

HOU-JIN: A CASE STUDY OF EXTERNAL ASSISTANCE
IN COMMUNITY ACTION

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by

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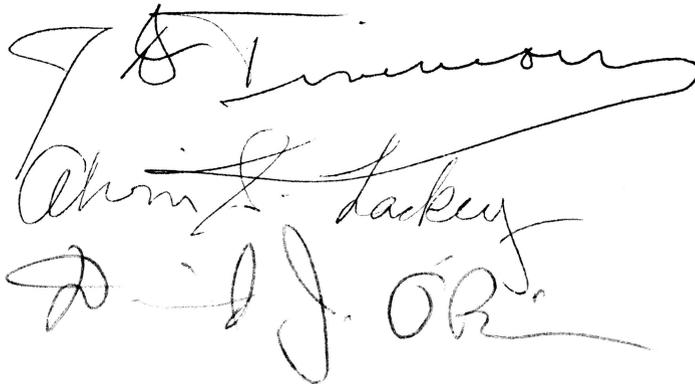
The undersigned, appointed by the Dean of the Graduate Faculty, have examined a thesis entitled

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IN COMMUNITY ACTION

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PREFACE

The protest of the Hou-jin community in Kaohsiung Taiwan against Chinese Petroleum Corporation's erection of the fifth naphtha cracker (FNC) plant lasted for more than three years, from July 1987 to September 1990, when construction for the new plant began.

As a community of seventeen thousand people, Hou-jin had fought with the giant corporation that was supported by the policy of Ministry of Economic Affairs. Although construction of the fifth naphtha cracker plant finally started, the efforts of Hou-jin residents had born fruit.

Because of the importance of the anti-FNC movement process, the Hou-jin community has become an object of study for sociologists and humanists. Although some among them have noticed the roles of external groups in the movement process (Wang 1989; Chou 1990), they focused mainly on the community itself. Interactions between the community and external groups were neglected.

In the process of Hou-jin's anti-FNC movement, the community had had help from several different external groups. These external groups did not claim themselves as community development practitioners, nor did the community claim their movement as a community development process.

Nonetheless, the movement involved almost the whole community and aimed to change living conditions of the community. It therefore fits certain characteristics of a community development process.

As erection of the fifth naphtha cracker plant was finally started on September 21, 1990, the main goal of the community action literally failed. But the movement made a lot of differences too.

Since the anti-FNC action has been called one of the most predominant community movements in Taiwan, it is worthwhile to look into the details of the whole process, so that community development practitioners might be able to learn some valuable experiences from the process.

In this research, the researcher starts by reviewing the literature concerning definition of community development, environmental disputes and research done on Hou-jin community. The second chapter illustrated the purposes and method of the research. A short history of the anti-FNC movement is given in Chapter 3 describing the ups and downs of the community action. Chapter 4, the analysis of the process, is a comparison of the anti-FNC movement and the characteristics of an ideal community development process. Chapter 5 wraps up the research by proposing conclusions, some recommendations for community development worker, and suggestions for further studies in the future.

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CHAPTER ONE
LITERATURE REVIEW

Definitions of Community Development

There is a wide variety of definitions of community development in the literature. Although, due to the interdisciplinary nature of community development, there might be some differences between one definition and another, there are some parts in common that have always been mentioned. The following are some of those definitions.

The United Nation's definition of community development is worthwhile to pay attention to since the organization has served as a major role in world-wide community development work. According to the United Nations, community development is:

the process by which the efforts of the people themselves are united with those of governmental authorities to improve the economic, social, and cultural conditions of communities, to integrate these communities into the life of the nation and to enable them to contribute fully to national progress. This complex of processes is, therefore, made up of two essential elements: the participation by the people themselves in efforts to improve their level of living, with as much reliance as possible on their own initiative; and the provision of technical and other services in ways which encourage initiative, self-help and mutual help and make these more effective. It is expressed in programmes designed to achieve a wide variety of specific improvements. (United Nations 1963, 4)

Christenson, Fendley, and Robinson (1989) think the United Nations' definition puts too much emphasis on government's role and achievement of national goals and gives

no room to non-governmental organizations and might minimize the importance of locality.

Faculty of the Department of Community Development in the University of Missouri-Columbia newly developed a definition of community development (Lackey 1991). The definition which will be used by all faculty in the department is:

Community development is a process of social action in which the people of a community organize themselves for planning and action; define their needs and goals; make plans to achieve their goals; and execute these plans with maximum reliance on community resources.

Unlike the United Nation's definition, the faculty emphasized the importance of local community's initiative and autonomy. The purpose of a community development is to achieve community's goal rather than government's.

Daniel J. Schler's definition of community development process includes many characteristics of a community development process that have been described by other authors.

The community development process in the localized context can best be described as a normative social action system that is conditioned and controlled to a large extent by the "staging" and "prompting" provided by the community development worker. Through participation, community members learn the values and procedures of this particular type of social action and gradually provide their own staging and prompting for carrying on the same process, with or without help of an external agent (Schler 1989, 119).

Schler's definition emphasizes the importance of a community development worker at the initial stage, and a

learning experience by community people throughout the process.

By reviewing Journal of the Community Development Society and Community Development Journal, Christenson, Fendley, and Robinson (1989) collected various types of definitions of community development. After listing ten definitions written by scholars and practitioners, they then synthesized them into their own definition of community development:

a group of people in a locality initiating a social action process (i.e., planned intervention) to change their economic, social, cultural, and/or environmental situation (Christenson, Fendley, and Robinson 1989, 14).

Different from the Schler's and the United Nations' definitions, their definition emphasizes local people's initiation of the process and neglects the external influence.

Donald D. Littrell (1973, 3), though not giving a definition of community development, provides helpful components of community development by saying that "several basic elements must be present if an activity is to be labeled community development."

1. Attention must be given to the wants and desires of the people involved and to the area of endeavor set by the people involved.

2. People can become active meaningful participants in a developmental process and have considerable control over the process.

3. The concept of self-help is vitally important to the community development process.

4. The community is viewed as a total being as opposed to division into community sub-units.

From the definitions and understanding above, several characteristics of community development can be derived.

Characteristics of Community Development Process

A Deliberate Community Activity

The words "programmes designed" in the United Nations', "planning and action", "needs and goals" in the Community Development Department Faculty's, and "normative social action system" in Schler's definitions all indicate this deliberate nature of community development. Some other scholars also pose the same kind of understanding of community development. Richard Cawley (1984, 16) defines the community development process as a "deliberate, democratic . . . activity . . . on an existing social and geographical grouping of people;" John M. Huie (1976, 14-15) describes community development as "a process . . . of development of programs designed to make their community a better place to live and work." Paul D. Warner (1989, 33) also uses the words "deliberated change" in defining community development.

On the other hand, in a community development process, the community people should act collectively through the process as Littrell has indicated above. Cawley (1984, 17) also uses "people working together as a group" as a criteria for community development activities.

Emphasis on the Citizen's Participation and Control over the Process

Many community development practitioners see community development process as a helping process where one or a group of external agents assist the community to fulfill its needs (Brokensha and Hodge 1969; Morris 1989). Still, most of the definitions agree that people in the community should take the initiative for and be involved in the process. Even the definition of the United Nations, though criticized by Christenson, Fendly, and Robinson (1989) for putting too much emphasis on government control and national progress, recognizes the importance of the initiation of citizens.

A Process of Learning and Improving

Community development does not just mean to change the materialistic aspects of a community life - it also means to develop the human resource, of a community. The United Nations' statement of the purpose of community development is to "improve the economic, social, and cultural conditions of communities". Cary (1989) says that community development has two sources as its heritages: the economic development and community organization. The two different origins show the fact that community development aims to change not only one aspect of community life. Through the community development process, a community is not just improving its

material aspects, such as infrastructure, but also acquiring the knowledge and skill of planning and organizing. Littrell (1971, 5) emphasizes that it is "developing the ability of human beings to meet and deal with their environment" that community development is interested in.

According to Schler's (1989, 124) definition, community people will "gradually provide their own staging and prompting for carrying on the same [community development] process." This implies the existence of learning process. Schler (1989) further indicates that through a community development process there are five dimensions of community life in which change can be anticipated, namely: (1) human competencies, (2) scope of concern, (3) social technology, (4) physical technology, (5) social organization.

A Process of Helping

Though Christenson, Fendly, and Robinson (1989) tend to minimize the importance of external assistance in their definition of community development, and Schler (1989) too, sees a community development as a process enabling the community to carry on the same process "with or without help of an external agent," the idea of community development as a helping process is shared by many other community development practitioners (Brokensha and Hodge 1969; Morris 1989). What makes community development a unique type of helping relationship is clearly stated by Littrell (1971, 3):

[T]he helping relationship is not a dependency of 'doing for' relationship, but a developmental relationship, . . . the notion of becoming is of major importance to the fundamental methods and principles of community development."

Community Development Worker

Seeing community development as a helping process implies the intervention of an external agent in the process. A community development agent's deed in a community is inevitably tempered by his/her own cognition of the nature of community development. Christenson, Fendley, and Robinson (1989, 14) think "how one interprets community development affects one's orientation when initiating a development program". Morris (1989, 178) also says that "for the most part, a development agent begins his assignment with his own vision of the good society."

But a community development worker can not do whatever he/she wants. He or she might be hired by a governmental or private agency. The type of employer significantly influences the goals of the development worker and his/her method of working. A community development worker sometimes needs to decide and arrive at a balance among those seemingly contradictory orientations of community development (Morris 1989, 189-191).

Besides the employer, the specific situation of a community will affect the role of the community development worker. Warner (1989) indicates that the specific roles a

community development worker needs to play in a community will vary from one community to another, because each community has its own specific problems and environments. A community development professional may have to play different roles at different stages of a community development process according to various needs of the community. Warner (1989, 119) also points out, "Just as there is no single approach to community development, there is no single role that describes all community development professionals."

Many sets of a community developer's roles have been developed by scholars, mostly based on the tasks a community development worker will assume.

Robert Morris (1989) differentiates four types of roles for community development workers, according to the tasks they perform: (1) the field agent, (2) the consultant, (3) the advocate, and (4) the planner.

A list made by Kelley, Balderrabano, and Briseno (1986) of twelve roles performed at different stages of the development process is another example of efforts to categorize roles of community development workers. They are: (1) consultant, (2) researcher, (3) policy analyst, (4) enabler, (5) planner, (6) program developer, (7) organizer, (8) rehabilitator, (9) advocate, (10) coordinator, (11) educator, and (12) mediator.

It is not a matter of which role is better than the others. What is important, as Marie Arnot Fischer (Fischer

1989) has indicated, is that the goal of community development is to build community capacity, and the role of the community development practitioner is to facilitate that process.

Littrell (1971) proposes that the community development worker should not focus on solutions, but on human development, and he/she should choose the role which is most appropriate for him/her to fulfill the task.

External help can be developmental or nondevelopmental, as Frank A. Fear, Larry Gamm, and Fredrick Fisher (1989) indicate when discussing technical assistance. They quoted Kelman and Warwick's value-oriented questions to test whether the technical assistance was to be developmental or nondevelopmental: (1) Whose values are to be served by the intervention? (2) To what extent do the recipients have an opportunity to participate in the choice of goals? (3) To what extent does the process enhance the power of the target population to solve problems? (4) To what extent is the provider engaging in a self-serving activity? (5) Whose problem(s) is (are) being primarily addressed in the technical assistance episode: the provider's or the recipient's? (6) Is a reasonable set of alternatives available to the recipient? (7) Is incomplete or distorted information presented about the effects of assistance? Or, are only the probable benefits emphasized? Does the provider

know, understand, and communicate the probable sociocultural, economic, environmental, and psychological impacts? (8) Will the assistance create a dependency relationship between the donor and receiver? Though the questions are for technical assistance, it applies to all community development process as long as external assistance is involved.

