problems of old resettlement housing estates are severe. The estates have no lifts and the living space is very small. Facilities such as toilets and baths are shared. The strategy of the Housing Authority is to redevelop worn out resettlement estates to upgrade the quality of the living environment.

Residents living in clearance and newly-developed sites, and victims of natural disaster (e.g., landslips) who become homeless are rehoused in temporary housing areas. This is a 'site and services' approach of low-cost accommodation for the poor. The Housing Department allocated areas of land for temporary accommodation in the early 1970s, put in a minimal infrastructure of toilets and public water taps, and residents were required to build their own huts. In the late 1970s, the Housing Department instituted higher standards of accommodation and put up common roofs and platforms for residents. In the mid-1980s, owing to the disputes arising from triad (gang) involvement in the construction of huts for residents, the Housing Department took over the responsibility of actually putting up the huts for residents. In the newly built temporary housing areas, there is planning provision for a social service centre, a market and playground facilities.

For the population living in squatter areas, the Housing Department launched a squatter area improvement (SAI) scheme in 1982 to upgrade facilities and the infrastructure of the squatter areas. It was designed to prevent squatter fires and to improve the quality of life for the population. The SAI scheme includes the installation of fire hydrants, fire-breaks (squatter huts are divided by stairs and open areas so that the extent of damage can be controlled in case a fire breaks out), street lighting, footpaths, post-boxes and refuse collection points. The SAI Scheme was a typical 'upgrading' project in low-income communities. The government paid most of the cost of the SAI scheme. The project ended in 1990 as squatter areas were by then scheduled for demolition. The housing policies designed to provide low-income communities with a reasonable living environment are described by Pauline Choi in Chapter 7. Grassroots responses to the environmental problems of squatter areas are discussed in Chapter 8.

District coordination

Besides central policy planning, the participation of local-level organizations is also important. The district boards, i.e., local citizen consultative councils in Hong Kong, can also allocate money for small-scale local environment improvement projects in their area. Before the implementation of the SAI Scheme, this small-scale environmental improvement project funding was the sole source for environmental improvement in squatter areas. When the SAI scheme was terminated, the District Boards had to resume their duty to upgrade low-income squatter areas. The role and contribution of District Board and non-governmental organizations in environmental management are reviewed by Hung Wing Tat in Chapters 4 and 5.

Grassroots mobilization

> Given the urban policy in favour of the rich, the poor have taken upon themselves the task of improving their welfare by providing better services and enhancing economic opportunities (Yeung, 1990:310)

Grassroots participation in environmental improvement is seen as a viable alternative to government intervention. Local initiative is often welcomed as a cost-saving and more efficient alternative.

Planners and government have encouraged grassroots participation in low-income communities so as to improve the quality of life through collective action. In this way, the government's commitment to service provision can be reduced and the quality of service can be improved. There are several government-sponsored grassroots mobilization schemes in Hong Kong: neighbourhood-level community development projects, mutual aid committees and community centre

programmes. Grassroots mobilization tactics are discussed by Cecilia Chan in Chapter 2.

Neighbourhood-level community development projects. The Hong Kong government endorsed the policy of setting up neighbourhood-level community development projects in 'deprived' communities in 1977. Deprived communities are identified by the criteria of low-income, being remote from existing social services, and a lack of basic infrastructure. Teams of three social workers are employed to work in deprived communities of 3,000-15,000 people. Furthermore, the community will not be relocated for at least three years to make the grassroots organization worthwhile. In 1991, there were 51 such projects throughout Hong Kong employing more than 150 social workers. Two of these social workers, Fiona Chang and Regina Cheung, report on their experience of working in two squatter areas in Chapters 11 and 14.

Mutual aid committees and owners' corporations. Multi-storey buildings are a common feature of housing in Hong Kong. To mobilize residents or owners of domestic flats in multi-storey buildings to take part in the day-to-day administration of the building, the Hong Kong government enacted an Owners' Corporation (OC) Ordinance in 1971 and introduced a mutual help organization called the Mutual Aid Committee (MAC) in 1973. The City and New Territories Administration offers mutual aid committees and owners corporations technical advice on building maintenance to make citizens' participation possible. Mutual aid committees are given a quarterly stipend to pay their telephone and electricity bills. Mok Hing Luen and Lau Kwong Kit describe their community education approach in a refuse recycling project in a middle-class housing estate in Chapter 13.

Community action and community care. As well as neighbourhood-level community development projects, mutual aid committees and owners' corporations, which are sponsored by the government, there are voluntary agencies in Hong Kong which actively organize the grassroots to seek environmental improvements. These are agencies such as the Society of Community Organization, the Council on Public Housing Policy, the Council on Squatter Area Policy, and the Christian Industrial Committee, which organize low-income residents to fight for environmental improvement.

The Society of Community Organization organizes tenants in 'cage' accommodation to fight for their housing rights upon the demolition of their apartments, and organizes boat squatters in Yau Ma Tei to fight for their right to public housing. The Council on Public Housing Policy organizes residents in public housing estates, about half of the Hong Kong population, to bargain with the

Housing Department for environmental improvements. The Council on Squatter Policy mobilizes squatters to collaborate in the implementation of SAI schemes. The Christian Industrial Committee mobilize workers to seek a safer working environment and helps victims of industrial accidents to apply for compensation. The effort of the Workers' Health Centre is presented by Chan Kun Kam in Chapter 15.

The role and contribution of social planners and community organizers

Social planners and community organizers can contribute to environmental protection, especially for the poor, through public education, advocacy groups, legal aid or advice, and grassroots organizations to give feedback on town plans, and demonstration projects for small-scale environmental improvements and protection measures.

Public education

Social planners and service agencies are actively involved in public education and the promotion of environmental protection concepts among residents' groups, women's groups, as well as children and young people. Most of the projects launched are still at a low level of consciousness-raising. Teaching aids, educational designs, and campaign strategies have to be developed so as to create a greater impact on the audience.

Advocacy groups

Individual social planners and community organizers have participated in environmental groups such as Green Power and Friends of the Earth. However, the key concerns in the organizing of low-income communities are local environmental issues. Community workers have organized local resident groups to put pressure on the government to release information on environmental impact studies of oil depots, industrial waste depots and projects which can cause a nuisance to residents. Ng Hang Sau uses the experience of the Tsing Yi Concern Group to illustrate how local activist groups can act as a watchdog for landuse planning and environmental policies. His study is reported in Chapter 6.

Professional aid and advice

Although social planners and community organizers are not lawyers or engineers, they can assist the residents' groups in seeking professional advice on issues concerning low-income neighbourhoods. Residents' groups can be referred to sympathetic lawyers, planners, engineers and environmental advocacy groups for consultation and advice.

A multidisciplinary approach to environmental protection

Anti-poverty programmes for the welfare of economically underprivileged groups usually involve programmes on income subsidy, health maintenance, fertility control, housing, education, access to public services and employment (Yeung, 1990:313). Housing and access to public services are related to the living environment. Our brief review of environmental protection interventions through government policies, departmental programmes, local involvement and grassroots mobilization projects suggests that Hong Kong possesses an extensive system of institutions and procedures for tackling environmental problems. However, despite the apparently comprehensive multi-level intervention system for such problems there are major shortcomings in the Hong Kong system. These include policy bias towards the rich, limited interdisciplinary cooperation, limited residents' mobilization and contribution, and efficiency shortcomings.

Policy bias towards the rich

Governments in developing countries can adopt destructive tactics of 'closing' the city to migrants from the rural areas, removing them and destroying squatter settlements without providing alternatives for the urban poor (Yeung, 1990:315). In Hong Kong, a similar policy bias towards the rich can be found. Large corporations in Hong Kong represent a very powerful lobby. More government attention is being given to encourage investment and industrial production than for environmental protection. The political priority attached to pollution control and environmental protection has been relatively low.

The Hong Kong and Shanghai Banking Corporation and the Swire Group are two of a number of major local companies that have recently formed the Private Sector Committee on the Environment, the objective of which is to mobilize private sector interests and resources to contribute to the task of environmental protection. One of the Committee's first projects was to organize a privately operated system to remove floating rubbish from Victoria Harbour in an attempt to improve the public image of Hong Kong. However, it can be argued that in a more general sense, the private sector, particularly smaller firms have shown themselves unwilling to tackle the key problems which are related to industrial pollution (Menagh, 1991).

Limited interdisciplinary cooperation

There is some degree of division of labour in environmental protection at various levels but there is not a great deal of cooperation between agencies and individuals. Most environmental protection policies are coordinated by the EPD, which is dominated by professional scientists and engineers. Cooperation consists mainly of the EPD explaining policies to the public and seeking cooperation from

citizens during the implementation of the projects. Communication and coordination among professionals in different disciplines is not common.

The existing planning structures do not provide for multidisciplinary cooperation in environmental protection. The members of the Environmental Pollution Advisory Committee and the Environmental Campaign Committee are also dominated by professionals and representatives of industrial and commercial associations. There is a subtle sense of self-sufficiency among professionals and they tend not to foster or encourage interdisciplinary cooperation and grassroots participation.

Social planners and community organizers have never been regarded as part of the multidisciplinary team in environmental protection. They have to equip themselves with information on environmental protection and community education in order to demonstrate their skills and ability in mobilizing grassroots support for environmental protection (Chan and Lam, 1992).

Limited residents' mobilization and contribution

It is often important to develop the self-confidence of the poor in environmental protection so that they can develop into confident, self-reliant and independent individuals. Owing to the technical nature of the problem, the grassroots can easily be overwhelmed. There are severe knowledge gaps among the public and there is insufficient resource support for grassroots participation in environmentally-related issues. Therefore, the community organizers working in the neighbourhood-level community development projects have a unique contribution to make in grassroots mobilization and training so that the competence of the residents to offer feedback on environmental policies and problems can be enhanced.

Effectiveness versus efficiency

Efficiency has usually been accorded the highest priority in Hong Kong. The participation of grassroots interests is viewed as a time-consuming process hindering the efficiency of the environmental planning process. However, if the public can be consulted properly beforehand, their opinions can be adequately reflected in project planning. Citizens can help to contribute ideas to increase the relevance of the plan for their needs. The overall effectiveness of the project can be enhanced. In order that grassroots consultation will not delay the planning progress, it is desirable for planning organizations to institutionalize grassroots participation and consultation into working procedures.

Social planners and community organizers can also serve as agents to educate professionals as to the importance of grassroots involvement in environmental protection. The documentation of the specific case examples on the contribution of low-income citizens to environmental planning and

management in this volume serves to illustrate the importance of grassroots consultation and participation in the planning process.

Conclusion

Low-income communities in Hong Kong often experience poor environmental conditions. Their conditions are particularly difficult because they have relatively few resources for environmental improvement. Since the White Paper on "Pollution in Hong Kong: A Time to Act" was issued in 1989, there has been a conscious effort on the part of the Hong Kong government to tackle pollution problems on a more systematic basis. Central and district coordination can effectively channel information and launch appropriate plans to tackle the problems. Meanwhile, grassroots mobilization is effected mainly through the neighbourhood-level community development projects and government-sponsored residents' organizations. Social workers not only contribute to the education process but also to advocacy. They also provide professional advice. However, the existing elite-based planning system, which is biased towards the higher-income groups, has created a situation in which there is still a long way to go before lower-income communities can establish a sufficient power base to have a significant impact on environmental problem-solving in their communities.

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Chapter 2

Grassroots Mobilization for Environmental Protection: Tactics and Dilemmas

Cecilia Chan

Introduction

Some years ago, Prince Philip warned that 'we have already set in motion a process of decline that ... will make human life impossible on this earth'. He suggested that people are the key to solving the planet's environmental woes, and proposed that 'limiting the pollution of water and the atmosphere, controlling the output of the chemicals that may be causing global warming and climate change, recycling glass bottles and eating less meat may go some way to help'. (Newsweek, 17 June 1991)

In the promotion of environmental protection, it is much easier to accept the idea of environmental protection while suggesting that someone else take on the responsibility. When it comes to changes in behaviour or habits, especially when this involves personal sacrifices, this is very difficult to achieve. The previous Governor of Hong Kong, Sir David Wilson, rightly pointed out in his 1989 address to the Legislative Council that, 'until recently, far too many of us in Hong Kong were not aware of the threats to our environment. We placed far too little importance on protecting it'. Despite the apparent determination of the Hong Kong government to protect the environment since the 1989 White Paper on pollution, it still has a long way to go before the grassroots population in Hong Kong is ready to participate in environmental protection.

If the general public can be made more aware of the importance of preserving our environment, then people may be more willing to take active steps to reduce household refuse by not throwing away usable items, keeping used paper for recycling, using unleaded petrol in their cars, reducing the noise volume of sound systems at home, collectively putting pressure on, or supporting, the government to launch environmental impact studies on major projects, and control pollution sources.

As social planners and social workers, the questions that we have to ask include what can be done about grassroots apathy towards environmental

protection, how can people be mobilized to participate in environmental protection and what can social workers and social service agencies contribute to the promotion of environmental protection. This chapter will examine local experiences of grassroots mobilization on environmental issues and discuss the tactics and dilemmas of grassroots participation.

The contributions of grassroots participation

Industrial pollution is particularly severe in developing countries, which typically are more concerned about attracting investment than preserving the quality of the environment. They may even claim that they cannot afford to impose environmental regulations on industry. The lack of awareness of the importance of environmental protection is a major cause of rapid environmental deterioration in the Third World.

Adequate legislation for environmental protection, together with proper enforcement and monitoring, are the most effective contributions of government. At the individual level, calling upon people to participate in environmental protection will require long-term and large-scale public education, as well as extensive policy support. For example, when individuals are asked to package their waste paper for recycling, the municipal services must operate a refuse collection system which provides for separate collection of domestic waste from that of paper or glass bottles for recycling. Slogans such as 'environmental protection begins with me', the theme of the environmental campaign in Hong Kong in 1990-1991, will be remain rhetorical if there are no concrete and specific behaviour instructions which citizens can follow and comply with.

Individuals have important contributions to make to the task of environmental protection. First, individuals can take personal steps to reduce waste and save energy to preserve the environment. They can also take a proactive stand in monitoring and reacting to localized environmental hazards as well as pressurizing government departments to enforce existing regulations.[1] Public awareness and concern about the environment can also put pressure on corporations to reduce pollution and produce environmentally sensitive products (Glucksman, 1991). Finally, the voting preference of citizens may be translated into policy and legislation which can reflect the public interest in environmental protection. This process can be initiated by active environmentally conscious political lobbying organizations. For example, environmental concern groups can conduct a questionnaire survey of all candidates for local district board and municipal council elections and publish a list of 'green' candidates who are

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[1] The Environmental Protection Department received 4,790 complaints in 1989; 47% related to air pollution, 42% on noise pollution and the remainder to waste and water pollution.

supportive of environmental protection.

Low-income citizens are generally apathetic to appeals for environmental protection as they may be preoccupied by their sense of helplessness with regard to government social policies. The experience of participation is a learning process where grassroots citizens formulate their views on the destructive effect of environmental pollution on their livelihood and pick up skills to bring about change through collective action. Successful experience of grassroots participation can increase public confidence in the government and combat alienation as well as enhance public commitment to environmental protection (Crouch, 1977:11). When more citizens are involved in environmental protection, their sense of involvement and sense of social and moral responsibility will increase (Wandersman, 1981:47) and thus they will be more willing to accept personal sacrifices or even inconveniences for the sake of environmental protection and pollution control. This will be beneficial to the overall improvement and stability of the society.

Individual participation in environmental protection

Individual actions with regard to different levels of participation in environmental protection are summarised in Table 2.1.

Table 2.1 Action at Different Levels of Participation

Levels of participation	Tasks and manifestations
(positive) High	Put political pressure on government and legislature, form political lobby groups Seek professional advice on environmental issues, explicitly stating preference for environmentally conscious candidates Join environmental groups as members
Medium	Choose environmentally sensitive products Take action to preserve the environment Be willing to learn more about environmental protection and what individuals can do Participate in environmental campaigns
Low (negative)	Agree in principle but resist taking active steps in environmental protection Disagree with environmental protection and actively pollute the environment.

Participation of grassroots citizens in environmental protection can be

active (e.g., taking up leadership roles in advocacy groups, participating in environmental campaign activities and learning more about behaving in an environmentally responsible way), passive (e.g., complying with legislation and regulations), and in some cases negative (e.g., deliberately behaving in a way that damages the environment).

There are a number of environmental advocacy groups in Hong Kong. They are local branches of Friends of the Earth and the World Wide Fund for Nature, as well as local organizations such as the Conservancy Association and Green Power. Until recently, the membership of environmental groups consisted mainly of expatriates or professionals educated overseas. The concept of environmental protection seemed quite alien to the local population. Since the setting up of the Environmental Campaign Committee in 1990, more citizens have become aware of the message of environmental protection. Being 'green' is taken as a fashionable style of living. More influential political figures, movie stars and pop singers participate in Environment Day programmes or even become members of environmental concern groups such as Green Power. Their contribution to attitude change among the general public, especially young persons, will be very significant.

As well as joining environmental groups, more ordinary citizens participate in promotional campaigns and programmes organized to educate the public about the importance of environmental protection. Secondary school students launch environmental protection projects such as picnics to country parks and games days (Chan and Lam, 1992), and most of them have been well-received. The lack of readily available teaching aids, training materials and programme skills among organizers have, however, sometimes limited the success and impact of promotion campaigns on environmental protection.

Residents' organizations such as kaifong associations,[2] district concern groups, mutual aid committees[3] and district boards[4] also take part in environmental protection promotion activities. They organize exhibitions, talks and waste paper collection campaigns. However, small-scale and short-term waste paper collection in local districts will not be able to contribute significantly to environmental protection unless the waste paper collection is instituted as part of the regular municipal refuse collection system.

Most citizens comply passively with regulations not to throw rubbish on

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2 Kaifong associations are traditional neighbourhood fraternity organizations in Hong Kong.

3 Mutual aid committees are self-help residents organizations sponsored by the government through the City and New Territories Administration.

4 District boards are local consultative councils with directly elected members to represent the views of citizens in local affairs.

the streets and quite a few have started to use unleaded petrol for their cars (partly because it is cheaper than leaded petrol). They have little idea of what environmental protection is all about. There are also citizens who do not care about the environment and are consciously or unconsciously carrying out activities that are damaging to it. It was disappointing to find that some of the small boxes put out for the collection of waste paper along the streets in Tsuen Wan were being used as rubbish bins. A large number of small factory owners are also trying to cut costs by disregarding regulations on water pollution control and passing untreated, heavily polluted water into the sea.

The Kennedy Town Environmental Concern Group

At the grassroots mobilization level, residents can also collectively express their opinions on pollution problems and put pressure on the authorities to improve their environment. Housing problems, traffic issues and environmental problems are the three key themes of large-scale residents' mobilization in Hong Kong over the last ten years. The example of the Kennedy Town Environmental Concern Group will be used to illustrate how grassroots citizens can be mobilized to react to local environmental pollution problems.

Kennedy Town is situated on the west side of Hong Kong island and has a population of 100,000. It was an old trading port and cargo-handling area, with godowns along the water front. As it is an old urban area, there is no outline zoning plan which governs land use of the neighbourhood. There is a cement plant on the water front surrounded by residential apartment buildings, a vegetable wholesale market, a chicken and duck wholesale market (poultry *laans*), an abattoir which supplies meat to Hong Kong island, an incinerator for cremating animals which have died before they are slaughtered, a gas depot and an incinerator which burns refuse collected on the island. All these facilities constitute an environmental nuisance producing noise, dust, foul smells, smoke and traffic congestion in the residential neighbourhood of Kennedy Town.

As well as these large-scale environmental nuisances, there are also small lard-manufacturing workshops, roast pig workshops, and shark-fin processing workshops scattered among shop-floors and inter-mixed with residential units in pre-war buildings. They also produce a foul smell, heat, a fire risk and hygiene problems in the neighbourhood. When there was a fire near the gas depot, residents were very worried that the whole gas depot would blow up; it was adjacent to a public housing estate and surrounded by private residential buildings. As the price of these residential buildings increased, the gas depot was moved and the site was developed into a residential estate.

Because of long-standing environmental pollution problems, a group of conscientious residents formed the Kennedy Town Environmental Concern Group in 1986. The members of the Concern Group consisted of chairpersons and

executive members of Owners' Corporations in Kennedy Town, social workers, district board members, residents and a school principal who used to actively participate in local community activities. The Concern Group launched educational programmes to raise the residents' awareness of the problems of Kennedy Town and organized protest actions against the cement factory, abattoir, incinerators, wholesale markets, poultry *laans*, roast pig factories and lard factories. Some of the cases of their collective action will be described below.

As there were no town plans governing the development of Kennedy Town, the Concern Group complained to the Area Committee,[5] District Board, District Office, and Town Planning Office. The Concern Group organized a community forum to explain the draft plan. Fifty-five residents representing 35 buildings and local organizations attended the forum. They were pleased to learn about the details of the town plan which might put an end to uncoordinated developments in their residential neighbourhood. The residents were concerned about the future land use of the abattoir and incinerator sites after demolition, as well as the lack of open space. Despite objections from the Concern Group and the District Board, the Town Planning Office did not improve the open space provision in the plan for financial reasons (Chan, 1988).

Finally, the Outline Zoning Plan was gazetted in 1987 and there were conscious attempts to remove environmental nuisances in the district. According to the government departments, as a result of constant pressure from the residents, the poultry *laans* were moved in 1988, the vegetable wholesale market in 1991, the abattoir and the two incinerators were supposed to be demolished by 1991, and a new Urban Council Complex would be built to house street hawkers. No more licences for lard factories would be issued and, seemingly, the problem would disappear as the area was redeveloped.

As the Outline Zoning Plan only defines future landuse and has no authority over existing usage, the Concern Group has to mobilize residents' support through other means. The most popular means adopted by the Concern Group was through petitions and signature campaigns to object to the various environmental nuisances in Kennedy Town. The constant pressure pushed the District Board to exert pressure on government departments. The Environmental Protection Department was involved and a working group was set up within the District Board to work out interim measures for improvements. In a collaborative research study with academics at the University of Hong Kong, the working group

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[5] The local consultative bodies in Hong Kong are divided into several levels:

District level	District Board (250,000 people)
Neighbourhood level	Area Committee (50,000 people)
Building level	Mutual Aid Committee/Owners' Corporation

of the District Board identified ways to reduce the smell of the incinerators and the abattoirs. An after-burner was added to the incinerator cremating dead animals to reduce the foul smell.

The poultry *laans* were moved as planned but the vegetable wholesale market was not moved. The plans for the abattoir and the incinerators were adjusted. The abattoir would be privatized and public accountability would be turned over to the operator. The incinerator for burning refuse would be demolished and the site converted to a refuse transfer station for sending refuse to landfills.

As the cement plant was surrounded by residential buildings, residents were annoyed by the constant cement dust in the area. Children and elderly persons were found to suffer from frequent coughing and respiratory tract infections. The Concern Group mobilized Owners' Corporations of buildings surrounding the cement plant in a signature campaign. These signatures were presented to the District Board Environmental Improvement Committee, which subsequently put pressure on the Secretary for Lands to think of relocating the cement plant. Finding a suitable site for the cement plant with harbour facilities, road access and at an affordable price was not easy. The government put pressure on the cement plant to spray water on trucks and on the open areas for loading and unloading. Despite minor improvements, the noise and cement dust powder continued to be a nuisance to residents.

Owing to the continuous actions against various environmental hazards in the neighbourhood, the residents were generally more conscious of the impact of pollution on their health and well-being. More residents are ready to express their opinions and voice their complaints to the authorities concerned. The Owners' Corporation of a multi-storey building took two years to have a pig-roasting factory removed through an injunction in the Courts (Chan, 1990).

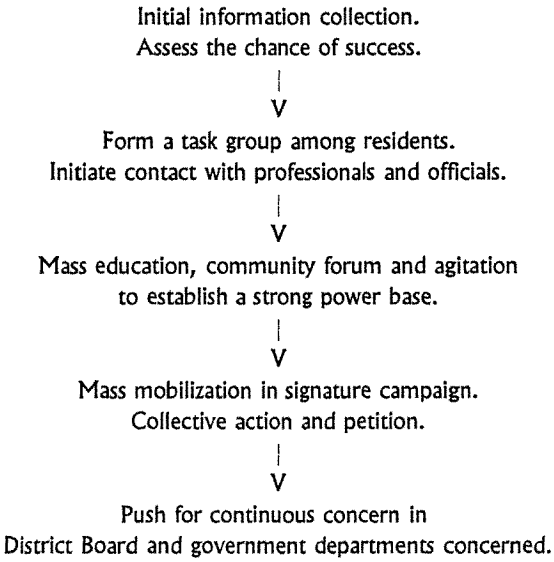
Strategies and tactics

These examples of collective action in Kennedy Town were only partially effective. The poultry *laans* were moved to newly reclaimed land; the traffic eased, the noise and smell from the poultry have gone. The after-burner helped a little to reduce the smell from the abattoir incinerator. The number of lard factories and pollution from the cement plant have been reduced as the Environmental Protection Department is keeping a constant eye on them. Factory owners and proprietors of polluting industries are unlikely to stop their business for the public good unless they are given relocation priority or attracted by the redevelopment potential of their site. General conditions will improve further when the vegetable wholesale market is moved.

The Concern Group used the tactics of public education, newsletters, community forum, signature campaigns, press conferences, public opinion surveys,

petitions to the District Board, and petitions to the Office of Members of the Legislative and Executive Councils in the mobilization of residents' participation in environmental issues. This collective action approach is effective. Mobilizing residents in signature campaigns on environmental pollution issues is very easy. The cost of participation is very low.

As leaders of existing Owners' Corporations were mostly experienced in community service and have frequent contacts with residents, they were effective in mobilizing signature campaigns within short periods of time. The watchmen of buildings might also be asked to assist in asking residents to sign the petition letters in the lift lobby. With the established network of multi-storey building Owners' Corporation, the usual problems of a lack of leadership and insufficient grassroots contact are not significant. The mobilization process adopted by the Group usually involves five stages:



Issues in grassroots mobilization for environmental protection

During the grassroots mobilization process, social workers or organizers encounter many problems. These are problems of building up expectations which may not eventually be fulfilled, lack of information, grassroots apathy and unresponsive policy-making.

Building up expectations and fostering frustrations?

If the organizers are quite sure that the chance of winning an issue is low, the organizer falls into an ethical dilemma of whether or not to mobilize. If the issue fails to bring about results, the process brings more frustration than satisfaction. This failure experience will suffocate budding interest in community

participation. On the other-hand, organizers will argue that one can never know whether an issue will result in any specific achievement or not. The only way to find out is to try. In Hong Kong, grassroots participation is quite mature and lack of progress in collective action has never resulted in negative behaviour.

The rule of thumb for choosing the right issue for mobilization includes selecting issues with the following criteria: high visibility, sudden and abrupt onset, geographically specific areas, a clear line of responsibility, low technical complexity (so that residents can comprehend them easily), veto ability, and issues which fall into institutionalized procedures of participation and can attract greater grassroots participation (Henig, 1982:59-61). Most environmental pollution cases fit into the criteria of high visibility and are geographically specific.

Lack of information

Major problems in grassroots mobilization, especially in areas of environmental policy, are access to information and technical incompetence among the grassroots population. The planning process in the Hong Kong government is secretive and always restricts information and knowledge for internal use. The public can hardly provide feedback when they do not have sufficient information to comment on. For example, the consultancy company appointed by the government refused to release information about the environmental impact study of the West Kowloon reclamation project to District Board members and concerned local organizations. Without such necessary information, it is indeed very difficult to educate the grassroots population and mobilize them for collective action. Existing provision for collective participation under the Town Planning Ordinance is also very restricted. The Ordinance only defines participation as 'informing the public through newspapers'.

Grassroots apathy

The scope of concern of grassroots citizens is largely confined to one's personal interests (Olson, 1965). Environmental pollution problems are relevant but most residents may find the problem too difficult to change and are therefore reluctant to participate (O'Brien, 1975). The problem must be immediate, specific and adversely affect the quality of life of the residents before they are willing to participate. Air pollution and noise pollution are the two key areas about which the public is concerned because they both meet the above criteria. The cost of participation, i.e. the contribution to taking action individually or collectively, must also be reduced so that the residents will not have to worry about paying a high price for participation while getting nothing in return. Another reason for grassroots apathy is the great sense of helplessness on technical matters. Grassroots citizens can easily be silenced by complicated and highly technical explanations by engineers and professionals during consultation

processes.

Unresponsive policies and legislation

The pursuit of environmental control policies and legislation in Hong Kong is very slow and difficult. Industrialists have strong representation[6] in the Environmental Pollution Advisory Committee[7] and the Legislative Council, which often delays the process of enacting environmental pollution control legislation in order to reduce political controversies and public criticism. Officials and politicians are too busy with their own struggles; involvement of the grassroots population in environmental planning has never been on the political agenda of Hong Kong. If environmental protection is not on the political agenda, residents, small-scale self-help projects and collective action will not be very helpful to the overall preservation of the environment.

Overcoming the barriers

In order to overcome these barriers, a series of actions have to be taken. The citizens' right to know should be endorsed by conscious policy efforts on public education and consultation. Teams of professionals on environmental pollution and control should be set up to offer the public professional advice and technical assistance. The training and professional institutions should also emphasize the potential contribution of grassroots participation in environmental planning and management. If they are not convinced of the importance and contribution of grassroots participation, the job can never be done properly.

Lobbying by environmental groups should be increased in order to speed up the legislative process on environmental protection. The implementation of the Water Control Zones is exceedingly slow because of opposition from manufacturing industries. The Hong Kong Productivity Council is helping to research the actual impact of such policies on the costs of production. It is evident that the fear of escalating costs due to the installation of environmental pollution control measures is not well founded. Regular consultation with affected groups will reduce unnecessary confrontation and hostility as in the case of the delay in implementation of the Water Control Zones and the open hostility during

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6 Membership in the Environmental Pollution Advisory Committee includes individuals appointed by the Governor as well as persons appointed on the nomination of the Hong Kong General Chamber of Commerce, the Federation of Hong Kong Industries, and the Chinese Manufacturers' Association (EPD, 1990:147).

7 The participation in the Environmental Pollution Advisory Committee and Environmental Campaign Committee by professionals, legislative councillors, urban and regional council members, industrialists and academics serves as a platform of joint planning (Lam, 1987:17). However, as members to these committees are appointed by the Governor, the influence of environmentally conscious groups is relatively small.

the control of livestock wastes debate in 1988 and 1991.

Large-scale infrastructural project planning should contain an environmental impact study whose results should be announced in public hearings. Documentation should be made available to the public for consultation. The case of the West Kowloon reclamation is a good example of such a problem. The consultancy firm produced very limited material in its verbal presentation to the District Board. Important adverse environmental impacts of the reclamation were not mentioned. Hiding such important facts from the public will actually make the implementation of the project more difficult as the public is not psychologically prepared to tolerate problems during the implementation period.

The role of non-governmental organizations in grassroots mobilization

Government departments such as the EPD contribute greatly to environmental protection but they have done very little to mobilize grassroots concern and participation. Non-governmental organizations such as residents' organizations, local concern groups, professional organizations and social service organizations can contribute significantly to grassroots mobilization for environmental protection. They can contribute in the form of advice and consultation on technical aspects of problems, community organization of the grassroots, community education and the raising of public awareness.

Advice and consultation

With the rapid political changes in Hong Kong during the transition period, there is increasing pressure for democratization and a rapid increase in awareness of the importance of environmental pollution control. Environmental issues are non-controversial and can be used by local politicians to establish their popularity among constituents. Therefore, local political groups and District Board members provide advice and information to residents groups on neighbourhood environmental issues.

Environmental groups such as Friends of the Earth, the Conservancy Association and Green Power offer free advice to residents' groups which in turn mobilize local people in their concern for environmental problems. Most of the issues are raised by local residents' groups who lack the expertise and technical know-how to measure environmental problems such as the nuisance caused by the noise of heavy traffic and industrial waste water discharge before treatment. The Friends of the Earth and the Conservancy Association offered a lot of support and advice to the Kennedy Town Concern Group in the initial stages of their project against the environmental nuisances caused by the incinerator and the abattoir. The Conservancy Association also helped the Concern Group in conducting noise measurements in primary schools near the steep roads in Kennedy Town to press for sound barriers to reduce the noise from the traffic.

Community and grassroots organizations

Non-governmental organizations in Hong Kong such as the Society for Community Organization and the Council on Public Housing Policy are sending organizers to mobilize residents to be concerned about their living environment. Local concern groups also play an important role in organizing residents to fight for their rights to a clean and unpolluted environment (clean air, clean water, clean coast and beaches, as well as a quiet and safe environment). Local resident groups can be formed to work on specific environmental problems or to promote the concept of environmental protection. Organizations such as the Tsing Yi Concern Group and the Kennedy Town Environmental Concern Group were formed by small groups of social workers who volunteered to provide support to residents on technical matters.

Community education and the raising of public awareness

The government has launched large-scale APIs (Announcements of Public Interest) on television and in the mass media to promote collective responsibility for environmental protection. Primary and secondary schools, children and youth centres, community centres, local groups and residents' organizations are all encouraged by the Environmental Campaign Committee through funding to organize more educational and promotional programmes (Chan and Lam, 1992). The amount of money invested in the environmental campaign amounted to $1 million in 1990, two and one half times the amount spent over the previous five years (EPD, 1990:111). Publicity aimed at increasing environmental awareness is important because an environmentally aware and well informed public is better able to contribute to environmental protection by putting more pressure on the administration for legislation and control.

Conclusions

From the review of the contributions, constraints and strategies of grassroots participation, it is clear that environmental pollution issues can be used in neighbourhood mobilization. Despite the obvious difficulties, Hong Kong grassroots citizens are becoming more aware of the importance of environmental protection. Non-governmental organizations are contributing significantly to grassroots mobilization in terms of education, advice, and training.

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Chapter 3

Environmental Protection in Hong Kong: An Historical Account

Pauline Choi

Introduction

Although an executive body on environmental matters, the Environmental Protection Department (EPD) did not come into existence until 1986, environmental problems have persisted in the territory since the mid-nineteenth century. The environmental problems faced by the public over the past three decades relate to air, noise, water pollution and sewage disposal, arising mainly from the rapid growth of industrial and commercial activities and, to a lesser extent, from livestock farming, whereas environmental concerns in the early days were centred on the insanitary living conditions of the public. The government's concern for the environmental quality of the territory dates back to the 1840s, soon after the British occupied Hong Kong island as a colony.

Environmental problems in the early days

> Hong Kong stank for most of the nineteenth century and anyone who doubted that could just take a stroll out along the waterfront on a summer evening when the tide was low. (The Urban Council, 1983)

The sanitary condition of Hong Kong in the nineteenth century was recorded as being exceedingly unhealthy, hazardous not only to the health of civilians but to that of the troops as well. Severe overcrowding was a feature of life; sharing of accommodation was a common phenomenon. The water supply was inadequate and absent in some parts of the city. The storm water drains were just as chaotic as the street network and drains were always improperly used as sewers, which discharged directly into the sea (Pryor, 1983). The filthy state of the territory presented a good breeding ground for the plague and diseases such as smallpox, cholera, typhoid, encephalitis and tuberculosis.

Contributing factors

Overcrowding was largely attributed to waves of people arriving from mainland China and to the topography of the territory. In May 1841, just two years before the Treaty of Nanking, the Chinese population in Hong Kong was only 7,400. After that, the territory's population grew at a dramatic rate so that by 1911 the figure had reached 457,000. It was 2.1 million in 1950. Although 1945 saw a big decline in the Chinese population, the territory quickly regained people and the population soared to 1.8 million within two years. Since the territory had made no planned provision for such a dramatic population growth, there was an acute housing shortage. Living conditions became extremely overcrowded as a result. The unsatisfactory condition was exacerbated by the defective design and construction of buildings. The Urban Council reported in 1983:

> Many of the houses had been very roughly constructed without any thought of how people were really going to manage to live in them ... The dwellings were crowded together, often built back-to-back or at best with tiny alleyways between them and precious little sunshine ever went creeping down into those squalid nests of hovels.

Houses were generally built with very narrow frontages and considerable depth. As a result only front rooms had windows and other compartments were deprived of sunlight and were poorly ventilated. Houses were not provided with latrines and bathrooms, which was in part related to the traditional Chinese dwelling design and in part to the high land values at that time.

High land values were a consequence of the limited space available for development. In the first few decades following the foundation of the colony, development was concentrated on the narrow strip of flat land on the northern shore of Hong Kong island. The Chinese community was located where Western District is today. Although a series of reclamations were undertaken subsequent to the first attempt in 1851, it was nonetheless an expensive means of forming land. While land premiums remained high, property owners continued to maximize the return from their properties and exploit the tenants. According to the Urban Council in 1983:

> A roof over the head was what they (landlords) provided, for a due sum, and they were not bothered about water, sewage disposal, cleanliness, garbage clearing or any of the services which would make life more pleasant and certainly more safe.

The concentration of ownership in the hands of a few wealthy Chinese helped to reinforce the unsatisfactory situation. The tenants, with limited financial means

and other more pressing concerns, had no choice but to endure the unpleasant living conditions.

The government's response

Although the government pursued a laissez-faire policy from the very outset, it soon realized that environmental issues could not just be left unchecked as the filthy conditions would present a breeding ground for epidemics. The first attempt by the government to address the public health issue was the establishment of a Committee of Public Health and Cleanliness in 1843 to enforce the sanitary rules. In order to rectify the problems caused by inadequacies in building design and regulations, the government introduced a Building and Nuisance Ordinance in 1856. The appointment of a Sanitary Committee in 1862 followed an outbreak of cholera in the territory. The government's approach was basically fire-fighting rather than preventive. Despite these measures, conditions improved little.

Osbert Chadwick was sent to Hong Kong by the Secretary of State in 1881 to examine the territory's conditions. In his report he claimed that 'the whole sanitary condition of Hong Kong was defective and required energetic measures' (Bristow, 1984). His recommendations included improvements in water supply, drainage, refuse and night soil collection, the provision of additional public facilities plus a new buildings ordinance. However, the implementation of his recommendations, just like many other previous ordinances, was very difficult, with strong opposition from property owners and other problems resulting from a shortage of resources.

An outbreak of bubonic plaque in 1894, which for the following ten years became more or less endemic, gave rise to a number of ordinances and a Housing Committee to look into dwelling conditions. The Closed House and Insanitary Dwellings Ordinance was introduced in 1894 to tighten construction controls. The Tai Ping Shan Resumption Ordinance of 1894 saw the solution to the problem in the resumption of the most afflicted area and rebuilding of the properties. The health crisis in the early 1900s also gave rise to a proposal for the physical segregation of the Chinese and European communities, which subsequently led to the passing of the Ordinance for the Reservation of a Residential Area in the Hill District in 1904. This ordinance was repealed in 1946.

During the first three decades of the twentieth century, stringent dwelling controls and increased housing provision were prescribed as an answer to the territory's environmental problems. The possible contribution of town planning, in this respect, was not considered until 1935 when the Housing Commission mentioned the establishment of a permanent town planning and housing committee. In 1939, a Town Planning Ordinance was passed but the Town

Planning Office only came into existence in 1947 after the war. The Town Planning Ordinance, however, did not provide the Town Planning Office with enforcement powers. Its implementation has therefore had to rely on lease conditions, which have proved to be inadequate. In the 1950s and 1960s, the government centred its attention and resources on housing provision and economic development. It was not until the early 1970s that the government once again expressed its concern about the territory's environment.

Environmental protection from the 1970s to the 1990s

Associated with the rapid industrial and commercial development in the 1960s and 1970s, there arose all sorts of pollution problems. Environmental protection once again became one of the government's major concerns: in 1974, it commissioned an overseas consulting firm, Environmental Resources Limited, to study existing conditions and make proposals for necessary legislative, policy and structural changes. The consultants three-year study led to the establishment in 1977 of an Environmental Protection Unit (EPU), attached to the Environment Branch of the Government Secretariat. The Unit was headed by an Environmental Protection Adviser. The responsibilities of the EPU included formulating environmental protection policy, establishing priorities and guidelines for pollution control, coordinating the pollution control efforts of various government departments, ensuring that the provision of environmental protection legislation were properly implemented and offering technical advice on pollution control.

