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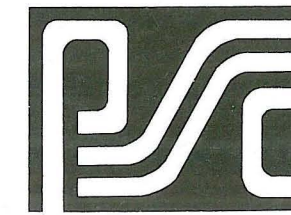
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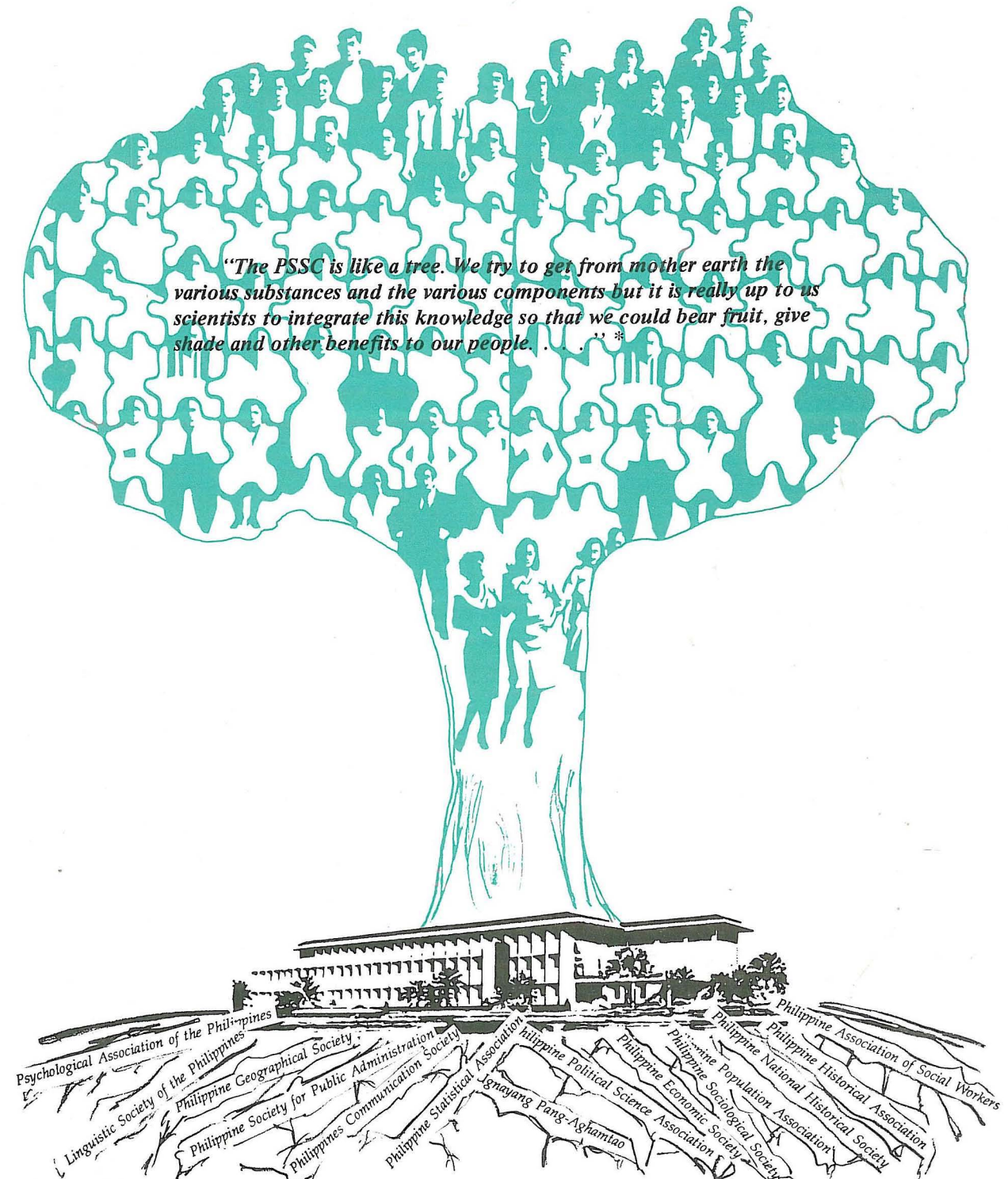
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"The PSSC is like a tree. We try to get from mother earth the various substances and the various components but it is really up to us scientists to integrate this knowledge so that we could bear fruit, give shade and other benefits to our people. . . ."

* Former Prime Minister CESAR E. A. VIRATA, Keynote Speaker, PSSCenter Inauguration (16 May 1983)

EDITORIAL

ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

Rosario Mendoza Cortes, Chairperson, Social Issues Committee

The year 1993, marking the Silver Jubilee of the founding of the Philippine Social Science Council, was a time to take stock of the role of the organization in the life of the nation. As the umbrella organization of professional social science associations in 13 disciplines, the PSSC has principally taken an advocacy role on social science issues confronting the nation. The year 1993 also marked the first half of the decade celebrating the Centennials of the Philippine Revolution and Nationalism. As the Republic prepares to celebrate the centennial of its declaration of freedom from colonial rule, what is the most crucial issue that the nation faces? Admittedly, it is the vexing problem of balancing economic growth for a nation 60-million strong with the conservation of the environment in an archipelago of diminishing resources.

For its Silver Jubilee theme, the PSSC thus chose to join the various sectors of the society in advocating the preservation and conservation of the environment towards a sustainable development of its resources for nation's populace. This was the theme of the PSSC National Symposium on Environment on 29-30 January that launched the Silver Jubilee celebration. It was also the theme of the Third National Social Science Congress (NSSC III) in 9-10 December that ended the Jubilee Year. While the January PSSC Symposium examined the issue of the Environment and Sustainable Development from the perspective of the social sciences, the end-of-the-year NSSC III was a forum for theory building in the social sciences on empowerment and accountability for sustainable development.

The two conferences brought out several facts that accentuate the issue of conserving the country's environment towards the sustenance of its increasing populace. For example, only 6.16 million hectares remained of the country's natural forests in 1990. At the rate the denudation of forests is going on, there will be no forests left in ten years time. And yet our legislators still continue to debate on the merits of total logging ban over selective logging as if we still have the luxury of time. But whether it is a total ban on logging or selective logging that will be approved; still, the bottomline is that, what is needed is a vigorous enforcement of the law. Only then can the policy on the conservation of our forests prevent the desertification of our land.