Environmental Disputes and Community Development Worker

Conflicts caused by environmental issues have been growing rapidly in Taiwan since 1981 (Hou 1989). Bacow and Wheeler (1984) point out that in environmental conflicts people often take opposing positions because they have quite different stakes in the outcome. Amy (1987) uses three models to categorize those environmental disputes: (1) the misunderstanding model, (2) the conflicting interests model, and (3) the basic principal model. He says if a conflict rises just because of a misunderstanding between community and industry, it is not difficult to resolve, as long as the necessary communication is provided. Even when the dispute is caused by conflicting interests, a process of negotiation is helpful to settle down the situation. But many disputes happen not just because of misunderstanding or conflicting interests. As Bacow and Wheeler (1984, 10) have pointed out: "more fundamentally, even when there might be no disagreement about the facts on an environmental problem, there might be differences of priorities, values, and attitudes toward

risks." Amy (1987) argues that disagreement on the latter ones are a lot harder to resolve than are conflicting interests, because for some environmental groups what needs to be done is a radical change of a community's life style rather than improvement of its technique on preventing pollution.

When considering intervening in an environmental dispute, a process of mediation that brings parties in dispute together to negotiate has frequently been recommended (Bacow and Wheeler 1984; Bureau of National Affairs 1985; Bingham 1986). They have advocated the advantage of negotiation over other approaches, such as litigation and legislation, because it saves time and money for the society as a whole.

But James H. Laue (1979a), an expert of conflict resolution, reminds us that mediation is not almighty. As a tool for achieving change, it has its advantages and disadvantages. He emphasizes that mediation is not suited to all conflicts and disputes. He further argues, in another paper, that information is a major source of power, and also that the one which has more power usually has the advantage of getting the relevant information concerning the conflict before the other party (Laue 1979b). This imbalance of power is also true in environmental disputes. Amy (1987) agrees that rushing into a negotiation process may not be the best

way for a community to reach its ultimate well being, for there exist inequalities of power among citizens and industries. The industries possess strong political and economic power over citizens. Also, they have access to more specific information needed for bargaining than does a local community. Amy (1987) warns that a flaw in negotiation is that it can be nothing but a subtle form of political control. He argues that more of a balance of power between the parties needs to be created before any possible egalitarian negotiation can occur.

Laue (1979b, 9) raises an ethical question for the conflict intervenor: "Whether the intervention contributes to the ability of relatively powerless individuals and groups in the situation to determine their own destinies to the greatest extent consistent with the common good."

Here the problem of a community development worker's role rises again. What kind of action can a community development worker take that can "contribute to the ability of the relatively powerless" and be ". . . consistent with the common good"? Under such circumstances, an external assistant who comes to help the community and sees the imbalance of power between community and industry might be tempted to do things "for" community people rather than "with" them. But T. R. Batten (1973) argues strongly against advocacy of goals or manipulation of people toward specific ends. He points out that such manipulation often leads people

to undertake tasks which they do not have the skills, the desires, or the resources to perform.

Previous Research Done on Hou-jin Community

The action that Hou-jin community took against the Chinese Petroleum Cooperation Kaohsiung Refinery's plan on building a new naphtha cracing plant was so prominent that it has drawn many researchers' attention.

Wang Ming-huei (1989) used the Hou-jin community as a case for studying the process of citizen's collective action against public pollution. The study focused on how a formal organization (The Anti Fifth Naphtha Cracker Committee, AFNCC) operated to mobilize the community people to participate in the action. He looked into the process during the period of time from July, 1987 to October, 1988, and concluded the process to be a successful example of mobilizing community people, as well as acquiring external resources through a formal organization to achieve a collective goal. He spent lots of space in his research to describe the strategies and methods the AFNCC used in pursueing its goals.

Though Wang (1989) gives lots of credit to the committee in terms of its efficiency in organizing and mobilizing community people, he also mentions that the committee is fairly weak in the knowledge and skill concerning community organizational work. It is their

education and occupation background, according to Wang, that limited the committee members' vitality. He points out that external help did play an important role in the process. He categorized the external help into three groups: (1) the social movement groups, (2) anti-pollution groups and individuals, and (3) political representatives, such as municipal council members and congressional members. Wang (1989) also stated that the Taiwan Green Peace Organization (TGPO) is actually the key planner of the strategies that had been practiced during the time period of his research.

But what has been missing in Wang's research is that he did not mention how those external groups work with the community, and the philosophy and strategy of those external groups when intervening in the community. Also, the process lasted for another 18 months after Wang had done his research. Things did not go as well later as they did the first one and a half years. After eighteen months, the plant was under construction. Assuming that those external groups are the key factors for the community's success in the beginning, why weren't they able to keep the community action alive in the latter days? Another flaw in Wang's research is that his research tends to neglect the opinions from the "right wings" of the community who dislike the activists' radical approaches. These seemingly more conservative people hold more community resources and have a decisive influence

in the development of the process.

One year after Wang's research, Chou Fen-je researched on four Taiwanese communities' anti-pollution actions in 1990 and included the Hou-jin community. In her research, Chou calls the AFNCC's efforts a failure rather than a success. The reason was: until the time she was conducting her research, none of the articulated goals had been reached (Chou 1990, 75). She argues that because of the complexity of the power structure of the community, it is very hard for the community to integrate its resources to launch a powerful and sustainable action. Though there is a committee (AFNCC) which is supposed to be responsible for the community action, many of the members are inactive because of their own interests. Since the community activists have difficulty in gaining sufficient support from within the community, they had to look for external help. Chou thinks the integration of the factions of a community is more important than external help for a community when pursuing community's goals. Because Chou's research is conducted one year later than Wang's, some weak points of the AFNCC which Wang missed have become apparent. Chou's focusing on the power structure of the community contributes some supplemental information to Wang's work. Her research provides good information about the reason why the community action eventually "failed". But because her research was focusing on factions within the community, she did not really address external groups' activities--not to

mention the interaction between those external persons or organizations and the community.

Hou You-huei and Mao Yie-fang's (1989) research on "health and political aspects of community environmental concerns" (1989) includes Hou-jin as one of six communities they are specially interested in. Hou and Mao indicate that what Hou-jin community did is an "anti-public pollution action", which is a reaction of feeling deprived of environmental rights, rather than a preventive environment protection movement.

Hou and Mao's (1989) research also provided some knowledge of the political background of the community. They indicated that the China Petroleum Cooperation is government owned. Many local leaders are members of Kuomintang (KMT), the ruling party in Taiwan. During the time period of the dispute, they often found themselves facing a dilemma between conforming to the party's instruction or to the will of community people.

In conclusion, the three research studies all agree that Hou-jin is a community which has a complex political structure. Contradictory interests from different factions make a collective action difficult to sustain. Additionally, all of them indicate that too much pollution makes the community action easy to be provoked. However, they have different emphases in their respective work. According to

Wang, the AFNCC was weak in terms of knowledge and skill of organizing community people. Therefore, external assistance is necessary. He also comments that some external groups had made good contributions in the first stage of the process. But Chou thinks that factions in the community with incompatible interests have made what Wang called "successful mobilization" in vain in the long run. External assistance does not seem to have been useful at the latter stage of the process according to Chou. And he suggests that a closer look at the external groups' ideas and deeds might be desirable in deciding the value of the external help.

CHAPTER TWO

PURPOSE AND METHOD OF THE RESEARCH

Purpose of the Research

Since the former studies about Hou-jin community did not address much about the external groups' activities during the time period of the process, which might give some information concerning why the community action appeared to be a failure, the purpose of this research is: (1) to document the process of Hou-jin community's anti-fifth naphtha cracker movement, from June 1987 to September 1990. The focus will be put on the interaction between the three external groups and the community leaders, and (2) to compare the process with the characteristics of a community development process. Special attention will be paid to three external groups' deeds during the process.

The research takes the perspective of community development, though the community never called the action community development. Also those external groups did not name themselves community development workers. The perspective of community development might provide some new light to scholars, community development workers and environmental advocates, when dealing with an environmental dispute between a community and a government owned enterprise.

Method of the Research

The basic procedure of the research follows the "Community Development Process Case Study Guide" developed by Dersham, Karns, Lackey, and Timmons (1991). Since the Guide is all inclusive, covering almost all aspects of a community development process, the researcher must limit himself, and focus on external groups' activities during the process. Time and capability limitations precludes anything more.

The profile of the community was not difficult to access. An Environmental Impact Assessment was done by the Chinese Petroleum Coporation (CPC) in 1989. The Assessment includes comprehensive basic information about the community, most of which are official records.

A short history of the process is compiled by the researcher by reviewing the newspapers the AFNCC collected from the beginning of the action.

Sources to determine the community's improvement, achievement, and learning experience are newspapers, the community's, and the CPC's publications. The researcher also interviewed the community leaders to gather information concerning the learning experience of the community. The leaders interviewed are seen as representatives of the community as a whole. A questionnaire has been developed for interviewing (see appendix 1).

Three types of leaders were interviewed: (1) the formal

leaders elected, (2) the community activists whose names are published in newspapers during the process, and (3) the elders in the community who are recommended by the former two types of interviewees. Twenty prospective interviewees are listed. The researcher was not able to reach six of them, and two others did not want to be interviewed. The researcher ended up interviewing twelve leaders of the community. Besides the questions listed in the questionnaire, additional questions were asked when the interviewer thought it necessary. All the interviews are recorded on cassette.

The researcher interviewed all three external groups that had intervened in the community: Green Peace Organization (TGPO), Taiwan Environmental Protection Union (TEPU), and Social Movement Office (SMO) (see appendix 2). The strategy and activities of those groups were gathered through interviews. Constitutions, bylaws and publications of those groups are analyzed to understand the philosophy and ideology of each group.

The contribution and shortcoming of external groups, when intervening in the community, are evaluated by the community leaders through the interviews mentioned earlier.

The process of community development of Hou-jin will be analyzed in detail by answering the questions presented below. These questions are synthesized from those that have been raised by Cawley (1984), Kelman and Warwick (1978), Dersham, Karns, Lackey, and Timmons (1991) as criteria to

asses a community development process:

A. A deliberate community activity

1. Who initiated the idea of the action?
2. Was the goal(s) clearly defined and shared by general public in the community?

B. Participation and ownership of the process:

3. To what extent did the community people participate in activities throughout the process? (To what extent did the AFNCC represent the community? In what other settings did the community people give their inputs?)
4. Did community people have control of the planning process and their implementation?

C. A learning experience and improvement of community life:

5. What knowledge or skills has the community learned through the process?
6. What aspects of community life has been improved? (Awareness of environmental pollution, Solidarity, Participation, or Physical environment. . . .?)

D. A helping process

7. What types of external assistance did those groups provide? (field agent, consultant, advocate, or planner)
8. Whose values were served by the intervention?
9. To what extent did the recipients participate in the choice of goals?
10. To what extent did the process enhance the power of the community people to solve problems?
11. Were a reasonable set of alternatives available to the recipients?
12. Did the assistant groups present to the community people incomplete or distorted information about the effects of assistance? Or, did they emphasize only the probable benefits?

13. Did the assistance create a dependency relationship between the donor and the receiver?

The questions for the helping process are somewhat overlapped with the other three characteristics which are: a deliberate community activity, emphasis on citizen participation and ownership of the process, and a learning and improving process. The researcher wishes to examine the process from two angles: the community and external groups. Opinions from both sides will be used to assess the community's development and the external groups' helping.

CHAPTER THREE

A SHORT HISTORY OF THE ANTI-FNC MOVEMENT

The anti-fifth naphtha cracker movement of Hou-jin can be roughly divided into three phases: (1) the first phase, from July 2, 1987 to the end of the year, lasting approximately half a year, is the initial period; (2) the second phase, from the beginning of 1988 to the end of 1989, is the tug-of-war phase of the movement; (3) the third phase, from the beginning of 1990 to September of the same year, the announcement of the erection of the fifth naphtha cracker, is the decisive phase of the movement.

This chapter will first depict the profile of the Hou-jin community and then describe chronologically the process of the Hou-jin community's opposition to the erection of the fifth naphtha cracker.

The Profile of Hou-jin

Location and Origin of the Hou-jin Community

Hou-jin is a northern suburban community of Nan-tze Ward, Kaohsiung city. The community consists of five precincts of Nan-tze Ward.