The EPU complemented the function of the Environmental Protection Advisory Committee (EPCOM), which was set up in 1970 and reconstituted in 1979 and 1984. It was retitled the Environmental Pollution Advisory Committee in 1984. The Committee currently comprises a Chairman and 17 members. They are appointed by the government; all Unofficials. The Committee members come from various community sectors, including the Legislative Council, the Urban and Regional Councils, the District Boards, industrial associations, environmental groups and academia, and they represent a wide spectrum of interests. In addition, the Secretary for Planning, Environment and Lands or his representative, and the Director of Environmental Protection are also in attendance at the Committee's meetings.

The government consults EPCOM on a wide range of environmental matters connected with policy-making, new legislative proposals and the implementation of pollution control measures. EPCOM ensures that the need for environment improvement and the interests of the industrial sector are duly taken into account in the formulation of new environmental legislation.

In 1981, the EPU was reorganized as a free-standing Environmental Protection Agency (EPA) with the following responsibilities: to serve as a central

source of expertise and scientific data on pollution control, to coordinate the government's efforts in formulating and implementing environmental policies, to establish environmental quality objectives, to monitor long-term trends in environmental quality, and to assess and advise on the environmental impact of major new developments.

The EPA was upgraded to an Environmental Protection Department (EPD) in 1986 to recommend policy initiatives, prepare waste disposal and sewage programmes, enforce the main provisions of the environmental protection ordinances, and carry out environmental impact assessments. It is responsible to the Secretary for Planning, Environment and Land.

In an attempt to address the pollution problems in the territory, the government has prepared a comprehensive programme to protect the environment. The programme comprises five complementary elements:

(1) planning against pollution;
(2) environmental legislation;
(3) the provision of facilities and services for collection, treatment and waste disposal;
(4) environmental monitoring and investigations;
(5) environmental education.

Planning against pollution

The government's approach to environmental protection until the mid-1980s was essentially oriented to problem-solving rather than prevention. Since 1985, an 'Environment' chapter has been incorporated into the ***Hong Kong Planning Standards and Guidelines*** to guide new development and land use plans. Environmental considerations are now taken account of at different levels of planning. The importance of 'preventing' problems at the planning stage is recognised.

Another new measure is the requirement that an environmental review be undertaken for proposed developments. The environmental review indicates the appropriate level of environmental impact assessment that must be carried out in the project planning process.

Environmental legislation

The government adopted the consultant's recommendations in 1977 to introduce five ordinances, covering air, water and noise pollution, waste disposal and environmental impact assessment. So far, four ordinances, air, water and noise pollution, and waste disposal, have been enacted. The EPD is responsible for implementing most of the provisions contained in the environmental protection ordinances.

Water pollution control policy and ordinance

The government's policy objectives for water pollution, stipulated in the 1989 White Paper on pollution, are as follows:

(1) to achieve and maintain the quality of inland waters so that they can be used for their legitimate purposes;

(2) to provide public sewerage of a capacity adequate to accommodate existing and future demands;

(3) to provide waste water treatment and disposal facilities for waste waters collected in the public sewerage system at the stipulated standards;

(4) to put in place and enforce legislation aimed at protecting the well-being of the community from adverse environmental effects caused by the discharge of toxic chemicals and bacteria.

The Water Pollution Control Ordinance (WPCO) was enacted in 1980 to control waste water discharges. The provisions of the Ordinance allow the government to designate water control zones, by means of which the quality objectives of each control zone can be achieved. A licence is required from the EPD before effluents are discharged into water control zones. The licence may contain conditions specifying the amount of effluent that can be discharged or requiring the effluent to be treated before discharge. Dischargers existing at the time when the Ordinance was enacted were originally given exemption from control and could even increase their pollution load by 30%. The Water Pollution Control (Amendment) Ordinance was passed by the Legislative Council on 25 July, 1990 to remove the exemptions of the existing polluters from the licensing requirement within two years.

The Ordinance contains a technical memorandum, in which effluent standards are set out to guide the authority on issuing licences and industry in their investment planning.

The Ordinance is currently only applied in water control zones, beyond which the government has to rely on lease conditions and the provisions of the Public Health and Municipal Services Ordinance to control liquid effluent discharge.

Apart from the EPD, the Territory Development Department, Drainage Services Department, Water Supplies Department, Agriculture and Fisheries Department, and the Urban and Regional Services Departments are also involved in the government's water quality and waste management programme.

Waste management policies and ordinance

The government's policies for waste management as specified in *Environment Hong Kong 1991* (EPD 1991), are:

(1) to provide facilities, by either the public or the private sectors, for the cost-effective and environmentally satisfactory disposal of wastes;
(2) to protect the health and welfare of the public from any adverse effects caused by the storage, collection, treatment and disposal of wastes;
(3) to minimize waste disposal through the encouragement of waste reduction, reuse and recycling;
(4) to reduce the environmental impact of waste disposal through educational programmes and campaigns intended to raise the public's environmental concern.

The Waste Disposal Ordinance was first enacted in 1980. The amended ordinance introduced in 1987 extended controls to livestock waste disposal. Other provisions include controlling the collection and disposal of specified types of wastes and the licensing of specified waste treatment and disposal facilities. The government is formulating further amendments to the ordinance in an attempt to strengthen the control over the collection, transport and disposal of all types of wastes, to extend the licensing requirement to all major waste treatment and disposal facilities operated by both public and private sectors, and to set out the requirements for the packaging, labelling, storage, collection, treatment and disposal of chemical wastes.

The control of dumping of dredged marine spoils or excavated materials unsuitable for reclamation purposes relies on a licensing system. The provisions of the Dumping at Sea Act 1974 (Overseas Territories) Order 1985 empowers the EPD to issue licences in this respect. There is a Merchant Shipping (Prevention and Control of Pollution) Ordinance, enacted in 1990, to protect the marine environment from discharges of oil, noxious liquids and other wastes from ships.

In addition to formulating a long-term plan for waste disposal, the government has embarked on drawing up measures for arresting, if not reducing, the waste load generated and encouraging the recovery and recycling of wastes.

Air pollution control policy and ordinance

The government's policy objectives for air quality, according to the 1989 White Paper on pollution are as follows:

(1) to control air pollution in Hong Kong with the aim of protecting the well-being of the community;
(2) to ensure that the minimum standards set out for various pollutants are complied with;
(3) to control air pollution through the implementation of the Air

Pollution Control Ordinance provisions and through land use planning measures.

The Air Pollution Control Ordinance (APCO) was enacted in 1983 to control air pollution caused by industrial undertakings and stationary sources. APCO contains a provision for the Governor-in-Council to declare air control zones, which normally happens after consultation with the Environmental Pollution Advisory Committee. Altogether, ten air control zones, covering the whole territory of Hong Kong, have been established. Air quality objectives have been identified for all the zones. The ordinance also empowers the EPD to issue notices in cases requiring the abatement of air pollutant nuisances, the prohibition of the use of high-sulphur heavy fuel oil, modification or repair of chimneys or relevant plants, etc.

The ordinance also has provisions for regulating pollution problems generated by uses other than stationary sources and industrial establishments. The Air Pollution Control (Fuel Restriction) Regulations enacted in January 1989 govern the use of sulphur-containing fuel. The new regulations implemented in July 1990 represent the government's attempt to improve the territory's air quality by limiting the sulphur content of liquid fuel to 0.5% by weight while allowing Sha Tin to continue using only gaseous fuels due to its topographical constraints.

For industrial undertakings which may give rise to serious air pollution, classified as 'specified processes', the government resorts to a licensing system created by the Air Pollution Control (Specified Processes) Regulations enacted in October 1987.

Other complementary regulations include: the Air Pollution Control (Smoke) Regulations, to restrict dark smoke emission from stationary combustion sources, the Air Pollution Control (Finance, Ovens and Chimneys) (Installation and Alternation) Regulations and the Ozone Layer Protection Ordinance.

Noise control policy and ordinance

The following are the government's policy objectives on noise control, as specified on the 1989 White Paper on pollution:

(1) to control specific noise sources under the provisions of the Noise Control Ordinance;

(2) to set out noise standards in the environment chapter of the ***Hong Kong Planning Standards and Guidelines***, which serve as a reference for planning against noise;

(3) to give due consideration to the noise factor in planning the government's development projects and in preparing outline zoning and development plans.

The Noise Control Ordinance was enacted in 1988 and its main provisions concerning construction, industrial and neighbourhood noise control were implemented in stages in 1989. The control of noise generated by powered mechanical equipment used in general construction work is administered through a noise permit system. The permit, issued by the EPD, may specify the number and type of equipment employed and, if appropriate, may require the employment of silenced equipment and noise reduction measures.

The ordinance provisions empower the EPD to issue noise abatement notices to industrial, commercial, trade or business establishments if required. Control of noise generated in domestic premises and public places rests with the police.

The provision of facilities for waste disposal and treatment

The government obviously realizes that pollution cannot be controlled merely by legislation so it has recently prepared a series of plans concerning waste disposal and treatment and has launched a number of projects in this regard.

The Waste Disposal Plan endorsed by the Governor-in-Council in 1989 comprises two elements: a territorial waste disposal strategy and a programme to replace old facilities by new provisions. As part of the plan, large-capacity landfills are being constructed with a view to accommodating the territory's demand for disposal facilities over the next 20 years.

The sewage disposal strategy and the sewerage master plans were formulated to redress the existing problems arising from the collection and disposal of sewage. The design and construction works of several municipal treatment and disposal projects are well under way.

Other government projects include:

(1) the construction of the sludge pumping, temporary holding facilities, and sludge disposal vessels under the marine disposal of sludges scheme;

(2) the replacement of the existing poorly located incinerators, which cause serious air pollution, by new transfer stations;

(3) the development of a chemical waste treatment centre with the aim of tackling the problems caused by non-discriminating disposal of chemical wastes with municipal wastes, and disposal of chemical wastes without treatment;

(4) the provision of incinerators for clinical wastes.

Monitoring and investigations

Associated with the introduction of various pieces of environment legislation is the development of a relatively comprehensive monitoring programme. Environmental monitoring and investigation perform an important

role in providing an objective basis for policy development and necessary information for policy and programme assessment.

The EPD has initiated a substantial monitoring programme with monitoring stations being operated at sea, on beaches, and in rivers and streams. The data collected are used to assess water quality against the stipulated quality objectives and to detect the severity of water pollution in various bodies of water. In addition to the monitoring stations, investigations are carried out upon receipt of complaints, by means of which pollution sources are located.

The occurrences of waste are surveyed on a bi-annual basis with the aim of providing a basis for planning disposal facilities to meet future demand.

Air quality throughout the territory is being monitored by a network of fixed monitoring stations. The EPD operates a central computer for processing and reports air quality measurements recorded at the remote stations. Other measures include short-term air quality studies, territory-wide screening tests for indoor radon levels, the installation of a mobile stack emission monitoring laboratory, and the development of a computerized enforcement management system.

Public education and awareness

It was not until the late 1980s that the government realized the importance of environmental education and that an environmentally aware and well-informed community would contribute to the development of a better environment.

The government's environmental education objectives are:

(1) to make the public aware of their responsibilities in creating and maintaining a healthy and pleasant environment;

(2) to develop a well informed, environmentally aware and responsible community through the formal education system;

(3) to promote the awareness of the professionals concerned with development and decision-makers of the implications of their decisions on the environment and the well-being of the community.

Environmental education is provided for the public in various forms, including:

(1) running publicity campaigns in the form of posters, pamphlets and television programmes;

(2) undertaking activities on World Environment Day (5 June) every year to promote the public's awareness;

(3) interviews and talks given by government staff to the media, schools, colleges and community groups;

(4) environmental education packages for all secondary schools;
(5) the incorporation of environmental education into school curricula at various levels, from primary to tertiary;
(6) promoting environmental education in schools through various social service activities and the community youth club scheme;
(7) organizing short refresher courses and seminars on environmental education for in-service teachers by the Education Department;
(8) providing financial support to teachers for designing and developing environmental education projects through the school-based curriculum project scheme;
(9) offering financial support to organizations providing environmental education;
(10) establishing an environmental information centre, where information and teaching resource materials are made available to educational, professional and community groups.

Conclusions

Environmental problems have persisted in Hong Kong for over a century; with the transformation of the territory's economic structure, the nature of the problems has changed. This is manifested in the ordinances introduced. There has also been a change in the government's attitude towards the environment from the previously negative and fire-fighting attitude to today's positive and preventive attitude. Four ordinances have been enacted and more resources are now made available for environmental education. Yet, there is still much left to do.

The current system makes no provision for public participation. The government's consultation is very limited, mainly being confined to the Environmental Pollution Advisory Committee, which is composed of a small group of the elite. Details and studies of environmental issues are normally not released to the public and they are only discussed at the legislative and executive councils. The public's opinions and interests may be channelled through the districts boards, but it is nonetheless one-way traffic.

The responsibilities of environmental protection are still fragmented among government departments, and the enforcement of environmental ordinances has been delayed because of the slow formulation of regulations. This is largely attributed to the overwhelming representation of industrial and commercial interests on the two decision-making Councils. Within such a context, it is perhaps not surprising that environmental considerations are still often relegated to a lower position on the agenda.

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Chapter 4

The Politicization of the Environment

Hung Wing Tat

Introduction

Concern for the environment has, for some years, been seen by the public as the business of the rich in Hong Kong. Employment and housing were the basic concerns in the early days, perhaps because of the low educational level of many Hong Kong people.

The first voluntary group dedicated to environmental concerns was the Conservancy Association. When it was formed in 1968, nearly all its members were expatriates or well-educated locals who had returned from abroad. Although the concerns of the Association affected a large number of people, it did not arouse much of a public response. The first issue publicized by the Association concerned the river water pollution caused by the tannery factories in Sheung Shui. The Association suggested that the government should relocate these factories to Tsuen Wan and install a proper treatment plant. The government accepted the suggestion and relocation took place without consultation. There were no significant complaints from either the public or industrialists.

Over the years, a number of important environmental issues have arisen such as a nuclear plant proposal by the power companies in 1979 and the night flights proposal by the Civil Aviation Department in the early 1980s. Apart from opposition from the Conservancy Association and a number of residents, these issues have not generally been a central topic of discussion in the Hong Kong community.

One of the characteristics of Hong Kong people has been their apolitical stance on many issues. This may be the result of over one hundred years of colonial administration coupled with the Confucian Chinese culture. The concept of 'not in the position, not give a thought to it' has been entrenched in the minds of Chinese locals. Rulers in the past were vested with the trust of the people to make all decisions concerning public affairs. This situation lasted for over 140 years until the Hong Kong people were forced to be concerned with politics in the early 1980s. The 1997 issue was put on the agenda for discussions between the governments of Britain and China. 'Hong Kong people rule Hong Kong' was

the aspiration and the slogan used to describe the Sino-British Joint Declaration on Hong Kong signed by the two governments in 1984.

The 1997 issue forced the colonial government of Hong Kong to become more open to the public and thus gave a lot of room for those interested in politics to participate in and influence the administration. These new politicians in Hong Kong are mostly second-generation born in Hong Kong and they have been educated in Hong Kong or abroad. They are influenced by Western culture and think differently from their fathers and grandfathers. They feel strongly that Hong Kong people should rule Hong Kong.

The Hong Kong government started its programme to set up a more representative governmental system in 1981, when the White paper on local administration was published. The first district board elections were held in 1982. Large-scale direct elections for the Urban Council started in 1986. The first direct elections for the Legislative Council took place in 1991. Politicians and politicals parties emerged. Political activities, especially canvassing during elections, roused the Hong Kong people to show concern about their own well-being.

Against this historical background, and with the rapid deterioration of the environment which affects more and more people, environmental issues have become more and more political. They are now one of the major concerns of all political parties and politicians. The Chernobyl nuclear power Plant diasaster in the USSR on 26 April 1986 expedited this politicization process.

The Daya Bay nuclear power plant issue

This was probably the first environmental issue that turned out to be very political in the history of Hong Kong. Over a million Hong Kong people signed a petition to the Beijing government to protest against the Daya Bay nuclear power plant being planned and built.

Daya Bay is situated about 50 kilometres to the north-east of Hong Kong. The nuclear plant being constructed consists of two 900 MW pressurized water reactors. There are several reasons for locating the plant there: (a) the whole of southern China has a severe shortage of power, which is a great constraint on economic growth; every effort is being exerted to generate more power, so there is always a will to construct power plants; (b) there is not much coal in Guangdong Province and other power resources have to be explored; nuclear power is seen as one of the best potential power resources; (c) the China Light and Power Company of Hong Kong forecasts that Hong Kong will need more energy to substain its economic growth in the 1990s; as it is becoming more and more difficult to find land to construct a new plant in Hong Kong, the company is willing to invest in China to develop a plant not far away from the border, with the intention of buying back a significant proportion of the power generated.

The China Light and Power and the Guangdong authorities soon enjoyed a cosy relationship. They agreed to develop jointly a nuclear power plant at Daya Bay. The decision was made in 1983 although it has been under discussion for some time. Not many Hong Kong people were aware of this news. Of course, the Conservancy Association expressed its reservations about this plant. The public did not pay attention to the Daya Bay nuclear plant until the disastrous accident at Chernobyl in April 1986. Environmental groups, i.e. the Conservancy Association and the Friends of the Earth, when interviewed by the mass media on the environmental effects of the accident, soon drew the connection with the concerns expressed about the power plant across the border. The whole community was suddenly alerted to the existence of this proposed plant. Many questions concerning safety measures and the management of the plant were raised. China Light and Power and the Economic Services Branch of the Hong Kong government, which supervises the power companies, soon found themselves at the centre of a major controversy.

The initial questions raised were technical and academic. What type of nuclear reactors would be installed at Daya Bay? Would they be the same as those at Chernobyl? Would the design be adequate to contain major accidents as serious as the one at Chernobyl? Would the Chinese authorities have sufficient well-trained staff to manage the plant and guarantee no human error that might initiate accidents?

From May to July 1986, every relevant authority in both Hong Kong and China tried to answer these questions. The Governor of Hong Kong said that the government would try to obtain more information concerning safety measures at the Daya Bay nuclear plant. The Secretary for Economic Services said that the Daya Bay plant met international safety standards. Sir S.Y. Chung, the then Senior Executive Councillor, said that the protective shield of the plant was strong enough to withstand the collision of even a jumbo jet. Lydia Dunn said that nobody had objected to the plant three years earlier when the government gave its approval. The then Chinese deputy premier, Li Peng, said that safety was one of the most important criteria in designing the plant and China would pay attention to that; China would not change its construction plan.

Despite all these assurances, the people of Hong Kong were not convinced. On 4 July 1986, the Legislative Council decided to send two fact-finding delegations on nuclear power to the United States, Japan and Europe, especially France, because the Daya Bay nuclear unit was of French design, to investigate the safety aspects of nuclear power plants. The fact-finding report issued in September 1986 basically confirmed that the proposed plant at Daya Bay would be safe. Although a number of accidents had occurred in similar plants, the causes of the accidents had been ascertained and there was very little risk that a similar accident could occur at Daya Bay.

However, opposition pressure to the Daya Bay nuclear plant was mounting in Hong Kong. A number of concerned groups came together to form an ad hoc group named 'The Joint Conference for the Shelving of the Daya Bay Nuclear Plant'. The group organized the 'Sign Up Against Daya Bay Nuclear Plant' campaign. Over one million signatures were collected and the petition was submitted to the Chinese government in September 1986. In response to this, the Chinese government held a large-scale nuclear usage exhibition in Hong Kong to demonstrate to Hong Kong people that the plant would be safe. A consultative committee to monitor the safety of the Daya Bay nuclear plant was also subsequently formed. All committee members were appointed by the Chinese government. The attitudes of the governments of Hong Kong and China were quite consistent. They had no intention of altering the construction programme for the nuclear plant. From the start, the Governor of Hong Kong made it clear that information about the plant safety measures would be made known to the Hong Kong public. The Legislative Council and the various officials of Hong Kong and China all talked about this point only. The exhibition and the Consultative Committee merely served the purpose of information flow. They had no influence whatever on the major decisions concerning the plant such as its location or its construction programme.

Hong Kong people are not stupid. Over a million (almost 20% of the population) signed the petition and they obviously did not believe that either the Chinese or the Hong Kong authorities were sincere in consulting or genuinely informing the local population. The fact that not one alteration was made to the construction programme demonstrated that neither authority respected public opinion.

Calls for genuine consultation and democracy emerged as the main objective of the opposition campaign. This environmental event turned out to be very political indeed.

Rapid environmental deterioration and a slow government response

The Daya Bay nuclear plant issue represents a milestone in the process of the politicization of the environment in Hong Kong. This process, however, would not have progressed so fast if the environment of Hong Kong had not deteriorated so badly. Pollution has been building up for years. From 1987 onwards, various environmental incidents were brought to the public's attention. Students in various schools were irritated by unidentified poisonous gases and had to be admitted to hospital. Hundreds of residents, having eaten vegetables bought from local markets, felt uncomfortable and were confirmed to have food poisoning from pesticides. Hazardous asbestos was discovered in the parapet walls of hundreds of public housing estates in 1988. The worst event of all was the occurrence of poisonous 'red-tide' algae in Hong Kong waters. The government

had to close a number of public beaches.

Government reacted reluctantly and slowly to this situation. Sir Philip Haddon-Cave, formerly Financial Secretary (1971-82) and Chief Secretary (1981-87) summarized the government's philosophy for administering Hong Kong:

> It is preferable to describe our attitude to the economy as one of positive non-interventionism: this involves taking the view that, in the great majority of circumstances, it is futile and damaging to the growth rate of the economy for attempts to be made to plan the allocation of resources available to the private sector and to frustrate the operation of market forces which, in an open economy, are difficult enough to predict, let alone to control.

In other words, planning and control are not the policy pursued by the government. It is rather the contrary. The government adopts a non-interventionist posture and provides essentially a stable legal and institutional framework for private enterprises and initiatives to develop and prosper. Unfortunately, the by-product of private industrial development is large-scale pollution, which can only be mediated by strong planning and control.

Following the Joint Convention of the United Nations Conference on Human Environment, held at Stockholm, Sweden, in 1972, the Hong Kong government, under the influence of the British government, which was one of the signatory countries, started to study the local environmental situation. A consultant was commissioned in 1974 to look at what could be done about the Hong Kong environment. The appendix to this chapter summarizes the progress throughout the years.

There are a number of policy elements available for the Hong Kong government to combat pollution and protect the environment.

Land use planning

The legislative instruments available over the years are the Country Park Ordinance 1973 (CPO) and the Town Planning Ordinance 1939 (TPO). The CPO empowers the authority to designate important natural reserve areas and areas of special scientific interest to be country parks. Within the country parks, no development is allowed unless special permission is granted by the Governor-in-Council. No environmental considerations were apparent in the TPO until 1985, when a chapter on the environment was added to the ***Hong Kong Planning Standards and Guidelines*** under the auspices of the TPO. The environment chapter is, however, simply a collection of the various current pollution control ordinances. It acts as a reminder to the town planners to abide by the law.

Land use control

The Government has the right to impose conditions on land leases for new development or redevelopment projects or rejection of building plans if such plans contravene the provisions of a statutory plan under the Buildings Ordinance. The inclusion of environmental protection conditions in these leases is the most effective way to deter potential pollution. However, these conditions can be subjective, impulsive, inflexible and inequitable.

Control of polluting activities

These control measures consist largely of licensing and penalty elements. Pollutors are licensed to emit a threshold level of pollutants but will be punished if the threshold is exceeded. All the four main environmental ordinances, i.e. the Water Pollution Control Ordinance, the Solid Waste Control Ordinance, the Air Pollution Control Ordinance, and the Noise Control Ordinance, employ this same principle.

Voluntary regulation

This may be carried out through public education and codes of practice.

Provision of reception and disposal facilities

These facilities include sewerage and sewage disposal systems, refuse transfer stations and landfills, treatment plants, etc. Billions of Hong Kong dollars are earmarked for the provision of these facilities. This fact has been quoted again and again to demonstrate government sincerity in protecting the environment in recent years.

Nevertheless, many of these control policies have not however been effectively implemented. It is often seems that the government is taking a half-hearted approach to dealing with pollution. The crucial underlying factor is that no relationship has been drawn between economic growth, development and the environment. Environmental protection work is simply treated as clearance of the debris and waste produced by other activities. All the efforts and investments in protecting the environment have been erased by resource-consuming and waste-producing economic growth and development over the years.

Politicization of the environment

The slow reaction of the government to protect the environment has been influenced by a strong industrial and commercial lobby within the colonial government. Before 1980, this lobbying was very effective, at a time when no public participation was allowed in government policy formulation. Government policies are initiated by adminstrators and passed by various government-appointed advisory committees. The commercial and industrial sectors are usually

well represented in all important committees, such as the Land Policy Committee, the Town Planning Board and the Economic Policy Committee. Even such small committee as the Environmental Pollution Advisory Committee has a strong bias towards these polluters.

Unfortunately, the majority of people in the industrial and commercial sectors in Hong Kong have a very short-sighted and self-centred view towards economic development. They do not see that they have a responsibility to limit their use of the world's scarce resources or their emissions which erode the earth's capability of self-cleansing. Sustainable development is simply not in their daily vocabulary.

The politics of environment were very simple until the 1980s. All politics were internalized within the government structure. The people were apolitical. There were no political parties or politicians. A policy could be adopted or rejected if the chief policy administrator (i.e. the Secretary for the Environment in the case of environmental policy) was persuaded.

This closed policy consultation process started to change when the 1997 issue emerged in the early 1980s. The Sino-British Joint Declaration signed in 1984 had a tremendous impact on the Hong Kong administration. The Hong Kong government became more open; it started to convert itself to a representative government by the establishment of the district boards in 1982. Large-scale direct elections were introduced in the 1985 and 1986 district board and Urban and Regional Council elections. Direct elections were first introduced in the Legislative Council in 1991.

Environmental concerns have been written explicitly in the terms of reference of the district boards and Urban and Regional Councils. In fact, environmental issues are one of the territory's major concerns, together with housing. These issues were included in the political platforms of the political groups and politicians who emerged during the election campaigns.

Environmental issues which used to be settled behind closed-doors were introduced to the public through open discussion in the district boards and in the Urban, Regional and Legislative Councils. Occasionally, political groups take these issues onto the street through demonstrations and petitions. The 'Tsing Yi Concern Group' has done this. The recent demonstration opposing the construction of the Container Terminal 9 project adjacent to Tsing Yi Island is a typical example. This group has been pressing the government to relocate hazardous facilities, including the oil depot and chemical plants on the island, since its establishment in 1983. Tackling these problems seems to be a vote-winner. Activists within this group have been elected to district boards and Urban Councils. A similar phenomenon has been observed in other districts throughout the territory.

The politicization of the environment reached a climax in the campaign

against the construction of Daya Bay nuclear plant across the border. Large-scale public participation was involved probably because (a) a politicization process was taking place in Hong Kong and (b) public participation was suppressed during the negotiation of the Sino-British Joint Declaration which determined the future of Hong Kong. This situation created a time-bomb. The time-bomb has now exploded and Hong Kong people have become more vocal than ever before on issues affecting their welfare, including issues of environmental quality.

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Appendix 1

Legislative and Related Events Concerning Environmental Control: 1974-1990

1974 Formation of the Advisory Committee on Environmental Pollution (EPCOM). The whole territory became a smoke control area. Environmental Resources Ltd. (ERL) was commissioned to undertake a comprehensive investigation into the growing need for environmental control in Hong Kong.

1975 Merchant shipping (Oil Pollution) Ordinance made oil pollution liability insurance mandatory for all cargo-carrying vessels.

1976 Public Health and Urban Services (Minor Amendments) Ordinance prescribed acceptable levels of air conditioner noise. Factories and Industrial Undertakings Ordinance regulated permissible noise levels. The establishment of the Environmental Protection Unit (EPU), within the Environmental Branch (based on ERL's preliminary report), as a small unit responsible for developing policy and formulating legislation on environmental protection.

1977 Ban on aircraft movements between midnight and 6:30 a.m.; ERL completed study and submitted proposed noise abatement, waste disposal, water pollution control, air pollution control and environmental impact ordinances.

1978 Summary Offences (Night Work) Ordinance put limits on night-time construction work noise. The government replaced the 1974 Advisory Committee on Environmental Pollution with an Environmental Protection Advisory Committee.

1980 Water Pollution Control Ordinance introduced water control zones. Enactment of the Waste Disposal Ordinance provided statutory powers over waste collection and disposal for the relevant authorities.

1981 EPU was detached from the Government Secretariat to form the Environmental Protection Agency (EPA). The Environment Branch was dissolved. EPA was supervised by the Home Affairs Branch.

1982 Tolo Harbour was declared the first Water Control Zone (WCZ); EPA was transferred under the Health and Social Welfare Branch.

1983 Air Pollution Control Ordinance (APCO) introduced air control zones and air quality objectives in respect of these zones. These are enforced

by the Air Pollution Control Division (APCD) of the Labour Department.

1984 The Environmental Pollution Advisory Committee was reconstituted.

1985 Draft water pollution control regulations under public consultation.

1986 EPA was restructured to EPD so as to centralize all pollution control units within the government. Water pollution control legislation passed in the Legislative Council.

1987 First Appointed Day was announced for Tolo Harbour.

1988 Southern WCZ was announced. Sewerage master plans and the livestock waste control scheme were implemented. The Noise Control Ordinance was enacted. EPD was transferred to the newly established Planning, Environment and Lands Branch.

1989 ***White Paper on Pollution: A Time to Act*** was published. Port Shelter and Junk Bay WCZs were announced. A waste disposal plan was published. A sewage disposal strategy was adopted. The Ozone Layer Protection Ordinance (1989) was enacted.

1990 Deep Bay and Mirs Bay were declared WCZs. The first refuse transfer station at Kowloon Bay became operational. Lai Chi Kok incinerator and Jordan Valley landfill were phased out. The Environmental Campaign Committee was established and the first Environmental Festival was launched.

Chapter 5

The Role of District Boards in Community-based Environmental Management

Hung Wing Tat

Introduction

In the district administration White Paper of 1981, which proposed the establishment of district boards, it is clearly stated that the district board is a means of guaranteeing that the future administration of Hong Kong (i.e. after 1997) will be firmly rooted locally. The district board, although acting only as an advisory body, was the first elected council in the history of Hong Kong. There are now 19 district boards across the territory, each serving a population of about 300,000.

Before the formation of the district boards, there were numerous active pressure groups and sectoral interests within the community. These groups acted as an almost permanent opposition to the then Hong Kong government. They usually took matters onto the streets and demonstrated outside government offices. Sit-ins and demonstrations were commonly-used tactics. The district board has effectively absorbed these organizations or their activists into the administration and thus internalized conflicts.

As elections have been introduced for higher level decision-making bodies, i.e., the Urban Council, the Regional Council and the Legislative Council, political opinions and complaints in the community can now be channelled and acted upon by elected representatives within the structure of government.

The district board, at the lowest level of this current representative administrative system, has the following functions as defined by the District Boards Ordinance:

(a) To advise the Government:
    (i) on matters affecting the well-being of the people in the district;
    (ii) on the provision and use of public facilities and services within the district;
    (iii) on the adequacy and priorities of government programmes for the district, and the effectiveness of existing controls;

(iv) on the use of public funds allocated to the district for local public works and community activities.

(b) Where funds are made available for the purpose, to undertake
  (i) environmental improvements within the district;
  (ii) promote recreational and cultural activities within the district.

It is clear that the district board does have an important role to play as far as local matters, especially environmental issues, are concerned. Examples from the Central and Western District Board will be used to analyse the district board's role in environmental management in Hong Kong.

Role in community-based environmental management

From its terms of reference, the district board is not to look after the welfare of the natural environment but rather the well-being of the people who would like to enjoy a good environment. The district board, therefore, only looks after the environment where the well-being of people is concerned. Indeed, the majority of district board members are not genuine nature lovers. The

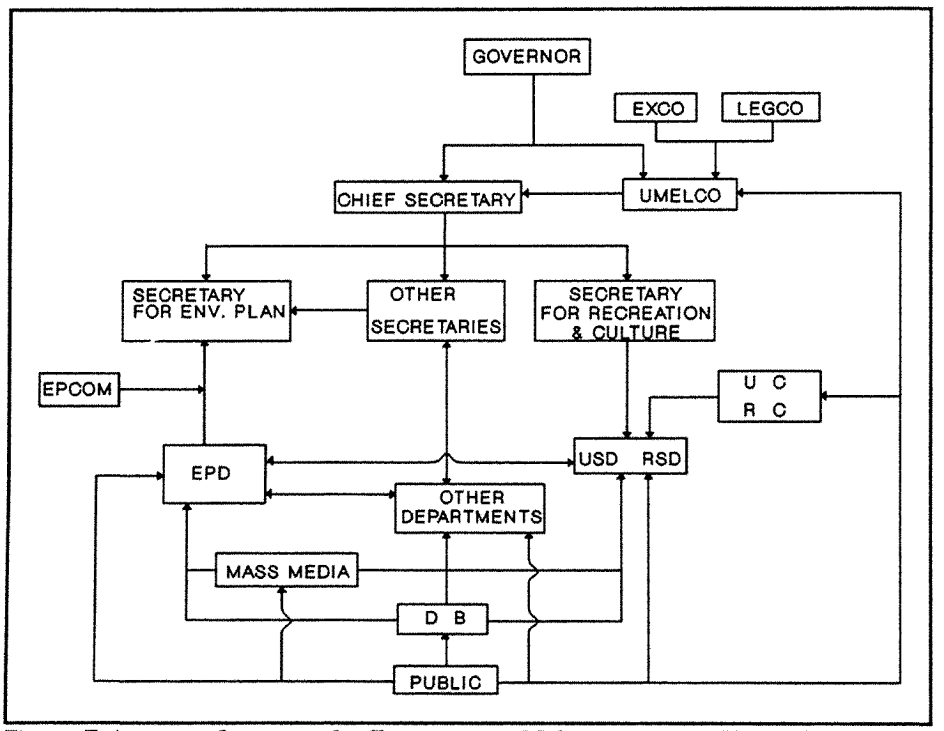

Figure 5.1 Structure for Environmental Management in Hong Kong

boundary of the environment under discussion is limited to the urban physical environment which affects the well-being of the residents.

To understand the role of the district board in community environmental management, it is useful, first of all, to gain a comprehensive view of environmental management in Hong Kong. The organizational system for environmental management is illustrated in Figure 5.1.

The Environmental Protection Department (EPD) and the Urban and Regional Service Departments (USD/RSD) are the major government bodies responsible for looking after the urban environment. The EPD combats pollution through:

(a) planning and environmental impact assessment;
(b) drafting and enforcing legislation to control the emission of pollutants into the environment;
(c) implementing a programme of pollution monitoring to check on the effectiveness of existing controls;
(d) formulating capital projects to provide collection, reception, treatment and disposal facilities for pollutants.

The USD and RSD are responsible for providing recreational facilities, including parks and sitting-out areas, street trees and waste collection services. These executive departments are overseen by their respective policy-making bodies headed by secretaries: EPD under the Secretary for Environment, Planning and Lands and USD/RSD under the Secretary for Recreation and Culture. These Secretaries are overseen by the Chief Secretary and subsequently by the Governor.

The district boards, Urban, Regional and Legislative Councils are partially elected bodies advising the government at different levels. The Environmental Pollution Advisory Committee is a Governor-appointed advisory body on environmental matters.

Public comment on environmental pollution can be directed straight to the relevant government departments or can be channelled to the Administration through these elected bodies for appropriate action. On the other hand, the government may consult the public on matters including environmental policies through the elected bodies.

Decisions and judgements on public opinions relating to environmental matters may be made at the departmental level or the policy branch level depending on the size of population these decisions might affect or the existence of relevant policies. The district board has substantial influence at the departmental level on local matters but less influence on territorial matters.

The district board has four ways of tackling local environmental problems. First, it can advise the government to carry out certain environmental protection and pollution abatement programmes. For example, to stop people from

destroying the natural hill slopes and causing hazards to morning walkers, the Central and Western District Board advised the government to include the Lung Fu Shan area as a country park which would then be properly managed by the Agricultural and Fisheries Department. This proposal has been accepted by the government and is to be implemented in the 1992/93 fiscal year.

Secondly, the district board can bridge the communication gap between the private and public sectors. For example, the Central and Western District Board negotiated with the owners' corporations of the Whitty Street compound (18 buildings altogether) to relinquish a piece of land in the middle of their compound to the government so that environmental improvement work could be carried out there. Thirdly, it can finance small environmental improvement projects from the annual fund allotted to it by the government, for example, building a small sitting-out area. Fourthly, it can initiate and finance community educational programmes to request the public to exercise self-restraint and stop polluting the environment.

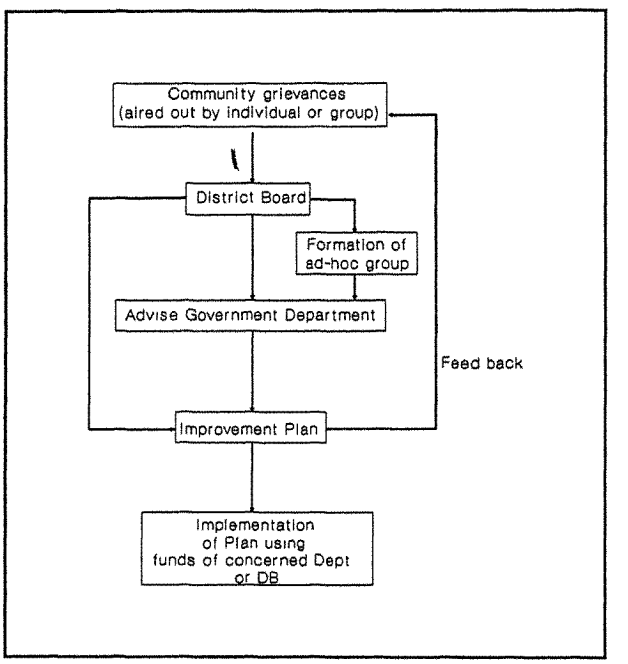

Figure 5.2 Pathway of District Board response to grievances

A typical working mechanism of the district board in response to community grievances is demonstrated in Figure 5.2. Nearly all district boards are working on complaints where environmental affairs are concerned. When a complaint is received, either through an individual or an organized interested

group, the district board will discuss the matter in its meeting. Pressure for improvement will be exerted on the concerned government departments. If the matter is simple and the department is able to make a promise to eradicate the problem, the solution will be fed back to the complainant and the issue will be settled immediately to the satisfaction of the complainant. In more difficult cases, the issue will have to be followed up at a number of meetings, or an ad hoc committee under the district board will be formed.

An accepted improvement plan has to be agreed among all the parties concerned: the complainant, all governmental departments and other affected parties (if any). This improvement plan may be implemented by the concerned department(s) or the district board if it is small-scale and there is no appropriate department to take the matter up.

The district board effectively bridges the gap between government departments on local environmental issues. These issues may be considered minor or may fall into the 'grey area' of different authorities. There are a vast number of examples of this type. For instance, where an access road partly falls on crown land and partly on private land with multiple ownership, maintenance of the road surface or underground utilities would involve several parties such as the private owners, the Lands Department, the Highways Department, the Transport Department and/or the police, etc. The district board works as an arbitrator to draw all the parties together to settle the problem. The solution may involve working outside the 'rule book' of the government department(s).

Tackling district environmental problems

The 19 district boards have their individual environmental problems and typical examples are quoted in the appendix to this chapter. As discussed above, there are four ways that the district boards may take to tackle these problems: (a) to pressurize the government to take action, (b) to bridge the gap between the private and public sectors, (c) to finance small-scale environmental improvement projects, and (d) to finance community educational programmes. Each type of action is examined in greater detail with examples from the Central and Western District Board.

The refuse incinerator and the animal crematorium: pressurizing government

Some 30 years ago, Kennedy Town was still a remote area, with only a few villages and a sparsely distributed population of a few thousand. Because of its strategic location on Hong Kong island, the government decided to put nearly all supporting facilities at the west end of the island: the wholesale markets for vegetables, livestock, fish etc., as well as godowns for rice, sugar, cooking oil etc., are all situated in Kennedy Town. Two offensive installations, i.e. the refuse incinerator and an animal crematorium are among these facilities.