The Philippines, an archipelago of more than 7,100 islands, with an abundance of internal seas, gulfs and bays and terrestrial lakes, rivers and swamps, has 211 million hectares of maritime resources which is seven times bigger than its more than 30 million hectares of land resources. Yet it was revealed that among the nation's subsistence fisherfolk and their dependents, fish catch has dipped from an average of 20 kilograms in the 1960s to just one to three kilos today. In coastal villages so near the natural habitat of fish, 75 percent of children aged one to four years suffer from malnutrition. What a biting irony that hunger should stalk the islands. This has been traced to a policy adopted during Martial Law years that banked on the optimism that the industrialization of the fishery sector and the exploitation of its export potential would stimulate economic growth and redound to the national good. This policy opened the floodgates to the massive exploitation of fisheries under PD 704 leading the whole country to the wrong direction. Consensus is now shaping behind what fishery policy should target — economic development and sustainability — but there is discord and dissonance on what exactly fishery policy should be.

Filipino social scientists, particularly those with strong ecological dimension, convincingly argued that the paradigm of development that the Philippines followed and is still following is simply a model from the western world. The challenge now is the quest for a sustainable development framework that aims to temper the excesses of economic development while arguing for a wide but sustainable use of natural resources. It has been suggested that policy planners look into the traditional resource management systems of peoples like the Aetas and the Cordilleras. These have been shown to be effective and adaptive in allowing people to survive and thrive within their given sociocultural and biophysical conditions.

These are among the concerns that have been brought out in the PSSC sponsored National conferences held during the Silver Jubilee year. Government planners have presented a Framework Plan which is anchored on the strategy of "Export-Led Balanced Agro-Industrialization". It is purportedly designed with a conscious integration of environmental concerns in the planning and policy formulation stages. Other papers presented had to do with industrial policies for industrial development and a new industrial order for labor and industry that will bring about sustainable development. As the nation faces the beginning of another century, social scientists of the PSSC can only resolve to help our society in meeting the challenges of the next century. □

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ENVIRONMENT, SOCIETY AND DEVELOPMENT: PHILIPPINE REPORT ON SOCIAL SCIENCE PERSPECTIVES AND SUSTAINABLE DEVELOPMENT

Amaryllis T. Torres

"The land is entrusted by our ancestors for the life of succeeding generations. It consists of everything below and above it like air, sunshine, darkness, moon and stars."

[Apo Tomas, a Bagobo elder]

"Our land comes first. We T'boli are nothing, without our land. Everything must come after recognition of our ancestral domain ownership."

[Crispin Simpal, a T'boli]

I. Introduction

'Caring for the Earth'

'Caring for the Earth' is the battlecry of development activists today. It is an advocacy for strategies that improve the quality of human life within the carrying capacity of the ecosystem. It is an aspiration to meet the needs of present societies without jeopardizing the heritage of future generations. It is a commitment to progress unfettered by the mindless exploitation of human and natural resources.

'Caring for the Earth' encompasses a concern for judicious, equitable and responsible development of both natural and human resources. It underlies the global strategy for sustainable development.

The Earth Summit

Sustainable development, as it is widely understood today, refers to "a dynamic process in which the development and utilization of resources, orientation of technological development, institutional change and direction of investments are in harmony and enhance both current and future

potentials to meet human needs and aspirations" (UP National Assessment Report on the Environment, 1992).

In June 1992, the United Nations Conference on Environment and Development (UNCED) was held in Rio de Janeiro, Brazil. More popularly known as the "Earth Summit", it was the culmination of a series of preparatory activities since 1989, when the U.N. General Assembly passed a resolution for nations to take a balanced and integrated approach to environment and development issues.

The "Rio Declaration" is one of the landmark documents from the UNCED. It contains statements of principles for sustainable development, with the underlying principle that a more balanced power relationship must be upheld between developed and developing nations. Among the principles of the Rio Declaration are the right to development (Principle 3), the differentiated responsibilities of member-states in the pursuit of sustainable development, especially since pressures on the global environment come largely from developed countries (Principle 7), the need for States to cooperate so that activities and substances which cause severe environmental degradation that can be harmful to human health are not relocated or transferred to other States (Principle 14), and Principle 24 which states that "Warfare is inherently destructive of sustainable development. States shall

therefore respect international law providing protection for the environment in times of armed conflict..." (from Ganapin, 1992).

The principles of the Rio Declaration are the building blocks for Agenda 21, the comprehensive program of action on sustainable development adopted by the UNCED participants. Part I, entitled "Social and Economic Dimensions" is of particular relevance to the social sciences. It focuses on strategies for combating poverty, changing consumption patterns, demographic dynamics and sustainability, protection and promotion of human health conditions, promotion of sustainable human settlement development, and the integration of environment and development concerns in the State's decision making (Ganapin, 1992).

In addition, the Philippines and other countries argued for the insertion of provisions in Agenda 21 on endogenous capacity building. This includes the transfer of facilities that strengthen that capacity (e.g. gene banks and laboratories for biotechnology), the recognition of indigenous know-how, and fair compensation in the use of these technologies. (Ganapin, 1992).

II. Social Science and Sustainable Development

The concept of sustainable development has stirred debate and discussion in the social sciences since the 70s. In fact, the

¹Country Paper presented at the Tenth Biennial Conference of the Association of Asian Social Research Councils, Kawasaki, Japan, 5-12 September 1993. Dr. Torres is President of the Executive Board, Philippine Social Science Council.

²From the fieldnotes of L. Duhaaylungsod and R. Piopino, October 20-26, 1992 (see Duhaaylungsod, 1993).

Focus of Agenda 21 is a mere reflection of the concern that social sciences have taken on the myriad relations between human society, economic growth and development.

Mitlin (1992) traces the discussion on sustainability to the time when *Limits to Growth* (Meadows, 1972) was first published, followed by Ward and Dubos' *Only One Earth* (1972) and Schaumacher's *Small is Beautiful*. These authors sounded the first warnings on the potential conflict between strategies of economic growth in a market-driven world, on the one hand, and concerns for environmental conservation, on the other.