The community is bordered by Hou-jin creek in the north and east. The south side of Hou-jin is the main factory area of Taipei, Taiwan: Chinese Petroleum Corporation, Kaohsiung

Refinery. The residential area of the refinery where its employees reside is the community's west side neighborhood.

Though the area of the community is as large as 462.37 hectares (Table 1), most of the population resides in the older settlement area of 64.1 hectares.

Table 1.--Area and Population Density of Hou-jin Area

precinct	Area (Hectare)	Population	Density of Population (Person/Hectare)
Jin-ping	88.20	3911	44.34
Yu-ping	12.43	2544	204.67
Ren-tien	97.81	1932	19.75
Gin-tien	77.61	3725	48.00
Rei-ping	186.32	4957	26.60
Total	462.37	17,069	36.92

Source: M. E. Brooks Consultants, INC. 1988, Environmental impact assessment on the plan of the fifth naphtha cracker Taipei, Taiwan: Chinese Petroleum Corporation. Table 4.7.3-2

Hou-jin is a settlement more than 300 years old. In the beginning, it was a military camping site. Cheng Chen-goun, a general of the army in the Ming Dynasty, and his troops fled to Taiwan, after being defeated by Chin Dynasty in 1663 A.D. A portion of his troop was sent to this area to cultivate the land and produce grains in a preparation for the military counterattack against Ching Dynasty, who took

over the reign of mainland China. The name "Hou-jin" means "tough backing-up units". It is a military term indicating the location and the strength of the troops. As the order of counterattacking and re-establishing the Ming Dynasty had never been made by the general, the soldiers gradually became farmers and permanent residents of the area (Tzen Yu-kun 1987).

Population Size, Characteristics, and Growth

Before describing the population characteristics of the community, some explanation is necessary.

Rei-ping used to be a marginal area of the community. It became a precinct of Hou-jin only since the year of 1981. It is a newly developed area of the community. Because of the setting up of the Nan-tze Export Processing Zone in 1969 at the north west side of the community (EIA 1988), many migrant workers from neighboring counties have moved into the area.

According to the Environmental Impacts Assesment made by the M. E. Brooks Consulnats, INC. the population of Hou-jin was 16,968 in 1986. The community had experienced a continuous growth in population from 1951 to 1981. Though the total population of Hou-jin increased by 2637 from the year of 1981 to 1986, the population of the older settlement actually decreased by 1.0% if the population of Rei-ping precinct is deducted (Table 2).

Table 2.--The Growth of Population of Hou-jin

precinct	Year							
	51	56	61	66	71	76	81	86
Jin-ping	558	1346	2060	2572	3941	4544	4113	3990
Yu-ping	496	1228	1564	1666	2033	2255	2622	2598
Ren-tien	638	1295	1430	1529	1777	1767	1813	1940
Gin-tien	451	1198	1632	2059	2533	3466	3791	3695
Rei-ping	--	--	--	--	--	--	1992	4745
Total (including Rei-ping)	2233	5067	6686	7826	10284	12032	14331	16968
Growth(%) (including Rei-ping)	--	126.9	31.9	17.1	31.4	17.0	19.1	18.4
Total (excluding Rei-ping)	2233	5067	6686	7826	10284	12032	12339	12223
Growth(%)	--	126.9	31.9	17.1	31.4	17.0	2.6	-1.0

Source: M. E. Brooks Consultants, INC. 1988, Environmental impact assessment on the plan of the fifth naphtha cracker, Taipei, Taiwan: Chinese Petroleum Corporation. Table 4.7.3-3

The average age of the community is quite young, as shown in Table 3. But the the ratio of the dependent population (aged under 14 or above 65) is higher than that of Kaohsiung city as a whole (see Table 4). On the other hand, the percentage of higher educated people is lower than that of the Kaohsiung city (Table 5).

Employment Characteristics

The largest portion of the community people's occupation is "labor worker" (48.8%). The second largest is "farmer" (14.5%). The percentage of these two occupations in Hou-jin is higher than that of the average of Kaohsiung city (34.1% and 7.4%), and the population of skilled workers, supervisors, businessmen and service workers is fairly low (Table 6). All these figures show that the community does not have an above-average socio-economic status.

Table 3.--Age Formation of Hou-jin Population

precinct	Age							
	Under 10	10- 19	20- 29	30- 39	40- 49	50- 59	60- 69	70 & Above
Jin-ping	775 (19.4) ¹	804 (20.2)	809 (20.3)	674 (16.9)	359 (9.0)	299 (7.5)	168 (4.2)	102 (2.6)
Yu-ping	513 (19.8)	525 (20.2)	553 (21.3)	388 (14.9)	233 (9.0)	213 (8.2)	111 (4.3)	62 (2.4)
Ren-tien	356 (18.4)	381 (19.6)	404 (20.8)	314 (16.2)	172 (8.9)	154 (7.9)	108 (5.6)	51 (2.6)
Gin-tien	704 (19.1)	788 (21.3)	744 (20.1)	570 (15.4)	367 (9.9)	291 (7.9)	144 (3.9)	87 (2.4)
Rei-ping	1207 (25.4)	843 (17.8)	817 (17.2)	1130 (23.8)	334 (7.0)	236 (5.0)	139 (2.9)	39 (0.8)
Total	3555 (21.0)	3341 (19.7)	3327 (19.6)	3076 (18.1)	1465 (8.6)	1193 (7.0)	670 (4.0)	341 (2.0)

Source: M. E. Brooks Consultants, INC. 1988, Environmental impact assessment on the plan of the fifth naphtha cracker, Taipei, Taiwan: Chinese Petroleum Corporation. Table 4.7.3-4
 Note: 1. Numbers in the brackets are percents.

Table 4.--The Ratio of Dependent Population (RDP¹)

Area	Age			RDP
	0-14 (a)	15-64 (b)	65 & Above (c)	
Hou-jin				
Jin-ping	1215 (30.45) ²	2605 (65.29)	170 (4.26)	53.16
Yu-ping	780 (30.02)	1704 (62.59)	114 (4.39)	52.46
Ren-tien	560 (28.87)	1288 (66.39)	92 (4.74)	50.63
Gin-tien	1093 (29.58)	2464 (66.68)	138 (3.73)	49.95
Rei-ping	1697 (35.76)	2953 (62.23)	95 (2.00)	60.68
Total	5345 (31.50)	11014 (64.91)	609 (3.59)	54.06
Nan-tze Ward	31710 (30.48)	68643 (65.99)	3666 (3.52)	51.54
Kaohsiung City	394198 (29.85)	876896 (66.40)	49458 (3.75)	50.59

Source: M. E. Brooks Consultants, INC. 1988, Environmental impact assessment on the plan of the fifth naphtha cracker, Taipei, Taiwan: Chinese Petroleum Corporation. Table 4.7.3-5

Note: 1. RDP= (a+c/b)*100

2. Numbers in the brackets are percents.

Table 5.--Education Level of Citizens (aged 6 years old and above) .

	College and above	Junior college	High school	Jr. high	Ele- ment.	Illit erate

Hou-jin						

Jin-ping	73 (2.0)	110 (3.1)	996 (27.6)	592 (16.4)	1320 (36.6)	512 (14.2)
Yu-ping	48 (2.1)	98 (4.3)	488 (21.2)	451 (19.6)	955 (41.5)	264 (11.5)
Ren-tien	37 (2.1)	58 (3.3)	373 (21.2)	325 (18.5)	758 (43.1)	207 (11.8)
Gin-tien	63 (1.9)	118 (3.5)	830 (25.0)	611 (18.4)	1215 (36.5)	489 (14.8)
Rei-ping	160 (4.0)	259 (6.4)	1158 (23.5)	712 (17.6)	1482 (36.5)	286 (7.0)

Total	381 (2.5)	643 (4.3)	3845 (25.6)	2691 (17.9)	5730 (38.1)	1758 (11.7)

Kaohsiung city	61173 (5.2)	77778 (6.6)	289508 (24.5)	222770 (18.9)	437509 (37.1)	91635 (7.8)

Source: M. E. Brooks Consultants, INC. 1988, Environmental impact assessment on the plan of the fifth naphtha cracker, Taipei, Taiwan: Chinese Petroleum Corporation. Table 4.7.3-6

Table 6.--Employment of Citizen (aged 15 years and older)

	TS ¹	AS	SA	TR	SW	FF	LW	OT

Hou-jin								

Jin-ping	58 (3.5)	1 (0.1)	204 (12.4)	111 (6.7)	165 (10.0)	350 (21.2)	661 (40.1)	98 (6.0)
Yu-ping	24 (2.3)	16 (1.5)	45 (4.2)	82 (7.7)	119 (11.2)	185 (17.4)	544 (51.2)	48 (4.5)
Ren-tien	19 (2.5)	9 (1.2)	45 (5.8)	49 (6.3)	74 (9.6)	71 (22.1)	353 (45.7)	53 (6.9)
Gin-tien	38 (2.7)	22 (1.5)	115 (8.0)	85 (5.9)	156 (10.9)	198 (13.9)	726 (50.8)	90 (6.3)
Rei-ping	94 (5.5)	37 (2.2)	230 (13.5)	121 (7.1)	97 (5.7)	59 (3.5)	951 (55.7)	120 (7.0)

Total	233 (3.5)	85 (1.3)	639 (9.7)	448 (6.8)	611 (9.2)	963 (14.5)	3235 (48.8)	409 (6.2)

Nan-tze Ward	2763 (6.8)	466 (1.1)	4739 (11.6)	3445 (8.4)	3359 (8.2)	4011 (9.8)	18557 (45.5)	3449 (8.4)

Kao- hsiung city	39675 (7.0)	14491 (2.6)	95340 (17.0)	87439 (15.6)	57173 (10.2)	41917 (7.4)	191893 (34.1)	34338 (6.1)

Source: M. E. Brooks Consultants, INC. 1988, Environmental impact assessment on the plan of the fifth naphtha cracker, Taipei, Taiwan: Chinese Petroleum Corporation. Table 4.7.3-8

Note: 1. Explanation of the abbreviations
 TS: Technical Specialist.
 AS: Administrative Supervisor.
 SA: Supervision Assistant.
 TR: Trader.
 SW: Service Worker.
 FF: Farm, Forest, and Fish worker.
 LW: Labor Worker.
 OT: Others.

Cultural Background and Characteristic

Hou-jin, as stated above, used to be a traditional community where people had made their living by farming. The residents still have strong feelings about their land and living environments. The kinship within the community is also very close--a large portion of people in Hou-jin are relatives in one way or another (Wang 1989).

Temple activities of folk religions have been flourishing at Hou-jin. There are at least six temples in the community, each with different gods to worship (Wang 1989). For example, there are gods of medicine, harvest, and land. Among these temples, Feng Ping Kong, Shen Uen Kong and Fu Te Tze are the three major ones that belong to a similar type of traditional folk religion which is the main stream of Taiwanese people's belief. One thing in common about these gods is that they are all historical heroes of Chinese or Taiwanese who were reified. The other temples belong to either Buddhism or other newly developed folk religions. Community people are free to go to any one of the temples to pray and ask for blessings. Religious ceremonies are the major arena where the community people get involved and encounter each other. The two most notable festivals in the community every year are: the god of harvest's birthday (April 26 and January 13 of the lunar calendar) and the birthday of the god of medicine (Wang 1989).

The largest temple in the community is Feng Ping Kong where the god of harvest is worshiped. The plaza in front of the temple is the place where most temple activities take place, and where the community people hold their village meetings. The Committee of Temples Affairs is formed to manage various kinds of activities sponsored by the three main temples. The committee is also responsible for taking care of the three temples' properties (Hou and Mao 1989).

Power Structure of the Community

There are two major political parties in Taiwan: KuominTang (KMT) and Democratic Progressive Party (DPP). Both parties have their supporters in Hou-jin, but KMT has a longer history and more resources than does DPP. Members of KMT hold most of the elected positions within the community.