There were local objections to these two installations from the day the government decided to locate them there. The Chairman of the Sai Wan Kaifong Association, a local community organization, recalls that throughout the years of operation of these facilities much illness has been reported within the vicinity. In October 1986, the Central and Western Development Research Centre carried out a lung function test and a health survey of residents of Kennedy Town. Doctors and nurses offered to help: the lung function ability of 128 residents was tested. In addition, 417 valid questionnaire returns were obtained. The results of the tests showed that male residents exhibited on average a 100 l/min. lower lung function ability than the norm and women a lung function ability some 80 l/min. lower than the standard rate. The lung functional ability of Kennedy Town residents was on average 30% lower than the norm.

These two offensive installations have also been the concern of the Kennedy Town Environmental Concern Group. Complaints about pollution have long existed in the community, as reflected by petitions and demonstrations organized by this local concerned group. The Central and Western District Board started pursuing this matter in 1985 and the Environmental Protection Agency was asked to look into the health effects caused by emissions from these facilities. It was obvious that the emissions from the chimney of the animal crematorium were causing a nuisance and health problems to nearby residents. Because the chimney was short, only about 10m high, it was recommended that an after-burner should be installed to reduce the pungent smell. Installation work was completed in late 1987.

In relation to the incinerator, the EPA answered in November 1986 that 'a sampling exercise was carried out at Kennedy Town Incinerator to check on the level of emission of gaseous pollutants...taking the dilution of chimney emission of Kennedy Town Incinerator into account the levels of emission are considered to be low and there is no need for health concern.' The district board was not convinced and a working group was formed to follow up the matter and further study the emission problems at the Kennedy Town incinerator and abattoir (the animal crematorium is attached to the abattoir) in November 1986. Two academics from the Baptist College and the University of Hong Kong were employed to look into the problems and a study report was compiled in March 1988. The report recognized the pollution and its effect on the health of nearby residents. Nine recommendations involving the installation of new equipment and practicing good housekeeping were made. The district board accepted the report and urged concerned government departments to follow up the recommendations. It further requested the government to relocate these facilities as a long-term solution.

In response to the demands of the district board, all concerned departments replied that they would try every possible means, including the

district board's recommendations, to reduce pollution. In the first 'District Environmental Statement' in 1988, the EPD promised to decommission the incinerator in the financial year 1991/92 (now delayed to 1992/93) and to establish a centralized incineration facility to replace the Kennedy Town animal crematorium; the location of the new facility was not confirmed.

This case illustrates a typical district board formula for pressurizing government departments to take remedial action to improve the environment. The district board, representing the local community, effectively brought the concerned authorities together, face to face, to negotiate a workable solution to the problems. The district board successfully brought in experts when the government, armed with its experts, refused to meet residents' reasonable demands. In fact, drawing in experts is a useful tactic for all district boards. In this case, it needed not only tactics but the time and stamina of the district board.

Hing Hon Road open sewer: linking private and public sectors

According to the District Board Ordinance, the role of the district board is to advise the government but it is difficult in theory for the district board to function where private rights are concerned. Hing Hon Road is a street adjacent to a privately owned housing block. There was an open channel by the side of this building. The channel should be a storm water drain rather than a drain for raw domestic sewage, but for some unknown reason, it was turned into an open sewer and was very smelly, especially in the summer.

Residents in the area had complained about the bad smell for years and asked the government to cover this sewer but nothing was done. The Central and Western District Board took up the case in 1987. The EPD was requested to find the source of pollution and the Lands Department was asked to check the ownership of the sewer. The pollution was actually caused by a discharge from illegal connections of the nearby buildings and the sewer was located on private land. The EPD could, of course, issue abatement orders to owners of these illegal connections but, unfortunately, it was very difficult to find out who the owner was. The only practical solution was to cover the sewer and redirect the illegal connections.

The government could not do this because the sewer was on private land! The land is in multiple ownership and because of the complexity of the situation, no government department was willing to sort it out. The district board therefore negotiated with the owners' corporations and requested them to relinquish this piece of land to the government if they wanted to see this problem solved and enjoy a better environment. They finally agreed. The open sewer was covered. The process took about three years. This case shows clearly how the district board bridged the 'no decision' gap among government departments. The covering of the sewer was a minor operation, but no department was willing to

exert much effort to overcome the obstacles to do it though it was a source of constant complaint. The district board worked out a way through the problem and was successful in this case.

The cattle depot: pressurizing government and using district board funds

The cattle depot was situated about half a kilometre from the abattoir in Kennedy Town. It served as a temporary holding area for cattle to be slaughtered in the abattoir. The area was remote when the depot was built. Owing to failures of landuse planning in the early years, residential buildings were allowed to be constructed surrounding the depot, which soon became a source of complaints.

The district board took up the case in early 1985. Pressure was put on the Agricultural and Fisheries Department to relocate the depot. The area around the depot was densely built up and traffic on adjacent roads was heavy and it was, in fact, quite inconvenient for the Department to bring cattle across to the abattoir every-day. The Department therefore decided to accommodate the cattle back in the abattoir and work without a depot. It took nearly two years for the removal operation.

Knowing that the depot was to go, the district board decided to request the government to put shortfall community facilities there. A government and market complex was then planned but it would only be built in 1993/94. This piece of land would be left vacant for a number of years. The district board further suggested that district board funds should be used to build a temporary children's playground in order to avoid the government putting another temporary offensive installation there and at the same time, satisfy local needs. The suggestion was accepted.

The Department of Architecture of the University of Hong Kong was invited to design this playground and it retains the characteristics of the old cattle depot. The construction work was completed in 1988 and the playground was immediately opened to public. The district board spent HK$400,000 on this project. That was the largest environment improvement project funded by the district board. The playground is now a popular place for children in the local community.

Environmental spots nomination competition: community education funded by the district board

The district board funds numerous local community education projects launched by voluntary agencies. These projects have a variety of themes, environmental protection being one. It also organizes projects of its own when it feels this is appropriate.

The 'ten good and ten bad environmental spots nomination' competition was a self-funded and self-organized project of the Central and Western District Board. Participants were asked to name 20 locations, ten good and ten bad environmentally. The locations which got the most number of votes would be the top ten. Through this type of project, the community is reminded of the need to care for the environment.

Conclusions

District Boards, as focal points of public opinion, have a very important role to play as far as community environmental management is concerned. With the right tactics, they can satisfy, to a certain extent, the local demand for a better environment.

The role of the district boards, however, has not been well established. The success of the district board hinges on a number of factors, including:

Respect for the role of the district boards by government departments

The district board assumes an advisory role by law and the government may not listen to what the district board says. Government departments may not even entertain the ideas of the district board by refusing to send a representative to district board meetings. Even the Environmental Protection Department does not have a constant representative in the Environmental Committee of district boards and it has, on many occasions, delayed answering questions from the district boards and refused to attend their meetings using as an excuse a shortage of manpower.

Good relationships with other elected bodies (Urban and Regional Councils)

The constituencies of the two councils overlap with the district boards. The Urban Council covers ten urban district boards while the Regional Council covers the rest. As such, there is a dual representation on matters under the jurisdiction of the councils. There was a case concerning the construction of a park on the Western reclamation in the Central and Western District in which the district board insisted that the park should be built as soon as possible while the Urban Council ruled that the construction work should be held back because the park would be affected by the Third Harbour Crossing in three years time. There was a serious argument between the Urban Council and the district board in a joint meeting and representatives of the district board stormed out of the meeting.

Resource availability

The annual budget allocated to each district board by the government has been very small, averaging about $5 or $6 per person in each district. Despite

this, the district boards suffered a budgetary cut of 20% in the fiscal year 1991/92. The district boards can do less and less of their own free will. If this trend continues, the functions of the district board will be diminished and they will become merely advisory.

Independence

The secretariat support to the district boards has been provided by the City and New Territories Administration (CNTA). The public inevitably views the district boards as the babies of the CNTA rather than independent bodies. In fact, the district boards do not have full control over their secretariats or budget. The district officers of CNTA are in direct charge of staff in district board secretariats. District boards have no say about the organization or work allocation of the secretariats. The budget allocated to the district board is officially controlled by district officers who also ensure that the money is spent according to the guidelines set by CNTA. If the district boards are going to establish confidence in their functions within the community, the district board secretariat and budget should be controlled directly by them.

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Appendix 1

Typical District Environmental Problems

Central & Western	Smoke and smell generated by an animal crematorium in Kennedy Town.
Eastern	Water pollution at Aldrich Bay Typhoon Shelter caused by 400 vessels moored there and discharge of untreated sewage from the nearby Shau Kei Wan area.
Island	Unpleasant odour at typhoon shelter caused by raw sewage discharge.
Kowloon City	Noise pollution from road traffic, trains, and planes.
Kwai Tsing	Air and noise pollution caused by heavy traffic and nearby industrial area, industrial effluents also pollute the drainage system.
Kwun Tong	Hydrogen sulphide and unpleasant odour emitted from Kowloon Bay Typhoon Shelter because of illegal discharges from domestic dwellings and factories.
Mong Kok	Blockage of sewage drains causing dirty water floods in streets.
North	Livestock waste, sewage and industrial effluents discharges in Beas River and River Indus causing serious pollution.
Sai Kung	Heavy pollution of Ho Chung River caused by discharges of dyestuffs from dyeing factories as well as inadequate water flow.
Sham Shui Po	Accumulation of refuse is an unpleasant eyesore and a breeding ground for rats and insects.
Sha Tin	Noise pollution from the trains and buses and water pollution in Shing Mun River from the Fo Tan industrial area as well as the water treatment plant.
Southern	Water pollution in Aberdeen Typhoon Shelter caused by domestic and industrial discharges.

Tai Po	Accumulation of rubbish and debris in river courses resulting in a deterioration of water quality in these courses as well as Tolo Harbour.
Tsuen Wan	The coastal area of Tsuen Wan has been seriously affected by the discharge of effluents into the nullah. Dyes that include iron, lead and sulphur enter the nullah via five streams and settle quickly to form harmful sediments that adversely affect the ecology of the river and sea.
Tuen Mun	Water pollution in the Tuen Mun nullah caused by discharges of untreated industrial and livestock waste from factories and farms.
Wan Chai	Air pollution caused by paint spraying at car repair workshops, blockage of drains.
Wong Tai Sin	Odour from Chi Lin Stream in Diamond Hill caused by effluent from dyeing factories and domestic refuse dump.
Yau Tsim	Sewage drain blockage causes overflowing of sewage and debris, rain water drain blockage causes flooding, particularly during rainy season.
Yuen Long	Pollution in the 4.8 m four-channel Yuen Long nullah caused by animal waste discharge and illegal connections of domestic and industrial premises.

Chapter 6

Mobilizing Tsing Yi Residents Against Environmental Hazards

Ng Hang Sau

Introduction

In recent years, a number of incidents around the world and in Hong Kong have shown that the populace is living in an increasingly dangerous and unsafe environment. For instance, the inferno at a liquefied petroleum gas distribution centre in Mexico City in November 1984, and the poison gas leak from a pesticide plant in Bhopal, India, in December 1984 are two major foreign examples. These tragic events caused considerable loss of life and suffering; they sharpened the awareness of the public towards these hazardous installations.

In the local community of Tsing Yi, the proximity of housing developments to liquefied petroleum gas (LPG) tanks in several petroleum storage depots aroused the islanders' concern. Some local residents' organizations, most notably the Tsing Yi Concern Group, mobilized local residents in collective campaigns including petitions, sleep-ins, signature campaigns, press conferences, and negotiations with government departments urging the removal of the oil depots.

This chapter summarizes the experiences gained through the mobilization of residents against environmental hazards on Tsing Yi Island. Hopefully, through case-studies of successful experiences, residents will be more aware of their collective ability to pressurize government and multinational enterprises.

Historical development of Tsing Yi Island

For many years, Tsing Yi Island was relatively unimportant in terms of both population and economic activities. Up to the early 1960s, it was virtually deserted; it is separated from the Kowloon peninsula by the Rambler Channel. The population of Tsing Yi consisted principally of fishermen and farmers, who lived in a few villages along the northern coast of the island. The principal means of transport for Tsing Yi residents was a regular ferry service to Tsuen Wan operated by the Yaumati Ferry Company.

The channels which separate Tsing Yi, Ma Wan, and Lantau are an important passage for marine traffic plying between Hong Kong and mainland

China, and for oil tankers. Moreover, because the island is situated at the north-west corner of the harbour and very close to the urban industrial area, it is an ideal place for the storage of hazardous industrial goods, such as oil products and chemicals. Therefore, since the early 1960s, the oil depots in urban areas such as Lai Chi Kok have been moved to Tsing Yi to make way for residential development.

In order to reduce high transportation costs due to lack of road access, the major oil companies and China Light and Power jointly invested in a two-lane bridge across the Rambler Channel linking the island and Kwai Chung. The Tsing Yi bridge was completed in February 1974 and the bridge was then handed over to the Hong Kong government for maintenance and management.

Since the mid-1960s, Tsing Yi has been identified as a centre for hazardous installations and heavy industrial development. However, it was also targeted for new residential development in the 1970s to alleviate the intense shortage of land in urban areas. It was planned that Tsing Yi would accommodate more than 200,000 people by the end of 1992. This produced many environmental problems as the residential areas were close to the industrial sites and there was no safety zone.

When people started moving into Tsing Yi Island, some of them were totally unaware of the potentially dangerous situation created by these oil depots, but some were worried, particularly those living in Mayfair Gardens, which was only 50m away from the Mobil oil depot. The depot consisted of 21 tanks, 15 of which stored liquid products and six LPG; the total storage volume was 121,000 and 3,100m^2 respectively. According to the confidential Hazard Potential Consultancy Report 1982, the release of the LPG could give rise to an intense local fire (forming a fireball), or the gas might spread and subsequently burn as a flash fire, or it might burn explosively giving rise to fires and blast damage.

Apart from the Mobil depot, the existing potentially hazardous installations include five fuel storage sites (three with LPG storage) and two chemical plants, one manufacturing polystyrene from a styrene feedstock (Dow) and the other manufacturing chlorine. Chlorine is not at present stored but is converted to hypochlorite.

In addition, a number of installations are situated along the coastal strip in the southern half of the island. These include a power station, dockyards and various engineering and fabricating establishments. Moreover, the frequent movement of dangerous goods vehicles and the pungent smell of oil products also caused a nuisance to the residents, especially those living in Mayfair Gardens.

Residents of Mayfair Gardens organized themselves and raised their complaints and worries through the press and the district office, but the poor response of government officials made them very disappointed and the situation did not improve. The disaster which occurred in Mexico in 1984 further exacerbated anxiety and the grievances of residents when they began to realize the danger of these installations. At the same time, some social workers who were working on the island, together with some enthusiastic residents, formed a concern group named 'Tsing Yi Concern Group', which initiated a series of actions to combat environmental hazards.

The Tsing Yi Concern Group

In 1984, the Joint Declaration was signed by the Chinese and British governments agreeing that the sovereignty and administration of Hong Kong would return to China in 1997. Hong Kong would become a special administrative region ruled by Hong Kong people. In line with these changes, the Hong Kong Government carried out political reform in order to encourage people to participate in community affairs. In response to this political agenda, many district concern groups were formed: for example, the Sham Shui Po Livelihood Concern Group, the Shatin Livelihood Concern Group, and the Tsing Yi Concern Group. Most group members were young professionals with a tertiary education; some of them were leaders of the Student Movement during the 1970s. They were more willing to adopt a radical and confrontational approach in solving community problems.

The past history of indigenous villages tells us that decision-making power on all community affairs in the area rested with the village elder. However, the rapid development of Tsing Yi created an influx of people and serious community problems such as traffic, law and order, environmental degradation, etc. These new residents were quite dissatisfied with the living conditions and also queried the representativeness of the village elder.

In this context, a group of social workers formed the Tsing Yi Concern Group with the aim of promoting grassroots participation. The Concern Group picked up the issue of potentially hazardous installations as our intervention target since many residents were concerned with this; furthermore, the content of the confidential consultancy report was disclosed by a local newspaper columnist. This heightened the awareness of the public and also provided the Group with more information for intervention. As a result, thousands of residents were mobilized through exhibitions, opinion surveys, signature campaigns, petitions to the district board, OMELCO and other activities.

Apart from solving local issues, the Concern Group was also keen to carry out block development work by sending the part-time organizer to new housing blocks to help the residents form their own tenants' association or mutual

aid committee. Further, these local leaders were encouraged to join the Concern Group as a way of further participation. In 1985, the Concern Group put a candidate up for the district board elections and won a seat on the Kwai Chung and Tsing Yi District Board. As a result, the Concern Group was able to solicit more resources in terms of money and information. In 1988, the Concern Group won three seats on the District Board. In the last district board election (1991), the Concern Group won all the seats on Tsing Yi island. From the voting figures, more than 70% of the voters supported the candidates allied with the Concern Group.

Intervention strategy: potentially hazardous installations on Tsing Yi

The whole intervention process lasted for more than seven years and the issue has still not been finally resolved. Over this period, thousands of residents, a number of concerned environmental organizations and residents' organizations in Tsing Yi were mobilized to fight against environmental hazards on Tsing Yi. This chapter focuses on how the residents of Tsing Yi Island have been educated and mobilized, and the responses of the government and the residents' organizations.

To begin with, it should be emphasized that we always face an ethical dilemma of whether or not to mobilize. If the issue fails to bring about results, the process brings more frustration than satisfaction. This failure experience will suffocate budding interest in community participation (Chan, 1991). Besides, it will also hinder the development of the Concern Group. However, no one can know the result; the only way is to try it out.

For simplicity, the development of the issues on Tsing Yi are categorized into initial, middle and end phases, each with a different focus: on the risky condition of Mayfair Gardens, the relocation of two Shell depots from Ap Lei Chau and Cha Kwo Ling to Tsing Yi, and a gas leak at the Hong Kong oil depot, respectively.

Initial phase: the Mayfair Gardens case

The present site of Mayfair Gardens (Tsing Yi Town Lot No. 83) had been owned by Mobil Oil Hong Kong Limited since 1967 when the company moved its depot from the present Mei Foo Sun Chuen site to Tsing Yi Island. The lot was sold to May's Investment Limited, a subsidiary of Sun Hung Kai Property Company Limited, in 1977 at a price of HK$ 64.5 million. It was originally zoned for industrial use and the company intended to develop it into an industrial area as well. However, in June 1978, the lot was officially re-zoned as commercial-residential area because of the fear that further industrial development on the island would overload the transport network.

The entire development consisted of three phases. The three phases comprised five, three and four blocks respectively. The location of phase three is the nearest to the Mobil Oil depots. Phase one development, with 1,140 dwelling units, was completed in March 1982, and phase two, with 768 units, in early 1985. The original construction schedule of phase three was planned to commence in mid-1984. However, owing to strong objections from the residents and the Concern Group, the Executive Council banned the development in September 1984 because of its proximity to the Mobil Oil terminal.

Strategy. In response to the Mexican accident, together with information on the Tsing Yi potential hazard report leaked to a local newspaper, the Tsing Yi Concern Group started to organize residents' meetings to discuss the issues and experts were invited to strengthen residents' confidence. The main objective was to test the response of the government and convey the anxiety and dissatisfaction of the residents through the press, district board, and OMELCO. As it was in the initial encounter stage, the Concern Group did not strongly demand the removal of all depots from Tsing Yi.

After these actions, the government showed its sincerity and respect for public opinion by sending the former Chief Secretary, Sir David Akers-Jones, to the Tsuen Wan District Board. He explained the viewpoint of the government and emphasized the safety measures at the depots. Moreover, a high-powered interdepartmental working group was formed to investigate the issue and find ways to improve the situation. In fact, this response encouraged the residents to go ahead.

The working group proposed three options. First, the Environmental Protection Agency made a suggestion that the Mobil Oil depot should be moved since this depot was regarded as potentially the most dangerous, and the large piece of land could be very valuable for the future development of Tsing Yi. But the removal would involve a large sum of money and it was anticipated that the oil company would not agree to make such a move. Secondly, the Land and Works Branch proposed lobbying the housing developer, Sun Hung Kai Properties, to abandon the final phase of its development, which was the closest to the oil storage depot. It was suggested that surface oil storage facilities could be replaced by an underground system. However, the government would then have to compensate the company for its costs, which would also involve a very substantial sum. The third choice was simply to sit back and do nothing on the physical layout of the development, but to step up precautions to avoid an accident with the storage facilities. This last option would no doubt carry the least financial implications.

After learning about the options, the Concern Group launched an exhibition concerning the environmental hazards on Tsing Yi as a way to educate

the public. A convenient sample survey was also conducted at the bus-stop of Mayfair Gardens to solicit residents' opinions on the proposed options. More than 80% of the respondents supported the removal proposal in the long run. As a temporary measure, residents agreed that the phase three development be frozen until the depots were removed. The Concern Group called a meeting to discuss the findings with interested residents and finally a core group was formed with more than 20 members. In order to solicit more support from the residents, the core group initiated a signature campaign. After that, a press conference was held and the petition was forwarded to the Chairman of the government working group. However, the government was not willing to negotiate with the residents directly and the only means of communication was through the mass media.

Despite the difficulties encountered, the government announced a halt to the development of Mayfair Gardens phase three in mid-1984. The core group members were happy to learn about this but a number of residents and commercial tenants of the shopping mall lodged a complaint to the district office. They said that they would lose business. On the other hand, the residents were also deprived of some entertainment because, according to the original plan, phase three included a cinema and a restaurant. Apart from these, the residents also feared that the value of their property would decrease due to the unfavourable geographical location. Under these circumstances, the Concern Group and the core group maintained a low profile. The focus shifted to the policy level: i.e., urging that the Potential Hazard Consultancy Report 1982 be disclosed and the potential hazardous installations in Hong Kong reassessed.

Achievements. Although the outcome was not exactly what the residents had proposed, the Concern Group had successfully aroused the concern of the public on the environmental hazards and their possible impact on residents. The government did make some response by setting up a working group and halting the development of phase three of Mayfair Gardens, which was one request made by the Concern Group. However, this perception was not wholly accepted by all members of the core group and some left the Group because of a feeling of failure.

Middle phase: relocation of another two depots to Tsing Yi

In mid-1986, the Tsing Yi residents were alarmed by a controversial proposal to install another two LPG storage tanks on the island. The two depots which were originally located at Ap Lei Chau and Cha Kwo Ling, belonged to the Hong Kong Electric Group and Cheung Kong (Holdings) Limited, respectively. Actually, the two depots were quite far away from residential site in those areas, but these two pieces of land were attractive for redevelopment purposes. Furthermore, the government would also benefit since the complex land swap

deals were estimated to be worth about HK$1 billion in premium payments. Negotiations were then underway between the government, the Shell Oil Company and other parties to relocate the oil and LPG depots to Tsing Yi, but residents on the island did not have a chance to take part in the discussions. Residents expressed anger at this move because Tsing Yi had developed into a new town with a population of more than 200,000 and it was not acceptable for the government to re-zone Tsing Yi as a hazardous installations area. This really placed the lives of residents in danger.

Strategy. The Concern Group then organized a series of actions including lobbying the Town Planning Board members since the Board had some influence on the proposal. However, most of the Board members were involved in the business sector and their opinions were found to be basically pro-government. However, a coalition of more than five residents' organizations was formed under the leadership of the Concern Group. The coalition organized press conferences and petitions to the concerned departments. The issue was brought to a climax by two marches and demonstrations at Government House and the Town Planning Board, with more than 200 local residents participating each time.

On the other hand, a conservative organization, the Rural Committee, supported the government's idea and argued that the relocation of the depots would certainly benefit the island. Besides, the site for the relocation was owned by a private company and it was far from the residential area. However, some of residents were very suspicious of the motives of the Rural Committee in supporting the relocation. Nevertheless, the support of the Rural Committee was used by the government to attack the residents' opinions.

At that time, the then Secretary for Lands and Works, Mr Graham Barnes proposed a plan for segregating the dangerous industries and the residential areas. That meant that the Mobil and Hong Kong Oil depots had to be moved to the west of the island. However, the government would not make it compulsory for existing industries to move. As re-siting was on a voluntary basis, there would be no compensation for the industrial enterprises. Obviously, the government showed willingness to compromise with the residents in that it would move all the depots which were close to residential developments, such as the Mobil and Nga Ying Chau depots, to the other side of the island. However, this solution was very different from the objectives of the Concern Group which were that all hazardous installations should be moved off Tsing Yi island. Nevertheless, the response from the government indicated that the removal of depots was not totally impossible.

Reactions from the government and residents. Despite strong objections from most of the residents in Tsing Yi, the Town Planning Board endorsed the

relocation project after it had been delayed twice due to massive action against the plan. As a concession to worried residents, the government undertook a study of potentially hazardous installations on Tsing Yi and promised to withhold approval for any industrial projects until it was finished. The study aimed at determining the impact of potentially hazardous installations on the island and what hazards they might pose for residents.

Even though it seemed the residents groups had failed as the depots were to be moved in, they still won much support from local people. Furthermore, the majority of the unofficial members of Kwai Chung and Tsing Yi District Board allied with the Tsing Yi residents and urged reassessment. During the process, the Concern Group clearly showed its potential as a pressure group and fought for the interests of the grassroots population. As a result, more residents were willing to join the Concern Group and most of the newly formed residents' organizations agreed to form a coalition with the Concern Group.

End phase: gas leakage from the Hong Kong Oil Company facility

On 11 February 1989, gas leaked from a liquid petroleum gas delivery pipe from the Hong Kong Oil depots (formerly Gulf), which was very close to a residential site, Mayfair Gardens. As reported by the residents, when the accident occurred, none of the emergency departments knew how to handle the problem. The residents heard a special announcement on the radio that they should close all windows and extinguish all fires. The situation was chaotic and the residents realized that the government was impotent. The gas leak further exacerbated Tsing Yi residents' anxiety about the dangers of living in close proximity to such a huge volume of volatile fuels. It also heightened the residents' fears of the risks they faced.

From 18 to 20 February, a three-day sleep-in campaign outside the Gulf depots was organized by the Concern Group and this was soon supported by more than 15 residents' organizations on Tsing Yi. About 500 local residents waved banners, chanted slogans and marched with them to the depots. During the rally, some concerned legislative councillors, regional councillors, district board members from Kwai Chung, and environmental protection organizations were invited to condemn the government and urge feasible and comprehensive contingency plans. The angry residents even blocked the entrance to the depots. On 20 February, the Concern Group staged another rally and decided to forward a petition to the Office of Executive and Legislative Councillors and Gulf Oil headquarters. However, the staff of Gulf Oil were unhelpful and they refused to accept the letter. The residents' representatives stormed the door of the office and finally the conflict was settled by the police.

Responses of the government. In response to the increasing public concern and the continuous action staged by the residents, legislative councillors grilled the government over its plan to improve safety measures on Tsing Yi island on 22 February 1989, following the gas leak at the Hong Kong Oil Company. The former Secretary for Lands and Works, Mr Graham Barnes, admitted that the decision to site the oil depots in a residential area had been a mistake and that it represented bad planning by modern standards. From that time onwards, the government started to negotiate with the oil companies. In July 1989, the government agreed to move the Mobil, Hong Kong Oil and Nga Ying Chau depots away from their present locations to better ones by 1993-94 and the re-zoning of these areas was gazetted in March 1990. The government also published the 1982 Tsing Yi Hazard Potential Study Report and the 1989 Risk Reassessment Report.

Achievements. For most of the residents, the issue ended very successfully because the depots which were considered dangerous were to be moved. However, the new location was still on Tsing Yi Island, and although it was assessed by the technocracts as 'safe', the risk to society was not completely removed. In addition, before the gas leakage, all the officers had claimed that the installations were safe and had emphasized how effective their emergency units were but as it turned out the situation was completely different. The concept of 'safety' as guaranteed by the government was an empty slogan rather than a sign of confidence.

The residents felt happy because they had won the battle: government admitted its mistakes openly and agreed to publish the relevant reports. Through the working process, residents were being educated and mobilized to participate in events. Also, some unconventional and conflict-oriented strategies such as sleep-ins, demonstrations and marches proved to be acceptable to the residents.

A never-ending battle

It seemed to the public that the fight against the environmental hazards on Tsing Yi was finished, but most of the problems, such as the storage of toxic gases in the chemical plant, the oil depots in the so-called 'safe' location, the development of a residential site near the cement plant, the ship repair factories close to public housing blocks, and the transportation of dangerous goods, still pose a serious danger to the residents. Apart from sharing the success, continuous efforts have been made by the Concern Group and the coalition to fight against these environmental hazards. However, the public seems quite satisfied with the ***status quo***. The Concern Group and the residents' organizations were waiting for another chance event to occur so as to mobilize the residents for a large-scale campaign. Recently, another residents' group, the Monitoring of

Tsing Yi Public Facilities Group, most of whose members were affiliated with the conservative Rural Committee, launched a signature campaign in the north-east part of the island and forwarded the petition to the newly elected legislative councillor, demanding the removal of the Nga Ying Chau oil depots, which were considered one of the most dangerous installations on the island.

The main characteristics of the issues and the analysis are summarized in Appendix 1.

Reflections on the mobilization

The whole mobilization process lasted for seven years and involved a great deal of action. The Concern Group tried every means to encourage residents' participation, because it was their belief that residents could learn more and actualize their decision-making ability through participation. The following are some of the noticeable changes during and after the events.

Change of membership

In the very beginning, the core members of the Concern Group were basically social workers and some active youth members from the youth centre. The membership was around 30 and the average age was in the mid-twenties. The focus of intervention was mainly on educating Tsing Yi residents about the environmental hazards by means of exhibitions, seminars and opinion surveys. At that time, the mobilization was limited. One of the reasons for this was that those members were not focusing on organizing the residents but rather on self-learning. Besides, the time availability of those young people was quite limited as they were involved in many outside commitments. However, these youth members were more educated and willing to take radical action, thus facilitating the work considerably. However, it was difficult to encourage them to become core members. The Concern Group had to train local adult residents in order to ensure the Concern Group survived. Therefore, the Concern Group shifted the focus to recruit and organize local adult residents into the group. As indicated in last year's membership list, there are more than 200 members and most are married adults.

Shift of strategy

During the initial stages of the action against the environmental hazards, the social workers started to involve and mobilize the existing residents' organizations, community groups such as mutual aid committees in rental public housing blocks and the Tsing Yi Trade Association. However, the responses were not encouraging. This was because those existing organizations regarded the Concern Group as breaking up the harmony of the community. More importantly, the formation of the Concern Group might have threatened their

authority and interests. Given such factors, the Concern Group was only able to mobilize the public to a limited extent.

The experience of the initial mobilization stage showed us that we had to create our coalition by participating in the block organizing work in order to have effective mobilization during events. During this period, the Concern Group successfully formed more than 20 residents organizations on Tsing Yi. However, some of them left the Concern Group after a period of time. The reasons were mainly the different political views on nominating candidates for the district board elections and lack of follow-up intervention. Details of the formation are given in Appendix 2. After forming the coalition, the Concern Group experienced a favourable participation response from the public and thus strengthened its bargaining power in the middle and end phases. In response to this, the government had to make some concessions in environmental policy, such as reassessing the potentially hazardous installations in Hong Kong and segregating hazardous industries from residential development. In addition, the bureaucrats were also more aware of the opinion of the public. This eventually contributed to the formation of better policy.

Mobilizing resources

Resources limitations are one of the most detrimental factors hindering the mobilization and development of residents' organizations. The Concern Group had to face serious financial constraints in the early stages. The initiators (social workers) had to share the expenses of the organizing process. Some donations were received from supportive residents. Owing to the tight financial situation, no paid staff were employed. All the organizing work and secretarial support were basically performed by social workers and members after office hours. The worst headache was setting up an office base, since rents in commercial blocks were extremely expensive and a public housing flat could not be used for such a purpose. Ultimately, the Concern Group used a social worker's private residential flat.

The lack of access to information also had a tremendous effect on the development of the issue. Most of the government documents were confidential and the general public had no access to them. For example, the government claimed that the 1982 consultancy report contained important commercial information and could not be publicized until 1989.

The situation improved in 1985 when a member won a seat on the district board and the Concern Group could make use of the honorarium to cover expenses. In addition, as a district board member, he was able to obtain more relevant information. Apart from this, some training institutes also sent social work students to the Concern Group for fieldwork practice, which provided

additional manpower to start block development work. In fact, most of the formation of the residents' organizations was carried out by the students.

Community participation

People's participation has been defined as a process that provides for the participants a role in decision-making and in the implementation of programmes. It is an essential element of development and an important way of heightening consciousness and increasing knowledge of issues and available choices (ESCAP, 1977). However, this definition is too vague to be operationalized. Arnstein (1969) has developed a more concrete concept 'ladder of participation', which delineates participation into levels whereby intervention strategies can be developed (Table 6.1).

Table 6.1: The Ladder of Participation and Participant's Actions

Level on the Ladder of Participation		The participant's action
High 8	Citizens' control	Resource and administrative control
7	delegated power	Has delegated power in local affairs
6	Partnership	Joint decision-making with the authority
5	Placation	Organize opinions and seek change
4	Consultation	Support and feedback on plan
3	Informing	Learning about given information
2	Therapy	Service consumption
Low 1	Manipulation	Non-participation

From this ladder of participation, the Concern Group could identify four distinct types of participants at different levels of participation during the events. They could be called the non-participants, onlookers, group members and the core leaders. 'Non-participants' refers to the majority who are ignorant about resources and suffer in silence. The onlookers are the residents who care to attend meetings and respond to social and recreational programmes. Group members are those registered in the Concern Group and who are willing to pay a membership fee. The core members are those who attend meetings frequently and are willing to sacrifice their time and energy to assist the Concern Group.

During the whole process, the Concern Group successfully motivated the apathetic and raised them to the level of onlookers by providing them with

knowledge and information on hazardous industries. After the residents obtained the knowledge, some of them developed a positive attitude towards participation. Thus, the Concern Group could organize these onlookers into an ad hoc issue group or recruit them as members of the Concern Group. In the ad hoc group, skills in community analysis and organizing were provided and their interests in joining recreational activities were also met. Finally, mature and enthusiastic members were trained to become core leaders and executive committee members of the Concern Group through which they could develop a strong sense of justice and competence.

Table 6.2: Types of Participants and the Foci of Attention

Types of participants	Foci of attention
Core leader	Strengthen positive value and develop sense of social responsibility
Group members	Training of essential skills and sustain interest in participation
Spectators or onlookers	Shaping of attitude and providing access for mass education
Apathetic or non-participants	Providing knowledge and information

Appendix 3, shows that the participation rate was high when some chance events occurred and participation levels were normal when they were over. Therefore, the Concern Group made use of every chance event to raise residents' level of participation from the lowest to the higher level. It was fortunate that, in each event, the Concern Group was able to develop some residents into core leaders. During the static period, when no chance events occurred, the Concern Group jointly launched some recreational activities with the mutual aid committees and tenants' associations to sustain the members and maintained sound relationships with residents' organizations.

Developing leadership

In order to alleviate the problem of persistence, the Concern Group tried hard to develop local leaders to fill the leadership vacuum created when social workers leave the community. Also, it is difficult for a residents' organization to sustain its efforts over a long period of time. Enthusiasm and interests gradually subside and organizations experience entropy (Twelvetrees, 1976). The

established residents' organizations have to tackle difficult problems of survival, maintenance and manpower turnover.

In moving towards the solution of this problem, the Concern Group identifies and trains potential residents as executive committee members in order to fill the leadership vacuum when those social workers leave the Group. Hence, the membership of the executive committee of the Concern Group is gradually replaced by local residents. At present, there are only two social workers living on Tsing Yi island nominated as executive committee members of the Concern Group. This clearly reflects the achievement of the Concern Group in the cultivation of leadership on Tsing Yi. Details of the composition of the executive committee of the Concern Group are given in Appendix 4.

The achievement of the Concern Group in fighting against the environmental hazards in Tsing Yi Island cannot be said to have been a great success, but the organizing process and development have given the organizers a valuable and fruitful experience which they will remember for a lifetime.

Conclusions

The grassroots' scope of concern on communal problems is largely confined to personal interests and therefore the problem must be immediate, specific and affect the quality of life. The anticipated result also has a determinant effect on their participation. The problem of potential environmental hazards on Tsing Yi is relevant but most of the residents thought it difficult to change because the depots came before the residents. In general, those who wanted to change the existing order (the Concern Group and the residents) usually have less bargaining power than those who are happy with the ***status quo*** (the oil company and the government). In this case, the Concern Group was able to exploit every chance event, like the gas leakage from the oil depot, to introduce an extraneous element and achieve success. Apart from this, the skills of the organizer in using different tactics and strategies, the support of the mass media, the atmosphere of the community and ever rising expectations of the residents regarding a healthy environment will also increase the bargaining power of the Concern Group.

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Appendix 1

The main characteristics of the issues concerning environmental hazards on Tsing Yi Island

Phase	Dates	Extraneous event	Functions of TYCG	Strategies of TYCG	Expectations of TYCG	Actions and responses of government
Initial	1984-85	Mexico Incident The disclosure of information regarding the Tsing Yi Hazard Potential Report Formation of TYCG	Testing, exchanging views, pioneering Limited mobilization on Mayfair Gardens and Cheung Ching Estate Educating and organizing grassroots	Residents meetings Press conference Petition Exhibitions and seminars Survey Signature campaign	Encourage participation Develop opinions Right to know about the report Press for formation of Potential Hazardous Installations Committee	Chief Secretary explains government viewpoint Set up working group Stop phase III of Mayfair Gardens Refuse to reassess hazardous installations
Middle	1986-88	Relocation of 2 more depots onto Tsing Yi	Organizing and leading residents organizations Advocating change	Lobbying Petitions and demonstrations Residents meetings	Opposition to 2 depots relocating to Tsing Yi Formation of coalition Promote participation	2 more depots move onto Tsing Yi (with conditions) Reassessment of potentially hazardous installations on Tsing Yi Create counter-force

Phase	Dates	Extraneous event	Functions of TYCG	Strategies of TYCG	Expectations of TYCG	Actions and responses of government
End	1989	Gas leak near residential blocks	Planning, educating, coordinating and advocating change	Rally, 3-day sleep-in Petitions Block depot entrances Lobbying newly-formed residents organization to strengthen bargaining power	Move Mobil and HK Oil depots away from Mayfair Gardens and off Tsing Yi Formulate clear policy on hazardous installations	Plan to move 3 oil depots from residential areas but to other parts of Tsing Yi Admit fault Release the 2 relevant reports

Appendix 2

Residents' Organizations Formed After the Intervention of the Concern Group

Resident's Organisation	Dates
1. Ching Wah Court Owners' and Tenants' Association*	1986-1987
2. Ching Shing Court Owners' and Tenants' Association*	1986-1987
3. Cheung Hong Estate Hong Cheung House MAC**	1986-1987
4. Cheung Hong Estate Hong Shun House MAC**	1987-1988
5. Tsing Yi Estate Yee Kui House MAC**	1987-1988
6. Tsing Yi Estate Yee Yip House MAC**	1987-1988
7. Tsing Yi Garden Owners' & Tenants' Association***	1987-1988
8. Cheung Hong Estate Hong Mei House MAC**	1987-1988
9. Cheung Ching Estate Ching Chung House MAC**	reformed in 1988-89
10. Cheung Ching Estate Ching Yeung House MAC**	reformed in 1988-89
11. Mayfair Gardens Owners' Committee***	reformed in 1988-89
12. Cheung On Estate On Kong House MAC**	1988-1989
13. Cheung On Estate On Hoi House MAC**	1988-1989
14. Cheung On Estate On Yeung House MAC**	1988-1989
15. Cheung On Estate On Tao House MAC**	1988-1989
16. Ching Tai Court Owners' & Tenants' Association*	1988-1989
17. Cheung On Estate On Wu House MAC**	1989-1990
18. Cheung On Estate On Ching House MAC**	1989-1990
19. Cheung On Estate On Pak House MAC**	1989-1990
20. Cheung On Estate On Mei House Residents' group**	1990
21. Cheung On Estate On Chui House Residents' group**	1990
22. Cheung Fat Estate Chun Fat House Residents' group**	1991
23. Cheung Fat Estate Yin Fat House Residents' group**	1991

* Home ownership scheme provided by the Housing Authority.
** Rental public housing block.
*** Private housing.