More recent discussions have focused on some of the following issues:

A. "Who is to decide the limits of sustainability?"

One pressing issue is responsibility for defining the limits of sustainability. For Redclift (1987), sustainable development means more than a compromise between the natural environment and economic growth. It also means that sustainability has structural and natural origins, socially constructed by groups with

different degrees of power and conflicting economic interests.

Similarly, for Adams (1976), sustainable development is not only about the way the environment is managed. More importantly, it is about who has the power to decide how it is managed. Hence, 'bottom-up' participatory decision making is considered the best political framework to allocate and manage environmental resources (in Barrameda, 1993).

In the Philippines, initial moves have already been taken to invoke participatory, bottom-up approaches in managing natural resources. One such effort is in the area of community management of forestry resources. (see box article below).

B. "Who has done the most damage to the environment?"

Some would contend that, because of grinding poverty and their inability to engage in mainstream economic production, poor marginalized people are among the culprits of environmental degradation. They exhaust the natural resources to keep themselves from starving (Barrameda, 1993).

It is stated, for instance, that upland indigenous peoples are

heavily responsible for the depletion of forest and mountain resources, with their practices of swidden farming and traditional small-scale mining. On the other hand, development scholars and activists point out that the large-scale logging companies as well as corporate mines do more harm to the environment in one to ten years of operation than the indigenous peoples have over the centuries (Caballero, 1993; Duhaylungsod, 1993; Corpus, 1993).

Another face of this debate focuses on the relationship between the North and South, the colonialist and their colonies. Third World social scientists declare that the expansionist policies of Europe and other colonialists were premised on their need for raw materials (Mitlin, 1992). Thus, Asian, African and American societies were placed under Western dominion in the 16th to the 19th century in order that the colonialists could exploit the natural resources in these continents according to their prevailing appetites and consumption patterns.

Little has changed since the colonial period. Today, global market economics continues to

Community Management of Forest Resources

A Masterplan for Forestry Development has been prepared to guide the long-term development of the forestry sector in the Philippines.

Scenarios for forest product requirement and supply, amelioration of the environment, and conservation of biodiversity have been developed and translated into programs to meet the desired objectives (Serna, 1993:5).

An important objective of the plan is people's participation in forestry development, management and utilization. Through "people-oriented forestry," it is hoped that the degraded forests will be rehabilitated through the collaborative efforts of the local communities. Furthermore, it will promote equitable access to opportunities in forest developments, as well as in the sharing of benefits from forest resources.

Communities selected as partners in the Community Forestry Program are those which have demonstrated capabilities

for organized efforts. Usually, such local associations are assisted by social development organizations, also called non-governmental organizations (NGOs), which have established linkages with government bureaus (CFP, 1993).

Together, the community, the NGOs and government are expected to work together to devise a Community Resources Management and Development Plan. The Plan will form the basis for grants, loans, technical services and livelihood assistance programs. (The basic strategy for implementing the plan is community organizing. Through this people-based approach, talents and resources of the local community are to be harnessed through their direct participation in the planning, implementation and evaluation of the community resource management project.

Since 1991, several hundred of such projects have been launched in various areas of the country.

dictate what goods are to be processed from natural resources. And, as in the past, it is the white man, as well as new Asian 'colonialists', whose lifestyles create insatiable needs for the natural products of the Third World — including foods, metals and wood products.

The dilemma posed by large-scale resource development is illustrated aptly by the debate on the long-term (sustainable) impacts of corporate mining in the mountains of the Cordilleras. (see box article below).

C. Are economic growth and environmental conservation contradictory goals?

Finally, the debate revolves around the question of which is primary: the natural environment or basic (and not so basic) human needs? sustainable development or economic growth?

Previously, there were widely contrasting views on this matter. For some, economic growth was considered primary to sustainable development. For others, economic growth was deemed possible only with the application of sustainable strategies for development. Today, however, there is general agreement that the two are

complementary rather than contradictory concepts.

Interaction between people and their environment has been transformed through time. Presently, the relationship between the human and physico-chemical ecosystems has reached unprecedented increases in terms of rate, scale and complexities of the interaction.

The confrontation between environmental conservation and economic growth also involves multiple linkages, e.g., feedback among energy consumption, agriculture and climatic change. It has also escalated onto a global scale, so that pollution is no longer a localized incident; it may involve several countries. What were once thought to be relative reversible damages now affect several generations, such as the problem of radioactive waste disposal (Luna, 1993:1).

Indeed, from a history of specialization, social and physical sciences are presently moving towards unity and holism in studying the ecosystem. The basic premise of ecological science, therefore, is that humanity forms only one of the various ecosystems existing on our planet. It must,

therefore, respect the principles of ecology for the sustainability of life on the planet.

Principles of Ecology as Applied to Sustainable Development

Drawing heavily from the tenets of ecological science, several key concepts underlie the meaning of "sustainable development." Among these are the principles of interdependence, holism, non-hierarchical relations, and process (Torres, 1993).

Interdependence

All forms of life on the planet are important, and its separate subsystems must operate in synergy. Thus, the physical environment should not be regarded as inert, mindless, or rigid. It is not the 'deterministic machine' that Newton conceived of (Ferkiss, 1969). The human subsystem is only one component of the ecological system. Therefore, it cannot and should not assume superiority over nature.

Interdependence between humanity and nature is aptly expressed by elders from the Bagobo and T'boli tribes, two of the few remaining indigenous communities in Southern Philippines. Apo Tomas says (from Duhaylungsod,

Open-Pit and Bulk Mining: Their Impacts on Human Settlements

One of the largest mining companies in the Philippines has maintained mining operations in Benguet province since the early part of this century. Lately, they started large-scale open-pit and bulk mining operations in an area traditionally known for traditional small-scale mining and gold panning operations by native settlers—the town of Ragoc.

To begin with, the mine tunnels of small-scale miners within the company's claim site have been blasted, effectively closing access to these production sites from the villagers. Aside from this, a tailings dam constructed by the company to contain mine tailings and toxic wastes has been built on former agricultural fields (Corpuz, 1993).

The excess water from the dam is also discharged through a penstock that has stunted the growth of agricultural products in the nearby fields (Corpuz, 1993). While the company claims that it has paid for the land taken from displaced farmers, the latter claim that their compensations are incomplete. Others claim to having been forced to sign papers without fully understanding their meanings.