The community consists of five "Lee"s (precincts). "Lee Chang" is the head of the precinct elected by the residents from the precinct. Two Kaohsiung municipal council members, Chen Wan-dah and Liou Mao-te, have their head offices in Hou-jin, their home community, though they are elected ward wide. In 1987, when the community started its action against the plan of building the fifth naphtha cracker, all the heads of the five precincts and the two municipal council members were members of the KMT.

In the year of 1989, an election was held. Since Liou Mao-te did not campaign for the election, Wu Yu-huei, a

member of opposition party (DPP), became one of the candidates. He was elected as new municipal council member. Though Wu was not a resident of the community, he set his campaign office in Hou-jin and took the fifth naphtha cracker issue seriously. Chen Wan-dah campaigned for re-election and remained a council member.

Huang Tien-hsen is the most influential DPP member in the community. He has participated in several elections before 1987, but has never been elected. However, he has many supporters in Hou-jin. In the year of 1989, he ran for a seat in Legislative Yuan (House) of central government and won the election.

Besides the two political parties, the Committee of Temples Affairs is another organization that has influential power in the community. The committee has been managing religious ceremonies, which always involves a large number of community people. Also, the temples have lands that have been rented out for different purposes. The lands bring in a large sum of money for the community. Therefore, The Temples Affairs Committee plays an important role in Hou-jin community life.

The Background of the Movement

The anti-FNC movement began in July 1987, the year marking the rapid loosening of the martial law system and the liberation of people's power. During this period, there were

several local anti pollution movements in Taiwan; for example, anti-Dupont in Lu-kang, anti-Lichangrong Chemical in Hsinchu City, and anti-Sanhuang Pesticide Chemical in Tali, Taichung County. The change of the external environment exerted a great influence on the Hou-jin community, and they decided to express their intolerance of the Chinese Petroleum Corporation's long years of pollution on their residential area (Wang 1989).

Because of the change of the social and political environments on the island, the Hou-jin residents became much more conscious of having been mistreated by Chinese Petroleum. Their grudge against Chinese Petroleum includes both physical and social psychological aspects.

In the physical aspect, the community people had long suffered from a low quality of life due to the failure of Chinese Petroleum to control waste water, air, and noise pollution. According to The Environmental Impact Assessment of the fifth naphtha cracker, published by Chinese Petroleum Corporation (CPC), the residents' complaints included: "(1) the intolerable smell, noise and flaring light that causes their discomfort and feelings of insecurity, (2) the pollution of drinking water (3) the environment to which they had long been exposed, and which may cause respiratory problems and skin allergies, and (4) the concern for the future environment in which their children will have to live in" (EIA 1988, 7-1).

We can also find out the cause of the movement from a social psychological aspect. As a government run monopoly, Chinese Petroleum makes a good deal of profit each year. The employees enjoy high a standard of living. They have, for example, all kinds of recreational facilities in their dormitory area, including swimming pools, a golf course, bowling alley and tennis court. By contrast, the people living in the Hou-jin community, which is located next to Chinese Petroleum's dormitory area, suffered from the serious pollution made by the corporation without any kind of compensation. If a Hou-jin resident wanted to use the recreational facilities belonging to the corporation, he or she had to sneak into the dormitory area. Therefore, the community people always felt inferior to Chinese Petroleum's employees. Additionally, the difference in educational levels between these two groups added to the Hou-jin people's inferiority complex (Wang 1989; Lee 1991).

The Rise of the Anti-FNC Movement

The anti-FNC movement was initiated by several young men who participated in political campaigns in the past. These young people were mostly associated with the opposition party, Democratic Progressive Party (DPP), and had been campaign assistants of Huang Tien-seng. When the news of Chinese Petroleum's plan for building the fifth naphtha cracker was reported in the newspaper on June 12 1987, Huang

and his ex-campaign assistants thought that it might be helpful to their future political campaigns if they could make good use of the Hou-jin community's grudge against Chinese Petroleum (Wang 1989). The movement thus began on July 2, with a parade of these young men, demonstrating their opposition to the erection of the fifth naphtha cracker.

These young leaders were very active at the beginning of the movement. Within one month, they arranged a series of intense activities: a silent sit in protest at the north gate of Chinese Petroleum (July 3), a public speech on anti-FNC at the night market of the community (July 17), a rally at the west gate of Chinese Petroleum, aiming to appeal to the minister of Economic Affairs (July 24), followed by the setting up of tents to block the west gate (AFNCC 1990).

On August 5, the Anti-Fifth Naphtha Cracker Committee (AFNCC) was formally organized out of a general assembly of the community. On August 12, the AFNCC managed to gain two million New Taiwan dollars in funds (74,000 US dollars) from the Temples' Affairs Committee.

Search for External Help

Since the activists also realized their limits in experience and ability, they looked for support from outside. There had been three organizations invited to help with the anti-FNC movement; they were the Taiwan Green Peace Organization (TGPO), the Taiwan Environmental Protection

Union (TEPU) and the Social Movement Office (SMO).

Among these three organizations, the Taiwan Green Peace Organization was the one which contacted the community people the earliest, and the one which was involved in the movement the most. One of the members of the group, Nien Hsih-lin, had finished his work in the movement against the Dupont plant in his home town of Lu-kang in March 1987. Being visited and invited by the young activists, he began to contact the Hou-jin anti-FNC people in July of the same year. Since the young leaders expressed their wish to use his anti-Dupont experience for their own movement, Nien decided to stay with the Hou-jin people for the long term and moved into the community in August (Nien 1990).

The other two groups, the TEPU and the SMO, became involved in the movement later than the TGPO. The head office of the TEPU is located in Taipei, about 200 miles from Hou-jin. The organization was not formed until November 1987. Key members of the TEPU were joining another organization named New Environment Foundation then. In September, 1987, New Environment Foundation held a conference in Taipei concerning the plan of FNC. It was the first event where members of the TEPU had a connection with Hou-jin. the TEPU's involvement was minor at that time. It was not until January 1990, when the TEPU became active in Hou-jin again.

As did the TEPU, the SMO became involved in the

community's movement in the early stage too. On October 31, 1987, the largest community gathering ever occurring during the whole movement, occurred, with Chen Hsiu-hsien, the leader of the SMO, as one of the organizers. His speech attracted many people's attention (Min-jong Daily, Dec. 1 1987). But like the TEPU, the SMO did not have much influence in the community in the beginning either, even though their office is less than ten miles away from Hou-jin.

Efforts Made by the AFNCC in the Beginning

With the help of external groups, mainly the TGPO, the AFNCC arranged a series of activities to raise people's consciousness.

Locally, all over the community, they put signs and banners with anti-FNC slogans. They blocked the gates of the CPC Kaohsiung refinery whenever they felt the smell or noise coming out of the refinery was unusual or excessive. They held several community gatherings, gave speeches to the community people, explained the idea of environmental protection to the community people.

They also tried to attract the attention of the municipal council's and general public's attention. They went to the council hall to protest the council members' lack of concern about the community. They also held public speeches in one of the city parks to gain sympathy from outside the community.

Besides the efforts made locally, they also went to Taipei, the capital, to make their voice heard. They went to the Ministry of Economic Affairs to protest against the FNC plan. They also went to the Legislative Yuan, where national laws and regulations are made, to ask legislators to pay attention to Hou-jin's problem.

The time between July 2, 1987 and December 31 of the same year was the AFNCC's most active period. According to "the List of Major Events" in "Q and A for the Anti-FNC movement" distributed by the Anti-FNC committee (1990), there were thirty major events during the process of the movement. We note that out of thirty, fifteen major events occurred between July and December of 1987.

On January 6, 1988, the Taiwan Times reported that the journalists of Kaohsiung city selected the anti-FNC movement as the 1987 No. 1 news event in environmental issues.

Response of Chinese Petroleum during the Initial Phase

The Kaohsiung refinery had been keeping a low profile during the first half year. The head of the Kaohsiung refinery visited the community several times, hoping to have the consent of Hou-jin residents but was not successful in the beginning.

Internal problems of the movement

Though the AFNCC had drawn a lot of attention from all over the island, it had its internal problems too. No more than three months after the committee was formed, confusion over leadership within the committee and goals of the committee appeared (Min-jong Daily, Oct. 31, 1987; China Times Evening News Nov. 8, 1987). According to the China Times Evening News, because of differences in members' political stands, the committee could not operate cohesively. Reorganization of the committee had been proposed at that time, too. Even among the activists, there existed disagreements in terms of goals and approaches of the anti-FNC movement. Huang Tien-seng and his followers were politically oriented, looking for ways to gain him more votes in future elections, while Nien and other young activists were more idealistic, emphasizing environment protection and radical approaches (China Times Evening News Nov. 8, 1987).

Goals of the Movement

Goals of the movement can be found in several sources. There are slight differences among these reported sources. According to "Q and A for Anti-FNC", the goals were: (1) To urge the Ministry of Economic Affairs to stop the FNC plan, (2) To make the Kaohsiung refinery of the CPC improve its pollution control of the existing refinery units, (3) To request the Chinese Petroleum to make a plan of removing the

whole Kaohsiung Refinery to another place, (4) To push the government to reassess the necessity of petrochemical industry under the consideration of ecological aspects (AFNCC 1990). In Wang's thesis (1989), besides the above four, the goals also included that Chinese Petroleum should: (5) make health inspections for Hou-jin residents and (6) compensate the Hou-jin residents for their physical and psychological damages during the past years.

The Tug-of-War Phase of the Movement

Beginning in January 1988, the movement moved into another phase. Chinese Petroleum endeavored to gain support from the general public as well as from the Hou-jin residents. The AFNCC, on the other hand, faced difficulties of organization, leadership, and financial problems at the same period.

Chinese Petroleum no longer kept its low profile. Instead, it became active in winning the community people's friendship. The refinery set up a "good neighbor committee" to involve itself in the community's activities, especially in temple ceremonies.

Green Peace continued their involvement with the community activists during the first half of the tug-of-war phase. Under its coordination, a group of college students came to the community to run two weeks of activities in January 1988 (Independent Evening News Jan. 27, 1988). The

students' activities included a one-week survey concerning the community people's opinion of the FNC plan and a one week environmental protection camp for community children. About 150 children from the Hou-jin community participated in the environmental protection camp (Taiwan Times, February 10, 1988). Two months later, the students presented the results of their survey to the public in a press conference in Taipei. The press conference was also arranged by the TGPO (Independent Evening News, March 31, 1988).

Chinese Petroleum's Response and Efforts during the Tug of War Phase

The Kaohsiung refinery of Chinese Petroleum continued its efforts in drawing the community people's sympathy. The "Good Neighbor" project was a well planned campaign. Though the project was not welcomed by the community at the beginning (China Times April 9, 1988), Chinese Petroleum sustained their communication with the Hou-jin people. Besides inviting community leaders to have a tour of the oil refinery zone (China Times, April 9, 1988; January 1, 1989), Chinese Petroleum installed tap water for the the community as compensation for having contaminated Hou-jin's ground water. Chinese Petroleum also spent five million New Taiwan dollars (185,000 US dollars) to produce a multimedia program, presenting itself as involved in environmental protection (United News, August 26, 1988). In 1989 summer, the Chinese

Petroleum opened up thirty one summer jobs, hired students from Hou-jin to carry on a community survey. The community survey meant to build a better relationship between the corporation and the community (United News, August 22 1989). Other efforts made by Chinese Petroleum are in appendix 3.

Soon after the community people began their protest, Chinese Petroleum had M. E. Brooks Consultant, Inc. from the United States start an environmental impact assessment (EIA). The assessment was finished in August 1988. During the process of the assessment, several meetings had been held by Chinese Petroleum to gain input from scholars, environmentalists and Hou-jin residents. Hou-jin residents participated in each meeting and protested. The environmental impact assessment (EIA) of the FNC plan finally passed the government's approval in August 1988, which meant that Chinese Petroleum could proceed in building the fifth naphtha cracker (Liberty News, August 31, 1988).

In response to the efforts of Chinese Petroleum, the TGPO invited scholars to evaluate and criticize the EIA and published "An Assessment of the EIA" in August 1988 (Independent Evening News, August 30, 1988). Further, in order to show their strong protest, the TGPO organized the Hou-jin activists to start a hunger strike in October of the same year (Taiwan Times, October 5, 1988).