Appendix 3

Numbers Participating in Each Significant Action

Stage	Actions	Nature	Dates	Number of core members	Number of core organizations	Number of participants	Government's reaction
Initial (Mexico incident and unwillingness of government to disclose)	Talks (internal)	Self learning	3 6 84	10	1	0	20 8 84 Chief Secretary Akers Jones attended Tsuen Wan District Board to report on ExCo discussion
	Meeting with 3 ExCo members	Lobbying	11 6 84	4	1	0	
	Exhibition	Educational	6 84	10	1	500	
	Letter to Chief Secretary	Petition and express concerns	22 6 84	8	1	0	
	Press conference	Pressure	6 84	4	1	0	
	Meeting with Akers Jones	Lobbying and sharing views	28 6 84	5	2	0	
	Signature campaign (Mayfair Gardens)	Apply pressure and solicit opinion	9 84	20	2	200	Phase III of Mayfair Gardens stopped on 17 9 84
	Opinion survey	Solicit support for further action	9 84	15	2	410	
	Forward signatures to Akers Jones	Petition	13 9 84	10	2	20	
	Press conference to announce survey results	Apply pressure and arouse resident's concern	13 9 84	5	2	0	
Middle (Relocation of 2 depots to Tsing Yi)	Residents meetings	Express grievances and discuss strategy	4 86	20	4	50	17 12 87 Secretary for Lands and Works announces ExCo had approved removal plan
	Exchanges with Town Planning Board and ExCo members	Lobbying and pressure on government	1986 7	20	5	0	
	March to TPB Office	Petition and forward letter	1987	20	6	200	
	March and Demonstration at Government House	Petition and express demand	1987	20	6	200	
	Informal exchange with Mr LI Ka-shing	Lobbying	1987	30	6	0	
End (Gas leak)	Urgent residents meeting	Express grievance and concern	11 2 89	30	15	100	Government admitted fault in planning and announced that 3 depots to be removed from residential areas released the 2 relevant reports
	3 day sleep-in	Protest	2 89	30	15	30	
	Rally	Demonstration	20 2 89	40	15	500	
	Petition to Omelco and HK Oil	Protest and forward letters	2 89	30	15	50	

Remarks: During the static period from 9.1984 to mid-1986, the Concern Group had organized some seminars and occasional talks to refresh the memory of the residents that the environmental hazards in Tsing Yi had not been solved, but the response was not satisfactory. One of the members was elected as District Board Member on 1985, the Concern Group made use of every DB meeting to raise agenda item and solicit Members' support.

* Mr. LI Ka-shing was the General Director of Cheung Kong Holdings.

Appendix 4

The Composition of the Executive Committee of the Concern Group

Composition of ExCo Members	YEAR			
	1984	1989	1990	1991
Professional Social Worker Working in Tsing Yi	4	3	0	0
Professional Social Worker Living in Tsing Yi	1	2(a)	2(b)	2(e)
Youth Members from Youth Centres	3	0	0	1
Adult: Office bearer of MAC	0	5	7	6(f)
Office Bearer of Tenants' Association	0	3	7(c)	5(g)
Others	1	0	2(d)	3(h)
Total	9	13	18	17

Remarks: In 1984, over half of the ExCo members were social workers. In 1989, 5 out of 13 of the ExCo were social workers and the others were community leaders. In 1990 & 91, only two members were social workers. Both were living on the Island.

(a) (g) (h) 1 elected District Board Member
(b) (c) (d) (e) (f) 2 elected District Board Members

Chapter 7

Creating A Decent Environment for the Poor: Housing for Low-Income Groups

Pauline Choi

Introduction

A former Governor of Hong Kong, the then Sir Murray MacLehose pointed out that:

> The Hong Kong Government's perpetual problem is far too many people arriving far too fast in far too small an area. (Hong Kong Housing Authority, undated)

Periodic population influxes from mainland China since the mid-nineteenth century, have given rise to various problems. A housing shortage is one. The government's efforts in the early days were centred on the introduction of new ordinances and the tightening of existing regulations on building control. A proposal for the government's direct involvement in housing provision was first made by a Housing Commission appointed in 1935:

> The provision of adequate housing for the poorer classes cannot be left to private enterprise unassisted. If the housing is to conform to acceptable standards the return on capital will not be sufficient to attract private enterprise. (Bristow, 1984)

Any move intended by the government to improve the housing conditions was halted by the subsequent outbreak of the Pacific War and occupation of Hong Kong by the Japanese in 1941. The inflow of refugees from China in the late 1940s following the return of peace exacerbated the territory's housing problem. However, the government's public housing programme did not commence until 1954 after a disastrous squatter fire at Shek Kip Mei on Christmas night in 1953, which made 53,000 people homeless. Over the past three and a half decades, various changes in the organization of housing provision have been instituted and housing policies have been consolidated.

Public housing in Hong Kong is intended to accommodate households which cannot afford self-contained flats in the private sector, i.e. the low-income group. While waiting for public housing, which always takes a few years, the

applicants have to resort to other housing sources, mainly squatter areas and, in part, the Housing Authority's temporary housing. The median monthly household income levels for the Housing Authority cottages/temporary huts and private temporary housing (i.e. squatters) as recorded in the Hong Kong 1986 by-census were very low (Table 7.1). Living conditions in squatter and temporary housing areas are far from satisfactory. The Housing Authority has made a few attempts to improve its temporary housing areas in respect of their structure, layout and amenities, as well as improving environmental conditions in squatter areas by initiating a squatter area improvement programme.

Squatters and squatter policy

The squatter problem has persisted in the territory for many decades. The factors contributing to the development of squatter settlements were identified in the White Paper entitled 'Review of Policies for Squatter Control, Resettlement and Government Low-cost Housing 1964' in which it was acknowledged that there was an increasing incentive to squat on Crown Land as a result of the accelerated redevelopment of old buildings, the closure of dangerous property and the population growth resulting from immigrant influxes from China, as well as natural increase in the population (Hong Kong Government, 1964). Despite its long history, the squatter problem only became alarming to the government in the early 1950s when the squatter population reached a quarter of a million. The introduction of a resettlement programme in 1954 for squatters affected by development clearance and natural disasters did not contain the growth of the squatter population. On the contrary, the squatter population soared to about 600,000 in 1963 (Hong Kong Government, 1964). The total population in 1961 was approximately 3.13 million (Pryor, 1983). The average annual increase between 1954 and 1963 was about 35,000.

The government's commitment to squatters affected by clearance was initially restricted to offering sites. Within the designated sites, the settlers had to build their own huts. The first example of this self-help policy were cottage areas launched in 1948. They were scattered throughout the territory and today out of the 14 cottages areas built, only six still remain uncleared (Hong Kong Government, 1991). It was not until the outbreak of the Shek Kip Mei fire that a new dimension was added to this self-help policy.

Subsequent to the fierce blaze at Shek Kip Mei in 1953, a Resettlement Department was set up in the following year to deal with all matters concerning the prevention of illegal structures, as well as the clearance and resettlement of squatters. It also marked the commencement of the government's involvement in public housing provision. Between 1954 and 1975, a total of 36 multi-storey resettlement estates (Marks I-VI), comprising 471 blocks were completed (Hong Kong Housing Authority, 1975). The scale of the resettlement programme,

however, could not keep pace with the growth in housing demand, boosted by waves of illegal immigrants from China. It was estimated that approximately 400,000 illegal immigrants entered Hong Kong between 1978 and the ending of the touch-base policy in October 1980 (Pryor, 1983).

Before 1982, the government's squatter policy was basically negative. The government's resources were channelled to squatter control and clearance.

> The prevention of new squatting on Crown Land, and the clearance of squatters from land required for development are two of the Authority's most demanding tasks (Hong Kong Housing Authority, 1975: 17).

Despite the fact that the environmental conditions in squatter settlements were highly unsatisfactory, the government had no incentive to rectify the situation for the following reasons. First, the government considered squatter settlements unauthorized occupation of Crown Land. Any attempts to improve their living environment tended to indicate that legal status was being conferred on squatters. Secondly, the problem before the 1980s was out of control and there was a fear that any improvement in squatter areas would only encourage even more squatting.

A change in the government's squatter policy in the early 1980s can be attributed to a number of factors. The ending of the touch-base policy in late 1980 had succeeded in arresting the flow of illegal immigrants from China. A series of significant squatter fires and landslips in 1982 not only alarmed the government but also raised the public's awareness of squatter problems in respect of the safety and amenities within squatter settlements. There was a general recognition of the need for environmental improvements. The living conditions of squatters were typically improved through development clearance. Although the squatter problem seemed to be under control in the early 1980s, the government believed that the clearance of all squatter areas would take some considerable time. If the environmental problems of squatter settlements continued, squatters would have to remain in an unpleasant environment for years. This was increasingly regarded as unacceptable with the society's rising aspirations. The government's shift to a more positive approach to the squatter problem was underpinned by the squatter survey in 1982, which indicated tolerance of the squatters' existence by the government. The establishment of a Squatter Areas Improvement (SAI) Division within the Housing Department denoted a new direction in the Authority's squatter policy.

Prior to the introduction of the squatter areas improvement programme, the living environment of squatter settlements was considered highly unacceptable. Basic amenities and facilities were either absent or inadequately provided. Water supply relied on public standpipes, which always fell short of the demand. A legal supply of electricity was not available until 1976. Illegal water and electricity

tapping through racketeers, who charged very high rates for their services to the squatters, was a very serious problem up to the mid-1970s. Access within squatter areas was poor and illumination at night was insufficient owing to the lack of street lighting. A proper sewage system was non-existent and environmental pollution resulted. Other provisions such as recreational and community facilities were unheard of. In addition to all these problems, squatter areas were highly susceptible to fire and landslides.

The establishment of the Squatter Areas Improvement Division was intended to rectify this unsatisfactory state of affairs given the fact that it would take a considerable time before all squatter areas were cleared for development due to limited rehousing resources, the health and safety conditions of many squatter areas were highly unacceptable. Furthermore, the government's improvement efforts had been fragmented among various departments and improvement works were carried out on a piece-meal basis. The objectives of the squatter area improvement programme were to improve the safety and basic amenities within squatter settlements. The comprehensive improvement works undertaken included the following safety measures:

(a) the provision of fire services inlets, fire mains and fire hydrants;
(b) the installation of fire breaks 10m wide in order to break up large squatter settlements into clusters each with population size of 3,000;
(c) undertaking minor remedial geotechnical works on slopes to eliminate any potential landslips;

and the following amenity services:

(d) the provision of a water distribution system and 'T' standpipes at convenient locations to facilitate squatters to arrange for metered water supplies to their individual dwellings;
(e) the provision of street lights, toilet blocks/bathrooms, refuse bin sites or refuse collection points, and surface channels;
(f) the construction of footpaths, footsteps, and footbridges with handrailings at potentially dangerous locations;
(g) the provision of simple sitting-out areas.

The comprehensive improvement projects normally took nine months to complete. Squatter areas would only be considered for comprehensive improvement if they fulfilled the following criteria: they had a population over 500, they would not be cleared within three years and they were deficient in amenities and in need of safety improvement works.

In addition to the comprehensive improvement programme, a lighting programme was initiated in 1986 for squatter areas which did not qualify for comprehensive improvements. Since June 1986, the Housing Department has

undertaken the management and funding of the 285 street lights installed by the district boards in 21 urban squatter areas. The electricity bills for these lights are met by the Housing Department. The Housing Department also undertakes goodwill projects, which involve small-scale improvement works catering for the special needs of individual squatter areas, at the request of district boards.

After the completion of the first five-year SAI programme (1983/84 to 1987/88), the programme was extended for a further two years (1988/89 to 1989/90). In view of the fact that most of the larger squatter areas had already been improved, it was decided to reduce the population requirement from the original 500 to 300. Over the seven years, a total of 118 projects have been completed in 99 squatter areas, benefiting about 140,000 persons. The total cost incurred was HK$176 million; the average per capita cost for the five-year programme was HK$990 and HK$1,300 for the extended programme.

The SAI schemes were intended to be initiated in squatter areas located in the urban areas and in Tsuen Wan. However, at the request of the City and New Territories Administration, the Housing Department initiated six pilot projects in the New Territories to test the feasibility of the SAI schemes. No further projects were undertaken in the New Territories upon the completion of the six pilot schemes for the following reasons. First, the problems being faced by the New Territories squatter areas were quite different from those experienced by the urban squatter settlements; the aspects requiring improvement were outside the scope of the SAI programme. For instance, squatter areas in the New Territories were always attached to villages where amenities and safety measures were generally quite adequate. Their problems were mainly associated with environmental pollution resulting from the lack of proper drainage and sewer systems. The solution to these problems was obviously beyond the jurisdiction of the Housing Department. Secondly, the involvement of private land made the implementation of SAI works difficult, if not impossible. Thirdly, squatter areas in the New Territories were scattered and they were generally smaller in terms of population, which rendered improvement works very costly.

In the face of a dwindling workload, the SAI Division was disbanded on 1 November 1990.

Temporary housing areas (THAs)

The idea of temporary housing areas was developed from the licensed areas but with some significant improvements. The licensed areas were established in 1964 consequent to the endorsement of the White Paper on the Review of Policies for Squatter Control, Resettlement and Government Low-cost Housing. In view of the inadequacy of the then Resettlement Programme, which only catered for squatters affected by development clearance and natural disasters and made no provision for others who had no alternative but to squat, the White

Paper proposed that licensed areas should be established, as a supplement to the resettlement housing, for the genuinely homeless and squatter clearees, whose huts were not covered by the 1964 survey, to erect their own dwellings. Within the licensed areas, building layouts and materials were both regulated by the Authority. The range of facilities provided was limited to water standpipes and dry latrines only. It was not until 1973 that funds were made available by the government for expanding provision within the licensed areas to include house water and electricity.

Temporary housing areas, constructed and managed by the Housing Department, were first established in 1974. They were intended to be an interim measure to tackle the public housing shortage. Households of the following categories qualify for temporary housing:

(a) Development clearees and victims of fires and natural disasters and those who do not fulfil the 7 year's residence in Hong Kong.

(b) Tenement structure demolition:
  (i) those who have seven years' residence in Hong Kong are accorded urban temporary housing;
  (ii) others are accorded temporary housing in the New Territories.

(c) Rooftop structure demolition:
  (i) those who do not have seven years' residence in Hong Kong but have proof of residence in the structure since 1 June 1982[1] are eligible for local temporary housing.
  (ii) as (b)(ii) above.

(d) Street sleepers:
  (i) the Co-ordinating Committee on Street Sleepers recommended that day relief centres cum temporary shelters should be provided by welfare agencies for those who are either drug addicts or suffering from mental or physical illness;
  (ii) able-bodied street sleepers may be offered New Territories temporary housing only. If the Housing Department is satisfied that a street sleeper covered by the Social Welfare Department survey and pre-eviction survey is proved genuinely homeless, he/she would be allocated New Territories temporary housing and need not be transferred to a transit centre first;

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[1] It refers to structures covered by the Government's survey in 1982

(iii) street sleepers who are not covered by these records are required to move first into a transit centre for a test of genuine homelessness before the allocation of New Territories temporary housing;

(iv) street sleepers should not be registered by the Housing Department prior to eviction.

Temporary housing can be classified into two categories. Temporary housing constructed before 1984 consists of part-built structures, including single storey and duplex types. The structures contain only rows of asbestos roofs supported on a wooden frame and concrete floor with the rest to be completed by the licensees. Most of them, however, employ contractors to undertake the construction work. Provision within temporary housing areas comprises community and shopping facilities, basic services such as metered electricity and water supply, toilets, refuse bin sites, play areas, sitting-out areas and planting.

In 1984, part-built temporary housing areas (THA) were replaced by the duplex full-built structures with partitions and claddings. The new THAs are of better design and have better services/facilities provision. The new provisions include fire-fighting equipment and landscaped areas. The Authority regularly reviews the design and fittings in the THAs with the aim of meeting the residents' needs. The provision standards of various facilities for temporary housing areas are given in Table 7.2.

Cleansing services for temporary housing areas are carried out by contractors employed by the Hong Kong Housing Department. Cleansing workers are deployed at a ratio of 1 to 160 tenancies. The contractors are required to employ workers of both sexes so that the cleansing work of male and female latrines can be taken care of by workers of corresponding sexes. In cases when a temporary housing area is not of sufficient size to be entitled to two cleansing workers of different sexes, an arrangement can be made for two part-time (i.e. 4-hour service daily) workers instead of one. The cleansing workers are under the supervision of the Housing Department's staff. Warnings are given to contractors if the Department is not satisfied with the services provided. In serious cases, the Department may resort to the measure of disqualifying the contractor from tendering for the Housing Department's cleansing contracts in future. In addition to the provision of cleansing services, the Housing Department also puts up posters within the temporary housing areas to advise residents about the importance of keeping their environment clean and safe from fire hazards.

The THAs' layout is basically made up of blocks of structures which are spaced laterally at 7 m intervals, serving as a buffer against the spread of fire. A maximum of fifteen blocks form one package and the space between individual packages is 9.15m, usually in the form of an internal road.

Since the establishment of licensed areas, the space allocation standard per head has been improving, from the original 2.82 m^2 to the present 3.4 m^2. The improvement in the standard has consequently reduced the overall living density per hectare from 1,300 persons to 1,020 persons and the capacity of the standard duplex structure from 83 persons to 77 persons. The average space allocation standard per head for various types of THA structures is given in Table 7.3.

Like permanent public housing, temporary housing structures are built of different capacities to fit the requirements of various household sizes. Since the mid-1980s, provision has been made in temporary housing areas for singletons. One-person units are built for singletons to allow privacy. A kitchen and shower-room are shared by four single persons living in adjoining units and individuals have to pay their own electricity bills.

Licence fees are charged on an area basis (m^2) except for single person units. The charges vary with structure forms and locations, ranging from HK$6.5 to HK$23.1 per m^2 (see Table 7.4). The rates per square metre for the New Territories and outlying districts are respectively equivalent to approximately 80% and 60% of those for the urban areas. The fees are fixed at the time of completion with no subsequent adjustment. The fee levels are determined on the basis of recovering the construction cost over seven years, whereas recurrent management costs are fully borne by the Housing Department.

As at April 1991, there still remained 25 part-built and 47 full-built THAs accommodating approximately 82,000 persons and 31,000 households. The particulars of individual THAs are contained in Appendix 1 to this chapter. Given no dramatic immigration and natural growth, the government expects the demand for THAs to dwindle from 1990/91 onwards; the demand and supply of THAs are being monitored before any plans for new ones are made.

Conclusions

The low-income community has limited choices in life, including residential location. The living conditions, both internal and external, of squatter settlements and temporary housing areas are far from satisfactory despite the fact that the government has initiated a series of improvement works. Being occupied with other more pressing concerns, the residents of THAs and squatter areas obviously relegate environmental improvements to matters of secondary importance. On the other hand, the government finds it difficult to justify allocating too many resources to the improvement of squatter and temporary housing areas on the grounds of cost-effectiveness as they are intended as a transitional arrangement, serving as interim measures to redress the housing shortage. The government sees the long-term solution to the problem in the eventual clearance of all squatter and temporary housing areas and the relocation

of the affected clearees to permanent public housing. However, their final residential location will be where land is available for the construction of public housing and little regard is paid to social ties and the need for residential choice.

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Table 7.1 Median Monthly Household Income of Domestic Households by Type of Living Quarter

Type of living quarter	Overall
Public and aided housing	4,899
Housing Authority home ownership estates	7,077
Private housing blocks	5,845
Villas/Bungalows/Modern village houses	5,395
Simple stone structures	3,657
Institutions and other permanent housing	5,431
Housing Authority cottages/temporary huts	3,506
Private temporary housing	3,467

Source: Hong Kong 1986 By-Census

Table 7.2 Facility Provision Standards for Temporary Housing Areas

Facility	Facility Provision Standard
Shops	60m^2 per 1000 persons
Cooked Food Stalls	1 module (80m^2) per 5000 persons
Recreation	Local open space - up to 1 ha (NT) or 0.6 ha (urban area and Tsuen Wan) per 10,000 persons, if practicable, including childrens play areas - 400 m^2 per 5000 persons.
Community Hall, Neighbourhood Advise Centre, Clinic, Children/Youth Centres, Study Room	1 single storey block (30m^2) per 5000 persons
Kindergarten	1 classroom (38.4m^2) per 2700 persons
Bus/PLB Bays	As requested by C for T or there is a need, but to be located outside THA
HD MAC Management Offices	1 per THA 9.29m^2, 1 per THA
Refuse Collection Points	Normally 2 per 5000 persons
Public Latrines	Standard provision : 1 compartment for 50 persons, (flushing type) actual provision 1 for 38 - 42 persons. Fittings in latrines: Red non-slippery tiles, white glazed wall tiles to ceiling, yellow compartment doors, fluorescent lights, sink and water taps. One compartment in each male and female latrine fitted with handrails on both sides for the handicapped.
First Aid/Fire Fighting Equipment	Hose reel system, fire hydrants, fire extinguisher and sand buckets
Domestic Units	Metered, water and electricity supply, telephone and power socket installed inside unit, and a TV antenna holders.
Landscape	THA is landscaped

Table 7.3 Allocation Standards for Licensed and Temporary Housing Areas (1974-1991)

	1966 to 1973	1974 to 12/1976	12/1976 to 06/1978	06/1978 to 10/1983	10/1983 to 1991
Licensed Areas	1.9m^2	1.9m^2	2.2m^2	2.5m^2	3.4m^2
Single Storey Part-Built THAs	-	1.9m^2	2.2m^2	2.5m^2	3.4m^2
	05/1981 to 10/1983		10/1983 - 1991		12/1984 - 1991
Duplex Part- Built	2.8m^2		3.4m^2		-
Duplex Full-Built	-		-		3.4m^2

* For single person units, the standard is 4.6m^2 for ground floor and 3.8m^2 for cockloft

Table 7.4a Monthly License Fees for Temporary Housing Areas

Part-Built Structures				
District	Completed Before 1/1/83		Completed After 1/1/83	
	License Fees/m^2	Charge per Kitchen (HK$)	License Fee/m^2	Charge per Kitchen (HK$)
Urban[1]	7.5	7.5	9.7	9.5
N.T	6.5	6.5	8.6	8.5
Islands	-	-	-	-

Note:[1] Includes Tsuen Wan and Shatin

Table 7.4b Monthly License Fees for Temporary Housing Areas

District	Full-Built Structures									
	Completed Before 01/01/87		Completed Between 01/01/87 & 31/03/88		Completed Between 01/04/88 & 31/03/89		Completed Between 01/04/89 & 31/03/90		Completed After 01/04/90	
	License Fees /m^2	Single# Person Units (HK$)	License Fees /m^2	Single# Person Units (HK$)	License Fees /m^2	Single# Person Units (HK$)	License Fees /m^2	Single# Person Units (HK$)	License Fees /m^2	Single Person Units (HK$)
Urban[1]	13.2	110.0	15.8	135.0*	18.2	155.0*	21.8	190.0	23.1	200.0
N.T	10.6	90.0	12.7	115.0*	14.6	130.0*	17.4	150.0	18.5	160.0
Islands	7.9	70.0	9.5	90.0*	10.9	105.0*	-	-	-	-

Notes: Existing allocation standard - 3.4m^2 per person (approximately).
Rate/m^2 is not applicable to 1-P units.
* Including $5.00 being additional fee for each single person unit installed with enclosure.
[1] Includes Tsuen Wan and Shatin

Appendix 1

Particulars of Existing Temporary Housing Areas (As at 01/04/1991)

Name	Structure	Population	Completion Date
Ping Shek	Part-Built	2 337	3/75
*Kowloon Bay	"	2 505	8/75
*Lai Chi Kok Road	"	751	8/77
*Yue Kok	"	1 409	12/77
Fat Kwong Street	"	1 879	5/78
*Hong Ning Road	"	662	5/78
Tai Wo Ping	"	854	5/78
*Tai Chung Kui	"	335	8/78
Shun Lee Tsuen	"	2 326	9/78
*Cornwall Street	"	1 435	10/78
*Lai King	"	1 789	3/79
#Shatin Tau	"	1 400	7/79
Welfare Road	"	233	11/79
*Wong Chuk Hang	"	322	11/79
*Cheung Wan	"	777	6/80
#Yuen Chau Kok & Ext.	"	5 234	10/80
*Cheung Pei Shan	"	1 411	6/80
Mui Lee	"	2 231	9/82
*Pak Kok	"	1 459	10/82
#Sheung Shui I & Add'l	"	2 992	10/82 & 8/87
*Shuen Wan	"	1 390	10/82
#Yue Wan	"	1 451	11/82
Yick Yuen	"	725	1/82
Kai Cheung	"	4 978	7/83
Yau Shing Street	"	715	12/83
Sub-total		41 600	

Name	Structure	Population	Completion Date
Long Bin	Full Built	1 142	6/85
Tsing Fai	"	580	9/85
Sha Kok Mei	"	2 829	2/86
Tsing Hong Road	"	449	2/86
Kai Lok & extension	"	3 208	5/86
*Sam Ka Tsuen	"	540	6/86
Fortune Street	"	770	8/86
*Lok Wah	"	502	8/86
Nam Fung	"	430	12/86
Hau Man Street	"	731	1/87
Wing Tai	"	2 061	3/87
Tsing Tsui	"	344	4/87
Kai Wo	"	620	5/87
Kwai Hong	"	414	7/87
Kwai Tai	"	223	8/87
On Yip	"	180	9/87
Tsing Kin	"	838	11/87
Sheung On	"	2 090	12/87
Kwai Lok	"	418	1/88
Kwai Shun	"	385	2/88
Tseung Kwan O	"	1 299	2/88
Sheung Shing Street	"	188	3/88
Hing Tin	"	1 712	4/88
Kai Wang	"	676	5/88
Tin Sam	"	1 898	5/88
Kai Chui	"	500	6/88
Hau Yan	"	305	8/88
Kai Yuet	"	663	8/88
Tai Po Tau	"	505	8/88

Choi Chuk	"	1 813	10/88
Tsing Yan	"	2 129	11/88
Yuen Tung	"	19	11/88
Hoi Bun	"	533	12/88
Kai Yui	"	572	12/88
Sheung tai	"	1 197	1/89
Shing On	"	1 745	1/89
Yuen Ha	"	374	2/89
Fat Tseung Street	"	1 207	4/89
Hing Shing	"	1 242	5/89
Tsing On	"	285	7/89
Tsing Fat	"	271	12/89
Lung Ping Road	"	683	1/90
Yuen Tin	"	-	3/90
Hing On	"	1 578	6/90
Yen Chow Street	"	189	6/90
Yuen Ping	"	-	8/90
Pok Fu Lam	"	306	9/90
Sub-total		40 643	
Total		82 243	

Note: THAs with an asterisk are scheduled to be cleared in whole and those with # cleared in part in 1991/92.

Chapter 8

The Environment and Grassroots Participation in Squatter Areas

Ng Yiu Fai

Introduction

In common with many other large cities in the world, the rapid growth of population and the general shortage of housing in Hong Kong have resulted in large numbers of people living in substandard housing. At the end of 1990, it was estimated that there were about 307,000 people living in squatter huts (PCSP, 1991), some 5.6% of the population of this city. Squatters have been defined as:

> people occupying land to which they have no title (Wong, 1978:204).

People living in squatter areas often constitute the urban poor who cannot compete in the open market to obtain a regular housing unit. One study has shown that 38% of households moving into squatter areas were doing so because of economic hardship (NAAC, 1978). Another survey indicated that the monthly household income of 40% of squatters was below $2,000, whilst the median monthly household income of this city was $2,557 in the same year (CDO, Kwun Tong, undated). Squatters, in general, are among those with the lowest socio-economic status in Hong Kong, with the lowest household incomes and the lowest educational attainment. A considerable percentage of these people are unskilled or semi-skilled workers engaged in construction or manufacturing trades (NAAC, 1978, 1985; Wong, 1978).

Squatter huts are mostly one or two-storey temporary structures constructed of non-durable materials. Their illegal status:

> also means the non-provision of services and facilities like water supply, electricity, sewage and drainage system etc., which are otherwise provided by the city government to regular housing units (Wong, 1978:204).

The physical deterioration of squatter areas and deprivation of services or facilities are constantly associated with environmental problems which are hazardous to the

health of squatters themselves. However, as Golger (1972:32) stated in his study on the squatter problem of Hong Kong:

> The squatters themselves would just like to be left in peace and they do not like changing their pattern of life and environment. Poor people in general, and the Chinese in particular, are very conservative, believing that change may not be for the better.

Chan (1984b:17) also pointed that:

> most of the residents in low-income neighbourhoods belong to the group of the silent majority and are unwilling to contribute towards public goods.

The passivity of the squatter people does nothing to ameliorate their poor living environment. Motivating and mobilizing the grassroots to participate in collective action thus becomes an important issue in improving the living environment in squatter areas.

Encouraging citizen participation in the decision-making process is one major goal of community development. Helping the grassroots population to climb the ladder of participation, i.e. to move them from the level of non-participation to participation in decision-making and finally to citizen control is the major task of community workers (Chan, 1984a:46). This chapter reviews the squatter problem in Hong Kong and relates the experiences of squatters over the past two decades in participating in action to improve their living environment.

The squatter problem

The existence of squatters in Hong Kong can be traced back to 1884 when the governor of this city announced the prohibition of the erection of 'mat-houses' on Crown land (Wong, 1978:206). The problem grew after the Second World War when migrants from China moved here in large numbers. Between 1945 and 1950, the city's population increased by 377% (Golger, 1972:14). As a consequence, the problem of housing became even worse. As houses were filled to capacity, the poor people could find no shelter in regular housing. People thus overflowed into the streets and erected large squatter settlements on the urban periphery, on the roofs of buildings, and in sheltered coastal embayments on boats (Pryor, 1983:23). Between 1951 and 1953, the squatter population increased from 30,000 to 300,000 (Golger, 1972:14), which constituted about 15% of the entire population.

The government's initial response to the squatter problem was minimal. In the early 1950s, the government established several resettlement areas to attract people in squatter areas to move in gradually. But progress was slow because the majority of squatters either could not afford to build houses to the

standard required in these areas or were unwilling to move to the outlying areas (CR, 1956).

The fire that broke out at Shek Kip Mei on Christmas Eve 1953 alarmed the government. This fire made 53,000 squatter people homeless. The government took immediate action. As well as the usual emergency relief measures, the government decided to use public funds to build temporary two-storey buildings on the fire site as a matter of urgency. 'It was a major change in policy which had far-reaching consequences' (CR, 1956).

In 1954, the government established a Resettlement Department. The new department had four main functions: (a) the prevention of squatting, (b) the screening and documenting of squatters in areas due for clearance, (c) clearance and resettlement operations, and (d) the administration of resettlement areas and resettlement estates (CR, 1956). (This department was renamed as the Housing Department in 1973 with similar functions).

Thereafter, the government set up a clear policy towards squatters, whilst the Resettlement Department served as its executive arm. In October 1955, the Department took aerial photographs of all the squatter areas under its control. The squatter huts which were erected before that date would not be demolished until the sites they occupied were required for permanent development. New structures would be demolished without any offer of resettlement (CR, 1956). The squatter policy thus comprised a series of measures: (a) tolerance of old (surveyed) structures, (b) the prevention of the erection of new structures, and (c) the clearance of squatters and the resettlement of its people only when sites were required for permanent development. This policy has endured to the 1990s.

Policy had been established, but the squatter problem was not solved. After 10 years of clearance and resettlement operations, the squatter population did not diminish but actually increased. In 1963, it was estimated that 580,000 squatters remained (Hong Kong government, 1964). Accelerated redevelopment of old property, the greater number of dangerous buildings closed and the expansion of the population, caused by influxes from China and natural increase, were the factors contributing to the continued growth in squatting.

In 1964, the Legislative Council endorsed a White Paper entitled 'Review of Policies for Squatter Control, Resettlement and Government Low-cost Housing' as a general guide to future policy. The White Paper set out priorities to be followed in determining eligibility for resettlement and recommended an increased resettlement building programme. It also provided for the setting up of 'licensed areas' on which, for a fee, the genuinely homeless could build huts. Strict control of new squatting was to be enforced, and existing structures were to be tolerated until they could be cleared (CR, 1973:1). With the implementation of the new

policy, the squatter population decreased steadily over the next 10 years (Table 8.1).

Table 8.1 Squatter Population 1965-1973

31 March	Squatters
1965	463,000
1966	430,000
1967	428,000
1968	409,000
1969	401,000
1970	380,000
1971	358,000
1972	286,500
1973	280,500

Source: Commissioner for Resettlement (1973), *Annual Departmental Report 1972-73*,p.5.

However, the situation changed again in the late 1970s. About half a million legal and illegal immigrants again inundated Hong Kong (Hong Kong Government, 1981); three-fifths of these arrived between 1978 and 1980 (HKHA, 1980). With the influx of immigrants, unsatisfactory living conditions in crowded tenements and high rents in the private sector, the squatter population increased enormously (Pryor, 1983:100). One survey conducted in 1980 found an overall growth rate of 4.6% in four squatter areas in Kwun Tong over a two-month period (CDO, undated). In the same year, it was estimated that squatters in Hong Kong accounted for 750,000 people (HKHA, 1980), or 15% of the entire population.

In October 1980, the government took a major policy decision:

> ....deciding to end the so-called "touch base" policy under which illegal immigrants who succeeded in being reunited with relatives in Hong Kong, were allowed to remain and claim an identity card. (Hong Kong Government, 1981:3)

Such a policy change shut the door on illegal immigrants. Population growth subsided; the squatter population stabilized and then started to decrease again in the 1980s.

In 1984, the government took further steps to tackle the squatter problem, one of which was non-development clearance:

> This new approach means that squatters on dangerous slopes and occupying other sites not required for development can be rehoused systematically. (HKHA, 1985:13)

Another important step forward was the introduction of a comprehensive 10-year clearance programme which:

> with non-development clearances, foresees the clearance of all squatters in the urban area by the early 1990s. (HKHA, 1985:13)

Extensive squatter clearances were carried out in the 1980s involving thousands of people. With stricter control over the increase in the squatter population by the registration of all occupants of squatter huts during 1984 and 1985, squatters decreased significantly in the 1980s. In September 1985, 477,000 people were recorded in the 1984-85 survey (HKHA, 1986), which was about 9% of the city's population. This figure continued to decrease. In the 1989 survey, a figure of 292,000 was obtained (PCSP, 1990). The 1980 figure, i.e. 750,000, could be an over-estimation, but the relief of the squatter problem is a matter of fact in the 1990s.

The environment in squatter areas

Wong (1978:231) suggested that there are two approaches to tackling squatter problems: the traditional approach, which emphasizes the elimination of all squatter structures; and the environmentalists' approach, which works on the creation of opportunities for social and economic improvements for the squatters. In Hong Kong, the second approach was not included in the official squatter policies until the 1980s. As Wong (1978:223) comments:

> in line with government's policy which aims at the ultimate eradication of all squatters, there was a deliberate attempt not to provide the squatters with any facilities and services that were otherwise provided in other types of regular housing.

W. T. Leung (1983:71) further pointed out:

> Right from the early days the Government had been fully aware of the squalid conditions in squatter areas, which are no more than a haphazard collection of make-shift structures lacking in most of the basic facilities and services. Yet there was a deliberate attempt on the part of the Government up to the end of 1981 not to improve the environmental quality of the squatter settlement partly in line with the policy of containment. There was the worry that better living conditions would lead to fresh squatting. Furthermore, it was considered that the resources required for improvement might be more justifiable spent on the resettlement programme as squatter areas were to be eradicated ultimately and after all

> squatters have been regarded as occupants of illegal structures without any rights of tenure to the land.

As a consequence of the government's policy:

> none if any of the squatter areas had a level of services that could be considered to have satisfied the health and sanitary needs, not to mention the convenience and comfort of the squatters (Wong, 1978:223).

The following is a general description of the living environment in squatter areas in the 1970s and early 1980s.

Wong (1978:207-208) described squatter areas in general as being groups of huts clustered together in one area. The distribution of the squatter areas by size of population and area of land occupied does not show any pattern. However, areas with high population density are usually found to be associated with areas of high density of residential, commercial and industrial use. Small areas are basically agricultural squatters in a rural setting. They are located on any ground, no matter whether it is flat ground or a steep slope. W.T.Leung (1983) reported that in the late 1970s, new structures could even be found under pedestrian bridges, next to gas storage tanks, and on the pavements. In 1984, the government estimated that about 54,000 people lived in squatter huts on steep unstable slopes which were vulnerable to the forces of nature; their huts were prone to landslips during times of heavy rainfall (HKHA, 1984).

In fact, from an engineering point of view, the vast majority of squatter structures could be considered potentially dangerous (HKHA, 1984:9). In Wong's study (1978), approximately 80% of the squatters huts were temporary structures constructed of non-durable materials like wood and iron-zinc plates and asbestos roofing. The rest were permanent structures constructed of stone, brick or reinforced concrete. They were vulnerable to natural disasters such as fire in the dry season and rainstorms in the typhoon season.

The density of occupancy in squatter areas is in general inferior to that of the city average. One community study in 1984 showed that the average number of households occupying one squatter hut was 1.45. The average living space of each household, of 4.1 persons, was 167.5 sq. ft., which meant that the average living space per person in squatter huts was 40.8 sq. ft. (NAAC, 1984). Furthermore, poultry and sometimes pigs lived with people under the same roof or around the huts (Golger, 1972).

Poor environmental quality was another major problem. Since squatter areas were considered 'temporary' and huts were built without any plan, sewage systems were practically non-existent. Some squatters had plastic pipes coming out of the floor, discharging into adjacent stream beds or drainage channels adjacent to footpaths. People hence made use of the plastic pipe to establish

some form of private toilet (HKHA, 1982). The majority had to use the public toilets in the form of movable shacks provided by the government at a rate of one per 100 squatters (Wong, 1978), but it was grossly inadequate and inconvenient. Very often people had to walk a long way to and from the public toilets if they did not have a private toilet. Some people preferred to make use of pans at home, and would then empty them into these toilets (Golger, 1972).

Formal refuse collection services were provided to some squatter areas. In general, there were several public refuse dumps located at the main entrance or on vacant ground, if any. Most people disposed of their refuse and waste matter at the dumps or in the toilets (NAAC, 1978). Some people, however, just for convenience, threw their household refuse into stream beds and drainage channels. Thus, squatter areas were distinguished by the great amount of rubbish accumulating after a long period of dry weather. Streams, drainage and even paths and alleys were often left to be flushed out by heavy rain.

Standpipes were the most reliable source of water supply in the 1970s. Standpipes were provided by the government at the rate of one per 500 squatters (Wong, 1978:223); but very often the actual provision was below this standard. Standpipes, in general, did not reach those squatters located on upland areas or on more remote sites. Most people had to carry water from the standpipes over long distances. Some used plastic hoses to draw water from the standpipes. Others collected water from hillside streams. The stream water often consisted of contaminated water and the streams often dried up in the winter months (Golger, 1972; Wong, 1978). The shortage of water also made fire-fighting difficult.

Electricity was supplied by the China Light and Power Company but the supply was often limited to those huts surveyed in 1976. Therefore, illegal tapping of electricity from nearby buildings or transmission cables was widespread in squatter areas (Wong, 1978), some of which even used telephone poles and wires as a support system between the illegal connection to the power wire and the hut (HKHA, 1982). Illegal tapping of electricity often caused loss of life and fires in the squatter areas. It was in such a deprived environment that the squatter people lived. The huge squatter settlements in the late 1970s and early 1980s indeed constituted a danger to law and order. In the eyes of many people, squatter areas were often labelled as a 'cradle for crime' (CDO, undated; NAAC, 1978), but the real risks lay in the potential danger of a widespread epidemic or fires that might cost lives and cause major damage to property.