According to residents in the area of the mine site, wastes and flames from its operations have also taken toll on the people's health.

In December 1991, about 144 people complained of and were treated for vomiting, teary eyes and drying of the throats.

These complaints coincided with the discharge of chemical wastes directly into the Antamok river. Others have experienced fever and a general weakening of the body, along with skin irritations (Corpuz, 1993). Aside from production processes having effects on the people, the mining structures have also adversely affected the physical qualities of the environment. For instance, heavy siltations upstream tend to clog the mine's diversion tunnels in the rainy season. During a particularly strong typhoon in the past year, the contiguous community of Luneta was threatened by flooding as the diversion tunnels started to overflow.

Another danger is posed by the erosion of loosened soil as a result of open-pit operations. A number of accidents have already occurred along roads where the soil is washed down. The clogging of creeks and waterways also leads to flooding. The worst incident, however, has been one where a whole mountain collapsed as a result of bulk-mining operations (Corpuz, 1993).

1993):

"The land is entrusted to us by our ancestors for the life of succeeding generations..."

The T'boli, Perido Kusin, muses:

"We are not aware of title... Our plants are our titles...the bananas, the bamboos, the big trees and the waters. (see box article below)..."

Holism

Closely linked to the notion of interdependence is that of holism. It pertains to the realization of the interconnectedness of everything. It is a recognition that no part of the ecosystem is meaningful outside of its totality. Hence, there are no closed systems in nature, culture and society. Rather, they exist as a mind-body-nature totality. The organic whole, moreover, is defined from within and not by 'outsiders'.

Holism between social, economic and cultural practices forms part of the heritage of the Kankana-eyes, an indigenous group in the mountains of the Cordilleras. (see box article on page 8).

Non-hierarchical Relations

The next ecological principle logically follow from the first two. If each part of the global system is important, with its own role and

contribution in the natural world, then relationships between these components must be non-hierarchical. Rather they should work in synergy, within principles of holism and interdependence.

The ecological principles which are assumed to foster harmony and sustainable relationships between humanity and nature must also be mirrored in the relationships between societies, and between men and women (Torres, 1993). In an ecosystem where these principles operate, there is no reason for one nation to subjugate another, for one race to feel superior over the rest, or for the male sex to assume domination over females. In another vein, within every society there should be equality among cultural groups, including indigenous cultures. (see box articles on page 9).

Process

Ecology stresses the finite nature of living resources. The process by which these resources are utilized, therefore, is of paramount importance. The old adage that "the end justifies the means" is unacceptable for sustainable development.

Technologies must be appropriate to the needs of men and women, as well as cognizant of the finite characteristics of

resources. Regeneration, reproducibility, diversity and vitality of the species must be respected. In the end, respect for the dynamic processes of the ecosystem may result in the evolution of higher-level systems, with abilities to be adept and responsive to the planet's interconnected requirements.

Again, let us examine the mining processes of the Kankana-eyes. (see "Gold Processing.." on page 9).

Even as the industrial mines have become more mechanized, the Kankana-eyes have continued to use their simple and inexpensive tools. Mining and recovery processes remain much as they were 400 years ago (Caballero, 1993:7).

III. The Sustainability of Philippine Society: Perspective and Prospectus

"Living sustainably depends upon accepting a duty to seek harmony with other people and with nature."

(in Caring for the Earth, p.8)⁷

Forging a Sustainable Society

The founding principle of a sustainable society is "respect and care for the community of life" (IUCN-UNEP-WWF, 1991). It means caring for and sharing with other people, now and in the

The Lumads

The Bagobo and the T'boli are among the 18 non-Muslim indigenous peoples in Mindanao. They are called *Lumads* which literally means indigenous or "grown from the place" (Rodil, 1990:5). The term as a collective identity came into use during the past 15 years, as a result of their common experience of disenfranchisement at the hands of lowland Christian settlers and other intruders into their ancestral lands (Duhaylungsod, 1993).

To the Lumad, land is not for expropriation. It is their homeland for both present and future generations. Land tenure for appropriation of territory follows ancestral rights. Ownership is circumscribed by extensive and intimate knowledge of the place (Duhaylungsod, 1993:9).

Culture and not landscape and topography alone determine spatial limits. The cultural creation of place, whereby landforms are differentiated symbolically and assigned specific values, is an

ideology of spatial relations that serves to organize sociopolitical actions and cultural forms (Thornton, 1980).

Among the Lumads, economy and environment are integrated into a humanized, cultural landscape. They are conscious of ecosystem processes and their places within them (Clarke: 1990:245-247). In fact, it is said that their territorial domains are "embodiments of a people's history, spirituality and life held sacred and in perpetuity for the descendants" (Barrameda, 1990:2).

For the Bagobos, for instance, changes in the physical characteristics of Lake Apo, a body of water embedded in their people's history, are interpreted from a cultural standpoint. They believe that the increasing muddiness of the lake is an indication of the wrath of Apo Sandawa because the government has interfered with it through geothermal exploration (Duhaylungsod, 1993).

⁷IUCN-UNEP-WWF. *Caring for the Earth: A Strategy for Sustainable Living*. Gland, Switzerland, 1991.

future. It aims to "share fairly the benefits and costs of resource use and environmental conservation among different communities and interest groups, among people who are poor and those who are affluent, and between our generation and those who will come after us" (IUCN-UNEP-WWF, 1991).

Zablan (1993) presents a framework of sustainable development which stresses the interaction between populations, society and the environment (see Figure 1).

In the paradigm, key elements which affect sustainability are people (or populations), resources, and social institutions (Zablan, 1993). People require the earth's resources for its various needs. However, socio political, economic and cultural institutions which govern the internal and external relationships of various population groups affect the nature, volume and intensity of resource-related demands.

These dynamics may have different impacts. For instance,

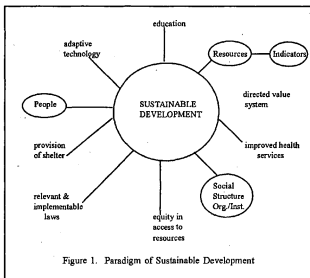


Figure 1. Paradigm of Sustainable Development

societal goals (e.g., economic growth) affect the carrying capacity of the environment. Changes in population size, composition and lifestyles influence demand for and consumption of resources. Or, unprecedented depletion in specific types of resources caused by natural or man-created

disasters may result in drastic imbalances in the natural as well as human ecosystems. Other impacts may result as well.