While the hunger strike was meant to be a radical

approach of protesting, it did not seem to have much impact on the government. There were more than forty people who joined the strike on the first day, but only eighteen of them were remaining on the second day (Taiwan Times, October 5, 1988).

After the hunger strike, the activists seemed to be exhausted by the 15 month-long movement. Liu Young-ling, one of the young activists, told the press that the anti-FNC had come into a period of "recession" (Pacific Times, October 19, 1988).

The cooperation between the TGPO and the activists ended at this time also. Nien, the delegate from the TGPO felt his opinion were not being taken seriously, the activists thought they had already learned what Nien could teach them. Nien left the community in November of 1988.

In October 1988, when the AFNCC was in their "recession" period, another anti-pollution movement happened in Lin-yuan, Kaohsiung County. Members of the AFNCC took part in the movement as outside supporters (Independent Evening News, October 13, 1988). The movement in Lin-yuan did not last long; it ended when the factories that caused pollution in Lin-yuan area promised to pay a certain amount of compensation to the Lin-yuan residents. The case of Lin-yuan tempted the Hou-jin residents. The activists sensed, because of the Lin-yuan case, that the anti-FNC movement became even more difficult; some Hou-jin people began to expect the same

type of compensation from Chinese Petroleum (Independent Evening News, November 29, 1988).

The SMO's Connection with Hou-jin

Beginning at the end of 1988, when the AFNCC was inactive, the Social Movement Office began its organizational work at the Hou-jin creek region of the Nan-tze Ward. The office believed that pollution was not happening only in Hou-jin; besides Hou-jin, there were other communities that were polluted too, and besides Chinese Petroleum, there were many other factories in the Nan-tze Ward that were polluting the region (Chen 1990).

The SMO's work influenced the activists of Hou-jin so that their attention began to turn to a broader geographical area. Assisted by the SMO, the Nan-tze Anti Pollution Alliance (NAPA) was established in January 1989. The Alliance united six environmental protection groups from the Nan-tze Ward. Liu Yong-ling and Tsai Chao-peng, two active members of the AFNCC became committee members of the NAPA (Min-jong Daily, March 19, 1989).

The Continuing Internal Problems of the AFNCC

Reviewing the newspapers collected by the AFNCC, there was no initiative action taken by the AFNCC in the year 1989. Further more, there were continuing reports about internal conflicts of the AFNCC. The funds that the AFNCC gained from

Temples' Affairs Committee had already been used up by January 1989. The AFNCC tried to acquire supplementary funds on February 25 but did not succeed.

On April 14, 1989, the Independent Daily reported that the AFNCC would consider disbanding if Chinese Petroleum could make a comprehensive proposal for environment protection. On the same day the Independent Daily also reported that the elected leaders of Hou-jin were not participating in the AFNCC's activities at that time. Two days later, the Min-jong Daily commented that a reorganization of the AFNCC was necessary because it was not functioning.

As mentioned previously, Lin-yuan's case made many Hou-jin residents begin to expect monetary compensation from the Chinese Petroleum Corporation. This expectation caused cracks in the AFNCC.

On July 3, a celebration for the second anniversary of the anti-FNC movement was held by the AFNCC. China Times reported that among twenty one committee members, only three of them participated in the celebration. At the same time, there were only 300 out of 17,000 community residents who came to the meeting.

On July 4, 1989, Huang Tien-seng began to organize another group of people in the community. The new organization aimed to gain compensation from Chinese Petroleum (Min-jong Daily, July 5, 1989).

A national level election was held at the end of 1989. It was the only major occasion during the tug-of-war phase that the AFNCC was working together to campaign for Huang Tien-seng. Huang was elected to be a legislator in that election (AFNCC 1990). The community hoped that Huang would speak for them in the central government.

Decisive Phase of The Anti-FNC Movement

Beginning in January of 1990, the anti-FNC movement came to its decisive phase. Five major events happened during this nine month period: (1) a final large gathering against the FNC plan held by the AFNCC; (2) reorganization of the AFNCC; (3) Hou-jin's public vote concerning the FNC plan; (4) Hou-jin local election; (5) the visit of Premier Hao Pei-tsun. In this phase, the terms of "hawk" (radical) and "dove" (compromise-seeking) began to be used by the newspapers describing the two groups of local leaders that possessed different attitudes toward the fifth naphtha cracker plant.

Chinese Petroleum never stopped its attempts to make Hou-jin's people believe its sincerity in improving environmental conditions. The "Good Neighbor" project continued and CPC's public relations personnel came to understand the community better. They now not only communicated with the local leaders, but also with the general public (Independent Daily, January 12, 1990). Chinese Petroleum hired those who had relationships with the

community, either relatives or friends, to talk to Hou-jin residents door-to-door. A "list of complaints against Chinese Petroleum from Hou-jin residents" was compiled to show that Chinese Petroleum did try to understand and resolve the problems they caused (Liberty Daily, March 12, 1990).

During this period of time, when the Taiwan Green Peace Organization left Hou-jin and the Social Movement Office had no deep collaboration with the community, the Taiwan Environmental Protection Union (TEPU) thought it was time for them to work with the AFNCC and their movement (Liau 1990).

In January 1990, the news that the erection of the fifth naphtha cracker would begin was being spread again (Universal News, January 7; Independent Evening News, January 8; Min-jong Daily, January 9, 1990). Stirred by the news, the AFNCC awakened from its "recession" period. Many drastic reactions occurred. Some activists had their wills made ready for they might give their lives during the conflict, against Chinese Petroleum (Universal Daily, January 9 1990). In the event of a bloody conflict, a fund-raising campaign was proposed to make funds available for the relief of families of the deceased (United Evening News, January 11, 1990).

The AFNCC also replaced all the signs and banners and hung them all over the community (Taiwan Times, February 26, 1990).

The Last Major anti-FNC Community Gathering

On March 25, the AFNCC held the last major gathering during the movement. With the help of the TEPU, there were more than 20 environmental protection groups from all over the island taking part in the gathering. Besides scholars and college students, some politicians from the Democratic Progressive Party, the opposition party, also participated in the gathering. The number of people was over 1000 in that gathering. But, in that gathering, according to the Taiwan Times (March 26) and United News (March 26), the participation of outside supporters was more than that of local residents. Chinese Petroleum assumed its "Good Neighbor" project had drawn the community people's support so that they no longer possessed strong opposition to the fifth naphtha cracker (China Times Evening News, March 27, 1990).

Reorganization of the AFNCC

On March 28, the China Times Evening News reported that the Hou-jin residents were only now concerned about the amount of compensation Chinese Petroleum would pay rather than environmental protection.

The internal conflict of the AFNCC had never been eased since the beginning of the movement. The gap between the young activists and the elected leaders of the community had become wider. Though the activists had been dominating the AFNCC, the elected leaders also represented a large portion

of the community people.

On April 2, the AFNCC was reorganized. In a general assembly meeting, several activists were excluded from the committee. After the reorganization, the new committee was then formed by the members who were more leaning towards compromise with Chinese Petroleum (Min-jong Daily, April 3, 1990; China Times, April 3, 1990). The newspapers began to call them "doves" in contrast with the "hawks", those young activists.

The Public Vote

A public vote had been proposed by the Green Peace Organization in 1989. (Independent Evening News, January 13 1989). In January 1990 several other environmental protection groups joined Green Peace to propose that a public vote was necessary so that the community people could express their will and the decision could be called a democratic one (China Times Evening News, January 10, 1990). On February 2, the TEPU told the press that the proposal for a public vote had gained more support from the general public (Min-jong Daily, February 2 1990). The proposal was finally adopted by the government authorities. A public vote was held in Hou-jin on May 6, 1990.

Before the public vote, because the "hawks" were no longer in the AFNCC, they had no formal channel through which to express their opinion. the TEPU and the TGPO again came to

the community to help them with their propaganda activities.

The result of the public vote was 4999 votes against and only 2990 votes for the FNC plan. While the result of the vote was obvious, the Ministry of Economic Affairs still claimed that the FNC plan would be a national policy.

After the public vote, the TEPU held a symposium in Taipei (China Times, May 15, 1990). The symposium meant to urge the government to comply with the results of the public vote and to express the TEPU's position against the FNC plan.

Local Election

While the activists were content with the results of the public vote, they soon experienced another failure.

One month later, a local election was held in Hou-jin. Five "Lee chang" (heads of the precincts) were to be re-elected in Hou-jin. With the results of public FNC vote in their favor, the activists assumed they had support from the public. They therefore nominated five candidates to run for those positions. But all of the five candidates were defeated by their opponents -- candidates from the Kuomintang (the KMT, the ruling party). The China Times (June 17 1990) then reported that the anti-FNC movement would become less radical in the future.

Premier's Visit and the Erection of the FNC

When the local election was over and the candidates

from the KMT won the election, the governmental officials were actively visiting Hou-jin again. The minister of economic affairs visited the community four times in two and a half months (Liou Ming-tang 1990). He consulted with community leaders, mostly the "doves", and gradually gained support from them for the FNC plan (Taiwan Times, September 23, 1990).

The highlight of official visits was on September 13 when Premier Hou Pei-tsun came personally to the community. After the minister of economic affairs had prepared everything, Hou came to the community and stayed one night to show his concern about the living conditions of Hou-jin's residents. He then had breakfast with community leaders. Although among forty local leaders only twenty nine came to the breakfast, the government sensed that there were no strong obstacles ahead (Deng and Chen 1990).

On September 22, Minister of Economic Affairs Hsiau Wuan-tsan announced that the erection of the fifth naphtha cracker of Chinese Petroleum Kaohsiung refinery had started (Taiwan Daily, September 23 1990). With the presence of three thousand member riot police force at the Kaohsiung refinery, the erection of the fifth naphtha cracker did not face any disruption (Hsieh 1990).

CHAPTER FOUR
ANALYSIS OF THE PROCESS

This chapter will analyze the process of the Hou-jin community's anti-FNC movement. In reference to the characteristics of community development process and the questions raised in Chapter Two, the analysis will include: the community leaders' initiation of the community action, the community people's participation and their learning experience in the process, the improvement of community life, and the external groups' contributions to the community.

**The Initiation of the Movement
and Generating of the Goals**

As the author has mentioned in Chapter Three, the movement was initiated by a group of the community's young activists. Huang Tien-seng, Tsai Chao-peng, and Liu Yong-ling were the core members of this group. They realized that because of the long term pollution caused by Chinese Petroleum Corporation (CPC), the community had born a strong grudge against the corporation. As the news of building the fifth naphtha cracker was released, they decided to use the issue as an opportunity to show their concern about their own community. Huang and Tsai were politically affiliated with the opposition party, the DPP. Besides improving the

environmental conditions of the community, they meant to gain more supporters for their election campaign in the future through this anti-pollution movement.

Generating the Goals of the Movement

Though the community people were very supportive of the movement in the beginning, they were not clearly informed about the goals of the movement. Neither the community as a whole nor the Anti-Fifth Naphtha Cracker Committee had an opportunity to work together on defining the actual goals of the movement (Liu September 1991). The activists were inexperienced in the beginning. They and the community people only knew that they would not let the CPC build another naphtha cracker which would make the existing pollution worse.

The movement started with a simple though difficult to achieve goal: to have the CPC abolish the fifth naphtha cracker plan at Hou-jin. Though several sets of goals could be found in various places (Wang 1989; Chou 1990; AFNCC 1990), they did not exist at the beginning of the movement.

There were Nein Hsih-lin from the Taiwan Green Peace Organization, scholars, and journalists concerned about environmental issues who contributed knowledge and ideas to the generating of those goals. These helpers came to the community frequently during the movement process to give advice to the activists. The activists then adopted their

advice and formed a more complicated set of goals. The end product of the goal-generating process consisted of issues such as urban development of Kaohsiung City, economic development, and ecological problems of the country (see Chapter Three). To the young activists, the process was actually a learning-by-doing one (Chen Shang-chia 1991; Liu Yong-ling September 1991).