Government intervention in the 1980s

The resurrection of squatting in the late 1970s resulted in a spate of fires and landslips. The squatter fires between October 1979 and December 1981 made 40,000 people homeless. Moreover, the heavy rainstorm in June 1982

caused huge landslides in some squatter areas, which also resulted in loss of life. The government thus was forced to reappraise its squatter policy. Whilst control measures must continue to be enforced, more positive action had to be taken by the government in squatter areas, such as the provision of basic facilities like electricity and standpipes, and preventive measures against natural disasters like fire breaks (Pryor, 1983). It became apparent to the government that squatter areas would remain for many years to come but the environment in most of them was not fit for human habitation. A more coordinated and comprehensive scheme of improving facilities and services to make squatter areas a safer and better place to live was desirable (Leung, 1983). The responsibility for improvements in squatter areas rested with the Hong Kong Housing Authority.

In January 1982, a new Squatter Area Improvements Division was established within the Operations Branch of the Housing Department. The new division carried out pilot schemes for upgrading basic facilities in three squatter areas. The work was carried out in two phases. The first phase involved improvements to safety, including slope protection work and the formation of fire breaks. The second phase included the provision of basic facilities such as a mains water supply, enclosed sewerage and drainage systems, improved access and street lighting. Toilets, bathhouses and refuse collection points were also provided and paid for by the Urban Council (HKHA, 1983).

Following the successful implementation of these pilot schemes, the government approved a five-year squatter area improvement (SAI) programme for similar works to be carried out in other squatter areas which were not scheduled for clearance in the next few years and which had more than 500 occupants. Priority would be given to those areas which had the least satisfactory environment and services (HKHA, 1983; Leung, 1983).

The SAI programme was welcomed by the people. People living in the improved areas regarded the works as useful; they felt that the environment and the safety of the place in which they lived had improved (PCSP, 1987). The government, on the other hand, also rated the programme as a success. The SAI programme was extended for two years to include urban settlements of 300 or more persons which were not scheduled for clearance within three years (HKHA, 1989). When the programme ended in 1991, it had been carried out in 99 squatter areas and had benefitted 144,000 people, at a cost of HK$182 million (PCSC, 1991).

In 1986, the Division implemented a two-year street lighting programme in small squatter areas where no comprehensive improvements had been planned. In 1988, the Division completed the installation of 85 street lights. The Division also took over 295 street lights which had been installed by district boards, for upgrading and maintenance (HKHA, 1988).

Furthermore, the poor environment in squatter areas also became a matter of public concern. In the mid-1980s, some district boards put money into small environmental improvement projects in squatter areas, including the installation of mail boxes and street lights, and path repairs (PCSP, 1985, 1986).

Grassroots participation in environmental management

Government initiatives and people's involvement are important elements in the successful improvement of squatter environments. However, traditional Chinese are characterized by their apathy towards politics and endurance of poverty (Lau, 1986). Grassroots squatters are thus generally reluctant to participate in community affairs. Although most of the squatter people can recognize the need for mutual cooperation to improve the community environment, many of them think that only the government can improve the living environment of squatters (NAAC, 1985). Therefore, grassroots participation in the 1960s was limited to collective efforts of groups of people to build or repair paths on a small scale, or mail delivery by local grassroots organizations (kai fong associations) in a few squatter areas (Golger, 1972).

In the 1970s, people living in deprived areas had rising expectations. People started to demand improvements in facilities such as water and electricity supply. Community development also spread into the deprived communities to organize the grassroots and to use confrontational strategies to achieve changes (Leung, 1986).

One significant event that has enhanced people's participation in squatter areas has been the implementation since 1978 of community development projects in deprived areas. These projects are called 'neighbourhood-level community development projects' (NLCDP). Subsidized by the Social Welfare Department, the projects are operated by voluntary agencies in communities lacking facilities and services, and with a population ranging from 3,000 to 15,000 (CDD, 1986). Although these projects were designed to fill service gaps, apart from enabling the residents to take some remedial action to improve their immediate social and physical environment, they also encourage the grassroots to participate actively in community affairs (Leung, 1986).

In the late 1970s, community development projects in squatter areas were aimed at building community networks, organizing community groups and developing local leaders. They also involved the grassroots in concrete tasks such as community clean-ups, path repairing and negotiations with local government authorities for improvements in the physical environment (Chan and Wong, 1980; Ng, 1982). As the environmental problem in squatter areas became acute in the early 1980s, these projects were amalgamated (i.e. the People's Council on Squatter Policy) to generate greater force for protest actions and campaigns at the city level. Thus, channels were developed for the grassroots

population to participate in environmental issues at both the neighbourhood and city levels.

Arnstein (1969:216) has offered a typology of citizen participation which 'is arranged in a ladder pattern with each rung corresponding to the extent of citizen's power in determining the plan and/or program'. Chan (1984a) adopted Arnstein's 'Ladder of Participation' and developed a framework for analysis of grassroots participation in Hong Kong. Based on Chan's analytical framework, a checklist of citywide grassroots actions in major environmental issues in the 1980s is produced here to illustrate the levels of participation of the squatter people in environment management (Table 8.2).

Two case examples are cited below to illustrate how squatter people actually participate in actions to achieve improvements in the environment.

Water supply

A fresh water supply used to be the biggest problem of squatter people. In the mid-1970s, approximately 5% of the squatter structures had a piped water supply inside their living quarters and they were almost entirely in permanent structures (Wong, 1978). The provision of standpipes (1 for 500 people) was quite inadequate and provision was very often based on the population figure of the 1976 squatter survey. The rapid growth of the squatter population in the late 1970s thus made the situation much worse. Many people had to find their own sources of water. Although most squatter areas were on sites with surface streams, few of them could rely on a natural water supply because the streams were either contaminated or would dry up in the winter months (Golger, 1972; Wong, 1978). Natural water was still a major source of supply to squatter people, particularly to those living on uplands where a standpipe was not available. Some people built water tanks collectively to store water for consumption; many purchased water from people, mostly triad members, who tapped water illegally from standpipes and from nearby buildings and sold it to the needy.

The provision of standpipes was the most pressing need. Because of the government's reluctance to improve the squatter environment, pleas from individual communities for a water supply always got unsatisfactory replies. In mid-1980, local leaders from six squatter areas with NLCDPs operating met together to deliberate on plans of action to improve the water supply in squatter areas. A press conference was held in late 1980 to find out people's grievances and to get publicity for improvements. With assistance from a community development project, a 'hot-line' was set up to receive complaints from squatters on water supply and to extend the network of the grassroots. Leaders also visited the squatter areas where complaints had been received; they met the people and motivated them to participate in future action.

Table 8.2 Checklist of grassroots actions in major environmental issues in squatter areas in the 1980s

Grassroots action	Level of participation							
	Manipulation	Therapy	Informing	Consultation	Placation	Partnership	Delegate Power	Citizen control
Grievances, tolerances, services, consumption (pre 1980s)	+	+						
Petition for water supply (1981)			+		+			
Fire prevention campaign (1981)			+		+			
Survey on squatter management (1982)					+			
Meet officials on SAI programme (1982)			+	+				
Installation of mail boxes in squatters (1983)	+							
Survey on street lighting (1983)					+			
Publication of the grassroots 'Green Paper on Housing Policy' (1983)					+			
Petition on dangerous slopes (1983)					+			
Fire prevention campaign (1983)			+		+			
Implementation of SAI programme (1983)		+	+	+				
Petition on refuse collection (1984)					+			
Publication of the grassroots' White Paper on Housing Policy (1984)					+			
Opinion survey on public housing allocation policies and meet officials (1984)				+	+			
Metered-water supply to squatters (1984)		+					+	
Petition for subsidy to fire patrol in squatters (1985)					+			
Meetings with officials on subsidy to fire patrol squatters (1985 1986)				+		+		
Anti electricity-stealing campaign (1985)			+					
Proposal to officials on handling empty huts (1986)					+			
Opinion survey on squatters to SAI programme (1987)				+	+			
Petition for prevention of fire in empty squatter huts (1988)					+			
Proposal on squatter policy in the 1990s (1990)					+			

Source: People's Council on Squatter Policy, *Newsletter*, 1982-91 (original in Chinese)

After the initial contacts, more local leaders were identified. A meeting was held among the leaders and they formed the Joint Council of Squatters. (This was renamed the People's Council on Squatter Policy in 1982). A preliminary survey was carried out to investigate the actual water supply situation in the urban squatter areas. They also took samples from the natural water that people consumed daily and took it to a laboratory for examination. (In one sample 5,000 bacteria in 1 ml water were found; another sample also contained 100 bacteria in 1 ml water). On 1 January 1981, the Council held a mass meeting. Hundreds of squatters participated in the meeting and pressed their demands for a fresh water supply. On the next day, the squatters handed in a petition to the Office of the Unofficial Members of the Executive and Legislative Council to demand improvements in the water supply in squatter areas. As well as an increase in the numbers of standpipes, representatives also demanded a metered water supply as the ultimate solution. As it was the first year of the International Decade of Water and Sanitation, the leaders also wrote a letter to the United Nations to solicit support.

At the neighbourhood level, local leaders continued their efforts in lobbying district board members and pressing the local authority for the same goal. The mass media were invited to visit squatter areas to witness the hardship of the people. This tactic won wide mass media coverage and aroused public concern and support, which increased pressure on the government.

In mid-1981, the government agreed to increase the number of standpipes in areas of underprovision. It further consented to a metered water supply in squatter areas in the future (PCSP, 1984). Meanwhile, local leaders liaised with the Water Authority to identify the most suitable spots to install standpipes for the convenience of the people.

In 1982, the government started to supply metered water to some squatter areas. The squatter people made their applications collectively through local community groups or organizations . When the applications were approved, the people formed a working group, usually affiliating with the local grassroots organizations like mutual aid committees, kaifong associations or residents' committees, to handle this matter. Public meetings were held to inform people about the details and procedures. The working group would select a contractor, mostly by tender, to carry out the work. The squatters deposited their money with the group, which would keep an eye on the progress and quality of the work of the contractor. When the installation was completed and the people were satisfied with the work, the group would pay the contractor on behalf of the people. Such a practice generally resulted in less expense for the people and generated cooperation in the neighbourhood (PCSP, 1984).

Fire prevention

Squatter people are under constant threat of fire. Fire prevention is consequently an important issue in squatter areas. In the late 1970s and early 1980s, several major fires broke out in squatter areas which made more than 40,000 people homeless. The people were alarmed by these fires. Although the actual causes were not known, there was speculation that poor fire-fighting equipment and people's negligence regarding fire prevention measures might be two of the reasons. Furthermore, many people were ignorant about the resettlement policy of the government. When they became fire victims, very often they did not possess sufficient knowledge and documents to prove their residence, and this made resettlement difficult.

In the autumn of 1981, the Joint Council of Squatters launched a citywide fire prevention campaign. The campaign was mainly educational in purpose and assistance was obtained from the NLCDPs in squatter areas. Slides were made and shown at neighbourhood level to educate the people about major measures in fire prevention. Domestic measures such as the proper way to handle LP gas and electrical appliances were emphasized and community measures such as communal fire-fighting equipment and organization of fire patrols were introduced. The people were also told what to do when a fire broke out: inform the police and the neighbours immediately, take their identity documents and escape. Pamphlets which introduced the government's resettlement policy to fire victims were distributed in the community. Community workers also took this opportunity to organize fire patrols among the neighbourhoods. A public forum was held; local leaders, scholars and officials from the Fire Department were invited to share their views on fire prevention and fire-fighting in squatter areas. The forum made the general public aware of the potential danger of squatter areas and won public support for improvements in safety measures in squatter areas.

In December 1983, the squatter people launched another fire prevention campaign. As well as being a community education programme, the campaign also focused on the organization and equipment of the fire patrols (PCSP, 1983). Fire patrols were formed by volunteers. They were either local voluntary groups or groups organized by local government departments like the City District Office, or by social service agencies. The main task of the fire patrols was to propagate the message of fire prevention in the neighbourhood; when there was a fire, they would help to maintain order during the escape. In 1983, there were about 200 fire patrols in the city; the majority were in squatter areas (PCSP, 1983).

However, government support was symbolic. Each new fire patrol could receive from the Information Services one set of equipment, including five fire-extinguishers, four brass gongs, eight sand buckets, and 20 badges. The Fire Department would give refresher training to the patrols once a year. The

contents of the training was limited to the way to use a fire-extinguisher to put out a fire and short talks on fire prevention measures. Although the fire patrols received minimal attention and support from the government, some patrols received genuine support at the grassroots level. In some squatter areas, people donated money to purchase and maintain fire-fighting equipment; some constructed water tanks to store rain or stream water to put out fires in case they occurred in the neighbourhood (PCSP, 1983).

In 1984, the City District Office assumed the duty of coordinating the activities of the fire patrols. The government also ceased subsidizing fire patrols. The patrols could apply for a subsidy from the district boards, but it was not secure as they had to compete with other applications for the limited resources of the boards. Therefore, many fire patrols could not get their fire-extinguishers refilled, and new patrols could not obtain the basic equipment (PCSP, 1985).

In early 1984, the People's Council on Squatter Policy organized meetings with the fire patrols of squatters to generate plans of action. Fire patrols decided to make applications for a subsidy to the district boards; but all applications failed. In the next year, together with leaders of some fire patrols, the Council held a press conference to publicize the issue. They also handed in a petition to the Office of the Unofficial Members of the Executive and Legislative Council to plead for improvements.

In February 1985, a meeting was held between the Council and officials of the City and New Territories Administration Department. In the meeting, a solution was worked out so that the CNTA would make suggestions to the district boards every year to reserve funds to subsidize the fire patrols. Meetings were held in two consecutive years to ensure funds were available and to deal with other matters such as the organization and revitalization of existing patrols. The people were thus able to participate in joint decision-making with the authority.

In sum, environmental deprivation provided community development a fertile land to grow and develop in squatter areas; in return, community development brought about environmental improvements in squatter areas through the enhancement of grassroots participation.

Looking to the 1990s

J.Leung (1986:7) has summarized four achievements of the community development effort, which include: (a) bringing about improvements in the environment and facilities in urban slums, (b) educating the general public about their civil rights, (c) cultivating indigenous leaders, participating actively in community affairs, and (d) consolidating people's power through the establishment of grassroots organizations. There is no doubt that community development in squatter areas has successfully mobilized community resources and enhanced grassroots participation to achieve environmental improvement.

Through a coalition of grassroots forces and collective action, the squatters have achieved significant changes in the government's squatter policy, particularly its attitude towards environmental problems in squatter areas (Au Yeung, 1986).

Entering the 1990s, the people's chief concern rests on matters relating to resettlement issues rather than environmental issues. The government's squatter area improvement programme covered all significant squatter sites in the urban area. Latterly, the government's 10-year squatter clearance programme has resulted in the removal of the most of the urban squatter areas. In 1981, there were 82,000 squatter huts in urban areas, whereas in 1990 there were just 24,000. People mainly care about when the huts in which they live will be cleared and where they will be rehoused; environmental matters therefore are often underrated (PCSP, 1991).

Nevertheless, there are currently about 241,000 people living in squatter areas in the New Territories, accounting for 78% of the total squatter population (PCSP, 1991). These squatter huts are mostly distributed fairly sparsely; many of them are located on private land, which makes government intervention difficult. In 1987, the Squatter Area Improvement Division started a pilot scheme to implement improvement works in six squatter areas in the New Territories but with little success. The main reason was that most squatters were located on private agricultural land and there were often difficulties in obtaining the landowners' consent for works to proceed (HKHA, 1989). With the government's absence or minimal intervention for physical improvements, environmental deprivation remains a core problem for squatters in the New Territories, although the degree of deprivation may differ from that of the urban squatters in the late 1970s. Community development thus can make a further contribution in squatter areas by mobilizing community resources and enhancing grassroots participation in communal environmental management projects to maintain and improve the physical environment.

While environmental management issues in squatter areas still need to be tackled, the ultimate solution to the squatter problem in Hong Kong is of greater concern. The size of the squatter population has been fluctuating in relation to the growth of the total population, the availability of public housing and the ability of households to pay rent for private housing (Wong, 1978:206). Stricter controls on immigration, the provision of more public housing and the large-scale clearance operations in recent years have resulted in a decrease in the size of the squatter population. However, housing for the poor now and in the future remains at the core of the housing problem in Hong Kong. Only when there is adequate housing for the poor, will people be less likely to choose, or be forced to choose squatter areas as a home.

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Chapter 9

Environmental Improvement Efforts in Temporary Housing Areas

Chui Wing Tak

Introduction

Environmental issues are apparent in all modern, industrialized and urbanized societies. Hong Kong, one of the most highly developed cities in the world, has also been plagued by severe problems of environmental pollution. Such problems are basically rooted in the misconceptions of people about the man-land relationship. However, policy makers and government administrators can also be held responsible for mismanagement and ineffective urban planning as well as inadequate social policies. The incidence of environmental deterioration is most acute in disadvantaged communities which are denied appropriate resources. In Hong Kong, there are various such communities - temporary housing areas (THAs) being one example - which are deeply affected by a number of environmental problems.

The government has not shown itself to be responsive enough to such issues. It therefore requires the mobilization of grassroots people in these deprived communities to improve living conditions. In this chapter, the characteristic features of the THAs are outlined, as well as the critical situation confronting the residents living there. The collective efforts of these people in tackling the situation is then discussed with case illustrations. The strategies employed will illustrate the role of grassroots citizen participation in environmental management.

Temporary housing areas in Hong Kong

The history of local temporary housing areas can be traced back to the 1950s, when the government allowed local residents to erect temporary structures in the urban areas. There were actually two kinds of such areas: 'approved areas' were those located in the vicinity of the metropolitan area and 'tolerated areas' were sites remote from the urban core, with virtually no landuse value. Such a lenient policy of tolerating people living in temporary accommodation was mainly the result of inadequate government provision of public housing in the urban area.

In 1964, government presented a White Paper on Squatter Resettlement and Temporary Housing Policy to update policy on these areas. The two types of area were subsequently renamed 'licensed areas class I and II' respectively (Drakakis-Smith, 1979). Class I areas provided temporary accommodation for those who were eligible for public housing but who had to wait until such estates were available. Class II areas were designated for those ineligible for permanent housing at that time. There was actually a third category of Class III areas which provided land for industrial undertakings displaced by the government's clearance programmes. Given their remote location and unfavourable communal facilities, such areas were not attractive to squatters (Hopkins, 1969).

In 1973, the new Housing Authority was established, encompassing the previous responsibilities of the Resettlement Department, the Public Works Department and the Urban Council in managing public rental housing estates. In subsequent years, the Authority received extra funds for improving conditions of the licensed areas. However, it was not until 1975 that the government took a more serious look at the matter of such temporary accommodation. All licensed areas were reinstated with the present name of temporary housing areas, with parallel improvements in and standardization of community facilities. Eventually, as the population grew, especially with the influx of Chinese immigrants, the demand for permanent accommodation became acute. Furthermore, when the government launched its squatter clearance programmes and urban renewal programmes, increasing numbers of clearance victims further fuelled the problem of an acute shortage of public housing. Temporary housing areas then became the key measure for relieving pressure on housing provision and on the government.

In policy terms, THAs are temporary accommodation for those people who are not yet eligible for public housing allocation. The major criterion defining such eligibility is seven years residence in the territory. Thus, victims of urban renewal, squatter clearance and even fire hazards who are essentially recent Chinese immigrants from the mainland and have a short period of residence will be transferred to such THAs. It is in such areas that they wait to pass the eligibility threshold.

According to the Housing Department, there are essentially 10 different categories of people eligible for a unit in a THA (Yeung 1991:38):

(a) development clearance cases;
(b) natural disaster cases (e.g. fire, rainstorm, landslide, etc.);
(c) ex-tenants of dangerous tenements;
(d) environmental improvement cases (from squatter areas);
(e) residents dislocated by the Housing Department's Squatter Control Division routine demolition programmes;
(f) tenement cases (e.g. private tenement redevelopment, court

repossession or enforcement action by the Buildings and Lands Department);

(g) unauthorized persons identified and subsequently evicted from public housing estates and other THAs;

(h) boat squatter people referred by the Marine Department;

(i) compassionate cases recommended by Social Welfare Department;

(j) miscellaneous.

The connotation of 'temporary' basically carries various underlying policy implications. In the first instance, the THAs are temporary structures in the sense that they are to be demolished and redeveloped in a short period of time. To start with, it is essential to clarify that the land tenure of the site where such THAs are located is basically transient. The Housing Department, which is the government department responsible for establishing and managing such THAs, virtually 'borrows' the land from other government departments originally allocated that particular piece of Crown land. Such an arrangement reflects various concerns. There is an urgent need for suitable sites to provide accommodation for the above categories of people. The 'lending' departments are not immediately in need of the land concerned. Thus, an agreement between the two departments will be reached where the Housing Department will be responsible for site formation and building the THA blocks and ultimately returning the site to the other department within an agreed time period.

In addition to the temporary nature of the landuse, the residence of the people is also transient in policy terms. As mentioned earlier, residents will eventually be allocated public housing units when they meet the local residence requirement. Thus, these areas are characterized by a high turnover of people.

However, the temporary nature of the residence hinges upon a variety of factors. It relies on the provision of adequate public housing estates for accommodating the enormous demand for such permanent housing. It also depends upon the availability of suitable locations of such housing estates for satisfying the residents' various choices. The residents have also to meet an income limit requirement when they are eligible for being considered for such permanent housing. Thus, for individual tenants, the period of such transient accommodation might range from a few months to several years or more. Such a high mobility of population results in low commitment and sense of belonging to the community, which may actually contribute to environmental deterioration.

Given the temporary tenure that it holds, the Housing Department is not willing to invest much capital in the construction of such housing blocks. According to the Department's 1990 figures, the operational cost for all the THAs in that year was HK$21.7 million. Another $5.5 million was used to

build new THAs (Yeung 1991:46). The Department is presenting a picture that the government is providing substantial subsidies to THA tenants, given the low rents of such areas. However, it is ironic to find that, comparatively speaking, the THAs are almost as expensive as permanent public housing estates. Table 9.1 illustrates this curious picture.

Table 9.1 Rent of residential units in Hong Kong as at 1989-1990 (HK$/sq.m.)

District	private 1989	public housing 1990	THA full-built 1989
Hong Kong Island			
Below 40 sq.m.	139.9	18.7	21.8
40-69.9 sq.m.	139.4	22.1	21.8
Kowloon			
Below 40 sq.m.	144.9	19.4	21.8
40-69.9 sq.m.	139.4	22.1	21.8
New Kowloon			
Below 40 sq.m.	129.2	17.6	21.8
40-69.9 sq.m.	109.6	21.6	21.8
New Territories			
Below 40 sq.m.	116.7	19.3	17.5
40-69.9 sq.m.	113.1	21.0	17.5

Sources: 'Hong Kong People's Council on Public Housing Policy THA Policy Concern Group (1989) THA Policy Green Paper'.
Housing Department (1990). 'Housing in Figures' (adapted from Yeung 1991:57).

It is therefore obvious that the residents are unfairly provided with poor living conditions given such a rent level. In the following sections, the unfavourable environmental conditions of the THA residents will be described in more detail. This serves to provide a background for subsequent discussion of the THA residents' grassroots participation in environmental improvement efforts.

In terms of community facilities, the THAs are provided with unacceptable standards of provision, given Hong Kong's economic prosperity, as shown in Table 9.2.

Table 9.2 Community Facilities in THAs.

Retail	shops:	60 sq.m. per 1,000 persons
	cooked food stalls:	1 module (80 sq.m.)/5,000 persons
Recreation	local open space:	up to 1 hectare (New Territories) or 0.6 hec. (urban and Tsuen Wan) per 10,000 persons, and if practicable; including...
	children play area:	400 sq.m. per 5,000 persons
Community	nursery/kindergarten:	1 part-built structure per 5,000 persons
	community hall:	1 part-built structure per 5,000 persons plus study room
Education	kindergarten:	1 classroom per 2,700 persons, 38.4 sq.m. minimum
	primary school:	nil
	secondary school:	nil
Transport	bus/public light bus:	nil
	car park:	nil
	bicycle tracks:	provide if required
Management Office	Housing Department:	1 per THA
	Mutual aid committee:	ditto
Police	neighborhood police unit:	ditto (40 sq.m.)
	Refuse collection points:	2 per 5,000 persons

Source: Edited from Housing Department (1985), Temporary Housing Division's operational manual. Adapted from Yeung (1991:49).

Notes: 1. Tsuen Wan was the first Satellite Town (currently called New Town) in the New Territories, developed in the 1970s, to be classified as an urban area in the Housing Department's allocation system.

2. Neighbourhood-level community development projects are social service projects financially supported by the government and operated by non-governmental organizations for deprived communities with 3,000-15,000 persons.

3. Mutual aid committees are government-sponsored residents' organizations facilitating government-citizen communication.

The housing blocks are actually one or two-storey wooden structures. The roofs of such blocks are made from asbestos which has been proved to be a serious hazard. The ventilation for individual units of such blocks is poor since the units are very compact. Living in such THA blocks during the summer is unbearably hot. The fact that such housing units are built with wooden boards renders a low standard of privacy for the residents. The problem of decay and deterioration of such wooden structures is accelerated by the existence of termites, coupled with the incidence of seeping water during the rainy and typhoon seasons.

There is a standard provision of one public toilet cubicle for 100 persons in a THA. Thus, an area with 3,000 people will be allocated a public toilet block with 30 cubicles. With such a high level of utilization, it is obvious that severe sanitation problems arise. Furthermore, it is the Housing Department's policy to provide regular cleaning of such public toilet blocks only twice a week. It is clear that such a low standard of cleaning service cannot adequately ease the poor sanitation situation. There is no independent bathroom for a household. Residents have to furnish themselves with movable partitions outside their housing unit, where the kitchen is located, for use as a bathroom. It is a considerable hardship when a person has to bathe, virtually unprotected, outdoors during the cold winter.

In the area, the sewage system is also meant to be of a transient nature. Open ditches are laid throughout the neighbourhood, only covered by iron or cement grills. This may be dangerous for residents living in the area. Old people and infants are most vulnerable to accidents caused by broken grills and uncovered ditches.

It is not infrequent for THAs to be located on unfavourable sites. If the site is located near a hillslope, there is the possible threat of falling rocks or debris, endangering the residents and the housing blocks. It should be recalled that the site itself is merely a 'borrowed place' and site formation projects are often not seriously dealt with, resulting in possible dangers. Another problem is the wild grass which results in problems of infestations of insects and health hazards.

It is clear that there are numerous potential and manifest problems in

THAs, which are pertinent for the active participation of residents in community problem-solving.

Table 9.3 Population of THAs, 1973-1989.

Year	Number of THAs	Population	
		Capacity	Actual
1973-74	22[a]	37,500	n.a.
1974-75	n.a.	51,000	n.a.
1975-76	n.a.	51,000	n.a.
1976-77	n.a.	54,000	n.a.
1977-78	38	73,000	n.a.
1978-79	40	81,000	65,700
1979-80	41	94,100	84,400
1980-81	38	96,000	89,000
1981-82	42	150,000	100,908
1982-83	60	n.a.	108,366
1983-84	56	n.a.	132,261
1984-85	54	n.a.	118,145
1985-86	56	n.a.	117,201
1986-87	60	n.a.	114,465
1987-88	72	n.a.	110,264
1988-89	74	n.a.	98,286

Source: Housing Authority *Annual Reports*, 1973/74 onwards.

[a] Previous to 1973/74, the THAs were actually licensed areas. This figure presents the licensed areas class II population. Since 1974/75, the areas have been officially renamed THAs. Review of the Authority's pre-1973/74 yearbooks reveals that the Authority had no official documentation on licensed areas.

Citizen participation in deprived communities

In general, environmental improvement efforts at the community level in local temporary housing areas can be categorized into two major types. In the first instance, people in the community or residents in the estate or area utilize their own resources to tackle environmental problems.

Reference is made here to Aldrich's (1976) concept of community resources. These might include a variety of tangible as well as intangible items. Manpower, in terms of numbers, provides labour resources for collective effort. Intelligence, being an intangible aspect of manpower, provides ideas in planning and problem analysis. Financial resources render the necessary assets for the purchase of equipment, remuneration for participants, and the like. Facilities in terms of substantive items are needed in any practical programmes for community improvement projects. Information can give an accurate and relevant assessment of community environmental problems. Power, or more accurately authority, or the access to it, helps to provide the necessary legitimacy and mandate for people to implement community programmes. These various items of community resources exist in any community. Yet, different communities are endowed with varied levels and proportions of these various items.

In cases where people utilize their own community resources to tackle environmental problems, people organize themselves to form such tasks groups as fire-fighting teams, cleaning workforce, minor works committees, and the like. People might first identify and analyse a specific community environmental problem; for instance, poor hygienic conditions. They would then collect relevant information pertaining to the causes and consequences of such a problem. If the problem is accepted and well defined, a task force would be formed with a division of labour. Fund-raising activities and volunteer recruitment efforts would be launched. The whole community problem-solving project would be mandated under the auspices of a residents' organization. This can be seen as the 'internal orientation' mode in community environmental improvement efforts.

The other major counterpart in local environmental improvement projects can be named the 'external orientation' mode. In this mode of community problem-solving, residents in a community identify the necessity of mobilizing external resources from outside the community itself. This can be further conceived in two different perspectives.

In the first place, people might recognize that there exists a relative scarcity of some particular resources, for instance money, in, say, launching a community cleaning campaign. They might locate some relevant funding bodies to sponsor their campaign. In the local context, the district board might serve as one such funding source.

However, people in a particular community might perceive that a specific external body is to be held responsible for causing or resolving a recognized

community environmental problem. For instance, residents living near a private carpark might rightly claim that the management company of the carpark should be held responsible for causing noise and air pollution in the area. Thus, they might organize themselves to appeal for a remedy from that company. In other instances, which in the local context happen to be more frequent, government departments might be identified as the responsible agents to tackle the community environmental problem. In a local case, residents' organizations in a public housing estate pressured the government to monitor nearby factories emitting air pollutants.

Tropman and Erlich's (1979) classification of consensus versus conflict strategies of community problem-solving can be further exemplified by adding the above two dimensions of 'internal' and 'external' orientations. In the first case, people within a community collectively contribute their own effort in a consensual manner to tackle their problems. In the second place, community residents utilize external resources by mobilizing their support to the community. This has also been regarded as a 'collaborative' strategy in community problem-solving. In the third case, when community groups identify a case of unfair treatment by some external agents or when the issue at stake is attributable to some external factors, people mobilize and organize themselves to pressurize an external action target in a conflictive way to tackle the identified problem. Finally, in the last case, when a community is characterized by a composition of various apparently conflicting groups, people might resort to confrontational actions against one another for community problem-solving.

When such a schema of community problem-strategy is integrated with the literature of community development, a number of models can be identified. Specifically, the locality development model, the social action model and the collaborative models will probably fit the various combinations of external-internal orientations cum conflictive-consensual strategies. However, the fourth model of 'disintegrative' strategy will seldom be resorted to by community social workers, since it apparently contradicts the fundamental principles of social work intervention.

Table 9.4. Schema of Strategies for Community Problem Solving

Orientation	Consensual strategy	Conflictive strategy
Internal	locality development: •self-help and mutual help groups •community education and programmes	disintegration: •intergroup conflict or hostility •not applied in actual situation
External	collaboration: •cooperation with community agencies •solicit resource support from outside agencies	Social action: •petitions, demonstrations, negotiation •lobby for support from representative institutions and members

The Confederation of THA Residents' Organizations

Before 1978, the impact of grassroots collective action in pressurizing the administration for environmental improvement was limited and sporadic. Environmental problems were at best attended to by individual THA communities in a disorganized fashion and on a short-term basis. It was only in the year 1978 that a grassroots-oriented pressure group emerged to take up the thrust of organizing THA residents in collective efforts for environmental improvement. The People's Council on Public Housing Policy (hereinafter called the People's Council) was formed in that particular year, with the mission of taking on a watchdog role on government public housing policies. As the THAs are essentially under the auspices of government, they became one of the Council's areas of concern.

Coincidentally, in that same year, the government recognized the needs of such deprived communities as the squatter areas, the THAs, the floating population, and the like. Social service programmes, the neighbourhood-level community development projects, were started in these communities to relieve people's distress. This further enhanced the potential for mobilizing THA residents in collective efforts to tackle environmental problems. The social workers and community organizers of the People's Council made a concerted effort to organize these deprived people to form grassroots organizations and action groups. Eventually, a coalition of residents' organizations from a number of THAs was established. This served to provide a collective front for THA

residents in tackling the government.

The Confederation was basically a subsidiary of the People's Council. Its membership comprised professional social workers serving the various NLCDPs in THAs, resident leaders from THAs of different districts and organizers from the People's Council. The Confederation adopted an issue-intervention approach in reacting to government policies and environmental problems. Special task forces were further formed to attend to emerging issues on an ad hoc basis. Generally speaking, the Confederation resorted to a conflictive confrontational approach with the government, in particular the Housing Department, in their efforts for policy advocacy and environmental improvement.

Table 9.5

Checklist of Major Environmental Issues Tackled
by the Confederation of THA Residents' Organizations, (1984-1991)

Year	Environmental Issues	Results
1984	1. Pressure on Housing Department (HD) to approve residents' installation of iron gates for security	1. Fire Service Department and HD approve installation
	2. Pressure on HD to approve residents installing air conditioners	2. HD to explore possibility of improved electricity supply
	3. Protest against congestion in small units: demands for relaxation of person-space standard in THA allocation	3. HD agrees to allocate some vacant units to relieve congestion

Year	Environmental Issues	Results
1985	1. Installation of air conditioners (continues) 2. HD asked to provide study room for students in THAs 3. Demands for relaxation of person-space standard continues 4. Demands for improvements to community facilities and unit design	1. HD approves a/c installation (with limits) 2. HD rejects request due to limited space 3. HD continues to make available vacant units but no policy change 4. HD provides extra facilities and more open space in THAs
1986	1. Demands to improve facilities for singletons	1. HD makes improvements, e.g., water taps and individual locks
1987	1. Demands for improved public toilets 2. Demands for early demolition of old, structurally unsound THAs 3. Demands for installation of fire-fighting equipment in THAs (Fire Service Dept. and CNTA lobbied for support)	1. HD closely monitors work of cleaning contractors 2. HD response: demolition of THAs must follow annual plans 3. HD improves standard provision of fire-fighting equipment for THAs
1988	1. Concern over fire hazards in THAs: HD pressurized on this point 2. Concern over use of asbestos in THA unit roofing	1. HD launches community education on fire prevention 2. HD starts assessment of health risks of asbestos

1989-90	1. HD and Fire Services Department pressurized to improve procedures in clearing asbestos debris after fires and to stop using asbestos in construction (EPD lobbied to gain support)	1. HD agrees to institute more stringent measures in debris clearance and agrees not to use asbestos
1990-91	1. Protests against deterioration of old THAs and demands for immediate demolition of such sites and relocation of residents (district boards lobbied for support)	1. HD agrees to demolish several THAs but insists that demolition should follow scheduled plans

Note: The CNTA, City and New Territories Administration, is responsible for bridging between government and citizens, organizing mutual aid committees for public housing estates, private buildings and small communities.

EPD - Environmental Proection Department

Source: People's Council on Public Housing Policy THA Residents' Organizations Confederation meeting notes 1981-91. Events in the period 1981-84 were not well documented.

In the following sections, several cases will be used to illustrate the ways in which local grassroots people can tackle community environmental problems. In some cases where the 'external orientation' and confrontational strategy was adopted, the Confederation of THA Residents' Organizations played a significant role in issue formulation, organization and advocacy. In other cases where a consensual strategy was utilized in either 'internal' or 'external' orientation situations, the residents' organizations of individual THAs were the sole agent organizing the residents and collaborating with relevant community agencies. Nevertheless, the common element in these examples is grassroots citizen mobilization and collective participation.

Asbestos: a potentially dangerous material

In the summer of 1988, fires struck a number of THAs across the territory. At the same time, the potential danger of asbestos came to the public

attention. The Confederation of THA Residents' Organizations was alarmed by the potential danger of the asbestos material used in the rooftops of the THA blocks. They were then concerned about the possible widespread dissemination of asbestos particles resulting from the fires. A concern group was formed under the Confederation to look into the issue and series of actions were launched to tackle such a problem.

In the first instance, in order to collect relevant information, the action group launched a comprehensive survey of all the THAs which were being served by community work teams of voluntary agencies. The objective of such a survey was to identify the number of THAs which had a potential asbestos hazard. It was found that among the 26 THAs, 19 of them (75%) had asbestos roofs. Furthermore, among the 19 concerned areas, 13 of them (68%) had had fires. In these cases, residents found that the Housing Department had not followed proper procedures for preventing asbestos dissemination. For instance, those housing blocks which were burnt were not covered to avoid asbestos particles from spreading in the wind. The affected blocks were not sprayed with water for the purpose of holding the asbestos residues onto the debris. Moreover, the period of treatment and cleaning up of the fire debris ranged from one to nine months. The responsible departments were not handling asbestos properly after fires in THAs. The issue crystallized, and an external target of action was then identified for tackling the community-wide issue. In this context, the community here is to be conceived of encompassing the entire THA population, instead of one or two isolated THAs.

The concern group launched a series of social actions to pressurize relevant authorities to provide prompt and effective measures to remedy and prevent the problem. Enquiry and protest letters were filed with the Environmental Protection Department and the Housing Department, respectively. A press conference was held to publicize the issue. In the conference, a deliberate effort was made to embarrass the Housing Department. The Department was accused of insufficient supervision of the contractor companies in the proper handling and disposal of asbestos waste. With the aid of the mass media, coupled with the general atmosphere of public concern over hazardous materials, the issue was well received by a sympathetic audience. The Housing Department was then alarmed at its inappropriate and inadequate policy measures in dealing with the asbestos problem. Eventually, the authority yielded by guaranteeing no further use of asbestos in the construction of THA blocks. This incident illustrates the mode of conflictive, external orientation of problem-solving activities by community residents in tackling environmental problems.

Collective efforts to tackle air and noise pollution

It is not uncommon for THAs to be situated on unfavourable sites, owing

to their transient nature. The residents are therefore subjected to a variety of hardships caused by such unfavourable environmental conditions. For instance, in some cases, THAs are located adjacent to refuse collection centres, domestic waste water treatment plants, and the like. They are often located near main roads with heavy traffic. In the following examples, two THAs which resorted to collective efforts in tackling the noise and air pollution problems in such situations serve to illustrate the issue.

In the first case, the 'Pillar Island' THA was severely affected by the pollution caused by heavy container-trucks travelling around the Kwai Fong industrial area. The THA was located at a road junction or, more precisely, a roundabout leading to a container terminal. The terminal is renowned for its size and its cargo-handling capacity and efficiency. It is obvious that the flow of container-trucks is high. Thus, the residents living in the Pillar Island THA had to endure the daily noise nuisance caused by numerous heavy vehicles. In addition, since there had been construction sites nearby, an enormous amount of dust was created by such vehicles. Ironically, the development was the site for a park which had to be built on ground originally used as a garbage disposal reclamation site. The residents of the area were then subjected to the dual nuisance of noise and air pollution.

Residents in the area were mostly recent Chinese immigrants. Such a population structure is a typical feature of THAs. These recent immigrants were not aware of their rights to protest against such an undesirable situation. They then resorted to individualized methods in coping with the problem. In the first instance, they erected large pieces of cloth outside their unit to keep away the dust. They closed all the windows and doors to avoid excessive noise. The noise could last until midnight or even overnight, since the container terminal operated on a 24-hour basis. Such means eventually proved ineffective. Frustration and discontent escalated. They ultimately sought help from external bodies. People approached community workers serving the area for a resolution of the problem. A concern group was formed to make their case to the Housing Department as well as the Highways Department. After a series of actions, the residents finally achieved concessions from the authorities concerned. The Housing Department erected wooden partitions between the main road and the housing units and the Highways Department imposed speed limits on vehicles travelling along the roads nearby. The problems of noise and air pollution were not totally eradicated, but they were kept under control. This served to improve the living condition of the people in the area.