Let us now examine the present state of the ecosystem in the Philippines, using this perspective as guideposts.

Traditional Small-Scale Mining of the Kankana-ey

"There will always be gold. We will never run out of gold, but you have to mine it the right way."

Small-scale mining in Benguet Province in Northern Philippines dates back at least 400 years (Caballero, 1993). Historical evidence suggests that when the Spaniards entered the area in the 17th century, gold mining was already a thriving production process in the municipality of Itogon (Quirante, 1624).

From the accounts of Quirante, it is known that the Kankana-ey of old dug tunnels in several sites which are still being mined today. The tunnels extended northeast to southeast, and were flooded with sunlight most of the day. Wooden pick-axes tipped with iron were used by the miners to chip the ore in the tunnels (Quirante, 1624).

The ore was then crushed by hand with a "stout rock" and other "smaller stones" until it was reduced to powder. This was then washed several times in the streams where the gold dust or grains were recognized by their gleam in the sunlight. The large ore grains were milled and washed several times until very little of the metal was left.

Many of these traditional mining practices exist in present days. For one, the grinding rocks described by Quirante are still being used by the present day Kankana-ey. Ceramic containers for roasting gold into gold beads were found in an archaeological

site in Itogon, and are similar to those still being used by the Kankana-ey small-scale miners (Caballero, 1993:3).

Shifting to ethnographic data, a great deal of social control by elders over gold production and distribution is in evidence. The Kankana-ey elders apparently determined how the gold was to be distributed and acted as arbiters in mining disputes (Caballero, 1993:4).

An interplay between social control, production and gender relations also emerges from the anthropological data. One feature of traditional Kankana-ey mining pertains to their practice of sharing gold. One such practice is called *sagaok*. It refers to the villagers going from one tunnel to another begging for ore with gold. Another mechanism for sharing was through *makinang*. It refers to sharing the gold concentrate among the villagers (Caballero, 1993:5).

In both practices, older women always had first priority to the shared ore or concentrates (Caballero, 1993). In Igorot society, old women have little means of livelihood, especially when they are already widowed. Sharing gold with the older women of the village, therefore, was one way of properly providing for them without marginalizing their existence.

For the Kankana-ey, therefore, mining "the right way" refers not only to the technological or productive system. It also involves their social and ritual subsystem (Caballero, 1993:5).

*The (Non) Sustainable Features
of Philippine Society and
Environment*

The current state of the Philippine ecosystem is already considered to have reached critical limits. The following situations illustrate the point (Zablan, 1993:4-5).

1. The forest cover has depleted to only 23% of its former state. Out of 15.88 million hectares of forestlands, only 6.015 million actually have forest cover as of 1991. These forests remain principally dipterocarp (67%) which are the main sources of timber for lumber, plywood and other construction purposes. Other types of remaining forests

are mossy cover (18.3%), submarginal forests (8.7%), pine forests (3.9%) and mangroves (2.1%) (Serna, 1993:2).

Forest denudation can be traced to rapid population growth towards forested areas, internal migration and poverty (Zablan, 1993:9). It is also a result of defective forest management, such as (1) allowing the rapid export of high quality logs, without efforts from businesses to replant the forests; (2) allowing influential individuals to continue logging activities until the forests were completely depleted or degraded, with complete disregard for forest laws and regulations; (3) government's failure to address the

problem of rapidly growing upland communities, which led to the clearing of residual forests for food production; and (4) the ineffective enforcement of forest laws due to institutional constraints faced by concerned agencies of government (Serna, 1993:4).

Forest denudation impinges on the hydrologic system, which in turn affects the ability of human settlements to have adequate potable water supply and sufficient energy sources for electricity. The experience of fifteen-hour brownouts (interruptions in electrical supply) documented in Mindanao aptly demonstrates the interacting dynamics between forest and

Constitutional Land and Ancestral Domain

The Philippine Constitution of 1986 enshrines the right of indigenous communities to their ancestral lands. However, the incorporation of indigenous territories into states has dismembered, if not eliminated, ancestral domains. For instance, massive energy infrastructure projects and intensified agriculture through plantation production have tended to ignore the presence and existence of Lumads, albeit they are the traditional settlers of

these areas. What has been touted as a 'wilderness' in Mindanao are in reality Lumad ancestral domains, created out of a humanized landscape in which indigenous peoples have been a major component, actively manipulating, modifying and culturally creating it (Clarke, 1990; Hyndman, 1991; Duhaungsood, 1993).

Forest, Watersheds and Energy Development

Electrical power in Mindanao is principally supplied by hydroelectrical plants located along the Agus River. It is the only riverine outlet of Lake Lanao, and supplies 80% of the power supply on the island. In 1991, a severe drought hit Mindanao, resulting in decreased volume of outflow from Agus River, as the water in Lake Lanao receded. Because of this, electrical power interruptions occurred, lasting for as long as 15 hours during its worst period.

Because of these "brownouts", industries drastically cut down their operations, workers were laid off by the hundreds, water supply became contaminated, school schedules were disrupted, and households faced months of inconvenient living (Umpa, 1993:1). Economic losses resulting from the energy shortage were estimated to be tens of billions of pesos.

The water level of Lake Lanao has been affected by illegal logging activities in the watershed areas surrounding it. Local residents attest to truckloads of logs and timber products regularly brought down from the watershed. At the same time, construction of the sixth plant (the Agus I Hydroelectric Plant) along the Agus River was met by oppositions and disrupted the social, economic and religious life of the Muslim communities. In addition, the project was held responsible for creating wide fluctuations in the Lake's water level.

Even in the face of the power crisis, these communities continued to oppose the operation of Agus I. Meanwhile, business and industry leaders in Marawi City and Iligan City (who are mostly Christians) vigorously urged the government to operate Agus I. As of the time of this writing, the controversy surrounding Agus I remains unresolved (Umpa, 1993:6).

Gold Processing in the Cordilleras

Kankana-ey mining and processing technologies, along with insights into their social system, provide a model of a mining tradition that is hundreds of years old and has proven itself to be sustainable (Caballero, 1993:7).