But the gradually generated goals, according to Chen Shang-chia, were shared only within a small group of people; only these activists were involved in the process of generating the goals. The general public of the community was not able to be involved in generating the goals, neither were they informed about the content of the goals. It was because the activists thought their followers did not have the capability to know about the rationality of goal setting. The activists also thought their followers concerned more about taking action than understanding the reasons for actions therefore they don't need to spend too much time and energy in communicating with the community people about the goals development process (Chen Shang-chia 1991; Liu Yong-ling September 1991).

From the activists' point of view, they felt it was difficult to share the goals with the community people, because the solidarity and morality of the community's movement were undermined soon after the CPC began its "good neighbor" project (Chen Shang-chia 1991). He also said that

except for the core members of those young activists, the community people who supported the anti-FNC movement did not care much about what were the actual goals the movement wished to achieve; all they would do was to support whatever activities were against the CPC (Chen Shang-chia 1991).

However, other community leaders who were not in the group of young activists thought the goals set by the activists were too far beyond the community people's knowledge and capability (Lee 1990; Tsai Wan fa 1990). They disagreed with such highly idealistic and radical appeals. Lee Yu-kun, the spokesman for the AFNCC, pointed out that the community people's demand was simple: better living conditions. The complicated goals were imposed by the external environmental protection groups, and the community people did not understand the actual meaning of those goals.

In short, the movement was initiated by a group of community young activists. They stirred up the issue in order to protect their health and to have some political gains. They started the movement with only a simple appeal, to abolish the fifth naphtha cracker plan. The whole set of goals was not formed from among the general public of the community, neither was it formed from among the community leaders from all factions. They were suggested by external helpers and then became a consensus among the activists. After the goals were decided, the activists did not share them with the community people or its leaders.

Community People's Participation during
the Time Period of the Movement

Participation in the Activities

There was a large difference between the initial phase and latter phases in terms of the community people's participation in the anti-FNC activities.

In the initial phase, it was easy to gain a response from the Hou-jin people. They would support every activity that the AFNCC planned. Between July and December 1987, there were at least seven occasions that more than one thousand community people showed up for the anti-FNC movement related activities. Among these seven occasions two of them gathered more than ten thousand people (see Table 7). But from January 1988 to September 1990 there was only one more time that the AFNCC managed to organize a one-thousand-people meeting; and half of them were from outside the community.

Table 7.--Major Activities of the Initial Phase

Date	Event	Numbers of Participants	Source ¹
July 2	Paraded in the village	7	Wang
July 3	Silent Protest at the north gate of the CPC	30	AFNCC
July 24	Waited for Minister of Economic Affairs to petition him; unable to meet him; therefore, blocked the west gate	*	AFNCC

Table 7.--Continued.

Date	Event	Numbers of Participants	Source ¹
Aug. 5	Anti-FNC committee was organized	*	AFNCC
Aug. 11	Conflict at the west gate with security guards of the CPC.	10,000	IDE
Aug. 31	Went to Taipei to appeal to the Ministry of Economic Affairs	700	AFNCC
Oct. 13	Passed out fliers and put up street signs with slogans		CT
Oct. 17	New Environment Foundation supported anti-FNC lectures in San-min Park	1,000	AFNCC
Oct. 20	Went to Taipei and appealed to the Environmental Protection Agency and Legistration Yuan; had conflict with the police, and two members were arrested.	400	ID
Oct. 21	Blocked the north gate for being mistreated in Taipei	1,000	ID
Oct. 25	Held a meeting for the support of the two communy residents who were arrested	2,000	MJ
Oct. 27	Five environmental protection groups had a meeting in Chin-hwua Junior High School, Taipei, in support of Houjin community	*	AFNCC
Oct. 28	The two residents were released; The community gathered to welcome them.	1,000	MJ
Oct. 31	Anti-FNC one hundred-day anniversary lecture was held in the night market of Houjin.	10,000	MJ

Table 7.--Continued.

Date	Event	Numbers of Participants	Source ¹
Dec. 22	The community mistook the Chinese Petroleum's Residual Hydrodesulfurization Unit for the machines for the fifth naphtha cracker and blocked the way at night when it was being transported into the factory.	400	Wang
Dec. 29	The police dismantled the blocks at the west gate during the night; Houjin people put four coffins to reblock the gate and show their determination to fight against the FNC	10,000	ID

Note: * figures unknown.

1. Explanation of the abbreviations

Wang: Wang, Ming-huei. 1989. Hou-jin, a case study on process of anti-pollution collective action. MS. thesis, Taichung, Taiwan: Tung Hai University.

AFNCC: Anti-fifth naphtha cracker committee. 1990. "Q and A for the Anti-FNC movement. Hou-jin", Taiwan: Anti-Nifth Naphtha Cracker Committee.

IDE: Independent Evening News.

CT: China Times.

ID: Independent Daily.

MJ: Min-jong Daily.

The phenomena of the decreasing of the community people's participation can be analyzed from three angles: (1) the community people's orientation, (2) the CPC's efforts and (3) the conflicting interest/value of the community leaders.

First, as Hou and Mao (1989) indicated, the movement was an anti-pollution oriented rather than an environmental protection one. The Hou-jin residents' major concern was

that their community had been polluted by the Kaohsiung refinery of the CPC for decades. They never had had an opportunity to express their discontent and anger, and they wanted the CPC to stop polluting their environment. They did not care much about a higher level of environmental issues. After the initial phase of the movement when they had let out their anger toward the CPC, they became less emotional during the latter phases.

Secondly, after keeping a low profile for a short period of time, the CPC made a lot of efforts to make the community people believe that the CPC was taking the Hou-jin residents' opinion seriously. They used every available opportunity to make the Hou-jin residents be aware of how much they had improved the environmental conditions of the community.

Thirdly, though the AFNCC was the major organization that was responsible for the planning and execution of the movement, it had been difficult to integrate the community leaders to work together even from the initial phase of the movement. None of the leaders from any factions of the community considered the AFNCC to be operating efficiently. (Tsai Wan-fa 1990; Liu 1990).

Nien Hsih-lin from the Taiwan Green Peace Organization thought that the AFNCC was formed in haste. He felt that since the community people were emotionally excited during

the general assembly meeting, they nominated and chose the committee members without deep consideration (Nien 1990).

However, Liu Yong-ling thought the committee did cover the leaders of all areas in the community. The young activists did want the committee to include as many local leaders as possible and believed it was the only way to have the conservative leaders get involved in the movement (Liu 1990).

The AFNCC did include most of the leaders of the community such as the leaders of five precincts, members of municipal council from Hou-jin, and the opposition party activists (see Table 8, 9). But inclusion does not mean participation.

What Chou Fen-je (1989) pointed out in her thesis about how the conflicting interests of the factions affected community people's participation is more important. She said that the formal leaders of the community had a long history of collaborating with the ruling party. Since the CPC is owned by the government, the formal leaders also had very good relationship with its Kaohsiung refinery.

By bidding on the construction works of the Kaohsiung refinery, these leaders (such as the two municipal council members from Hou-jin) used to make a lot of profit (Chou 1990; Lin Chen-yi 1990). Therefore, though all of these elected leaders were members of the AFNCC, they would not have had a very radical position against the CPC. This was

why while the young activists were working hard to promote the movement, the elected leaders were reluctant in participating (see Chapter three). Without the formal leaders' involvement, many Hou-jin residents who were their followers withdrew after the initial phase of the movement (Lin Chen-yi 1990).

Table 8.--Members of the Anti-Fifth Naphtha Cracker Committee¹ (August 5, 1987--April 2, 1990)

Name	Age	Occupation
Huang Te-wang	37	None
Chao Hsen-sie	50	Construction
Chao Chaun	56	Lee Chang ²
Hsu Rong-te	39	Tourism
Lin Chen-yi	50	Lee Chang
Chen Chun-chie	55	Lee Chang
Chen Ming-rou	55	Lee Chang
Wang Wen-hsung	38	Lee Chang
Lee Yu-kun	33	None
Liu Yong-Ling	36	Tailor
Cheng Huai-ren	35	None
Wang Ching-chiang	41	Labor
Wang Hsin-chang	49	Business
Hunag Ling-cheng	57	Fishery
Tsai Kuo-ho	35	Labor
Tsai Chao-peng	34	Business
Huang Tien-seng	46	Politician (DPP ³)
Liu Mao-te	47	Municipal councilor
Chen Wan-dah	55	Municipal councilor
Chen Chai	62	None
Tsai Wan-fa	62	Manager

- Note: 1. All the members of the Anti-Fifth Naphtha Cracker were males.
 2. "Lee Chang" is the elected leader of a precinct.
 3. DPP, the Democratic Progressive Party, is the main opposition party in Taiwan.

Table 9.--Members of the Anti-Fifth Naphtha Cracker
Committee¹ (April 2, 1990--September 21, 1990)

Name	Age	Occupation
Kuo San-ping	43	Rice Shop Owner
Kuo Kai-tsun	37	Labor
Chen Wen-bing	45	None
Huang Min-hsung	48	None
Tsai Wan-cheng	55	None
Huang Chieh-tsun	56	Construction
Lin Ming-te	52	Construction
Wang Wen-Huang	35	None
Tsai Yu-cheng	31	None
Luor Gin-ju	35	None
Chen Wan-dah	47	Municipal councilor
Huang Tien-seng	46	Politician (DPP ³)
Tsai Chao-peng	34	Business
Huang Ling-cheng	57	Fishery
Liu Yong-Ling	36	Tailor
Lee Yu-kun	33	None
Wang Wen-hsung	38	Lee Chang ²
Chen Ming-rou	55	Lee Chang
Chen Chun-chie	55	Lee Chang
Lin Chen-yi	50	Lee Chang
Chao Chaun	56	Lee Chang

- Note: 1. All the members of the Anti-Fifth Naphtha Cracker were males.
 2. "Lee Chang" is the elected leader of a precinct.
 3. DPP, the Democratic Progressive Party, is the main opposition party in Taiwan.

Ownership of the Process

The movement was initiated by a small group of community activists. Though there were many outside helpers who came to the community, they did not dominate the process. When dealing with the external groups, the community activists did not have any difficulty in controlling the planning process and its implementation. According to the community leaders interviewed, the three external groups

involved, the Taiwan Green Peace Organization (TGPO), the Social Movement Office (SMO), and the Taiwan Environmental Protection Union (TEPU), all respected the community's autonomy (see Table 10).

Table 10.--The Community Leaders' Perception about the External Groups' Respecting the Hou-jin Community's Autonomy

	Group A ¹	Group B	Total
Positive	6 (100)	3 (50.0)	9 (75.0)
Negative	0 (0)	0 (0)	0 (0)
No Comments	0 (0)	3 (50.0)	3 (25.0)

Note 1. Group A are the interviewees classified as "young activists"; Group B are the less radical community leaders. Among the interviewees, there were 6 persons in each group. Numbers before the brackets are the frequencies, in brackets are the percentages.

Even without the interference of the external groups, it is still difficult to conclude that the community as a whole owned the movement. The ownership of the movement can be said to have been in the hands of a small group of community leaders, the young activists. As mentioned above, the leaders who were affiliated with the ruling party were not participating in the movement though they were the members of the AFNCC.

While the young activists were facing their problems of sharing their ideas with the community formal leaders, none

of the external helpers were able to help them to deal with the problem of expanding the community people's involvement. On the contrary, the helpers made their contact with the community only through the Huang, Liu, and Tsai group. The external groups were not able to make themselves known to the community leaders other than the young activists (Liau 1990; Nien 1990; Chen Hsiu-hsien 1990).

Learning Experience and Improvement of Community Life

Going through a rough process as the anti-fifth naphtha cracker movement was an experience that the Hou-jin residents never had before. They learned some knowledge and skills about community organization and anti-pollution work. Because of the anti-FNC movement, the community also gained some improvement in the community's environmental conditions and infrastructure.

Learned Skills and Knowledge

From the interviews with the community leaders, we know that the learning experience of the community includes the following aspects: (1) means and skills of expressing the community people's will, (2) knowledge about environmental protection, and (3) skills of mobilizing the community people to participate in public affairs.