The 'Cheung Wan' THA is located adjacent to a container truck carpark. The noise caused by the application of brakes and the loading and unloading of cargos was unbearable to nearby residents. Eventually, the mutual aid committee, joined by a number of the most affected victims, appealed to the relevant bodies

for remedial measures. The Housing Department was urged to erect partition walls to reduce the noise and control air pollution. The Highways Department erected speed control signs along the road to remind drivers to reduce speed, which helped to minimize the noise caused by the excessive application of brakes. The carpark management company was asked to impose regulative measures to minimize the nuisance.

The above two cases also illustrate the mode of external orientation of collective effort in tackling environmental problems. In the latter case, the private sector was also involved in instituting remedial measures. Yet, the common thread underlying the cases was that of active citizen mobilization in an effort to identify and act upon a specific target. In the process of such collective mobilization, civic competence as well as awareness can be enhanced.

Self-help programmes to improve sanitation

In accordance with the themes of community development, people are encouraged to contribute their own efforts to collective problem-solving. They are also inculcated with the sense of community and mutual cohesion. Through the accomplishment of small, explicit and undemanding tasks, people are rewarded with tangible benefits of environmental improvement as well as psychological gratification. These are congruent with the underlying rationale of the locality development model expounded by Rothman (1979) in his community organization classic.

THA residents are helped by the service rendered by community workers in an attempt to encourage locality development. With reference to Rothman's schema of the defining variables of the locality model, there exist anomic situations among the residents of such deprived communities as THAs. If we look at the background of these THAs, residents in these areas are mostly recent Chinese immigrants with low incomes and often low educational attainment. The community relationship is rather poor as people are not acquainted with each other. The sense of belonging to the community is at most weak, if not non-existent. People conceive of their THA as transient accommodation in view of the eventual allocation of a permanent public housing unit. They therefore pay less attention to maintaining a favourable environment with such a mentality. This leads to a gradual deterioration of the environment in terms of poor hygienic conditions and damaged community facilities.

The issue at stake is obvious: environmental deterioration can be caused by THA residents themselves. This is a typical case of 'internal orientation' of community problem-solving. The resolution of such a problem might rest in the residents' own efforts of self-help or self-restraint. Here, the concept of community education often used in community development programmes is of prime relevance. People have to be inculcated with the sense of responsibility to

the community in which they live and belong. In addition to such an altruistic appeal, some more immediate and salient incentives must also be introduced. People need to be convinced of the utility and benefit of maintaining a decent living environment of their own. The costs and benefits of making the effort to maintain a good environment should be explained to THA residents. A consensus for improving the community environment for the collective good will then be spread among the people. However, Olson's (1965) notion of the 'free-rider' phenomenon in collective participation also deserves attention. Organizers or community development workers have to be cautious about the possible flaw in mobilizing a limited number of dedicated residents to participate in collective community improvement programmes, whilst leaving a large number of onlookers. This might have a discouraging and frustrating effect upon the committed participants.

In local experiences, community workers have attempted to propagate the ideas of environmental protection to THA residents. Some large-scale, community-wide cleaning programmes have been organized to foster community spirit as well as environmental improvement. Leaders of residents' organizations took the lead in organizing cleaning teams to perform a variety of tasks. In the first place, these cleaning teams publicized the cleaning programmes throughout the THAs. Posters, banners, leaflets, as well as audio-visual media were widely used to reach the residents. In line with such publicity and educational efforts, the cleaning team members made door-to-door visits to encourage people to dispose of their garbage properly. Lastly, the cleaning teams organized collective cleaning activities throughout the entire THA. With the provision of necessary equipment by the Housing Department, cleaning teams swept and sprayed the ground, cleared the ditches and weeded nearby wild grass. These mass cleaning activities were often held in the summer season when hygiene conditions are most critical.

In another instance, residents of some THAs were organized by their community workers to launch tree-planting projects in the area. In the case of Cheung Wan THA which is situated near a carpark for heavy container trucks, a mini 'green belt' was planted to keep away the dust caused by passing lorries. In other cases, residents were organized to plant trees and bushes along the fringe of the THA, where there was originally wild grass. These efforts to increase the vegetation near the THAs could actually serve various purposes. Collective effort in community environment improvement enhanced community spirit. The overall quality of the THA environment could be improved.

Table 9.6

An Overview of Citizen Participation Efforts in Environmental Improvement in THAs

Problem	Target	Strategies Employed
Noise: a) caused by traffic b) caused by industries	a) Transport Department Highway Department Police Traffic Unit b) Environmental Protection Department Labour Department	A. Externally-oriented, conflictive approach: 1. Organization and mobilization of people affected 2. Social action: e.g. letter to editor, petitions to concerned authorities
Air pollution: a) caused by traffic b) caused by industries	a) EPD Transport Department b) EPD Labour Department Factory owners	3. Contact/negotiation with relevant targets 4. Lobbying for support from representative institutions / members e.g. district board, OMELCO
Sanitation: a) within THA b) problems caused by nearby industries	a) Housing Department Urban/Regional Services Department Residents b) Urban/Regional Services Department EPD Factory owners	5. Pressure private sector for improvement
Fire risk:	Fire Service Department Housing Department	B. Externally-oriented, consensual approach: 1. Lobby and rally for support in financial, personnel, expertise, knowledge, facilities, etc. resources
Landslide/falling debris from hillside	Lands and Works Department	2. Collaboration / cooperation with friendly agencies

Problem	Target	Strategies Employed
Hazardous materials	EDP, Government Laboratories	C. Internally-oriented, consensual approach: 1. Community education, publicity, campaigns 2. Self-help or mutual-help task groups and programmes

Note: OMELCO, the Office of Members of Executive and Legislative Council, is responsible for receiving citizens' complaints against the administration; it is vested with the authority to investigate and demand remedial measures.

Conclusions

Hong Kong is renowned for its economic prosperity. Its development as a city is also impressive. Its success in economic development is based upon a variety of favourable factors. However, as other parts of the world are also becoming aware, such development has its costs in environmental terms. The administration, the private sector, and citizens alike all have a share in the ultimate responsibility of creating and worsening environmental problems.

The Hong Kong government's temporary housing policy was initially a measure for relieving the demand for permanent public housing. However, owing to inappropriate planning measures for resource allocation, THAs are poorly provided with community facilities and face unacceptable environmental conditions. Given the fact that such THAs are merely transient accommodation for those who are not yet eligible for government permanent housing, the residents there are deprived of a decent living environment. The transient nature of such communities, coupled with the relatively low socio-economic status of the residents, produces anomic situations within these communities.

It is through the citizens' collective participation that such issues as environmental deterioration should be addressed. The Confederation of THA Residents' Organizations and the grassroots organizations of individual THAs, with the assistance from community social workers, worked together to achieve environmental improvement. The various cases cited in this chapter illustrate how, with the use of conflictive and consensual strategies, coupled with internal and external orientations, people in deprived communities can manage to launch positive action for the betterment of their living conditions. Nonetheless, the ultimate resolution lies in the awareness of all parties concerned for an appropriate orientation and appreciation of the environmental problems at stake. Active citizen participation in this area certainly plays a crucial and indispensable role in

the battle to conserve the environment of our Good Earth.

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Chapter 10

Combatting Urban Blight

Fung Ho Lup

Introduction

At Christmas in 1990, a fire broke out in a small private apartment in Sham Shui Po, killing six people and injuring 50 others. The media reported that they lived in 'cages', a word which soon captured the attention of the public. Public pressure on the government to make improvements increased, with the result that measures were introduced to regulate the security and welfare of the 'caged people'.

Cages are cots enclosed by wire to protect the property of the tenants in the bedspace apartments. Tenants typically occupy in double or triple deck bunks which are approximately 1.65m^2 in area. The number of bedspaces in these apartments varies from a dozen to over 100. The living density in these bedspace apartments is very high. About 30% of the caged people live in an area of 2.97 m^2 per person (Society for Community Organization, 1990), and this living space is far below the average standard of 6.6 m^2/person set by the Housing Authority. In addition, basic facilities are very inadequate; 50% of these apartments are without kitchens, 13.9% without toilets and over 30% without bathrooms.

The caged people live in dire poverty. Most of them earn a monthly income of less than HK$2,000, working as coolies, casual workers on construction sites or waiters. Those who have no savings or are retired have to depend on the monthly $1,200 public assistance for survival (Society for Community Organization, 1990).

An international fact-finding team on the urban poor reported after a site visit:

> 'A 56 year old cage dweller told the team: "I come here only to sleep... I don't talk to anyone. I lived in a factory before. I slept and worked there. I have tuberculosis, but I can survive here. I get some welfare help. I dare not ask any questions." (Asian Coalition on Housing Rights, 1990).

Pressure groups launched surveys, held press conferences and organized the tenants to negotiate with the government. After one year of accumulated

pressure, the government finally agreed to relieve the over-crowded bedspace apartments by a package solution:

(a) introducing a licensing system on the cages which would lead to a 50% drop in occupancy rate;

(b) offering about 1,000 lodgers who cannot afford the new rents accommodation in neighbouring areas managed by voluntary agencies;

(c) those living on public assistance would be entitled to compassionate rehousing in public housing.

The plight of the'caged people' was temporarily solved but, if this case is set in the context of the scale of the slum problem in Hong Kong, it only represents the tip of the iceberg.

Private housing in Hong Kong

The overall population density of Hong Kong ranks second in the world. The average density in Hong Kong as a whole is 5,308 persons per km^2, compared with 325 in Japan, 234 in Britain and 22 in the United States (The Economist, 1991). Population densities in central residential districts (such as Mongkok, Wan Chai, Tai Kok Tsui, Jordan, Yau Ma Tei, Kwun Tong, Sham Shui Po and Hung Hom) are extraordinarily high. In Mongkok, for example, it is estimated that people live at a density of 140,000 per km^2 (Asian Coalition on Housing Rights, 1990). Most of the population in urban private sector accommodation lives in the oldest areas of occupation on Hong Kong island and Kowloon. There is a large pool of people living in congested, unsanitary and overcrowded accommodation in the urban area.

Although the Hong Kong government takes great pride in the success of its huge public housing programme, the 1986 census revealed that there were still about two million people living in 518,000 private housing units. Of this total, about 450,000 households lived in whole units, 160,000 in rooms and cubicles, 23,000 in bedspaces and cocklofts, with a mean household size of 3.7 persons/household (Hong Kong government, 1986). Furthermore, there were some 310,000 people living in temporary huts, rooftop structures and other private temporary structures. A rough figure of more than 900,000 people out of a population of 5.7 million living in overcrowded, overpriced, run-down tenements is thus not an unreasonable estimate.

The old urban area consists of a mixture of old and new buildings. New buildings, mostly built for purchase, are subject to government building regulations and standards. Older buildings, in contrast, frequently contain a mix of residential and industrial uses. This mixed use, combined with the age of the buildings and overcrowding, makes them exceptionally dangerous fire and health

risks. In 1983, a survey indicated that there were some 6,000 out of 44,000 private buildings in 38 town planning districts considered derelict and needing repair (Housing Society, 1983). A recent survey by the Buildings Ordinance Office suggested that about one-third of the 55,000 buildings erected during the 1950s and 1960s and under investigation were considered problematic, and 210 buildings were structurally dangerous and needed immediate attention (Ming Pao, 1990). Furthermore, it was estimated that there were some 25,000 illegal and dangerous structures in these old private buildings (Shui On Quarterly, 1987). Buildings in the old areas are structurally questionable and environmentally hazardous and they require immediate action for improvement or renewal.

During the 1970s and 1980s, the Hong Kong government opted to solve its housing problem by redistributing the population into new towns in the New Territories. Over the same period, however, the government has not attempted to regulate the quality of private housing in the old areas. The redevelopment and modernization of Hong Kong and Kowloon were left almost completely to the private sector. There were some small urban renewal programmes, but their implementation was very slow. Private sector redevelopment has been piecemeal and very uneven.

Although population densities in the older areas have gradually declined as private buildings projects have become larger and public housing schemes have dispersed some of the families, overall conditions remain poor. One reason for this is the low standard of many of the new developments erected quickly and often with inadequate supervision in order to make quick profits. Inferior quality, poor workmanship and lack of maintenance were widespread in private sector housing in the older areas. For example, the Cheong Hing tenement building, was considered structurally unsafe after only 13 years of residential use, as it was discovered that salt water had been used to make the concrete. Similar problems were also discovered on a larger scale in public housing buildings (Society for Community Organization, 1985).

In theory, there should be ample opportunities for improvements in the slum areas since the squatter problem has largely been overcome by the construction of public housing. However, the government seems to have no intention of solving problems in the inner city by switching the main thrust of the public housing programme in favour of the slum population. In the 1970s and the early 1980s, the public housing programme was geared to squatter resettlement. This led to a rapid fall in the squatter population, but at the same time the slum situation deteriorated rapidly so that there are now far more slum dwellers than squatters. The figures were estimated to be 900,000 and 300,000 in 1990 respectively.

The government's attitude to private and public sector housing is strikingly different. Planning controls on the private sector were relaxed to cope

with post-war immigration. Since then, whereas the Housing Authority has consistently sought to improve the quality of public housing, the government has not attempted to raise standards in the private sector, and has not intervened even to protect grossly disadvantaged groups.

The management of urban slums is the responsibility of various government departments and agencies. Until 1989, private sector housing came under the responsibility of the Department of Lands and Works, which has no responsibility for regulating the quality of accommodation. The Housing Authority, which has very detailed statistics about almost every aspect of public sector housing, has virtually none for the private sector; and no government department could provide detailed figures about the number, density or quality of privately rented or purchased accommodation. The Buildings Ordinance Office was responsible for the clearance of dangerous buildings and illegal structures. Security comes under the Fire Service Department. Sanitation goes to the Urban Service Department. The Land Development Corporation is responsible for urban renewal programmes. The recently formed Planning, Environment and Lands Branch is largely responsible for pollution control and infrastructure management, but it does not deal with urban squalor. The City and New Territories Administration is responsible for establishing owners' corporations and mutual aid committees to maintain and manage buildings, but the lack of manpower to supervise management has led to a general failure in basic cleanliness and environmental quality in the older areas. All in all, there is a lack of a policy and of a coherent strategy to tackle the problems of the urban slums.

Approaches to managing urban blight

Urban squalor can be managed in at least three ways: (a) urban renewal; (b) self-help; and (c) community action. Urban renewal is a top-down approach based on the perceptions of expert planners who, through their technical skills, can help to design or renew dilapidated community ecology. Pahl (1975) described this as an 'urban managerialist' approach by which the momentum of change lies with the expert planners. Structurally unsafe, overcrowded and dilapidated buildings are replaced by well-designed modern ones. Community and recreational amenities are provided after clearance of the old areas. This is the process of 'gentrification', which means the process by which areas of working-class residence become increasingly occupied by the middle classes (Williams, 1976). Market demand and supply, political control and management are of vital importance in the gentrification process. Consequent to the politico-economic forces of gentrification, the price of renewed inner-area property will rise sufficiently to exclude the less affluent but at the same time reach a desired ecological level of security, cleanliness and comfort. The environment is upgraded by an economic process without the participation of

local residents. It is a capital appreciation process, a 'movement of capital rather than people' (Smith, 1979). As a result, the local residents do not enjoy the fruits of urban renewal but are moved to less desirable areas away from the profitable investment areas. Urban renewal, judged by this effect, is ecologically redeemable, but socially questionable.

The self-help approach is based on the assumption that people can, and should, solve their own problems by collective participation. This approach considers the blighted areas as being inhabited by natural low-income communities that offer to their residents the formal networks and social support that evoke feelings of comfort and belonging. The task is not to redesign and rebuild these communities, much less to destroy buildings and dislocate residents, but to reinforce and rehabilitate them. The participation of the people affected is the key concept to ecological successes. Without the involvement and care of the community, the essential features of the slums will persist even after the environment has been modified. This approach is more concerned with the social aspects of urban blight than with pure ecological transformation, and considers primary groups and the process of social learning as the main strategies of intervention.

The basic mechanism of the self-help approach is the formation of voluntary associations devoted to the enhancement of community life and ecological purification. The objectives of this approach are to promote the formation of a shared interest arising out of the residents' identification of a way of life with a geographical area. What is needed in the self-help approach is to enhance the growth and sustenance of neighbourhood organizations that strive for their social and ecological functioning.

Yet, the self-help approach is closely related to the feeling of ownership without which participation cannot effectively be formed and maintained (Schon, 1980). Martel (1980) showed that only with extreme personal dedication can an individual organize a community to take care of its environment. Neighbourhood enablement is extremely difficult to generate and sustain, especially with transient rental accommodation that offers little encouragement to develop long-term community objectives. The problems of how to sustain enthusiasm and community participation have been a formidable hurdle in achieving effective self-help approaches. Unless there are elements of a wider system involving interlocking networking groups which provide supportive inputs, there is a high probability that these self-help neighbourhood improvement programmes will remain short-term activities without a lasting effect on the city as a whole.

The community action approach works on the assumption of a macro-intervention theory of the political economy of cities. Castells' (1977, 1983) analysis of urban social movements and his theory of collective

consumption laid down the socio-economic foundation of this approach. Castell sees cities as the product not of predetermined economic functions but of an interaction between social classes, interest groups or individuals. A conflict of interests is the core concept of this approach. The urban question is the result of conflicts arising from the concentration of capital and people. The city is not just a place of production and commercial activities, it is also a place of mass consumption of goods and services. Public services, as marketable and profitable goods, are often the battleground for urban conflicts and social movements. The capitalist state, in response to the collective demand for public services and as a safeguard against profiteering from urban facilities, has to step into the private market to prevent and control urban conflicts. The government has to provide affordable public services to accommodate the needs of the people. In fact, most modern governments have to provide housing subsidies or cheap public housing to ease housing shortages or to improve the environment. Thus, the strategy to combat urban squalor is to provide good quality and affordable public housing to contain the spread of urban slums. Other approaches like urban renewal and self-help are not effective. Urban renewal can only benefit those who are better-off. The self-help approach is too remedial and piecemeal. The most effective way, from the viewpoint of ordinary citizens, is to articulate their rightful claim for the provision of public services.

The method of community action is based on the building up of working class communities and neighbourhood action groups. The goals of these organizations are different from those of self-help. The community action approach assumes that working-class communities are characterized by an instrumental attitude towards public involvement. Organization outside the family fulfill specific needs and functions. People are not drawn into wider cooperation without compelling reasons and their participation cannot be encouraged and sustained unless there are urgent and tangible needs to be fulfilled. The role of neighbourhood groups is to address the grievances and urgent needs of the people, and to bring to the attention of the government the collective demands for public provision at the grassroots level.

However, this approach is often criticized as being too social movement-oriented without considering structural variables that determine the management of the complex urban system. It places too much emphasis on conspicuous political activities and places too little attention on the less overt socio-cultural processes. The politicization of urban and environmental questions often makes the issue lose its original meaning due to ideological and partisan conflicts. Furthermore, as Ceccarelli (1982) argued, urban social movements are symptoms of a process of social readjustment rather than vanguards of social change. Social movements can only create demands for change, but cannot implement the changes. Successive actions are needed to accomplish objectives.

What can be done in Hong Kong?

Urban renewal is widely regarded as the primary strategy determining the management of the complex urban system, and urban managers are considered as providing the momentum for urban improvement. Pahl (1975) put it succinctly:

> Wiser, more sensitive and better-trained urban managers, supported with more resources, is inevitably the policy conclusion.

They are considered the gatekeepers of urban environmental improvement.

However, as Yates (1977) suggested, the modern city is too complex and decentralized to permit coherent overall planning, and too simple and centralized to allow effective expression of the views and needs of its residents. Urban managers are too specialized in the environmental rather than social aspects of the city. They are often accused of failing to maintain contact with the recipients of urban services, of being too rigid in the application of regulatory controls, and unresponsive to the expression of local needs. Urban managers, if we can accept Pahl's statement, are only policy conclusions but not local solutions to the urban problem. If local residents want to make their environment socially acceptable, they have to rely on their own efforts in managing their community environment, with or without the help of urban managers.

The problem is thus whether Hong Kong should adopt the self-help approach by strengthening grassroots organizations to build up a community identity and to mobilize local efforts to achieve basic ecological maintenance, or to strengthen local groups and networks to form consumers' alliances to demand more public resources and decentralized administrative mechanisms to adapt to local needs.

The self-help approach, according to Lyon, works best only under certain conditions: first, it works best in a homogenous community; secondly, local residents should have the power, predilection and resources to help themselves, and middle-class communities may be best suited for this approach; thirdly, communities with a pluralistic power structure should have a tradition of open and democratic decision-making conducive to the self-help approach; and fourthly, this approach will be easiest to implement in relatively isolated, autonomous communities (Lyon, 1989).

Judging from all these conditions, the old areas of Hong Kong seem unsuitable for the self-help approach because community interests are not homogenous and residents are mostly low-income groups that do not have enough resources and power to mobilize themselves; also, residents have to undergo a time-consuming social learning process of democratic decision-making by participating in neighbourhood associations; and their communities are more

susceptible to an influx of low-income immigrants who want to obtain jobs in the city, thus disrupting the existing community identity.

The reality in the private sector seemed to justify the failure of this approach in the old area. Owners' corporations and mutual aid committees were established either by government bodies or through voluntary efforts to manage sanitation and structural problems of the buildings, but they were often criticized as ineffective because of inadequate legal powers, lack of informed and persistent participation, and divergent interests between owners and tenants (Yeung and Chan, 1989). Experimental projects with an intensive self-help approach by non-governmental organizations like the Yang Centre in the early 1970s also proved to be a failure, and community action was used instead of independent self-help activities (Leung, 1974).

In comparison, ad hoc community actions that are organized by organizations through a community network seem much easier and can achieve effective, tangible and immediate results. Action can exert pressure on government to produce immediate improvements or resettlement. Neighbourhood organizations can be formed on an instrumental basis built on task relations, and there is no need to develop long-term grassroots organizations to produce and maintain a community identity. Furthermore, the existing bulk of public housing in Hong Kong provides policy alternatives for grievances in the private sector. Rearrangement of public housing priorities can serve to move people out of the slum areas, thus easing problems of congestion and the environment.

However, this does not mean that community action is the most acceptable approach at the local level. The urban problem is much larger than the plight of the slum people. It is also a problem of social life and community ties. Urbanism is also a way of life which involves the problems of psychological attachment and alienation, of cooperation and competition, of order and identity in a geographical area. The Hong Kong people at this historical juncture need a social and community identity to consolidate their commitment to social harmony and development. Any instrumental, one-sided and narrow community approach to solve the problems of urban blight may suffer the same failure as a top-down strategy. The goals of self-help, local participation and peoples' power, as moral imperatives, are still cherished as individual virtues and also as the basis of a free society.

What is needed is a combination and mixture of community efforts to put the problem into proper perspective. The self-help approach, though it has largely failed to improve the environment in private housing, has built up a sense of community which is vital for general and effective social functions. However, it has to make necessary adjustments in its direction and mechanisms of change to adapt to the contextual background of Hong Kong's private housing.

Social networking, a concept related to self-help, which aims at building up loosely confederated groups in the community, can be more effective in promoting environmental improvement than the building of a strong neighbourhood organization imbued with an intense community identity. In private housing, the heterogeneity of its constituency and diversity of local problems engenders different directions of community involvement and renders consensus difficult, and this heterogeneity may further exacerbate conflicts of interest within the same community. The formation of a loose network to tolerate or reconcile conflicts can best serve the interests of the residents, and there is no need to establish a firm base for community integration. In fact, this has already been tried by some non-governmental organizations in Tuen Mun whereby an interlocking network was created to collaborate at different levels, and it proved a considerable success (Li, 1988).

The mechanisms of change, that is, the form of neighbourhood organization, may also need adjustment. Existing grassroots organizations like independent peoples' organizations, owners' corporations, and mutual aid committees, have in the past failed to adapt their objectives and structures to meet changing community demands. This has resulted in misdirected actions and a failure to meet community needs. Traditional neighbourhood organizations focus their attention on membership building and they attempt to act as spokesmen of the community by virtue of their degree of representativeness. Membership building is very labour intensive and this effort has proved time-consuming and ineffective (Leung, 1974). Smaller mobilization task groups functioning on specific objectives can better address community demands with greater flexibility. Neighbourhood organizations can take on various forms and structures. Sometimes they may function as ad hoc groups mobilizing the community to achieve tangible objectives. Sometimes they may take the form of coalitions to negotiate with the authorities, and sometimes as almost permanent, stable structures serving more general purposes. These organizations can co-exist simultaneously within the community, serving different purposes through the various capacities they possess.

Social learning by residents, as one of the objectives of grassroots organizations, should attempt to enhance understanding of both local environmental conditions and general policy issues, particularly those of an urban nature. In most self-help programmes, learning is typically directed to building up a self-help mentality which may have the effect of creating an unrealistic level of expectations regarding the impact of participation. A narrow interpretation of the self-help concept may result in isolation from forces of external intervention, with detrimental effects on local interests. To be successful, this approach must maintain a balance between assisting local residents to understand the extent and

effects of their involvement and exposing the role of government in the provision of public services.

Self-help grassroots organizations have to adapt to achieve a more effective balance between community and societal needs, between local social relations and linkages and general societal movements, and the promotion of a social consciousness that can benefit local interests while at the same time is interlocked with broader societal and environmental issues. The integration of self-help local organizations and community action is therefore, not merely a matter of academic concern but is also a practical necessity.

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Chapter 11

Tackling Environmental Pollution in Sham Tseng

Fiona Chang

Introduction

Sham Tseng is an old village community located in the western part of New Territories, midway between Tsuen Wan and Tuen Mun. Its settlers were emigrants from the Tsing Fai Tong Village two hundred years ago. Owing to limited transportation, the area was, until quite recently, rather remote and isolated. Sham Tseng itself can be broadly divided into eight villages, namely, Sham Tseng Village, Sham Tseng Sun Tsuen, Sham Tseng Commercial New Village, Sham Tseng West Tsuen, Sham Tseng East Village, Sham Tseng Pai Min Kok Village, Tsing Fai Tong Sun Tsuen and Shu On Terrace.

According to 1989 figures from the City and New Territories Administration, the total number of households in Sham Tseng is around five hundred and the population some 3,400. The usual household size is between four and six and one vertically extended nuclear family is commonly found. The Sham Tseng Community Survey conducted by the Sham Tseng and Tsing Lung Tau Neighborhood Level Community Development Project (1988) found that most of the residents were working class and their family incomes were below $5,000 dollars per month. Only a few people were well-off and they were the owners of roast duck food restaurants and some indigenous residents. In general, the education level of the residents was low and their educational attainment was usually below junior secondary school.

Being an old village community, facilities have long been quite inadequate. The drainage system was poor, there were no proper access roads, a lack of fire hydrants and shortages of water and a limited electricity supply. In April 1988, the Housing Department launched the Squatter Area Improvement Scheme with the objective of improving the living environment for the low income population. The scheme was effective in providing basic facilities in Sham Tseng and up-grading its living environment. Later, other facilities including a school, clinic, youth centre, recreation centre, basketball court, letter boxes and post-boxes were also provided.

During the long history of Sham Tseng, many resident organizations have been formed. The most representative was the Sham Tseng Village Office. Its functions were similar to a local government body. Other resident organizations included the Sham Tseng Chamber of Commerce, the Sham Tseng Chiu Chow Welfare Association, the Sham Tseng East Village Welfare Association and the Sham Tseng Pai Min Kok Village Co-operative Society. They represented different interests of people in Sham Tseng but the leaders of these organizations were typically paternalistic and conservative.

In 1986, Sham Tseng was identified as a deprived community in view of its income levels and remoteness from existing social services. Hence, the Sham Tseng and Tsing Lung Tau Neighbourhood Level Community Development Project (NLCDP) was launched. NLCDP was illustrative of a type of initiative endorsed by the Hong Kong Government. A team of three social workers were employed by the Tsuen Wan Ecumenical Social Service Centre. Their main task was to encourage grassroots participation to improve the quality of life of the local community. This chapter focuses on the problems of Sham Tseng and describes the role played by the NLCDP and other actors in helping the community to tackle its environmental problems.

Sham Tseng

The residential area consists of eight villages, as mentioned above. There are two types of living quarters: squatter huts and village houses. In the 1970s, when the economy of Hong Kong was taking off, the Government began developing the New Territories. In Sham Tseng, some homes were demolished for the construction of the Tuen Mun highway. Indigenous people who were affected by the project received a certain amount of money as compensation and they were able to build village houses in Sham Tseng Village. The family name of these indigenous people was mostly "Fu". The development of Sham Tseng, led to an influx of people from the urban areas, which accelerated contacts with the broader community. Those who moved into Sham Tseng settled mainly in squatter areas. Most were employed as factory workers in the vicinity.

As a result of new transportation links, more and more factories and plants were built. These factories included the Garden Company, the San Miguel Brewery, Kowloon Textile Industries and Union Carbide Asia. As a result, there are many employment opportunities available for Sham Tseng residents but on the negative side, industrial development has created environmental pollution.

To meet the catering needs of the factory workers, many restaurants were opened by better-off local residents. Some of their capital came from the relocation compensation paid by the Government. Roast duck has become a particular speciality of Sham Tseng and there are seven major restaurants serving duck. Each day, large numbers of people come to Sham Tseng just for the roast

duck. Apart from restaurants and stalls, many different kinds of shops can also be found in Sham Tseng.

It is clear that industrial and commercial activities are advantageous to the community, providing new job opportunities and various economic benefits. But there are trade offs. The Tuen Mun highway causes noise pollution and there are problems with objects falling from the flyover. The industrial wastes discharged from neighborhood factories and squatters contaminate the Sham Tseng nullah.

Environmental problems: Sham Tseng nullah and the Tuen Mun Highway

Pollution of the Sham Tseng nullah

The Sham Tseng nullah is around four miles long. It originates from the Sham Tseng Commercial New Village and runs to the San Miguel Brewery. The nullah has been polluted for more than ten years and the situation continues to deteriorate. On both sides of the nullah, there are food stalls, squatter villages and stores which are contributing to the pollution problem.

Observations suggest that there are three kinds of effluent polluting the nullah. The first is domestic waste from the squatter village. The Water Pollution Control Ordinance (Chapter 358) defines domestic sewage as any waste of a kind and quantity which is ordinarily disposed of in a household by the normal use of a toilet, bath, shower, sink, basin or other sanitary fitment by persons residing therein. The squatter village at Sham Tseng is unsewered and there are four public toilets with septic tanks which serve the area. However, the majority of the villagers choose to dispose of their sewage and waste directly into the nearby streamcourse via illegally constructed connections.

The second source of pollution arises from the discharge of oily and greasy effluents from roast duck restaurants located along the nullah. These discharges are not treated and pass directly into the nullah. Coupled with the faecal pollution problem, these discharges make the problem of pollution more severe. Finally, the nullah is polluted by the waste discharged from nearby industrial plants.

The pollution of the nullah affects the residents nearby. The smell from the nullah is very unpleasant. Waste material deposited in the nullah also leads to flooding. Waste deposits including stones and sands accumulate in the bed of the streamcourse, raising the bed of the stream and narrowing the channel. Flooding is therefore unavoidable after heavy rain (Sub-group on Pollution Problems in Tsuen Wan, 1989). Several parties have involved themselves in attempts to resolve the problem. They include the district board, relevant government departments, local residents and the Neighborhood Level Community Development Project.

In 1988, a working group on pollution problems in Tsuen Wan was set up under the Tsuen Wan District Board to examine and discuss pollution problems and related issues. The Working group's objective was to monitor pollution in Tsuen Wan. With respect to water pollution, its group members identified the Sham Tseng nullah as a major problem. One member of the Working Group, Mr. Chan Wai Ming, was an Elected Tsuen Wan District Board Member for the rural area constituency. He is also a local resident. It was Mr Chan who highlighted the Sham Tseng nullah issue.

Through open forums, exhibitions and competitions, campaigns, leaflet distribution and reports, the Working Group sought to raise people's awareness of the problem and promote greater public participation (Allen, 1989). The group sees its function as a providing a link between the Government and the community. It informs people and factory owners of the legislative and policy framework set out by the government, and in turn passes on to government the complaints and reactions of the community.

The Sham Tseng nullah problem was referred to New Territories Drainage Division of the Civil Engineering Services Department by the Environmental and Transport Affairs Committee in 1988. The Department agreed to carry out desilting work once a year. Mr. Chan was concerned that the desilting work was only a short-term precautionary measure to control flooding and reduce the bad odour. To improve the situation, he felt the desilting work should be done twice a year. However, the Drainage Division felt this proposal was too expensive. Consequently, it was decided that the desilting work would be done once a year, but more desilting work could be done if needed.

The pollution problem affecting the nullah was not really resolved and the situation remains very poor. In July 1991, a special meeting of the District Board was held to discuss infrastructural improvement in Sham Tseng. The proposed solutions to the problem are to expedite the construction of the Sham Tseng sewage treatment plant and sewage systems; to expedite the construction of the Sham Tseng Service Reservoir and water treatment facilities; and to facilitate the decking of the nullah, on which roads or community facilities can then be provided (Tsuen Wan District Board paper no. 30/91-92).

However, proposals regarding the location and design of the sewage treatment plant are subject to further examination and an environmental impact assessment by the Environmental Protection Department. The proposed decking of the nullah has long been under discussion amongst concerned departments. However, the Environmental Protection Department and Drainage Services Department do not support the proposal because it will not solve the pollution problem. In fact, it would make it difficult to carry out desilting work (Tsuen Wan District Board Paper No.30/91-92).

To understand the needs of the residents and the community problems in Sham Tseng, the NLCDP conducted a survey in 1987. The results indicated that all the residents recognized that the bad odour emitted from the nullah, especially during summer, affected the community environment. However, some of them said that the problem did not affect their daily life as they had already got used to it. Some residents recognized that the polluted nullah constituted a danger to public health and hygiene since the many mosquitoes there present a health hazard.

As pointed out by the residents during the interviews, the water flow in the nullah was not strong enough to carry away the refuse. As a result, deposits accumulated on the bed of the nullah. In addition, only one fifth of the nullah was desilted by the Government. The remaining part was never treated since the desilting machine could not gain access to these areas. To improve the situation, the residents suggested that it would be better if the nullah could be converted into a closed one. The frequency of desilting work could be increased and the residents should be more self-disciplined and not throw rubbish into the nullah (Sham Tseng Community Survey, 1989).

Noise pollution from the Tuen Mun Highway

The Tuen Mun highway is an important and busy road linking Tsuen Wan and Tuen Mun. Sham Tseng is bisected by an elevated section of the highway. This creates environmental problems. On rainy days surface water splashes down from the road surface. Furthermore, objects such as stones, sand and bottles from passing vehicles also fall down on to houses, the pleasure grounds for children, market place, sitting-out area, pavements, shops and other public areas. This poses a danger to the safety of the residents.

Although there are parapet walls along the sides of the highway, these are not high enough to prevent objects or surface water from falling or splashing down. On one occasion, a traffic accident occurred on the Sham Tseng section of the highway and a heavy vehicle crashed through the parapet and was suspended from the elevated road section. Following this event, many residents were worried that if a vehicle crashed over the parapets, it would fall down into the dwellings.

Considerable noise is generated by traffic on the highway and this causes a nuisance to Emmanuel Primary School and the residents of the village nearby. Students of the school find it difficult to concentrate. The noise arises as vehicles drive over the expansion joints of the bridge, according to the Highways Department. In fact, noise is a major nuisance that agitates the residents. Mr. Chan Wai Ming reported that an average reading of 84 dB(A) was obtained during a noise level test conducted at the Sham Tseng Flyover Section by the

Environmental Protection Department. This is 14 decibels higher than the tolerable noise level set by the Hong Kong Government.

Given these problems, Mr. Chan Wai Man, as a member of the Environment and Transport Affairs Committee, requested a site visit on 13 January, 1989 by the Committee to investigate the problems of objects falling from the flyover and the noise generated by the traffic on the Tuen Mun highway. The locations of the site visit were Emmanuel Primary School at Sham Tseng and Sham Tseng Village since these two areas were the most affected (ETA Paper No.66/88-89).

A concern group on the "Tuen Mun Road Problem" was formed by the joint efforts of residents in Sham Tseng and Mr. Chan. They conducted a two-month survey on June, 1989 to collect the opinions of the residents. The opinions collected were reflected to the Tsuen Wan District Board and the City and New Territories Administration. The sampling method divided Sham Tseng into four areas because different parts of the village would experience impacts of varying severity. The survey found that most of the residents worried about the problem of falling objects and traffic noise. More than 95.7% of the residents agreed that steps should be taken to solve the problems (Survey Report on Tuen Mun Road Problem, 1989). Sham Tseng residents also presented their views on the Tuen Mun highway problem in writing to the Chief Highway Engineer (Structures).

At an Environment and Transport Affairs Committee meeting, some solutions were suggested. Temporary or permanent sound-insulating facilities of appropriate length and height should be provided at locations where necessary along Tuen Mun highway (Sham Tseng Flyover Section). This would reduce the noise and also prevent objects falling from the flyover. For example, add-on cladding or solid infilling panels could be added to the existing crash barrier (ETA Paper No. 51/88-89).

The Environmental Protection Department suggested an interim noise mitigation measure - a 1.5m high hoarding to be provided along the sides of the highway adjacent to Emmanuel School. This could be in the form of suitable add-on cladding or solid sheets to the existing crash barrier, which would also prevent any objects or surface water from falling or splashing down to the school. The solid material should have a mass of not less than 10kg per square meter to provide effective noise reduction. This mitigation measure would, however, require the support of the Highways Department (ETA Paper No. 46/88-89).

Unfortunately, the Highways Department queried the "crashworthiness" of the hoarding on the flyover. In reply, the department stated that there were almost 600 road bridges in Hong Kong and the vast majority of them had the same type of standard vehicle parapet (railing) which met international standards, such as those of the U.K. Department of Transport. Therefore, the risk of

vehicles crashing through the parapets was very low. In virtually every accident with these parapets, the vehicle would strike the rails a glancing blow, and, while damaging the parapet, the vehicle itself was usually redirected back on to the road. The design of these parapets was based on many millions of dollars of research in various parts of the world. The view was, therefore, that the parapets could withstand the accidents which would normally be expected to occur on a bridge of this type (ETA Paper No. 51/88-89).

In addition, the Highways Department replied that its policy in this matter was that a potential hazard existed on all elevated structures and the financial implications of erecting solid barriers at all such locations was prohibitive. Therefore, it would only consider erecting additional facilities if substantive exceptional circumstances existed and it did not believe this to be the case at Sham Tseng (ETA Paper No. 51/88-89).

Meanwhile, a Steering Committee on Noise Abatement Measures in Schools had been set up within the government to oversee the provision of noise abatement measures to schools affected by noise. Installation of abatement measures such as the installation of air conditioning and sealed windows were implemented in Sham Tseng. In addition, the road joints which created the noise had been replaced by quieter ones and the noise from this source was considerably reduced. Open textured surfacing was laid especially to reduce the noise. However, the matter of objects falling from the road has not yet been resolved.

The effectiveness of environmental management in Sham Tseng

District boards have the important function of acting as a link between the government and the community. In the case of both the Sham Tseng nullah and the Tuen Mun highway, Working Groups under the district board played an active role in finding solutions to the problems. The district board also put pressure on government departments to provide clear answers. Representatives of government departments were also invited to district board meetings for consultations. Lobbying these government officials is very important and can be effective. As a result, improvements took place, including the increase in desilting work in the nullah and replacement of the joints on the Tuen Mun highway.

However, the district board, being a consultative body, lacks the authority to put its recommendations into action. Its role is mainly to provide information and to reflect the opinions and needs of the residents to the government. But final decisions are made at a higher level (e.g., the Legislative Council or by government departments). Very often, recommendations will be delayed or rejected because of financial implications. For instance, the Highways Department refused to replace the parapets. Although the district board has a certain amount

of funding, it is usually not enough for costly projects, especially environmental pollution improvement projects that require a large sums of money.

Residents' action

In the Tuen Mun highway case, some residents were mobilized to form a concern group to conduct a survey. Looking at local experiences such as the Tsing Yi Concern Group and the Kennedy Town Environmental Concern Group, local residents are a potential resource in solving community problems. Through community participation, they can learn how to resolve the problems by themselves. Learning by doing is the most effective mean of community education.