The Kankana-ey traditional small-scale miners use physical separation methods to separate gold from ore. This method eliminates the need for mercury in the extraction process, which is a major source of pollution emanating from the use of "gold rush"

mining technology. The Kankana-eyes use painstaking measures to recover gold from all solids and also to recycle the water used in this process. They scrape the surface of the soil around the work and roasting area, collect this soil in sacks and process it for the gold content. They crush and regrind the used crucible and recycle the middlings and panning tails. They then re-mill and re-pan the primary panning tails in the holding tank (Caballero, 1993:7).

water resources, on the one hand, and industrial projects and human settlements, on the other.

2. Efficiency of agricultural food production such as rice and corn has declined since 1985. This is due mainly to the expansion of populations into marginal lands, as well as to the reduction of areas of arable land as they are converted for residential and industrial uses (Zablan, 1993:4). The effects of large scale mining, for example, on the agricultural activities of contiguous communities have already been discussed earlier (see section 2).

Cabrido (1993:8) further implicates various forms of environmental degradation as having negative effects on food self-sufficiency efforts. These include soil erosion, soil pollution, drought, water pollution, sedimentation of coastal fishing grounds, deforestation, destruction of coral reefs and mangroves and other forms of degradation. In the final analysis, the effects of environmental degradation may be more significant on the food carrying capacity of an ecosystem than either technology or land use planning.

3. Out of 384 river systems, 40 are now considered biologically dead. Moreover, 480,000 hectares of freshwater areas have been affected by saltwater intrusion (Zablan, 1993:5).

Siltation, salination and pollution of rivers lead to the diminution or even complete cessation of aquatic production. It also spawns floods in human settlements, and propagates diseases related to the pollution of the drinking water supply. Garbage and human wastes thrown into the rivers also find their way eventually into the seas, and thus affect the quality of marine life (Gonzales, 1993).

A significant decline in fish

production, as well as in the supply of other fresh and salt water products, has deleterious effects on the quality of life of the populations that depend on these resources for livelihood. It also affects the nutritional status of urban and rural dwellers, who depend on riverine and marine products as relatively inexpensive sources of protein food.

4. *Marine resources have considerably declined.* Coastal and nearshore settlements have increased from 28.7 million in 1988 to 36.7 million people in 1990. The number of people dependent on offshore fishing for livelihood, therefore, has increased considerably. Moreover, mangroves have been systematically cut down for residential uses, for brackish aquaculture, or even for industrial expansion purposes (Serna, 1993).

Apart from factors related to population increases, the introduction of destructive fishing gear and fishing methods have destroyed the marine habitat (esp. our coral reefs). Commercial fisheries are principal culprits in this respect, especially with their extensive use of finemesh nets, "muro-ami," and other illegal fishing methods (Torres, 1991).

Degradation of the land, such as soil erosion, chemical pollution of agricultural areas, and uncontrolled waste disposal, contribute to the slow death of coastal areas. Enterprises engaged in shellcrafts or coral crafts, construction companies in need of sand and gravel, as well as coastal tourism (beach resorts) also deplete and diminish the quality of marine resources.

5. Over concentration of population in cities continues unabated (Zablan, 1993). Apart from natural population increase, the rate of urbanward migration has risen steadily over the past decade (Perez, 1991). Economic

factors principally propel individuals to migrate to the cities. Young, single women, in particular, make up the bulk of urban migrants.

A chain of migration is set off by movement to the cities of individual members of rural families. Eventually, pockets of kinfolk or provincemates are found living together in small, crowded households. Given the cost and scarcity of housing facilities, massive migration to cities such as Metro Manila results in the spread of slum areas (Jimenez, Chiong-Javier & Sevilla, 1991). Public services are stretched to the hilt, so that environmental sanitation and other living conditions are found below desirable standards in urban poor communities.

Eventually, urban overcrowding results in a chain process of environmental deterioration. Among its effects are air and water pollution, waste disposal problems, deterioration in the health and nutrition of the population, flooding, unemployment, and unabated poverty.

Strategies for Improving Sustainability

Disruption of harmonic relations between the key elements of sustainability require adjustment and re-creation of balance.

The mechanism which may allow human society to cope with changes in any of the concerned elements are identified by the model (refer to figure 1).

Among these mechanisms are (a) the use of adaptive technology; (b) introduction of environment education; (c) the development of value systems relevant to resource conservation; (d) improved health services for populations affected by environmental degradation; (e) equity in access to resources; (f) enactment of relevant laws governing

relations between individuals, society and the environment; and (g) adequate provision of shelter for changing populations.

To achieve sustainable development within this framework, three preconditions must be met. First, it is important to define the minimum quality of life or standards of living for the people. Second, the limits of the carrying capacity of the ecosystem and resource base must be determined, and indicators developed to alert the nation that limits have been exceeded. Third, technologies must be developed and utilized which enhance the transformation of goals and services into more useful but environmentally benign form (Zablan, 1993:8).

Let us now examine initiatives taken by the Philippines towards developing a sustainable society.

The Philippine Plan for Sustainable Development

1. Quality of Life Goals

For the next five years, the aspirations of the Filipino people in terms of desired quality of life standards can be deduced from the Medium Term Philippine Development Plan. As stated in the Plan, the development objectives of poverty alleviation, social equity, and sustainable development will be addressed (NEDA, 1993-98). The Plan goes on further to say:

"The twin strategies of world competitiveness and human development work together to ensure sustainable development. World competitiveness will enable development to be economically sustainable, freeing the country from the 'boom bust' cycle of growth (from) chronic macroeconomic imbalances. Human development... will enable economic progress to be ecologically sustainable. It recognizes that poverty is both a cause and a consequence of environmental degradation. Thus, these strategies will ensure

intergenerational equity so that people empowerment will not only be for this generation but also for the generation of Filipinos to come."

2. Defining the Limits of Carrying Capacity

In 1992, the National Economic Development Authority commissioned a research project entitled "National Population Carrying Capacity Study" (Cabrido, 1993). Its principal objective was to provide agricultural planners and decision makers the baseline information on the potential productivity and population-supporting capacities of land and aquatic resources.