Means and skills of expressing community opinion

With the help of external groups, the community used all kinds of methods to make their opinion be heard. They held many public gatherings and speeches, rallies and demonstrations in and out of the community. They blocked the west gate for three years and the north gate for a shorter period of time. They also went to Taipei, the capital, to present their appeals to the central government (see Chapter Three). The skills of writing appeals, editing pamphlets, and designing banners and slogan signs were also among the skills they learned from external groups.

Since the activists knew the newspaper could have large influence on the public and the government, they learned how to contact the press and gain support from some journalists (Wang 1990; Chen Shang-chia 1990).

When the activists of the AFNCC became comfortable with these skills, they even claimed that they are capable of doing everything by themselves (Liu January 1990).

The knowledge about environmental pollution and protection

Though the community had been exposed to the pollution caused by the Kaohsiung oil refinery, people in the community had very little knowledge about environmental pollution and protection. Because of the anti-FNC movement, they have improved in their knowledge of environmental issues (see

Table 11). Though the improvement of the community people's knowledge of environmental problems had been confirmed by the community leaders, to further understand to what extent they had been aware of environmental problems and what was the content of their learned knowledge of environmental issues will need more investigation.

Table 11.--The Community Leaders' Value on the Community's Development in Knowledge Concerning Environmental Protection

	Group A ¹	Group B	Total
Positive	6 (100)	5 (83.3)	11 (91.7)
Negative	0 (0)	0 (0)	0 (0)
No Comments	0 (0)	1 (16.7)	1 (8.3)

Note 1. Group A are the interviewees classified as "young activists"; Group B are the less radical community leaders. Among the interviewees, there were 6 persons in each group. Numbers before the brackets are the frequencies, in brackets are the percentages.

Mobilizing community people to participate

Since religious activities were flourishing in the community, it had never been difficult to invite people to participate in the temples' affairs. But mobilizing community people to participate in socio-political affairs was a new trial. The activists made good use of the broadcasting system in the community. The broadcasting system, with high power speakers located at several corners

of the community, was very effective that every one in the community could hear when there was an announcement. In the past, it was mostly used for the temples' affairs. During the anti-FNC movement period it was frequently used to assemble the community people whenever there was a conflict between Hou-jin and the CPC or special events in which they wished community people to participate. Besides the installed broadcasting system, the activists also used trucks, with microphones and speakers set up on them, to go around the community to mobilize the community residents (Wang 1989). As the activists learned how to make fliers, pamphlets, banners and slogan signs, all these materials were distributed in the community as a means of community education and mobilization.

Since the Hou-jin community still possesses traditional characteristics, folk religion activities are abundant, and the community people tend to comply with the will of the gods. The activists, on several occasions, also successfully mobilized community people in the name of the gods (Min-jong Daily August 12, October 31, 1987; AFNCC 1990; Liberty News May 8, 1990).

Improvement of Community Life

The learning experiences of the community can contribute to the improvement of community life a great deal if the community can make good use of them in the future.

Some improvement of the community's life already happened during the movement. These improvements were mostly due to the efforts made by the CPC, and are elaborated below.

In order to minimize the Hou-jin resident's discontent with the CPC so that they could begin its construction of the fifth naphtha cracker, the CPC spent a large amount of money on improving the environmental conditions of the community and trying to build up a better relationship with the community. Efforts that the CPC made included: (1) air pollution control, (2) wastewater treatment, (3) groundwater remediation, (4) noise abatement projects, (5) resource recovery and solid waste disposal, and (6) a good neighbor project. The budget for environmental improvement within a three year period, from 1989 to 1991, was \$ 6 billion N.T. (more than \$ 222 million U.S.) and for the good neighbor project was \$ 1.38 billion N.T. (about \$ 51.3 million U.S.) (CPC 1990a(?)). The CPC also deposited a fund of \$ 1.5 billion N.T. (about \$ 55.5 million U.S.) which will generate about \$ 150 million N.T. (\$ 5.5 million U.S.) interest yearly for the Hou-jin's community development use (Taiwan Times September 23, 1990).

Examples of the endeavors that the CPC made to improve the community's quality of living conditions are: (1) installation of tap water in the community so that the Hou-jin residents do not need to drink the contaminated ground water, (2) relocation of the elevated

flare of the No. 2 naphtha cracker to reduce its noise impact on the neighbors, (3) development of a 60 meter wide buffer green belt around the boundary of refinery, (4) establishment of an environmental monitoring station near by the community, (5) help to the community with infrastructure constructions (CPC 1990b). More details of the CPC's efforts of environmental improvement can be seen in appendix 3.

The Helping Process

Whose Goals Were Served by the Intervention

From the analysis above, we can see the intervention of the three external groups, the TGPO, the TEPU, and the SMO, were basically serving the community people's goal-- preventing the erection of the fifth naphtha cracker. But by reviewing the bylaws and publications of the three groups, we can also see that all the three external groups had goals that were broader than those of the community. The TGPO and the TEPU were concerned not only with anti environmental pollution issues, but also with environmental protection and ecological issues.

The main tasks of the TGPO were: (1) to protect the ecology and environment of Taiwan, (2) to prevent pollution and public hazard in Taiwan, and (3) to promote the

environmental protection and peace movement in Taiwan (TGPO 1990).

The TEPU, in Article Two of its bylaws, states its goals to be: to organize people who are concerned about environmental protection and to promote the environmental protection movement in order to maintain Taiwan's ecological environment (TEPU 1987).

Both of the two groups' concerns were more preventive rather than just after care, and both groups considered the anti-FNC movement as a good opportunity to educate Taiwanese people about environmental protection (She 1988; Nein 1990).

Though the SMO emphasized the importance of local people making decisions for their community's welfare, its concern was not limited to the Hou-jin community alone. It cared for all the area along the Hou-jin creek and tried to organize the communities up and down the stream of the Hou-jin creek for the anti-pollution movement (Chen Hsin-hsing 1989).

With those higher level ideals, the TGPO and the TEPU expressed their disappointment when some of the community leaders who were activists in the beginning of the movement became compromising at the latter phases of the movement (Nein 1990; Liao 1990). In other words, the TGPO and the TEPU did try to influence the orientation of the movement, to "upgrade" the level of the movement from an anti-pollution to a environmental protection one.

Capabilities the External
Groups Enhanced in
the Community

From among all the external groups, Nein Hsih-lin from the TGPO was the person who stayed and worked with the community for longest time. As mentioned previously, he helped the activists with writing appeals, pamphlets, and signs of slogans. He also brought college students into the community to help with the movement and educational activities.

The TEPU had several college technology faculty members as its members. They became useful resource persons for the community to gain knowledge about petrochemical engineering and environmental pollution and protection. The information they provided was helpful for the movement; it enhanced the community's capability when they had to debate with the CPC and the Ministry of Economic Affairs.

The community activists cooperated with the SMO when it was working on organizing the Nan-tze Environmental Protection Alliances. Through the cooperation, they learned much about organizing and making alliances, though they did not seem to make good use of the knowledge (Liu 1990; Tsai 1990).

The external helpers had contributed many skills and knowledge to the community during the movement. However, since all three groups made their contact with the community

only through the young activists and consequently the capabilities were developed only within the activists. The community leaders from the more conservative faction were less aware of what capabilities they had developed from the movement (see Table 12).

Table 12.--Community Leaders' Perception on Development of the Community's Capability

Item	Group A ¹		Group B		Total	
	P ²	N	P	N	P	N
Meeting & Decision Making	3 (50)	3 (50)	1 (16.7)	5 (83.3)	4 (33.3)	8 (66.7)
Mobilizing Community People to be involved in Community Action	6 (100)	0 (0)	2 (33.3)	4 (66.7)	8 (66.7)	4 (33.3)
Making Pamphlets, Fliers, & Posters, etc.	6 (100)	0 (0)	3 (50)	3 (50)	9 (75.0)	3 (25.0)

Note: 1. Group A are the interviewees classified as "young activists"; Group B are the less radical community leaders. Among the interviewees, there were 6 persons in each group.
 2. The "P" (positive) means the interviewees were aware of improvement, the "N" (negative) means the interviewees were not aware of improvement, numbers in brackets are the percentages.

Dependency

Though most of the formal leaders and young activists thought they would still need external help for future development (Table 13), they actually became more independent in managing the community's affairs. The reasons for not being dependent were: first, they were financially independent during the anti-FNC movement process; all the

leaders interviewed thought that helped keep the community from being manipulated by external groups (Table 14). Secondly, they had progressed a great deal in terms of organizing themselves and expressing their own ideas.

Table 13. Community Leaders' Perception on Needing External Help in the Future

	Group A ¹	Group B	Total
Positive	6 (100)	4 (66.6)	10 (83.4)
Negative	0 (0)	1 (16.7)	1 (8.3)
No Comments	0 (0)	1 (16.7)	1 (8.3)

Note 1. Group A are the interviewees classified as "young activists"; Group B are the less radical community leaders. Among the interviewees, there were 6 persons in each group. Numbers before the brackets are the frequencies, in brackets are the percentages.

Table 14.--Community Leaders' Perception on the Correlation between Financially Self Sufficient and Autonomous

	Group A ¹	Group B	Total
Positive	6 (100)	4 (66.6)	10 (83.4)
Negative	0 (0)	0 (0)	0 (0)
No Comments	0 (0)	2 (33.4)	2 (16.6)

Note 1. Group A are the interviewees classified as "young activists"; Group B are the less radical community leaders. Among the interviewees, there were 6 persons in each group. Numbers before the brackets are the frequencies, in brackets are the percentages.

Types of External Assistance

As Warner stated: "Just as there is no single approach to community development, there is no single role that describes all community development professionals" (1989, 119). Tempered by the situation that their target community was facing and their value to the anti-FNC movement, the three external groups were acting not just a single role during their assisting process. They played the roles of consultants and advocates during the movement. They were all invited by the community young activists to get involved in the movement. They provided the necessary skills and knowledge to the community activists. Besides providing help requested by the community, the external groups also tried to influence the community on the orientation of the movement. As there existed factions in the community, all three groups took sides during the movement. They all supported the young activists, believing what they had been doing was the best for the community (Chen Hsiu-hsien 1990; Nien 1990; Liau 1990).

The Unexpected Consequences

One consequence caused by the anti-FNC movement and mentioned by many of the community leaders was that the gap between factions in the community widened and the solidarity of the community became weaker (Table 15). Some leaders of the community indicated that the younger

generation now do not respect the older ones as they used to (Tsai Wan-fa 1991; Tsai Kuang 1990; Lee Yu-Kun 1991). The strong solidarity that the community had for a long time does not exist anymore. The young activists blamed this on the formal leaders' collaboration with the Chinese Petroleum Corporation and the Kuomintang. They thought the formal leaders considered the ruling party's will more than that of the people in the community; they were the ones who betrayed the community and made the movement fail (Liu 1990; Tsai Chao-peng 1990).

Table 15.--Community Leaders' Perception on the Community's Improvement in Solidarity

	Group A ¹	Group B	Total
Positive	2 (33.3)	2 (33.3)	4 (33.3)
Negative	4 (66.7)	4 (66.7)	8 (66.7)
No Comments	0 (0)	0 (0)	0 (0)

Note 1. Group A are the interviewees classified as "young activists", Group B are the less radical community leaders. Among the interviewees, there were 6 persons in each group. Numbers before the brackets are the frequencies, in brackets are the percentages.

The same phenomena can be interpreted differently. Liu Youn-ling did not consider the change to be all negative. He thought the Anti-FNC movement also caused a process of power redistribution in the community; the privileged were no longer dominating all resources in the community. They had to listen to the younger generation's opinion.

CHAPTER FIVE

CONCLUSION

The community leaders' responses were varied when they were asked if they thought the Anti-Fifth Naphtha Cracker Movement was successful or not; most of them avoided giving a simple and direct answer. Since the fifth naphtha cracker was finally under construction in September 1990, they had to admit that the movement literally failed. However, most of the community leaders thought that the movement forced the Chinese Petroleum Corporation to make a lot of efforts in improving the community's environmental conditions. The leaders in general gave the movement positive value; even those who were from the "compromise seeking" side confirmed that the movement has made its contribution to the community; without the movement, the CPC might never have cared about what the community people suffered from (Tsai Wan-fa 1991; Lee Yu-kun 1991).