However, many residents in Sham Tseng are passive and apathetic regarding community participation. They rarely take part in improving their community. Some of them argue that they are not apathetic but that they do not know the official channels for making complaints. Some of them act as free-riders. Although some residents did try to express their problems to government departments, the response they received caused them frustration (Sham Tseng Community Survey, 1988). In general, low-income citizens are apathetic to environmental protection since they have a sense of helplessness with respect to government policies.

According to Arnstein's Eight Rungs on a Ladder of Citizen Participation, "informing" and "consultation" are the rungs that best describe the level of participation of Sham Tseng residents. Arnstein (1969) described the characteristics of these two rungs as follows:

> When they are proffered by power-holders as the total extent of participation, citizens may indeed hear and be heard. But under these conditions they lack the power to insure that their views will be heeded by the powerful.

In the Sham Tseng case, there was no guarantee that the concerns and ideas of the residents would be taken into account. Finally, low participation leads to no change in community conditions. No change will then lead to low participation. A vicious cycle is created.

Resident organizations

The resident organizations in Sham Tseng are conservative . The leaders are respected by the residents because the idea of respecting an authority figure is deeply-rooted in their minds. Thus, the leaders in Sham Tseng are influential. The organizations are well-developed because they have a long history of serving the people. Every year, they organize recreational activities and social gatherings for the community. Although they show concern about environmental problems, they rarely take part in this particular type of community issue. In addition, they

dislike "outsiders" getting involved in community affairs since such attempts are seen as a challenge to the village administration.

The Neighbourhood Level Community Development Project

The NLCDP is involved in public education and the promotion of environmental protection concepts among residents groups as well as children. Its programme has included a Childrens Group on "Environmental Protection", a carnival, exhibitions and so on. Most of the projects launched are still at a low level of consciousness raising. (Chan, 1991). To mobilize the residents to improve their community and to enhance their participation in community affairs, two resident groups were formed by the NLCDP, that is, a youth community concern group and a womens group. They were organized because young people are more open and ready to express their ideas and because women have a wide social network in the community and are more sensitive to community problems (Wong and Wong, 1990).

The two groups were actively involved in community problems such as transport and security. The former group also showed its concern about the Squatter Area Improvement Scheme by conducting a survey to assess which areas of Sham Tseng needed to be improved. The latter group concentrated on organizing activities for the community such as tutorial classes and outing activities. These experiences increased their awareness of community affairs and enhanced their level of participation. They also learned more about their rights and the channels for expressing opinions through participation.

However, the conservative attitudes held by the traditional resident organization produced a barrier which prevented the NLCDP from mobilizing residents, especially on environmental issues. On one occasion, the NLCDP wrote to the government requesting the implementation of measures to reduce traffic speeds on a steep slope in Sham Tseng Village. However, the letter annoyed the Sham Tseng Village Office, which claimed that the NLCDP had interfered with village administration. As a result, the request was turned down. As a consequence of this experience, the NLCDP did not take part in the Sham Tseng nullah and Tuen Mun highway problems as it was feared that this would create conflicts with the Village Office.

In addition, the loss of manpower and high staff turnover rate of the NLCDP in recent years has also affected resident mobilization efforts. Since there was a lack of manpower to follow up with the groups, the youth community concern group was frozen and the womens group was also disbanded. However, environmental conservation will increasingly concern people everywhere. As we look ahead, we will witness an increase in various interest groups to conserve and prevent pollution of our environment. Citizens will be mobilized to deal with environmental issues at both the local and national levels (Vasoo, 1990).

Therefore, in the future the NLCDP will try to put more effort into mobilizing residents to fight for environmental improvements.

Conclusions

> Fighting pollution will be a long-running battle. It is not just a matter of two or three years, but 10 or 20 years before we can get a solution. We felt we should set an example and help the Government by identifying pollution problems and by coming up with suggestions which the Government may have overlooked. (SCMP, 1989)

At the grassroots mobilization level, residents can collectively express their opinions on pollution problems to improve their environment. Citizen participation has many contributions to make to environmental protection. Individual residents can take personal steps to preserve the environment. They can also take a more active role in monitoring conditions in their community and put pressure on government to deal with pollution problems.

In the case of Sham Tseng, the mix of commercial, industrial and residential land uses and the proximity of a major highway has produced various problems. However, most residents are unwilling to take active steps in the cause of environmental protection. Only a few of them participate in environmental campaign programmes. Their participation level is low and they have mainly depended on the district board member to take an active role in environmental improvement. As a result, the pressure from the people on government is weak and residents have missed the opportunity to develop skills to bring about change through collective action. They have never developed a self-help capacity.

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Chapter 12

Attitudinal and Behavioural Change in Environmental Protection

Cecilia Chan

Introduction

Concern about environmental protection has attracted much public attention in recent years and is likely to be one of the key themes in citizen education in the current decade. However, despite launching many social and educational programmes, community educators, planners and social workers are not well trained in the theory-base of attitude formation and behaviour change with regard to environmental protection.

This chapter reviews models of attitude and behaviour change, focussing on programmes for the promotion of environmental protection undertaken by social service agencies in Hong Kong. The chapter is divided into three sections. The first discusses social psychological theories concerning the processes that influence attitude and behaviour change. The second section describes the application of these models in the context of selected environmental campaigns in Hong Kong. The final section of the chapter presents some recommendations regarding required educational skills and intervention strategies for environmental protection.

Social psychological theories of attitude and behaviour change

According to Edwards (1990), social psychological concepts and processes can be divided into four main components (Table 12.1). These are the concepts of social cognition, social learning, social motivation and social influence; as well as the processes of communication, inter-personal actions, intra- and inter-group relations (Edwards, 1990:2-4).

The process of attitude change starts with social cognition when individuals obtain necessary information through effective communications media. A supportive group learning environment with appropriate role models and clear behaviour instructions can facilitate observational learning in the social learning process. A responsive social environment with specific societal rewards, and established social norms or approval, can increase the motivation of individuals to comply and maintain the behaviour. Stabilization in terms of continuous feedback

and encouragement, group conformity and sanctions can help individuals to develop a desirable behaviour repertoire and attitude.

Table 12.1
Concepts and Processes of Attitude and Behavioural Change

Concepts	Processes
Social Cognition (attribution, self-concept)	Communication (language, nonverbal messages)
Social Learning (modeling, verbal conditioning)	Interpersonal Actions (helping, liking, aggression)
Social Motivation (achievement, approval, consistency)	Intra-group Relations (coalition formation, polarization)
Social Influence (persuasion, conformity, leadership)	Inter-group Relations (conflict, bargaining, cooperation)

Forms of influence developed from social learning theory (Bandura, 1977) have been found to be applicable and appropriate to community and citizen education in Hong Kong (Chan, 1984; 1986; 1988). A systematic application of social and psychological processes is beneficial to the establishment of well informed practices in community education. An appropriate mix of communication tactics, interpersonal influences, intra- and inter-group relations can effectively influence the values and behaviour of individuals.

Model of the processes of social influence

Edwards delineated the processes of social influence on attitudes and behaviour into nine components of education, persuasion, imitation, induced counter-attitudinal action, conformity, compliance, conditioning, leadership, and obedience (Edwards, 1990:5). All these processes can bring about changes in attitude and behaviour. Five processes which have direct relevance to the promotion of environmental consciousness in Hong Kong are selected for discussion and they are as shown in Table 12.2. The five processes are education, persuasion, imitation, conformity and conditioning. The relatively authoritative approaches of compliance, obedience etc. are less appropriate in informal community educational situations.

Table 12.2
Forms and Components of Selected Social Influence Processes

Influence Type	Strategy	Mechanisms	Targets	Response
Education	Give information	Learn, recall skills, knowledge	Students, mass audience	Use knowledge and skills
Persuasion	Arouse emotions, provide arguments	Process arguments, mindless agreement	Message recipient	Change attitude and value
Imitation	Perform actions	observe, encode, rehearse	Observer	Imitate actions
Conformity	Express judgement	Social comparison, being accepted	Group minority	Overt agreement & commitment
Conditioning	Control stimuli, schedule rewards	Need reduction, habit formation	Learner	Change frequency of behaviour

(Adapted from Edwards, 1990:5)

Education

Provision of information through television, radio, pamphlets, notice-boards, exhibitions, case-stories, films and other mass media are commonly used to raise the consciousness of the public on the detrimental effects of environmental pollution and its control. However, merely providing correct information is not sufficient for effecting behaviour change. Additional educational strategies of training people with skills needed for change and providing them with clear behaviour instructions are also essential.

Persuasion

Systematic information processing and expert advice are often effective in persuasion. Presentation of statistics and research findings, computer simulator, advertising, person-to-person selling, are all commonly used approaches in

persuasion. Publicity on environmental protection in Hong Kong is usually tied to fearful realities that our sons and daughters will have no more clean air and water, the aim being to deter individuals from wasting water and paper, causing forest fires, or polluting the air. For example, most of the government Announcements of Public Interest (APIs) (i.e., government sponsored television and radio advertisements) on environmental protection contain fear-arousing contents. Fear, or some other disturbing emotional stimulus, helps attract public attention to important environmental issues and provides a strong deterent effect on the audience. The incentive for accepting the advocated attitude for environmental protection is fear reduction.

Imitation

The involvement of opinion leaders and popular singers in environmental campaigns are the best examples of modeling, especially for young persons. Effectiveness of imitation depends on factors such as the characteristics of models, consequences of their behaviour, as well as the target person's sense of efficacy about imitating the modeled action. Negative models who litter will have to go through the public degradation ceremonies of shaming and fines. Diffusion of positive behaviour is actually most effective when natural leaders such as teachers, school prefects, parents and friends within their social network are used as models of positive behaviour and attitudes.

Conformity

In order to avoid rejection and gain acceptance, individuals will tend to conform to the norms manifested by the majority. Naturally occurring groups such as peer networks and neighbourhood organizations can be employed in spreading relevant information, attitudes and promoting desirable behaviour. For example, waste paper collection projects were launched in a number of public housing estates by Mutual Aid Committees in 1990. Although their apparent influence on creating a social norm for conformity is low, they form part of the process of establishing a moral imperative among individuals to conserve paper and trees.

Conditioning

Behavioural conditioning can be achieved by controlling the physical environment to facilitate desired, and inhibit undesired, actions, increasing the degree and likelihood of penalties or other disincentives for excessive actions, giving informative feedback to encourage self-regulation, and offering incentives ranging from cost savings to individual rewards. Legislation, policies and judicial decisions are important components in society which condition individuals to comply or obey.

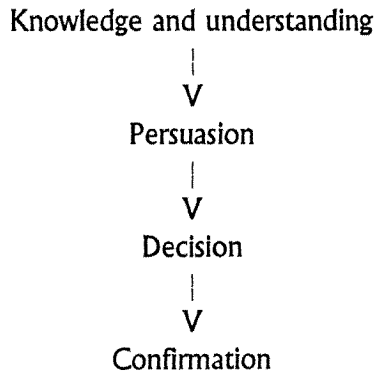
These processes of influence can be carried out separately or sequentially. For the behaviour to last, it is crucial to transfer control from external to internal sources. A mix or combination of processes of social influence is advisable and can better be explained by the model of diffusion of social innovation presented in the following section.

Model of diffusion of social innovation

Process models and the teaching sequence concept can be applied to the education on environmental protection. The model of diffusion of desirable social behaviour or "social innovation" (Rogers and Shoemaker, 1971) is being widely adopted in community-based educational programmes. Rogers and Shoemaker conceptualized four stages in the decision to adopt an innovation that provides a useful framework for understanding the impetus of environmental consciousness programmes (Figure 12.1).

Firstly, individuals are given information to develop an understanding of the innovation. Secondly, individuals are persuaded to hold a favourable attitude towards the innovation. Thirdly, individuals decide to engage in behaviour that leads to adopting the innovation. Last, individuals seek confirmation of the decision making. A failure to receive confirmation leads to reversal of the decision. Positive reassurance can strengthen the decision making and the behaviour can be developed into internalized habits.

Figure 12.1 The Path of Decision Making in Adoption of Innovation



This model of diffusion of social innovation provides a sequential guide to trainers on the steps in public education and attitude change (Loken et al., 1990:162-5). In fact, both the model of processes of social influence and the model of diffusion of social innovation are directly applicable to the study of the

promotion of environmental concerns in Hong Kong. The application of the models in environmental protection campaigns is described below.

Applying the models in promoting environmental concerns

Since 1990, schools, children and youth centres, as well as environmental organizations have been receiving financial support from the Environmental Campaign Committee for activities to promote environmental protection. The objective of the Environmental Campaign Committee is:

> to promote public awareness of environmental protection issues, at the same time encouraging and mobilizing people from all walks of life to contribute towards a better environment (Environmental Campaign Committee, 1991:3).

Despite the objective stating the targets of education as people from all walks of life, most of the activities organized in 1990 were geared towards children and youth.

The main emphasis of the environmental campaign is on recycling, consumer watch, vehicle emissions, energy conservation, noise pollution, environmental health, water quality control, and natural resources management. The Environmental Campaign Committee has high expectations of public education, and especially education in schools, to create a climate of public awareness. This focus is based on the assumption that students are easier to change during their character formation stage.

Of the environmental protection programmes organized by social service centres in 1990, the emphasis was mainly on information giving and exposure to pollution-free areas. Popular programmes include visits to the Mai Po Marshes, picnics to country parks, exhibitions, carnivals, a paper recycling scheme, and slogan design competition. Most of the programmes organized by the Children and Youth Centres are social and recreational "fun days", carnivals, competitions and camping which have low educational value. From the processes of attitude change and the diffusion of innovation, a focus of intervention according to the levels of change are listed in the Table 12.3.

Knowledge and understanding

In 1990, the Environmental Campaign Committee spent $1.7m (65.1% of its expenditure) on campaigns associated with World Environment Day and the Environmental Protection Festival. One-fifth of the budget was spent on funding education programmes of social organizations ($0.55m). The publicity campaign aimed at raising public awareness of the need for environmental protection and putting forward concrete action proposals, such as waste paper collection and saving energy, to participants. Green Power and Friends of the Earth are beginning to produce locally relevant training kits to be used in pre-school,

primary and secondary school settings. The information available is mostly borrowed from overseas and it may take some time before systematic local training packages can be produced for wider dissemination.

Table 12.3
Change Processes, Behavioural Outcomes and Foci of Intervention in Environmental Protection Campaigns

Change Process	Behavioural Outcome	Focus of Intervention
Knowledge and Understanding	learning information accepting arguments	draw attention to consequences of pollution and environmental destruction, dispel misinformation, form basis of reasoned action
Persuasion	forming favourable attitudes, imitating a model	establish logical basis of prevention, project image of model and desirable behaviour repertoire
Decision	engaging in action	clear behaviour instructions, skills training and on-going consultation
Conformation	seeking consistency, self-regulation	establishment of social norms, clear rewards and sanctions, policy and legislature back-up

Youth involvement in secondary school or youth centre projects is usually very high. Young people are involved in information collection, discussion, and data presentation to classmates or the public. The common forms of knowledge dissemination on environmental protection are exhibitions, computer simulation programmes, quizzes, and pamphlets. The public may only get vague ideas of environmental protection after reading the exhibition boards or participating in programmes. Those who benefit most are likely to be young persons who have gone through an intensive learning process of analysis, synthesis, and presentation of data on environmental protection. Young persons reported that they have changed their attitude and behaviour after participating in school projects on environmental protection.

Persuasion

The Environmental Protection Department periodically launches large scale publicity on the public hazards of water pollution, industrial noise and air pollution. The approach adopted in the publicity on television is mainly repulsion methods of imprinting the negative consequences of pollution on the audience. Deterrence effect by fear arousal is effective because citizens are forced into decision making concerning their children.

The involvement of supportive local neighbourhood networks in the establishment of social norms of environmental protection and a "green" life-style is a desirable strategy for attitude change. Schools and community centres are the most appropriate settings for knowledge dissemination to the public and for mass persuasion. Well organized arguments and systematic presentation of facts can dispel misinformation and help the public to form logical bases for "reasoned action" (Ajzen & Fishbein, 1980). Appropriate models can help promote actions in environmental protection and ways to a "green" life-style. A desirable behaviour repertoire can be established through persuasion and demonstration.

Decision

When individuals are convinced of the importance of environmental issues and make decisions to take part in environmental protection, they must be provided with clear behaviour instructions as to what they can do. Wherever possible, the public should also be provided with training and consultation on the specific steps to take in environmental protection.

Confirmation

To provide a supportive environment for practicing a "green" life-style, social norms, policy and legislative back-up, clear sanctions and rewards have to be established. In the United States, there are schemes particularly designed to attract youth into environmental protection activities. These include the President's Environmental Youth Award, Caretakers of the Environment for high school students, Environmental Youth Summit to award high school student winners, and Regional Certificate Programmes organized by Environmental Protection Agency Regional Offices. A conducive environment can help young people to internalize the values of environmental protection and develop an intrinsic "green" life-style without having to rely on external rewards.

The focus of intervention should be designed according to all four levels of the change process. The ultimate goal of education and persuasion is behaviour change. Isolated and sporadic publicity on environmental protection can contribute very little to the long term goal of conserving the environment. Remaining at the information giving stage without proceeding to the higher levels

of reasoned action, decision, and habit formation will be a waste of time and resources.

Recommended skill requirements and intervention strategies

With the network of social service centres, community development projects, primary and secondary schools, and uniform groups operating in Hong Kong, there is a massive network which has great capacity for influencing citizens' attitudes and behaviour. However, there is a lot to be done to prepare the community educator to be competent in the promotion of environmental protection.

It is logical to expect that individuals will be willing to abide by behavioural instructions or restrain from their usual habits only in the face of sanctions, fear or rewards. With regard to the usual campaign techniques of fear arousal for deterrence adopted in the government sponsored environmental protection publicity programmes, the negative repulsion is not adequately followed up by concrete behavioural proposals for individual citizens to follow. The recommendations are mainly confined to individual and household responsibilities in keeping the environment and beaches clean. Major sources of pollution, particularly industry, receive very little attention. The excessive fear arousal method in these cases is a source of stress on the population, as they may find themselves in a state of helplessness and despair.

Owing to the restricted publicity on what specific actions can be taken, most environmental protection activities are confined to collecting waste paper, switching away from the use of disposable utensils and containers, appreciation of nature and going to country parks. Secondary school students organize projects on using handkerchiefs instead of tissue paper. Local residents' groups organize small scale waste paper collection. These efforts are uncoordinated and there is no unified set of desirable behaviour repertoires offered for interested individuals or groups to follow. Such symbolic actions of citizen participation are only producing cosmetic results, with little real impact on conserving the environment. In fact, not too many people are willing to buy recycled paper as it costs more. Education on environmental protection in Hong Kong still has a long way to go.

To overcome these problems, three issues need to be tackled. First, policy and resource commitment is required if the movement is to expand. Second, community educators can adopt Edwards' model of social and psychological influences into the design of their strategies. Third, specific intervention tasks can be designed according to the goals of changing the individual and the environment.

Policy considerations

To delineate the necessary policy and resource support required in the promotion of environmental protection, the process of adopting social innovations (Rogers and Shoemaker, 1971) will be used as a framework of analysis. The first level of input is the establishment of a policy commitment and consensus among the social service agencies on the importance of the promotion of environmental protection. Training courses and seminars should be organized for interested staff in order to equip them as trainers. They will serve as living examples for the grassroots citizens to model themselves on. As well as education, persuasion and the decision to take action, the most crucial policy support is provided by legislative and administrative regulation. In the case of anti-smoking campaigns, the encouragement to use seat-belts, and the promotion of unleaded petrol, it was not until administrative sanctions of fines, controls or tax reduction were put into place that the public made the desirable behavioural adjustments. Political will and administrative commitment have a determining effect on the success of similar public morality issues in Hong Kong.

Table 12.4

Policy and Resource Inputs Needed for the Promotion of Environmental Concerns among Young Persons in Hong Kong

Path of attitude and behaviour change	Policy and Resource Input
Knowledge and understanding | | V	Concerted effort among govt. depts. and social service organizations, more funding for the production of training packages, set up resource centre to facilitate training of community workers, establish consensus among agencies on the importance of environmental protection
Persuasion | | V	Persuade workers in the first place, curriculum design to add in components of environment consciousness and behavioural instructions, more resources for programmes of environmental campaign to be allocated to local groups

Path of attitude and behaviour change	Policy and Resource Input
Decision | | V	The workers should themselves be convinced and live as life models on being environmentally conscious and responsible, the community leaders should be involved to confirm the desirable "green" behaviour
Confirmation	Legislation on environmental protection is the most effective mechanism of sustaining a green behaviour and deter anti-environment behaviour

Skills and tasks of intervention

The following proposal on skills and intervention strategies has been designed in accordance with the five selected forms of social influence process (Table 12.5). In the production of locally relevant educational kits, it is desirable that community workers taking part in the promotion of environment consciousness and environmental concern groups can work more closely with one another. Skills in advertising, publicity, promotion campaigns and mass education are essential in persuading citizens of the urgency of taking action against environmental degradation. Models, award schemes, reward systems and moral sanctions should be established to condition residents to continue with a "green" attitude and adopt environmentally sensitive behaviour.

As well as developing skills in providing information, in persuasion, and influencing behaviour, there are three dimensions which community workers have to work on to create a favourable atmosphere for environmental protection. These are environmental attributes, personality attributes and behavioural attributes. There are tasks to strengthen environmentally conscious behaviour, attitudes and values, as well as tasks to weaken long-established habits of environmentally destructive behaviour. The details of these tasks are listed in Table 12.6.

Table 12.5
Tasks and Skills Required of the Social Worker
under Different Behavioural Influence Strategies

Influence Type	Strategy	Tasks and Skills Required of the Workers
Education	Give information	Network with environmental concern groups, design systematic information package to be disseminated in community and social service units, work out exhibition boards which can be shared among service units, organize training courses and seminars to equip staff.
Persuasion	Arouse emotions, provide arguments	Publicity, mass education, fear arousal of consequences of environmental destruction, provide evidence for reasoned action, develop values and personality attributes that support environmentally conscious behaviour
Influence Type	Strategy	Tasks and Skills Required of the Workers
Imitation	Perform actions	Provide exposures to green models, create opportunities for green behaviour, teach skills to support green behaviour, guidebooks to teach alternative behaviour, develop a sense of pride in being "green"
Conformity	Express judgement	Set up reward and merit systems for "green" behaviour, establish linkage with policy planners, set up congruent policy and administrative backup in schools, social service centres and community groups
Conditioning	Control stimuli, schedule rewards	Establish social support for desirable behaviour, set up citizen award schemes, internalize values of environmental protection and conservation

Tasks in Changing Environmental, Personality and Behavioural Attributes

Environmental Attributes	
Develop new norms and expectations on environmental qualities Create opportunities for green behaviour Promote exposure to green models Provide social support for behaviour change	Weaken norms and expectations for anti-environment behaviour Limit opportunities for anti-environment behaviour Lessen exposure to anti-environment models Diminish social support for anti-environment behaviour
Personality Attributes	
Provide knowledge to support environmentally conscious behaviour Develop values that sustain environment conscious behaviour Establish functional meanings of behaviour that support green choices Strengthen internal locum-of-control for a green life-style	Provide knowledge that is incompatible with engaging in anti-environment behaviour Weaken values that support anti-environment behaviour Change functional meanings of behaviour that support anti-environment choices Overcome external locum-of-control for a non-green life-style
Behavioural Attributes	
Enlarge skill repertoire to support green behaviour Promote intentions to engage in green behaviour Positively reinforce green alternative behaviour Promote self-management of green behaviour	Teach skills to resist pressure to engage in anti-environment behaviour Weaken behaviour intentions that are anti-environment Negative reinforce anti-environment behaviour Discourage anti-environment lifestyle

(adapted from Loken et al., 1990:168)

Conclusions

The social and psychological theories of attitude and behaviour change are relevant to the promotion of environmental protection in Hong Kong. Community workers can develop their skills and tasks according to the objective of behaviour change and appropriate processes of influence.

Despite all the lists of required skills and tasks, community workers must still first be convinced of the importance of environmental protection. Social service agencies, the Environmental Campaign Committee, environmental concern groups, and community workers should work closely with one another. It is imperative that more community workers be involved in the promotion campaign. They can contribute to the design of locally relevant and systematic training packages for attitude and behaviour change.

The greatest barriers to environmental protection are the lack of public awareness of the importance of conserving the environment and the lack of political determination to do something about it. Policy and resource support is required to make promotional activities possible. Until necessary legislation and more vigorous administrative innovations are formulated and implemented, promotional activities will remain at the information and understanding level with no concrete actions being recommended. For instance, unless the municipal refuse collection system is re-organized to accommodate waste paper recycling, small-scale waste paper collection campaigns are hardly likely to make a significant contribution to environmental protection.

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Chapter 13

Environmental Education for the Public: A Rubbish Recycling Scheme in a Middle Class Housing Estate

Mok Hing Luen and Lau Kwong Kit

Introduction

This chapter focuses on the implementation of a rubbish recycling scheme in a middle class private housing estate in a new town during 1990. Unlike other similar projects, this scheme concentrated on educating the public to understand the importance of rubbish recycling as well as encouraging them to change their rubbish disposal behaviour. In addition, different groups were mobilized to contribute their efforts to the launching of the scheme. To establish the extent of any behavioural changes in dumping recyclable rubbish, two surveys were conducted to evaluate the impacts of a series of educational programmes that were mounted.

The importance of waste recycling

Waste recycling and recovery has been advocated as one of the most effective ways of reducing pollution and conserving the limited resources of the Earth.

Although the government is prepared to allocate large sums of money to collect and deal with waste in the present decade, the most practical way to tackle the waste problem is to reduce the amount of rubbish produced and to recycle or re-use wherever possible. A local survey revealed that 25% of domestic solid waste worth $400 million every year could be recycled (New Evening Post, 24 October 1990). This could save up to 550,000 m^3 at landfill sites each year. It is the government's intention to encourage waste recycling, as stated in the 1989 White Paper on pollution. The White Paper itself indicated that $2.1 billion worth of recycled waste was exported from Hong Kong in 1988.

In view of the importance of recycling, the first experimental waste recycling scheme promoted by the government was organized in Siu Hong Court, a Home Ownership Scheme in Tuen Mun New Town in March 1990.

The conceptualization of a rubbish recycling scheme

The community work team of the Yan Oi Tong (CWT), a voluntary agency serving Tuen Mun New Town, decided to organize a rubbish recycling scheme from July to November 1990. Instead of doing the project alone, the CWT sought the cooperation of 20 students and a lecturer from the Department of Applied Social Studies in the City Polytechnic of Hong Kong (CPHK).

In conceptualizing another rubbish recycling scheme during July 1990, both CWT and CPHK concluded that the past schemes had the following shortcomings:

(a) many had not put emphasis on the process of educating the public to appreciate the importance of waste recycling prior to trying to encourage people to change their behaviour;

(b) some schemes were "one-shot" programmes which were only very short-lived. They were symbolic gestures and did not encourage residents to sustain their recycling behaviour;

(c) some just collected waste paper and magazines for recycling but nothing else;

(d) some were implemented in a complicated way. Cleaning workers only collected the designated kinds of waste on certain dates and the public easily got confused. Residents had to first store the waste in their homes before it could be disposed of on designated dates. This created home cleanliness problems;

(e) most schemes were implemented in government-managed offices or estates only. They were not distributed widely across Hong Kong and were not involving private sector housing.

To avoid these shortcomings, the CWT and CPHK had the following considerations in mind when planning the rubbish recycling scheme:

(a) the target group should be middle class as this group had not been encouraged to implement any waste recycling schemes before. It was also expected that their environmental awareness would be higher because of their higher educational level. It should be easier to induce changes in behaviour to sustain rubbish recycling if the target group are more receptive to the concept;

(b) the target area should be within the geographical boundary of the CWT, i.e. within Tuen Mun;

(c) the introduction of any rubbish recycling scheme should not disrupt the established income-earning pattern of the cleaning

workers. Nearly all cleaning workers in Hong Kong pick out recyclable waste such as drink cans and bottles and sell them to waste dealers. It would be undesirable for any scheme to steal from the rice-bowls of the cleaning workers. Instead, residents should be educated to fully utilize the present system of waste collection practiced by the cleaning workers;

(d) the target community should have an active residents' organization, a cooperative management company and enthusiastic cleaning workers so that a concerted effort to bring about desirable behaviour changes could be realized. Mobilizing community resources, manpower, community leaders and all concerned parties in serving their own community, as well as educating the grassroots, are essential strategies in launching community education.

The target community

Seaview Garden was chosen as the target community for implementation of the rubbish recycling scheme. It is situated on the fringe of Tuen Mun, 28 kilometres from the central area of Hong Kong. The estate consists of 8 multi-storey blocks with about 600 households. Most of them are nuclear families and many of them employ Filipino housemaids. The general income levels as well as the educational level of residents are higher than the average of Hong Kong citizens.

The estate is managed by a famous private property management firm. The head of the company is active in social and political affairs and so there was a good chance that the proposed rubbish recycling scheme would get positive support and cooperation from the management agency. There is also an influential Owners Incorporation (OI), formed by the owners of Seaview Garden. The OI, which is very active in protecting owners' rights and interests, was supportive of launching the proposed rubbish recycling scheme with the CWT and CPHK.

The objectives of the scheme

The main objectives of the scheme were as follows:

(a) educating the residents in Seaview Garden to understand the importance of rubbish recycling, so that any behaviour change could be sustained for a longer period;

(b) motivating the residents of Seaview Garden to make use of the present waste-recycling system of the cleaning workers by distinguishing, classifying and putting the recyclable and unrecyclable rubbish in separate bags when they dumped their

rubbish. It was not expected that the CPHK, CWT and OI would transport the recyclable rubbish directly to the merchants when implementing the scheme. Instead the purpose of the proposed scheme was to encourage residents to separate the two kinds of rubbish before the cleaning workers took them to the garbage vehicle;

(c) making the residents realize that recyclable rubbish is not limited to waste paper, but can include drink cans, plastic bottles and other metal cans.

The scheme also had a number of secondary objectives, including:

(d) providing a chance for all relevant parties in the community to work together in order to build up a caring living environment in a concerted way where community leadership and potentials were realized;

(e) giving the social work students of CPHK the chance to assist in the mobilization of the grassroots in caring for their own environment.

Dimensions of the scheme

The implementation of the rubbish recycling scheme can be divided into five stages:

Stage I: community identification and contract setting

A meeting with the OI of Seaview Garden was arranged in mid-July 1990. An agreement on cooperation was reached between the OI, CWT and CPHK. In late July, a liaison visit to the management office was arranged and cooperation as well as support from it were solicited. Field observations of the actual operation of the current recycling system adopted by the cleaning workers of Seaview Garden were attended by all relevant parties. Programme planning meetings were held between the OI, CWT and CPHK in late July. They all agreed to design a strategy that encouraged residents to fully utilize the system already operated by the cleaning workers. The details of all programmes and procedures of the scheme were finalized in mid-August.

Stage II: relationship building with the community

In early August, some burglary cases were reported in Seaview Garden. It was desirable and strongly suggested by the OI that gaining the trust of the residents was very important before any scheme was implemented. Thus, a show was organized on a weekend evening in late August 1990 to introduce the

recycling scheme, to build up trust and a relationship between the relevant parties and the residents, and build up some initial cooperative experiences among all parties before the rubbish recycling scheme started. The night show attracted 300 residents.

Stage III: studying the community

A survey was carried out in order to find out residents' current habits and patterns of dumping rubbish and their awareness of rubbish recycling. It was useful in evaluating the effects of a series of educational activities. The survey, done in early September, was in the form of a structured questionnaire. Since it was quite disturbing to conduct door-to-door interviews after some burglary cases had been reported, interviewing with the questionnaire was done just at the front gate of every block for five evenings. The interviewer tried to reach every resident who passed by the front gate. To reduce duplication, only one person from each household was interviewed.

As a result, 245 (40% of the whole estate) residents were successfully interviewed in this initial study. It was found that 77% of respondents had heard about rubbish recycling before. Table 13.1 shows that while around 60% of respondents separated newspapers and magazines from other rubbish, only a few were separating out the drink cans and plastic bottles. As regards their attitudes towards rubbish recycling, Table 13.2 shows that the overall response was very positive.

Table 13.1

Responses to "How is your family dumping the following kinds of rubbish"?					
	Newspapers	Magazines	Plastic bottles	Drink cans	Other metal cans
Mix them with other rubbish in one bag	31.4%	31.4%	80.8%	83.7%	81.6%
Separate them from other rubbish in different bags	62.4%	58.4%	12.7%	9.8%	9.8%
Others	6.2%	10.2%	6.5%	6.5%	8.6%
Total	245	245	245	245	245

Table 13.2

Do you agree with the following statement?			
	Agree	Disagree	Others
A. Rubbish recycling can reduce the pollution caused by dealing with such waste	95.9%	3.7%	0.4%
B. Since the resources of the Earth are rich, it is not necessary to have rubbish recycling	7.3%	88.6%	4.1%
C. Rubbish recycling could reduce the exhaustion of natural resources	93.5%	3.7%	2.9%
D. Rubbish recycling only benefits the cleaning workers	21.1%	77.1%	1.6%
E. It is troublesome to dump the rubbish in separate bags	39.2%	60.0%	0.8%
F. Every citizen should join the rubbish recycling scheme	89.9%	6.9%	3.3%
Total: The total respondents for each item was 245			

The hiring of Filipino housemaids is very common among middle-class families. One of their main jobs is to dump the household rubbish everyday. The organizers of the scheme had considered that educating these housemaids would be effective in inducing behaviour changes in practicing rubbish recycling. However, the preliminary survey showed that only 13.9% of households' housemaids were responsible for dumping the rubbish everyday. The proportion was not as large as expected. So the plan to educate the Filipino housemaids was abandoned.

As regards whether they would join any rubbish recycling scheme organized by the OI, CWT and CPHK, 81.6% said yes, which was very encouraging. It was concluded that while residents were positive and receptive both in attitude and the practice of rubbish recycling, many were not actually recycling at the time the preliminary survey was done.

Stage IV: programme implementation

A series of educational activities were organized to raise residents' awareness and motivate them to recycle rubbish:

(a) an educational carnival was held on a weekend evening in late September. There were exhibition boards introducing the need for rubbish recycling, a quiz game encouraging participants to read the exhibition boards, game stalls introducing the concept of waste separation, a handicraft display, and a demonstration of small-scale paper recycling. Altogether 300 residents attended the function.

(b) an inter-block competition on rubbish separation and collection was held on the following day. The total weight of the rubbish returned from participants was grouped under their own residential blocks for comparison. 50 households joined in the competition.

(c) a brief talk on rubbish recycling was organized in a residents' meeting on the same evening. The importance of rubbish recycling was explained. Pamphlets outlining the details were distributed to the residents. 150 residents attended the meeting.

(d) 1 October was designated as the launching date for residents to start practicing rubbish separation when they dumped their rubbish. Residents were advised to put the newspapers, magazines, drink cans, plastic bottles and other metal cans in one bag and the other unrecyclable items in another bag. Publicity was carried out in late September in the following ways. Posters were displayed at the entrance of each residential block. Pamphlets were distributed through the letter-box of every household. Verbal explanations were made to about 200 residents at the entrance gate of Seaview Garden.

Stage V: evaluation

After a series of educational activities had been held, a second survey was carried out in late October to find out how far the residents were practicing rubbish recycling. The sample comprised all those who had been interviewed in the first survey in September, i.e. the 245 respondents. Since the telephone numbers and names of every respondent in the first survey were recorded, telephone interviewing was used as the data collection method in this second survey.

As a result, 140 out of 245 households could be traced successfully for interview. 75.7% correctly understood about rubbish recycling and 93.6% had actually practiced the method of rubbish recycling suggested by the organizers. Such figures were very satisfactory as only 85.7% of households indicated that they would join such scheme in the first survey. Table 13.3 shows there was a

significant increase in the number of residents practicing rubbish recycling as compared to Table 13.1. Such a change in behaviour was especially significant with regard to separating plastic bottles, drink cans and other metal cans from other unrecyclable rubbish.

Table 13.3
Responses to "How is your family dumping the following kind of rubbish?"

	Newspaper	Magazines	Plastic bottles	Drink cans	Other metal cans
Mixed them with other rubbish in one bag	7.1%	6.4%	35.0%	28.6%	35.0%
Separated from other rubbish in different bags	90.0%	90.0%	58.6%	65.0%	59.3%
Others	2.9%	3.6%	6.4%	6.4%	5.7%
Total	140	140	140	140	140

Table 13.4 provides a comparison between the results of the first and second survey. It was found that the "desirable" behaviour change (i.e. previously one bag, now separate bag) was especially pronounced in separating plastic bottles, drink cans and other metal cans from unrecyclable waste. On the other hand, the "desirable" behaviour change in separating newspapers and magazines from unrecyclable waste was not so evident.

When asked what difficulties they encountered when practicing rubbish recycling, 73.5% said they had no difficulties. Only about 10.7% said they had to keep the recycled rubbish in separate bags, causing inconvenience at home. Some said that they had to use more plastic bags in dumping their rubbish after practicing recycling.

Most residents suggested that the government or the management office should put at least two plastic buckets or cardboard boxes at each storey of every block to make it easier for residents to separate rubbish when dumping it. Some also suggested that the organizers should emphasize the importance of further publicity for the scheme and education of the public about the need for rubbish recycling.

Table 13.4
Comparison between previous and present waste dumping patterns of residents

	Newspaper	Magazine	Plastic bottle	Drink cans	Other metal cans
From one bag to one bag	4.3%	3.6%	27.9%	24.3%	28.6%
From one bag to separate bag	25.0%	22.9%	43.6%	51.4%	49.3%
From separate bag to one bag	2.9%	2.9%	6.4%	3.6%	4.3%
From separate bag to separate bag	59.3%	57.1%	10.0	9.3%	6.4%
Others	8.6%	13.5%	12.2%	11.4%	11.4%
Total	140	140	140	140	140

The experience of the scheme

Although it was not known whether residents would sustain their recycling efforts, the second survey confirmed that residents' behaviour had changed. It is difficult to be certain whether such changes were directly related to the series of educational activities that took place. Nevertheless, these programs undoubtedly had an impact on residents as many said they had actively participated.

The success of such a scheme shows that many residents, especially the middle-class, are receptive and ready to practice rubbish recycling as long as there is enough publicity. They are willing to return reusable rubbish if a simple and easy collection system is established. Any new practices should not involve a great change in the whole system, otherwise residents will find it hard to accept. For example, it would be too troublesome if every type of recyclable rubbish were to be put in different kinds of plastic bags. In the current scheme, residents were only asked to use two bags, i.e. the recyclable rubbish in one bag and the unrecycled waste in the other. In addition to paper collection, this scheme also offered the possibility of returning drink cans and plastic bottles.

The cleaning workers in Hong Kong have already set up some economic rubbish recycling channels for gaining additional income. It is advisable that any new scheme be compatible with this existing system to avoid unnecessary conflicts and misunderstandings. The support of the cleaning workers is vital and they should be invited to provide information and comments throughout the planning

process.

A successful rubbish recycling project requires a thorough understanding of the resident's mentality and their existing pattern of dumping rubbish. It was essential to involve local residents and community leaders in planning and implementing the whole scheme as they were more familiar with their own culture and were usually more influential within their community. Utilizing their resources and potential in developing a better and caring community proved effective as a mechanism of community education.

Conclusions

The rubbish recycling scheme was implemented quite successfully with evident changes in residents' behaviour. It was implemented at a time when rubbish recycling was not as popular as it is today. Its success suggests that as long as the recycling system suits people's habits and living patterns, recycling behaviour can be encouraged quite easily. Constant publicity is, of course, very important in sustaining such behaviour. Community education was not only useful in fostering people's positive attitudes and correcting their misconceptions about environmental protection, but was also effective in bringing about "desirable" behaviour changes in practicing rubbish recycling. The achievements of the scheme suggest that the scope of environmental protection projects in Hong Kong can be further broadened.

Chapter 14

The Campaign Approach in Grassroots Mobilization

Regina Cheung

Introduction

Environmental protection has become a popular theme in community education in recent years. This implies that people are becoming more aware of the effects of environmental damage. Squatter area residents typically have to face a variety of environmental problems everyday. Their living conditions are extremely poor and they also often experience health problems. What can community workers in a Neighbourhood Level Community Development Project do to assist residents to deal with environmental problems? What limitations do we face in carrying out community interventions? These questions represent the main theme of this chapter.