From this study, the following outputs and their general uses can be delineated as follows:

a. Land suitability maps: The spatial and geographic information in the maps serve as crop development guides for agricultural and land use planners.

b. Statistical database information on crop, livestock and fishery production at the regional and provincial levels. These help in regional and provincial agricultural development planning.

c. Computed potential sustainable production of crops, livestock and fisheries under given scenarios. It indicates the infrastructural as production inputs required to attain targeted production levels. These sets of information can be used in setting targets for food production and in investment planning.

d. Population-supporting capacity of potential food production. The results can be used in determining food self-sufficiency levels on the basis of nutrition standards and consumption levels. It may also be used in strategic planning for the spatial distribution of future populations.

In addition to these outputs, the study identifies other factors which have to be dealt with if the country's self-sufficiency in food

Another critical factor for meeting food self-sufficiency is technology. Unless the desired level of technology and management of inputs is met, the estimates for population supporting food production will not be attained.

production is to be met. The first factor is population increase. According to Cabrido (1993:8), using present levels of inputs and technologies, the Philippines will not be able to attain self-sufficiency in food beyond Year 2042, under an average population growth rate assumption of 1.5%. The delay in the onset of the "hunger" year may be possible if (a) we attain a low population growth rate of less than 1.5% in the next 40 years; or (b) the food carrying capacity is increased by adopting improved technology and management practices. However, such a strategy requires a large amount of financial investment.

Another critical factor for meeting food self-sufficiency is technology. Unless the desired level of technology and management of inputs is met, the estimates for population supporting food production will not be attained.

A third factor is maintaining the quality of land and aquatic resources. If these deteriorate further, then food supply will continue to be less than what is needed by the population. The integrity of food resources, therefore, must be maintained through environmental conservation and protection measures.

3. Development of Sustainable Technologies

Industrialization and agricultural production must develop or refine respective technologies, within a framework of applying extractive or processing procedures that consciously seek to protect the resource base, develop national self-sufficiency in production, while producing foods and other products required by human populations, locally and in the rest of the world.

In the Earth summit, the Philippines argued for the recognition of indigenous technologies. It also supported efforts to include a provision that requires developed countries to transfer environmentally safe and sound technologies, as well as for the transfer of facilities that develop localized technologies for biodiversity conservation and biotechnological development (Ganapin, 1992).

On other fronts, environmentalists advocate for the dissemination of appropriate technologies. (see box article below).

In addition to machinery and processing techniques, social technologies must be employed to ensure the sustainability of development. The conduct of an Environmental Impact Assessment (EIA) is one such technology. The implementation of Community Resource Management Programs is another social approach to correcting faulty

strategies on environment, development and poverty (see box article on page 13).

IV. Advocacy Efforts for Sustainable Development

"Such arrogance to speak of owning the land. When you shall be owned by it. How can you own that which will outlive you. Only the race owns the land because the race lives forever!"

(Maciling Dulag, a Kalinga elder)

In the Philippines today, multisectoral efforts are being implemented towards the realization of the goals of a sustainable society. In this report, initiatives from three sectors will be reviewed: those from government, the private sector, and the social sciences.

Government Initiatives for Sustainable Development

1. Executive and Legislative Mandate

As early as 1977, the Philippines laid down the state's framework for environmental policy, through Presidential Decree No. 1155, entitled "Philippine Environmental Policy" (Luna, 1993). The details of the policy were later set forth in another decree entitled "Establishing an Environmental Impact Assessment System, Including Other Environmental Management Related Measures..."

More recently, the 1987 Philippine Constitution declared it a state policy to "protect and advance the right of the people to a balanced and healthy ecology in

accord with the rhythm and harmony of nature (Article II, Sec. 16).

Other measures concerning the environment have since been enacted, such as the following: (1) a decree creating the National Environmental Protection Council; (2) a decree on the Philippine Environment Code which established specific environmental management policies and quality standards; (3) an Executive Order requiring project proponents to seek clearance that their projects are in accordance with land use plans and zoning ordinances; and (4) the Local Government Code, which states that consultations shall be held with appropriate local government units, non-governmental and people's organizations, and other concerned community sectors before any project is implemented in their respective jurisdictions (Luna, 1993:2).

2. The Implementing Machinery

The Department of Energy and Natural Resources (DENR) is charged with the implementation of national environmental policies. In 1988, it formulated the Philippine Strategy for Sustainable Development.

The ten strategies adopted by the DENR vis-a-vis sustainable environmental management include the following (from Aguilar, 1993):

- integration of environmental factors in formulation and decision making activities, thus leading to the organization of special units in charge of Natural Resource Accounting, Environmental Impact Assessment, and Land Use Planning (Aguilar, 1993:2);
- proper pricing of natural resources that build-in the cost of damages to the environment;
- property rights reforms that regulate open access to the natural resources, including forest

"Approtech"

The term appropriate technology should fulfill the following requisites: (a) it is appropriate to the physicochemical, biological and sociocultural environment within which production will be undertaken; (b) it employs local components or inventions in the manufacture of machines or parts, rather than expensive imported products or components requiring national indebtedness; (c) the technology will not lead to large-scale displacement of human (especially female) labor or of livelihood opportunities for the communities where it is to be applied; (d) if displacement is unavoidable, consultative producers are undertaken with the affected population to develop holistic and long-term procedures for their compensation or resettlement; and (e) the technology is gender-friendly, and is suited to the participation of males and females in the production endeavor.

stewardship contracts, small holder timber concessions, artificial reef licenses, community forests, community fishing grounds and mining cooperatives; this will provide equitable access, tenurial security and community responsibility in the utilization of natural resources;

d. establishment of an integrated protected areas system to conserve the wildlife and unique ecosystem for scientific, educational, historical and cultural values;

e. rehabilitation of degraded ecosystems, such as reforestation of denuded watersheds, mangrove replantation, clean-up and control of pollution, revival of biologically dead rivers, and transplantation of seagrass;

f. strengthening of residuals management in industry as well as pollution control;

g. integration of population concerns and social welfare in development planning, with the intention of strengthening the people's involvement in production and the preservation of the ecosystem;

h. inducement of the growth of rural areas, including employment generation for the rural poor;

i. promotion of environmental education, and its integration in the elementary and secondary curricula to develop social values supportive of environmental protection; and

j. strengthening of citizen's participation and constituency building.