The three external groups involved did have their contribution to the community during the movement. However, some shortcomings were obvious, too, when what they have done is examined by the characteristics of a community development process.

This chapter will propose some conclusions about the anti-FNC movement out of what has been illustrated in

Chapters Three and Four about the process of the movement. The content of this chapter will include: (1) a comparison of the movement and an ideal community development process, (2) the external groups' contribution and shortcomings when helping the community with the movement, and (3) the lessons that a community development worker can learn from the movement.

Finally, in order to have a comprehensive understanding of what impact the anti-FNC movement made in the community, some aspects of the Hou-jin's community life will be worthwhile looking into in the future. This chapter will also give some suggestions for further studies.

The Anti-FNC Movement and a Community Development Process

Compared to the characteristics of an ideal community development process, illustrated in Chapter One, the Anti-Fifth Naphtha Cracker Movement had its accomplishments and shortcomings. Characteristics that the movement met were:

1. The movement had a clear goal of preventing the fifth naphtha cracker plant.
2. The community young activists took the initiative for the movement and the community people were participatory in at least the first phase of the movement.
3. The community people, especially the young activists in the movement, have learned some methods and

skills, which they were unfamiliar with before the movement started.

The community's environmental conditions were greatly improved due to the anti-FNC movement. The setting up of a community development fund can be a great help for the community's future development.

4. External groups provided necessary knowledge to the movement. They, though with higher level ideas in environmental protection issues, respected the community's autonomy during the process. The type of roles the external groups played can be described as a mixture of consultant and advocate.

The shortcomings of the movement were:

1. The activists were not able to share their latter developed goals with other leaders or the general public in the community because they believe the formal leaders were collaborating with the government and the Chinese Petroleum Corporation, the activists also thought the general public in the community did not have the ability or interest to learn about a complicated set of goals; there was a gap between the activists and conservative leaders in terms of how far the movement should go before they would call it a success.

2. The community activists, though claiming that the whole community was on their side throughout the movement, were not able to keep the community people's participation in

the activities of the latter phases.

3. Community development is a process of empowerment as well as improvement. Though the community, through the movement, had improved their living conditions, the learning experience of community organizational work seems limited to a small group of people. More efforts need to be done (e.g. some educational and training courses on civil rights, environmental protection, and community organization,) so that the movement can be called a developmental one.

4. Though the external groups contributed knowledge, methods, and skills to the community, one important element was missing during their helping process. It seemed that none of the external groups emphasized the importance of participation; the external groups did not help the activists with any strategy for increasing participation, nor did they expand their channel of contact in the community, they cooperated only with the activists.

The External Groups' Contribution and Shortcomings

During the time period of the anti-FNC movement, each of the external groups involved had a certain period of time as the major assisting group for the community. The Taiwan Green Peace Organization assisted the community mainly from July of 1987 to the end of 1988. The Social Movement Office contacted the Hou-jin community as early as October of 1987,

but not until the end of 1988, when the TGPO left the community did they have an opportunity to have a deeper relationship with the community. Though the SMO kept their contact with the community until the end of the movement and helped the community with editing and circulation of the pamphlet, "Q and A for the Anti-FNC movement", they actually assisted the community only until June of 1989. Because the SMO's interest was to make the anti-FNC movement a part of their "Hou-jin creek area purification movement", they had a larger area to work with and therefore limited their time of involvement in Hou-jin.

The Taiwan Environmental Protection Union also began their contact with the community in October of 1987. However, since they did not have a delegate staying in the community as Nien Hsih-lin of the TGPO, nor had they the convenience of being geographically near to the community as did the SMO, they had to wait until the beginning of 1990, when the other two groups had less intensive interaction with the community, to become the major assisting group in the movement.

The TGPO contributed their experience in anti-pollution movements they previously learned in another community (Lu-kang), which included skills in publicity campaigns and approaches for organizing community activities. The SMO, through working with the community leaders in the "Hou-jin creek purification movement", helped the community activists with the approaches to making alliances with others. Somehow

this learning experience did not seem to enable the activists to expand the participation of the anti-FNC movement in the community. The TEPU provided the knowledge of petrochemical engineering and environmental pollution and protection. They also helped to organize several community gatherings during the last phase of the movement. None of the three groups were able to help the community overcome its problem of community integration, nor did they emphasize gaining broader participation from the community people.

Besides the conflicts between factions in the community, there existed other factors that made the external groups' mission even more difficult. The CPC, supported by the Ministry of Economic Affairs of the government, was a strong opponent to the movement. The CPC used all means to gain support from the community. Meanwhile, in order to speed up the execution of the fifth naphtha cracker plan, the government threatened the community activists and the external groups that they might be charged by criminal law for disturbing social order (Taiwan Times 23 September, 1990).

Lessons for the Community Development Worker

There are some lessons a community development worker can learn from the process of the anti-FNC movement:

1. An external group needs to take the community people's interest and educational level into account, no

matter what type of roles it wants to play when assisting a community. As one of the well-known principles for community development workers states: start from where the people are.

2. Conflicts between factions in a community can affect community participation, and therefore, can affect the outcome of a community development process. Skills for conflict resolution and negotiation are things with which a community development worker needs to be equipped.

3. Since it is one of the most decisive factors that can constrain the outcome of a community development process, the political environment needs to be taken into consideration when starting an intervention and doing evaluation afterwards.

4. The Community's religious ceremonies and traditional activities can be the arenas for making appeals to the community people; a community development worker needs to know of these in order to make good use of them. Both the Anti-Fifth Naphtha Cracker Committee and the Chinese Petroleum Corporation are good examples of making use of those opportunities.

Suggestions for Further Studies

Some studies would be valuable for further understanding the impact of the anti-FNC movement on the community. Some suggestions are: (1) Looking at the elections in the coming years, which can show the change of

power structure in the community, (2) Studying the management of the community development funds, which can indicate the community's organizational work and solidarity, and (3) Examining the environmental conditions of the community and the health conditions of its people, which can indicate the actual improvement of the community's environmental conditions.

Though, after three year's struggle, the Anti-Fifth Naphtha Cracker movement finally ended, what the community learned during the movement will be valuable resources for them to face challenges in the future.

APPENDIX 1

QUESTIONNAIRE FOR COMMUNITY LEADERS

No. ___ Date _____

A. General Information:

1. NAME: _____ 2. SEX: M ___ F ___ 3. AGE: _____
4. PRECIENT: (1) Jin-ping ___ (2) Ren-tien ___ (3) Yu-ping ___
(4) Gin-tien (5) Rei-ping ___
5. OCCUPATION _____

B. A GENERAL EVALUATION TO THE COMMUNITY ACTION

1. How would you evaluate the community's action for the Anti Fifth Naphtha Cracker Movement during July 1987-September 1990? Do you think it was a successful one or not? Why?
2. Do you think the community has developed in terms of the following aspects of community life?
- (1) In expressing local people's will. Yes ___ No ___
- (2) In obtaining knowledge concerning environmental protection. Yes ___ No ___
- (3) In developing community solidarity. Yes ___ No ___
- (4) In participating public affairs Yes ___ No ___

C. COMMUNITY'S INTERACTION WITH EXTERNAL GROUPS

3. Do you know any of the following groups which have come to the community to help?
- (1) Taiwan Green Peace Organization (TGPO) Yes ___ No ___
- (2) Taiwan Environmental Protection Union (TEPU) Yes ___ No ___

(3) Social Movement Office (SMO) Yes__ No__

(4) Other?

4. Do you think Hou-jin still need any of those group's help in the future? If yes, in which way?

(1) Taiwan Green Peace Organization (TGPO) Yes__ No__

(2) Taiwan Environmental Protection Union (TEPU) Yes__ No__

(3) Social Movement Office (SMO) Yes__ No__

5. Do you think those external groups came to the community are for (a) the well-being of the community or (b) for their own interests? (a)___ (b)___

6. Did the community ever get financial support from outside of the community? Yes__ No__

7. According to your knowledge, has the money for the movement always been enough? Yes__ No__

8. Did those external groups understand and respect your idea when they worked with you? Yes__ No__

9. Do you think the community's financial self support is the main reason that kept the community from external groups' manipulation? Yes__ No__

10. Can you recall any situation in which external groups had conflict with you? Why did it happen? What was the consequences? Who gave in?

D. THE COMMITTEE IN DEVELOPMENT

11. Do you think the committee has progressed in organizing

meeting and making decision since July 1987? If yes, did any of the following groups help in this?

1.TGPO 2.TEPU 3.SMO

12. Do you think the committee has developed its capability in mobilizing people to get involved in community action? If yes, did any of the following groups help in this?

1.TGPO 2.TEPU 3.SMO

13. Do you think the community has developed its skill in making posters, fliers, and brochures? If yes, did any of the following groups help in this?

1.TGPO 2.TEPU 3.SMO

APPENDIX 2

QUESTIONNAIRE FOR EXTERNAL GROUPS

1. When did your group get involved in the movement?
2. Under what kind of situation did you intervene? Were you invited or you did you take the initiative? By whom, if you were invited?
3. What was your impression about the community when you first came to the community.
4. Who are the persons you have been dealing with most throughout your intervention?
5. What was your strategy or plan when you came to the community?
6. In what aspects did you believe you could help the community? What are the things you believe you have done to help them?
7. What is your observation about the development of the community throughout these three years?
8. When did you leave the community? Why did you leave?

APPENDIX 3

CHINESE PETROLEUM'S EFFORTS IN ENVIRONMENTAL IMPROVEMENT (September 1987--December 1989)

Air Pollution Control

1. Installed a 150M high common stack to enhance better dispersion of the emission from boilers.
2. Substituted of fuel oil with liquefied natural gas (LNG) to cut down the total amount of SOx emission.
3. Installed De-NOx facilities or low-NOx burners to lower the NOx emission quantity.
4. Put in gas recovery system and ground flare to the existing elevated flare to reduce the chance of emitting dark smoke.
5. Improved the smell emitted from the sulfur factory.
6. Used seal system in wastewater treatment plants to prevent emission of unpleasant smell.
7. Relocated the elevated flare of No. 2 Naphtha Cracker.
8. Improved dust problem in the second Fluid Catalytic Cracking Unit.

Wastewater Treatment

1. Improved the appearance of effluent water by Puri-step process.
2. Revamped the oily drain system and CPI/API to enhance better separation of oil and water.
3. Developed a new storm water buffering system to prevent contaminated storm water from fouling up the effluent water quality.
4. Improved water-cleaning system to improve the appearance of water.
5. Installed waste-sodium oxygenization plant and pre-treated the sodium contained wastewater to increase the efficiency in eliminating smell.

Groundwater Remediation

1. Set up groundwater monitoring system.
2. Revamped all storm drains by reinforced concrete lining to prevent wastewater contaminating the groundwater.
3. Conducted hydrogeologic survey to evaluate the geologic and hydrologic condition of the plant site.
4. Employed the ISI company from the United States to investigate the groundwater area, dirt and the polluted conditions of groundwater in order to find the source of pollution and set up improvement plan.

5. Installed pipe water system for 1900 Hou-jin families for free to eliminate the necessity to drink groundwater.

Noise Abatement Projects

1. Put up a 20 meter high sound proof wall to lower the noise level in the neighborhood.
2. Relocated the elevated flare of No. 2 naphtha cracker to reduce its noise impact on the neighbors.
3. Developed a 60 meter wide buffer green belt around the boundary of refinery.
4. Hired renown foreign consulting firm (West Germany G+H Company) to design the long term noise abatement program.
5. Installed soundproof coverage on the high-noise producing facilities.

Resources Recovery and Solid Waste Disposal

1. Conducted a general survey of the properties and quantities of wastes.
2. Minimized waste production by changing process conditions or operation improvements.
3. Searched for possible reuse routes of wastes.
4. Install incinerators and minimize waste volumes.
5. Developed hazardous landfill for the final disposal of hazardous wastes.

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