The chapter focuses on the situation in Sheung Yuen Ling Village and Diamond New Village, the two squatter areas in Diamond Hill. The discussion is divided into three parts. The first part deals with the background to the two areas and provides a brief description of their problems. There then follows a discussion of the approaches we have used in dealing with these problems. The third part of the chapter focuses on the implications of the work that has been done and the lessons it provides for us.

The two squatter villages

Diamond New Village is situated in the central part of Diamond Hill. The upper and middle parts of the village contain mainly industrial activities, principally dyeing factories. There are only a few domestic huts in this portion of the village. Domestic huts are located mainly in the lower part of the village (Diamond Hill Centre, 1991-92).

As there are many dyeing factories located on the upper sections of the stream which passes through Diamond New Village, the waters are seriously polluted by the untreated wastes that are discharged by these plants. The stream is badly discoloured by these discharges and has a very offensive smell. The situation is particularly bad during the summer months. The dyeing factories also pollute the air in the village.

Since there are not enough rubbish collection points in the village, the residents dispose of waste in a haphazard way, which affects the cleanliness of the pathways, creates offensive smells and attracts rats. Even the existing rubbish collection station is only temporary and the rubbish tends to be blown everywhere. As it just has a few public toilets, people also throw human waste into the stream which causes even more pollution (Diamond Hill Centre, 1991-92).

Sheung Yuen Ling Village is situated on flat land parallel to the Lung Cheung Road and is bounded by the Tate's Cairn Tunnel road. It contains domestic as well as industrial and commercial structures.

The main environmental problem in Sheung Yuen Ling is drainage. The drainage system in the area is primitive and unsystematic. Construction work in the area makes the drainage situation even worse. Construction debris, rubbish, and human waste obstruct the drains. As a result, frequent flooding occurs. Large numbers of rats can also be found in the drains (Diamond Hill Centre, Centre Plan, 1991-92).

Tackling the problems

In tackling the above problems we have not adopted a militant, conflict-oriented approach, but have focused mainly on promoting community education on environmental protection. The reasons for adopting such a strategy are described below.

The theoretical rationale

Community development can be defined as:

> a process of raising social consciousness in which people are encouraged through **collective participation** to identify, express and act on their needs (HKCSS, 1986).

The NLCDP is one kind of community development service, its aim being to develop a caring, self- help community by encouraging residents to become involved in identifying social needs. Hence citizen participation is:

> an essential element of development and an important way of heightening consciousness and increase knowledge of issues and available resources (Chan, 1984:46).

Community education is an effective approach to enhance citizen participation. It is manifest in the process of locality development. The ultimate goal of the latter is to develop the community's capacity:

> to become functionally integrated, to engage in cooperative problem-solving on a self help basis and to utilize democratic process (Rothman, 1979:8).

By providing knowledge and teaching skills to the residents, they can intervene more easily and can thus enhance their self-help capacity. Hence, community education is an essential component of the locality development model.

Community education can also compensate for some of the limitations of locality development. In the latter model, the basic strategy involves an effort to get a wide range of community residents involved in determining their "felt" needs and solving their own problems. However, people cannot want those possibilities that they do not know exist. Alternatively, people may be deterred from pursuing those wants that do not fit the requirements of national and regional development programmes. Thus, needs may be learnt by conditioning and manipulated by societal forces, with the result that they represent "false" needs (Rothman, 1979). By providing education to the residents, it is hoped that they can become aware of their needs and identify these more clearly.

Community education can also lay the foundation for further social action. Mobilizing people to participate in social action requires that residents be conscious of their needs and have some understanding of both the community and the wider society, so that people can actually decide whether or not to participate. Thus, self determination can be assured and the mobilization process can be facilitated.

Practical considerations

Levels of citizen participation in the two villages are not high. In Diamond New Village, a high proportion of the population are newly-arrived immigrants from China. Their sense of belonging to the community is low. Furthermore, many people in the village are not Cantonese and speak other dialects. They are not confident about joining in actions as they think that others cannot understand what they say. Thus, the residents do not have much experience of participation and their civic knowledge is limited. Although there is a residents group, the Diamond New Village Environmental Concern Group, in the village, the group is not well established or supported.

In Sheung Yuen Ling Village, participation levels are also low. The reasons are slightly different from those applying in Diamond New Village. It seems that in Shuen Yuen Ling there is little trust among residents. They have very utilitarian attitudes and regard each other as being basically apathetic towards the idea of a community. Most are preoccupied with earning a living.

In both cases, community education represents the first step in the process of providing knowledge to the residents and creating an atmosphere for participation among them.

Causes of environmental problems

When we analyse the causes of the environmental problems mentioned in the first part of this chapter, it is clear that they involve a combination of factors: poor facilities, the presence of the polluting dyeing factories and the actions of the residents themselves. It is because they are not aware of the importance of environmental protection that residents throw rubbish everywhere simply for their own convenience. Thus, some education on this matter is essential if conditions in the villages are to be improved.

Other factors

As well as considering the contribution of the community education approach and the practicalities of the situation in the villages, there were other factors that led us to reject a militant approach to achieve a quicker response to the problems.

As far as the pollution problem in the Chi Lin stream is concerned, as the pollution is mainly generated by the dyeing factories, these must be involved in the intervention which immediately creates two different interest groups (i.e., the residents and factories). Furthermore, this particular pollution problem must eventually be tackled through the appropriate environmental legislation. Thus, it would not be easy to improve the situation over the short-term.

With regard to the village hygiene problem, the provision of more public toilets may be a solution but their location would be a sensitive issue and would not be easy to resolve.

A further complication arose when it became clear that Diamond New Village would shortly be cleared, which would make it even more difficult to mobilize the population.

In view of these factors, we decided to adopt community education as our main approach in assisting residents to tackle environmental problems in the villages.

Community education activities

In December, 1991, we commenced community education in the two villages on the theme of environmental protection. The aims of the campaign were to transmit knowledge of environmental protection to the residents, and to raise their awareness in identifying the environmental problems around them through their own participation. We also hoped to use community action to encourage district board members and CNTA officials to visit the villages to receive the views of the residents regarding the environmental problems they were experiencing.

We started the campaign at about the time of the Chinese New Year and we therefore made use of the festival to bring out the idea of environmental

protection. We held two small scale programmes in December 1991. The first one was "The Make Use of Rubbish Design Competition", the general objective of which was to create an atmosphere for protecting the environment in the villages. The second campaign was a "Home Cleaning Competition" in which the children were asked to clean their school bags and desks so as to prepare for the Chinese New Year, the social workers would go to their homes to visit them to judge their performance. The aim of this was to provide an opportunity for the participants to practice the kind of behaviour implied by the objective. Through "learning by doing", it was hoped that the children could internalize the message we transmitted. We also wanted to use this programme as means of contacting the families so as to enlarge our network.

An Environmental Protection Angels Group was also formed during this period as a link between the above two programmes and the mass programme scheduled for the Chinese New Year. Activities of the group included taking photographs to reflect the environmental problems in the two villages. Some of these were selected to join the "presentation of environmental problems" competition. In addition to the photos, participants were also asked to write down a few lines describing the problems as well as giving suggestions on how to improve them. All the contributions were presented in the mass programme. The ultimate aim of the competition was to stimulate the residents to identify their community problems. As well as the competition, two group sessions were used to teach the participants to make use of rubbish to produce some gifts. All the gifts served as presents in the mass programme.

The participants in the above three programmes were rather limited in number. The programmes were held to filter through some ideas on environmental protection to the residents. The mass programme can be regarded as the formal start of the campaign and served as the beginning of awareness of environmental problems in the villages.

The programme consisted of three parts: an opening ceremony, a "cloth doll" drama and gamestalls. The District Board members, chairmen of two Mutual Aid Committees and the Liaison Officer of the CNTA were invited as guest for the opening ceremony. As part of the ceremony guests were given some "wish trees" that consisted of residents' wishes on improving the environmental problems in the villages The guests were asked to attach these to a larger tree which would be used to mark the progress of work during the following summer. Souvenir wish trees were also presented to the guests. The aim of this was to gain the commitment of the guests to improve the environment in the community.

The "cloth doll drama" was run by the residents (adults) themselves. The content mainly describing the environmental situation in the villages, the responsibilities of the residents, as well as education on environmental protection. Once again, it served as an opportunity for the residents to practice the

appropriate behaviour and to internalize knowledge about environmental protection. The gamestalls, needless to say, were all designed on the theme on environmental protection. One was the "wish tree" gamestall, in which the residents were asked to identify the environmental problems in the villages and write down suggestions for improvement.

Follow-up activities

The work of the campaign has been described above. But environmental protection activities did not end after the mass programme. Environmental protection remains the main theme and focus of our centre's plan of action in 1992-93. We decided to have a mid-term review on the progress of work during the summer of 1992 and an annual review at the next Chinese Year in 1993. All the previous guests from the district board and CNTA will be invited again to join the review. The Environmental Protection Angels Group will be reformed again and the campaign of paper collection will be carried out by the angels (Diamond Hill Centre, Centre Plan, 1992-93).

To coincide with the environmental protection activities, a civic education campaign on the theme of community resources has been planned for 1992-93. This will try to encourage residents to improve the situation by themselves. It is hoped that the civic education campaign can provide more knowledge to the residents and further assist them in tackling the environmental problems by themselves (Diamond Centre, Centre Plan, 1992-93).

Although the community education approach aims to enhance citizen participation, it has a limitation in that it is a long-term process and will therefore require a considerable period of time before people change their cognition, attitudes, and behaviour. Environmental problems cannot be solved in a short period of time. Hence, we cannot depend only on the education campaign. Other work should also be conducted. In fact, there have been some active residents, as well as two Environmental Concern Groups operating in Diamond New Village and Sheung Yuen Ling Village. The social workers have collaborated closely with them, trying to develop their level of social responsibility and social consciousness. Encouragement was given to them to contact district board members, the CNTA, etc. and to reflect the problems to them.

As regards the temporary rubbish collection station in Diamond New Village, after notifying the relevant departments about the unsatisfactory conditions, a station with a cover was established so that the rubbish would not be blown everywhere. Similarly, a fire prevention tap was successfully installed as a replacement for the public standpipe in Sheung Yuen Ling.

Conclusions

By analysing the activities undertaken, two implications can be drawn. Firstly, when attempting to improve the environmental situation in the villages, one cannot ignore the government departments and the district board. Commitment from them is essential. This is why we tried to involve different parties in our campaign. However, there are several factors that affected the commitment of the government regarding squatter areas. As the government announced that all the squatters in the urban areas will be cleared before 1995, the life span of the remaining squatter area will be very short. The squatters that we are working with now face the same prospect. Will the government be willing to spend money to improve the situation in squatter area given such circumstances? In tackling the pollution problems in the Chi Lin stream and the drainage system problem in Sheung Yuen Ling, the government would prefer to undertake remedial work rather than tackle the root causes of the problems.

Gender issues also manifested themselves in our work to a certain extent. Through working with the residents, it is clear that it is mainly the women who complain most about environmental problems, and that most of the active members and programme participants are women. In the Diamond New Village Environmental Concern Group, for example, four of the six members are women. As women stay in the community most of the time, they are most at risk from pollution problems.

However, the situation was different when we were handling the issue of the public standpipe in Sheung Yuen Ling. Here, it was the men that attended the meetings rather than the women. This may be due to the different nature of the issue. Since the water supply issue involved installation work for a new water pipe, which required a certain amount of expenditure, it seems that the decision had to be made by men who chose the plumber to carry out the work.

To conclude, what we have done in the villages does not represent high level education in environmental protection. We focused on some very basic concerns, namely, the environmental problems that surround them everyday, the environmental problems that worsen their living conditions, and the environmental problems that directly affect their health. Even though the squatters may be cleared in the near future, this does not mean that we can just stand there and do nothing else. On the one hand, we can view the improvement of environmental problems as ends. What we have to do is to help the deprived to fight for better living conditions for reasons of social justice. On the other hand, we can view the improvement of the environment as means. What we have to do is to develop the capacity and potential of the residents to solve environmental problems and this is what social work aims to do. Irrespective of our approach or objectives, the participation of the residents themselves is essential.

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Chapter 15

Towards a Healthier Working Environment in Hong Kong

K.K. Chan

Introduction

Hong Kong's industrialization since the 1960s has brought about not only economic success but also various side effects for society. One of the most obvious consequences has been the increase in various kinds of environmental pollution. As we all know, factories are a major source of pollutants, affecting both the working environment and the environment outside the workplace. Industrial workers are particularly vulnerable to the damaging effects of dangerous pollutants for a number of reasons.

Firstly, during the manufacturing process numerous chemicals are used. Many of these are potentially dangerous and even now we are not certain about the effects that various chemical compounds may have on workers exposed to them in factories.

Secondly, pollutants are usually at their highest concentrations at their source points within manufacturing plants. Workers are in the front-line of production and they are most likely to be exposed to potentially dangerous chemicals which can cause adverse health effects.

Thirdly, the vulnerability of workers is further increased by loose legislation governing the control of the use of industrial chemicals, by poor enforcement of the legislation by the factory inspectorate, the lack of incentives for employers to improve the working environment, and the ignorance of workers themselves about industrial chemical hazards.

This chapter examines the problem area of industrial chemical accidents and discusses recent experience in fighting for improvements in the legislation governing the control of the use of industrial chemicals.

Chemical hazards in the workplace in Hong Kong

One of the recent major incidents involving chemicals was the "Mabuchi Accident", which occurred in 1982. This incident occurred because high concentrations of ozone, phosgene and other gases slowly built up during the ink drying process in a printing shop using ultraviolet light inside the Mabuchi factory.

As a result, more than 200 workers were sent to hospital after inhaling toxic gases. One worker was in a coma for four days, while several suffered permanent lung damage. Thirteen victims were pregnant at the time of the accident and at least six were said to have experienced miscarriages or terminated pregnancies due to foetal death.

Another dangerous chemical accident was "The Cipel Marco Explosion Accident", which occurred on 8 October 1986 at 7pm. Thirty-four employees were working inside the Cipel Marco fur processing factory, when the accident happened. Benzene is one of the chemicals used for fur processing and for cloth and hand cleaning purposes. It is very toxic and highly flammable (it has a flash-point of less than 23 degrees Celsius). Investigation of this accident revealed that the workers were working in hazardous conditions at the time of explosion: more than half of the workers smoked at work; fifteen plastic containers of benzene, each containing 18 litres, were stored inside the factory (according to law, the maximum quantity that could be stored without a license was 20 litres); no warning labels were attached to the chemical containers; spillages were frequent when the benzene was being poured; chemicals were not stored in a safe area; the ventilation system was not properly maintained and one system used for ventilating the tumbling compartment where the explosion was believed to have occurred was out of order; the machines were poorly maintained and the ambient temperature, 25.6 degrees, on that day was sufficient to release vapour at a flammable concentration.

As noted, the tumbling process at the plant involved the use of benzene. The tumblers were supported by a radial ball-bearing. The explosion apparently occurred because of overheating of the bearing which probably caused a flash fire followed by an explosion due to the inflammable atmosphere. The consequences of the explosion were disastrous. Twenty-four workers suffered severe burns. Thirteen died, from 70 to 95 per cent burns. The youngest victim was a fifteen year-old boy, the oldest, a man in his sixties. Ninety-six summons were subsequently issued by the Fire Department and Labour Department.

These two cases well illustrate the point that workers are a high risk group where industrial chemical hazards are concerned.

The struggle for a safer working environment

The Hong Kong Workers' Health Centre (WHC) has gained a great deal of experience in promoting occupational health and safety. It is a non-profit-making, charitable organization which aims to promote occupational health and safety in Hong kong.

The WHC believes that it is a major responsibility of the Hong Kong government to promote occupational health and safety in Hong Kong and to protect its citizens and the environment from the adverse effects of dangerous

industrial chemicals. It believes the government should enact strict laws and take adequate measures to eliminate or minimize the potentially adverse effects of industrial chemicals.

The WHC and other organizations have a duty to monitor the performance of the government in order to ensure that it fulfills its responsibility to ensure the occupational health and safety of workers. The WHC also believes that workers, unions and labour organizations should be allowed and encouraged to participate in the development of a safer and healthier workplace which is free from dangerous industrial chemicals and other hazards. In a pluralistic society, workers and concerned bodies must have the right to take action to protect their interests so as to ensure a safe and healthy workplace.

With this basic background, the discussion now focuses on the actions and programmes undertaken by the WHC, together with some unions and labour organizations, in its campaign from 1986-89 for better legislation governing the control and use of dangerous industrial chemicals.

In 1986-87, shortly after the Cipel-Marco explosion, unions and labour organizations provided assistance for the victims and their family members. They demanded that government take action to prevent the chaotic use of industrial chemicals. This was done through a series of campaigns involving petitions, protests, seminars and press conferences. Later, a group of eleven labour organisations launched a campaign on "Reporting Dangerous Chemicals and Fire Hazards in the Workplace". Following these activities, the Legislative Council passed a bill to control the use of carcinogenic substances in industry. The Labour Department also promised to formulate legislation on the labelling of chemicals and to produce guidelines for the safe use of chemicals.

In 1988, the Labour Department proposed the Factories and Industrial Undertakings (Dangerous Substances) Bill. The main provision in the proposed bill required employers to label 231 commonly used dangerous chemicals according to their properties -- i.e. explosive, harmful, flammable, toxic, corrosive, oxidizing and irritant. In addition, labels were supposed to bear the proper or common names of the chemicals, the risks involved in handling them and the safety precautions required. Employers were required to provide proper training and safety equipment to workers handling dangerous chemicals. Workers are required to follow employers' instructions on safety precautions, or face a $10,000 fine.

However, the proposed bill had many loopholes. For example, it did not offer enough protection for workers. In order to advocate better control over the use of industrial chemicals, the Hong Kong Workers' Health Centre criticized the inadequacies of the proposed bill and made suggestions for improvements through its Annual General Meeting, bulletins, the mass media, talks, seminars, articles in newspapers, contact with labour organisations, unions and Legislative Councillors.

Greater concern was aroused among the public, and joint actions were organized by labour organisations and unions. A Joint Committee for the Concern of Dangerous Chemicals was formed by several labour organisations headed by the Association for the Rights of Industrial Accident Victims and the Hong Kong Workers' Health Centre. The joint committee launched a campaign against the proposed regulations. Eventually, the bill was passed by the Legislative Council with two amendments. One requires employers to put up notices in their premises to warn workers of the hazards of chemicals used during the manufacturing process. The other states that laboratories will not be exempted from labelling requirements.

In 1989, the Joint Committee started a mass education and promotion programme to monitor the implementation of the new legislation. The activity included exhibitions, demonstrations of the use of industrial protective equipment, distribution of pamphlets and reporting forms for workers encouraging them to report possible violations of Factories and Industrial Undertakings (Dangerous Substances) Regulations, and a survey.

After completing the survey on "Implementation of Present Legislation Governing the Factories and Industrial Undertakings (Dangerous Substances) Regulations", the results were presented to the public and to the Labour Department, with suggestions for improvements.

Action strategies

From the experiences of the WHC, unions and labour organizations, we may summarize the working strategies that have been employed.

The first working strategy is what can be called crisis intervention. Shortly after the accidents, the WHC, unions and labour organizations, contacted the victims, their family members and related workers to provide emotional support, financial support, legal advice and other services for them. Through crisis intervention, not only can we show concern for their difficulties and help tackle their individual problems, but it also provides a means for us to examine the underlying facts concerning the accidents and to identify the loopholes in the present policies governing the control of the use of the industrial chemicals in Hong Kong. This is also an effective means to unite the victims and others to fight for both their personal rights at the micro-level and seek policy change at the macro-level.

The second working strategy is advocacy. The WHC, unions and other labour organizations have employed this strategy to criticize the present legislation concerning the use of industrial chemicals; to urge the government to review the present policy, to take steps to introduce better industrial chemicals control, to deal with the loopholes in the present legislation and to press for stricter enforcement and heavier penalties for violators.

Through this working strategy, we can point out the relationship between the individual issues and the underlying policy weaknesses. The government will be put in an embarrassing position and will be open to criticism by the public. This provides an opportunity for us to improve policy even though the changes may be piece-meal, pragmatic and trivial.

The third working strategy is organization. The major obstacle to unity is the different or conflicting interests of various community groups and individuals. The most effective and powerful way to overcome this problem is to organize labour groups, unions and other concerned bodies to fight together for policy change and to arouse the public's concern. We can quote two examples from our working experience to illustrate this point.

In the first case, eleven labour organizations organized a campaign on "Reporting Dangerous Chemicals and Fire Hazards at the Workplace" in 1987. In the second, a Joint Committee for the Concern of Dangerous Chemicals was formed in 1988 to criticize the Factories and Industrial Undertakings (Dangerous Substances) Bill. Recommendations were suggested to the Labour Department and the Legislative Council.

The fourth working strategy is education. Workers, unions, labour organizations and the public should realize the seriousness of industrial chemical hazards and the importance of control over the use of chemicals in the workplace. The provision of educational opportunities is very important. The WHC has held a variety of educational activities such as exhibitions, talks, seminars, training courses and distribution of educational materials to educate the public, with particular emphasis on current workers and future members of the workforce. The latter was done through educational programmes in vocational training centres, prevocational schools and technical institutes. The Joint Committee for the Concern of Dangerous Chemicals also organized major activities in various industrial areas and commercial centres in 1989.

The last strategy is lobbying. Since the 1980s, a more democratic representative political system has gradually developed in Hong Kong. This means that many political representatives are elected directly or indirectly into the present political system, e.g., district boards, the Regional Council, the Urban Council and the Legislative Council. These changes in the political system provide an alternative channel for us to fight for policy change within the present political structure. Those elected by the public are accountable to the public. They will be more willing to speak out the needs of the people and to urge for improvements in policy. This provides a foundation for us to cooperate with them to fight for improvements in the legislation governing the control of industrial chemicals. The WHC has attempted to lobby the members of the Legislative Councillors about concerns over the loopholes in the present legislation. As a professional group working on occupational health and safety with more scientific analysis of

industrial chemical hazards and prevention strategies, together with our grassroot connections with workers, labour unions and organizations, the WHC is in a good position to liaise with Legislative Councillors. They can then help to expose the problems and influence other councillors to press for changes in policy.

Conclusions

It is obvious that the Hong Kong government has favoured the pursuit of economic prosperity rather than the protection of the health and safety of workers. Hong Kong has been ruled as a colony by the British government which has adopted a neo-conservative ideology. It is not surprising, therefore, that Hong Kong government has failed to play an active role in promoting occupational health and safety. This is why we can find many employees working in an unhealthy and unsafe environment without proper protection. Violations of legislation governing occupational health and safety are frequent in Hong Kong because of inadequate controls and penalties.

In view of this situation, workers and other concerned organizations have to take the initiative in fighting for a better working environment rather than relying on the conscience of the government. The limited experiences of the WHC, unions and labour organizations has shown how this can be done. If more and more workers, labour organizations, unions, legislative councillors, medical personnel, safety officers, engineers and other concerned bodies realize the importance of environmental health and the prevention of industrial chemical hazards, joint efforts can be made to promote a better living and working environment. It will be beneficial not only to workers, but to the whole population of Hong Kong.

Chapter 16

Conclusions

Peter Hills and Cecilia Chan

Introduction

The chapters in this book reveal the existence of a variety of environmental protection initiatives that have been launched at the local level through a variety of grassroots mobilization efforts. These efforts are striking in terms of both their number and diversity. Clearly, there have been many other such efforts which it has not been possible to document in this book.

In this final chapter we shall focus on some of the key features of the grassroots mobilization process with regard to environmental protection. In so doing we shall also look to the future and to the changes that we feel may be taking place within Hong Kong society that will shape community attitudes to the environment in the years ahead.

A "top-down" approach to environmental protection

One of the most notable features of the environmental protection movement in Hong Kong has been the extent to which local community-based initiatives have largely failed to shape or influence the move towards greater regulation and control of polluting activities. Pollution control efforts have been primarily driven by government concern about the declining quality of the Hong Kong environment, a concern that may be traced back to the mid-1970s when government itself commissioned a consultancy study that was to set out the framework for subsequent legislative developments in this field. At that time, there was little in the way of articulated public concern about environmental problems in the territory. Indeed, until the latter part of the 1980s, government initiatives in the environmental protection field were typically launched against the backcloth of public apathy, and opposition, sometimes intense, from industrial interests. Environmental policy making in Hong Kong has therefore taken the form of a "top down" approach in which government has been obliged to take the lead to push through measures in the fields of air, water and noise pollution and waste management with little overt support from the general public. This is in marked contrast to the situation that has characterized environmental policy making in the industrialized nations, where it has often been direct and very overt

public pressure (and the occasional environmental disaster) that has forced governments to act on environmental issues. That government in Hong Kong has taken the lead is all the more surprising when one considers that the territory's administration has a reputation for distancing itself from potentially sensitive issues that might bring it into conflict with the private sector through its avowed stance of positive non-interventionism. Why, then, should its position on the environment stand in such stark contrast to its stance on various other issues of concern?

We would argue that this situation represents to a significant degree the superimposition of western values concerning the need for environmental protection on the prevailing materialist culture of Hong Kong. In that sense it may represent a fortuitous merging of the two cultures which Hong Kong itself is often regarded as epitomizing. There are, however, more practical considerations at work. Clearly, government, through its access to a wide variety of data and information, is in the best position to determine the pace and scale of environmental deterioration. In those areas which have potentially serious public health implications (e.g., air and water pollution) only government is in the position to regulate the behaviour of individuals, private companies and, indeed, itself, to address pollution problems.

There can be little doubt that the attitudes and dispositions of successive governors of Hong Kong have also played an important part in reinforcing this top down approach. The then Governor, Sir Murray MacLehose (1972-82), is often credited with fostering greater concern about the environment within the administration and it is quite clear that a number of important initiatives were launched during his period of office (e.g., the establishment of the original Environmental Protection Unit and the territory's country parks policy). His successor, Sir Edward Youde (1982-86), was largely preoccupied with the negotiations concerning the future of Hong Kong and it is noteworthy that the early to mid-1980s saw something of a slackening in the pace of environmental reforms in the territory. Indeed, this period was marked by some of the most intense opposition from the private sector to increased environmental regulation. Sir David, now Lord, Wilson (1987-1992) was widely regarded as the territory's first "Green Governor" and again we can observe an acceleration in the pace of legislative and institutional developments in the environmental protection field. The appointment of Christopher Patten, a former Secretary of State for the Environment in the UK government, to succeed Sir David as Governor in 1992, seems likely to ensure that environmental issues will remain high on the administration's policy agenda.

While it is clear that an interest in, and commitment to, solving Hong Kong's environmental problems on the part of the territory's most senior government officials is of paramount importance and perhaps even a **necessary**

condition for action, it is probably insufficient in itself to explain the relative continuity in the government's position since the late 1970s. Other contributing factors may have been Hong Kong's growing wealth which has provided the resources needed to staff-up the Environmental Protection Department (which, incidentally, has been one of the fastest growing departments since 1980) and to launch various initiatives in the field of pollution control. In addition, structural economic change has produced a situation in which the service sector has expanded at the expense of manufacturing industry, which has declined steadily since the earlier 1980s in terms of both its contribution to GDP and the number of workers it employs. Many companies, attracted by lower labour and land costs, have either relocated across the border into China or have chosen to expand their production capacity there rather than in Hong Kong. The power base of the industrial lobby, though still a force to be reckoned with, has nonetheless been progressively eroded over the past decade and it has consequently become more difficult for industry to oppose environmental measures.

Changing public attitudes to the environment

Rising living standards, the return of middle class emigrants from abroad and a generally higher level of education in the community may also have helped to foster a situation in which awareness of environmental issues in Hong Kong has grown significantly over the past ten years. Even though the general public has failed to mobilize on many environmental concerns (with the possible exception of the Daya Bay nuclear power plant controversy) this does not mean that it is disinterested as regards issues of environmental quality. What we can clearly detect is a pattern whereby the public is undoubtedly aware of the seriousness of various environmental problems but may not accord the resolution of these problems as high a priority as, for example, maintaining a healthy economy, providing good education and health care systems or adequate, affordable housing. Interestingly, there is now some evidence to suggest that the public would be willing to see more government expenditure on the environment. This view is supported by recent data derived from a territory-wide social survey commissioned by the Education Working Group of the Environmental Campaigns Committee (ECC)(see Tables 16.1 - 16.2). Nonetheless, direct participation in environmental campaigns remains at a relatively low level (Table 16.3), although levels of awareness of the activities of environmental groups and general campaigns, such as those promoted by the ECC, are encouraging and probably far exceed those that might have been expected in the early 1980s, or even five years ago (Table 16.4-16.5).

It is noteworthy that the most widely known environmental group, Green Power, is also an organization which is widely perceived to be of a political activist

nature. Furthermore, its members include a number of prominent local political and showbusiness personalities and the group's coordinator is a charismatic figure who is capable of attracting considerable media attention. Perhaps this is an indication that environmental groups really do need personalities whom the public can easily recognize and possibly identify with. Though increasingly active in many areas of environmental education, and in the case of the local branch of the World Wide Fund for Nature directly in conservation efforts in the Mai Po marshes, Hong Kong's environmental groups have typically carried out their work in a relatively low key manner. Their leaders are not generally well-known to the public and this has perhaps been one of their weaknesses. The approach in Hong Kong has often been to draw in prominent personalities from other fields, most notably the entertainment world, to focus public attention on environmental concerns and to encourage public participation in environmental protection initiatives. This approach has, for example, been used with some success by the Environmental Campaigns Committee. Certainly, experience in many industrialized countries suggests that environmental issues need to be sold to the public and that this can be done more easily when the leaders of environmental groups are well-known and enjoy a large measure of credibility with the public.

In common with their counterparts in the industrialized countries, Hong Kong environmental groups have certainly become much more technically competent in recent years. They regularly undertake their own research projects and have become significant contributors to the literature on environmental problems in the territory. This has undoubtedly enhanced their credibility with both government and the public. It has also served to place them in a position where they are able to exert more influence on the policy making process. For the most part, however, the major environmental groups in Hong Kong have been preoccupied with issues at the territorial level and, more recently, with the relationship between Hong Kong's environmental problems and those of the international community (e.g., global climate change, sustainable development). It is noteworthy that the case studies presented in this book indicate that these groups have not been particularly active in assisting grassroots mobilization processes at the local community level. This is perhaps an interesting paradox in their approach to promoting environmental awareness in the territory. It may, in part, reflect the origins of most of these groups and the fact that in their early years they were led by foreigners or more highly educated, better off Hong Kong people whose links with the grassroots were limited.

Table 16.1 Perceived Seriousness of Environmental Pollution Problems

Problem	% respondents regarding this as a very serious problem in Hong Kong	% respondents regarding this as not a serious problem in Hong Kong
Air pollution	91.9	8.1
Water pollution	94.5	5.5
Noise pollution	85.3	14.7
Contamination of drinking water	44.6	55.4
Radioactive contamination	17.3	82.7
Accumulation of plastic bags	95.0	5.0

Source: ECC Survey (1993)

Table 16.2 Public Attitudes to Government Spending on the Environment

Employment category	% respondents supporting increased government spending	% respondents opposing increasing government spending
Professional/semi-professional	94.0	6.0
Clerical and service workers	91.5	8.5
Production workers	93.5	6.5
Students	97.2	2.8
Housewives	98.1	1.9
Others	98.7	1.3
Overall	94.7	5.3

Source: ECC Survey (1993)

Table 16.3 Participation in Environmental Campaigns and Groups

Employment category	% respondents who had participated in an environmental campaign	% respondents who had not participated in an environmental campaign	% respondents who had been a member of an environmental group	% respondents who had not been a member of an environmental group
Professional/semi -professional	17.0	83.0	17.7	82.3
Clerical and service workers	13.3	86.7	2.0	98.0
Production workers	6.6	93.4	5.0	95.0
Students	32.3	67.7	2.9	97.1
Housewives	7.0	93.0	0.0	100.0
Others	8.4	91.6	0.0	100.0
Overall	12.2	87.8	6.3	93.7

Source: ECC Survey (1993)

Table 16.4 Public Awareness of Hong Kong Environmental Groups

% respondents aware of Friends of the Earth	% respondents aware of Conservancy Association	% respondents aware of the Hong Kong Environment Centre	% respondents aware of World Wide Fund for Nature	% respondents aware of Green Power
73.7	61.8	21.9	50.7	76.2

Source: ECC Survey (1993)

Table 16.5 Public Awareness of Environmental Campaigns in Hong Kong

% respondents aware of the Environmental Campaigns Committee (ECC)	% respondents aware of the ECC's slogan "Environmental Protection begins with Me"
57.8	86.5

Source: ECC Survey (1993)

Although the data presented above are encouraging in a number of respects, as several of the chapters in this volume have indicated, it is far from easy to mobilize low-income residents in squatter and temporary housing areas to participate in action-oriented environmental initiatives. In part this is due to the temporary nature of the housing areas concerned. Residents appear to feel that there is little point in improving the environment of such areas given that they, the residents, will eventually be relocated elsewhere and the area itself will be redeveloped at some point in the future. This attitude tends to be reinforced by government's own reluctance to invest in environmental improvement schemes in such areas.

Problems in the mobilization of recent immigrants

One important factor identified in several of our case studies concerns the difficulties encountered in fostering community identity and environmental action in those areas housing significant numbers of recent immigrants from China. These newcomers, often socially isolated by virtue of not being Cantonese-speakers, are difficult to mobilize for other reasons. Again, they tend to see their present living conditions as only a temporary phenomenon and seem to have little interest in working for environmental improvements within the locality. Not surprisingly, they tend to be preoccupied with establishing themselves in Hong Kong, which basically means finding employment. In addition, whereas Hong Kong people have been progressively imbued with a sense of environmental responsibility (which may not, admittedly, always manifest itself in terms of positive actions), recent arrivals from China have often had little exposure to the idea of environmental protection and the role that the individual can and should play in this task. Although this is not an issue that can be effectively tackled in the short term, environmental education efforts in the community as in whole should prove beneficial in the longer term. Certainly, the children of recent

arrivals will be increasingly exposed to a variety of environmental issues through the educational initiatives that have been launched at both primary and secondary school levels.

The politicization of the environment

As a number of the case studies have shown, local environmental improvement initiatives have become progressively more politicized in recent years. In most cases, this simply means that residents and other participants such as social work teams, have attempted to enlist the support of local elected representatives, most notably district board members, to assist in publicizing issues, liaising with government departments and generally mobilizing the community. The introduction of the elected district board system did, of course, coincide with the upsurge in public concern about environmental issues and many prospective electoral candidates were quick to recognize the potential vote-catching appeal of the environment. This was further encouraged by the fact that district boards are allocated small sums of money for minor environmental improvements. Thus, district board members are in a position to translate their avowed concern with environmental issues into actions, albeit on a small scale.

In many respects, however, the emergence of a predominantly elected Legislative Council has potentially transformed the political context for environmental policy making in the territory. As in the case of the district boards, environmental issues figured prominently in the campaigns of quite a number of the newly directly elected members of the Council. There is an active Ad Hoc Group on the Environment comprising Council members and debates on environmental matters seem to attract rather more interest and participation now than was the case for much of the 1980s.

These changes in government institutions in Hong Kong have also served to change the long-established relationship between the Legislative Council and the civil service. Government in Hong Kong has traditionally functioned on the basis of a consensus-seeking approach in which the administration has attempted to reconcile the interests of powerful lobbies, while at the same time avoiding what it regards as unnecessary regulation or intervention and placating public opinion by providing a progressively more extensive system of social infrastructure. This system is, however, beginning to break down as Hong Kong develops its own political culture. It can no longer be assumed that sensitive issues are capable of resolution through the consensus-based approach and this is just as true of environmental concerns as it is of many other areas of policy making. Government is now under far more intense and effective scrutiny. Directly elected members of the Legislative Council expect accountability from civil servants and, like politicians elsewhere in the world, are not averse to making political capital out of the administration's apparent shortcomings and mistakes.

For many long-serving civil servants these sorts of changes are creating a new and somewhat alien, if not traumatic, working environment. Whether this new political culture persists in quite the same form after 1997 remains to be seen.

Environmental protection as pollution control

As many of the case studies reveal, pollution control figures prominently as a goal of environmental protection in Hong Kong. Many local community initiatives have focused on specific pollution problems and the identification of policy or technical responses to deal with them. This perspective is deeply rooted in Hong Kong's approach to dealing with environmental issues and has, for a long time, been institutionalized through the organizational structure of the Environmental Protection Department (EPD) itself. Such an approach, while hopefully resulting in a reasonably clear demarcation of responsibilities within EPD, is nonetheless conceptually flawed, particularly in the context of the types of problems which many low income communities face. There is a tendency to regard environmental problems in Hong Kong as essentially technical problems, solutions for which exist but at a price. Sometimes the price is acceptable: sometimes it is not. However, as some of the case studies illustrate, the environmental problems of low income communities are not simply pollution problems. They reflect a mix of problems, some of which have technical solutions and some of which can only be effectively tackled through social and economic measures, including community education.

In the longer term, this preoccupation with pollution control must be replaced by a broader concept of environmentalism in Hong Kong, a perspective which embraces such concerns as sustainable development and conservation. Clearly, these may appear less tractable to policy makers and may appear somewhat nebulous to many ordinary people. Nonetheless, Hong Kong will be increasingly out of step with those countries at a similar level of development unless it moves to adopt a more comprehensive perspective on the nature and causes of environmental degradation. This will inevitably include a more searching examination of the nature of the development process in the territory and the trade offs this implies between economic growth and environmental quality. Government has successfully side-stepped these important issues for almost two decades. It will not be as easy in the future as international pressure mounts for all governments to adopt measures which are regarded as being in the interests of the global community as a whole.

The future of the Hong Kong environment

What will the environment of Hong Kong be like at the turn of the century? If the results of the ECC 1993 Survey are a pointer, a significant proportion (over 60%) of the population expect the quality of the environment

to improve over the next few years. This is certainly possible given a continuing commitment on the part of government (including the necessary allocation of resources to deal with major problems such as water pollution), sustained pressure from legislators and increased support from the general public. This, however, will not be easily achieved. The 1990s will be dominated by the impending transfer of administration from Britain to China, the continuing ramifications of the structural changes that are occurring in the local economy and the inevitably uncertainties that surround the development of Hong Kong in the years ahead.

From an environmental perspective, the signs are by no means discouraging but this does not guarantee an improved environment by the end of the century. Responses to environmental issues on the part of the community appear to be somewhat segmented. While there appears to be not only a consensus that the environment is an important issue but also a recognition that there are certain problems that should be tackled, fostering participation within the community is not easy. People need to know what to do to make a positive contribution and, perhaps more importantly, how to do it. Over the past few years, the public have been bombarded by a series of government-sponsored Announcements of Public Interest (APIs) on television imploring them to reduce waste, make less noise and stop polluting the air and water. That these APIs have had an effect is not disputed. They almost certainly have played an important role in heightening public awareness of the problems we face. However, these campaigns have highlighted problems and have done little, if anything, to educate the public about how to behave in a more environmentally-responsible manner. Even more significantly, perhaps, there are those who would argue that at least some of these campaigns should have been directed much more explicitly at key polluters, especially within industry, and should have been backed up by more extensive enforcement measures and tougher fines for offenders.

At the grassroots level, however, the problem remains one of education and mobilization. Better educated, higher income groups typically have a sharper sense of the virtues of environmental protection and the benefits it can bring to the community as a whole. At the grassroots level, where day-to-day living conditions and experiences are vastly different, one cannot assume that desirable environmental values are at all deeply entrenched. The case studies in this book show, however, that values can be changed and that people can be mobilized to improve their own environment. In many cases, this is a slow and difficult process. Nonetheless, the potential exists to translate the limited gains of the last decade into much more significant gains in the decades to come.

Reference

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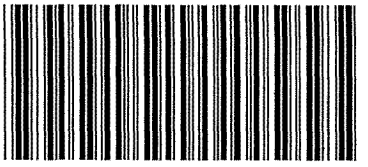
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