Specific programs and projects have been designed by the DENR and its attached agencies to give life to the stated strategies. If fiscal allocation is a measure of the degree of importance attached to them, the ranking of the Department's programs according to their share of the department's budget is as follows: (1) Forest Management, (2) Land Management, (3) Mines and Geo-Sciences, (4) Environmental Management, (5) Ecosystems Research and Development, (6) Protected Areas and Wildlife Resources, (7) Locally-Funded Projects, (8) Foreign-Assisted Peso Counterpart, and (9) Loan Proceeds (Ursal, 1993:6).

In consideration of the Philippines' participation at the Earth Summit in Brazil, additional steps will have to be taken to implement Agenda 21. The biggest responsibility the DENR faces will be to finance 80% of the requirements of the Agenda, even while bilateral assistance is available. With this in mind, the budget of the DENR may have to increase beyond the P3.6 billion it obtained for 1993 (Ursal, 1993). It will have to take a bigger share of the national budget, at levels beyond 1.74% of national appropriations which it now enjoys. These prospective plans will be difficult, but will be necessary for the full realization of both the

Philippine Plan for Sustainable Development and Agenda 21.

In addition, information systems, appropriate legislations, environmental policies, research, environmental education, and action programs have to be put quickly into place (Ganapin, 1992). Greater efforts should also be taken to mobilize the private sector and to harness their resources towards environmental advocacy.

Public Awareness and Environmental Advocacy

1. Extent of Public Awareness on Environmental Concerns

Despite official recognition of the principles of sustainable development, as well as substantial organized action taken by private organizations committed to the goals of sustainable development, public awareness on these issues remains selective and limited to certain groups. Results of two surveys on various environmental issues will be reviewed (see box articles on page 14).

The studies clearly reveal that the 'public' most aware of environmental issues tend to be the educated, higher socioeconomic groups residing in urban areas. Students in secondary and tertiary schools are also among those aware of environmental concerns, as well as others with access to media and other relevant sources of information. Moreover, the environment-related issues of which the public is aware is limited to air and water pollution, while there is little knowledge about other equally significant concerns.

Findings of these studies point the directions for environmental education and media campaign programs. They should target more rural-based, lower SES groups of all ages, with the

Environmental Impact Assessment (EIA)

The preparation of an EIA is mandated by law in the Philippines prior to the issuance of an Environmental Compliance Certificate for all projects considered to be environmentally critical.

The EIA is a multidisciplinary assessment of the potential impacts of a proposed project on the environment. First, it must describe the existing environment of the proposed project. Aside from geographic location, it must also portray the physical and cultural features of the proposed project site. This includes human settlements, infrastructures, socioeconomic structures, health and the aesthetic environment. Then future potential impacts of the project on the described environment must be suitably analyzed, including an assessment of potential adverse and beneficial effects. These effects must be projected in relation to individuals, neighborhoods and the country in general. Impacts of construction, short and long term, should also be presented. Finally, the EIA must recommend mitigating measures to minimize potential adverse effects of construction or project implementation (Luna, 1993:4).

use of radio and print as media. Interpersonal communications should also be more fully utilized, especially through schools, churches, and local government groups.

2. Advocacy Groups for Sustainable Development

While public awareness on environmental issues generally tends to be quite limited, advocacy efforts for sustainable development have gained momentum among selected sectors of the citizenry in the past several years. The participation of "environmental NGOs" in sustainable strategies have been done either by themselves or in conjunction with government, but always with linkages to affected communities. Thus, while media and the general public may express its concern over pollution, forest degradation and siltation, in general or conceptual terms, environmental activists take pains to work with critically affected ethnic groups and other communities whose lives and occupations are directly affected by environment-related

problems.

Actions which have been taken against by concerned citizens and environmental activists against (anti) development projects which pose dangers to nature and society provide clear examples to "people's power" at play. They are also the precursors of governmental action towards environmental protection — such as legislations, policies, and projects aimed at maintaining the integrity of the Philippine environment and the sustainability of people's lifeways (see box articles on page 15).

In addition to citizen action, environmentalists have been engaged in other forms of efforts towards sustainable development (Ragragio, 1993). These activities include lobbying for the passage of bills which seek to protect the environment, and engaging in information advocacy campaigns to highlight ongoing debates or adverse experiences related to projects which affect people and nature.

NGOs, federations of people's organizations and local groups

have also become more directly involved in the management of environmental programs (Ragragio, 1993). For instance, consultations are regularly held between the DENR, other government agencies, and other groups to discuss policies, implementing guidelines, program design and organizational structures for the implementation of reforestation, protected areas management and community resource management strategies.

Community groups are now direct participants in rehabilitation and conservation programs of the DENR, the Department of Agriculture and other instrumentalities. They are involved in environmental surveillance efforts, contract reforestation, rural development projects, natural resource management, and environmental education, among others (Ragragio, 1993).

Finally, civic advocacy is a global effort.

"We've got to make the saving of the Earth's environment the central organizing principle of the post-Cold War world."

(Al Gore, 1992)

Social Weather Stations Survey

The Social Weather Stations regularly generates primary data on social conditions and public opinions regarding important Philippine issues. In its April 1992 survey, a set of 1,200 respondents were asked their opinions on environmental issues of critical importance at the time. One of the issues was on a congressional move towards a "total log ban". Another was on the debate concerning the safety of the Bataan Nuclear Power Plant (Arroyo & Sandoval, 1993).

Results generally were as follows: (1) The higher the respondent's socioeconomic class, the less his/her perceived poverty, the greater is the sentiment favoring a total log ban and the feeling that the nuclear plant is unsafe; (2) Similar opinions were expressed by respondents from urban places of residence; and (3) Highly-educated persons felt the nuclear plant was unsafe. However, high schoolers favored a total log ban more than those of higher education (Arroyo & Sandoval, 1993:10).

Awareness of Environmental Issues among Urban Dwellers along the Pasig

A survey was undertaken to determine the nature of environmental issues which residents along the Pasig River were aware of their sources of information, media habits and media sources on environmental issues, and their awareness of efforts to rehabilitate the Pasig River, and the environment in general (Gonzales & Hofileña, 1993). A sample of 1,199 residents were interviewed from 18 barangays situated along the River, with males and females represented in the sample.

Findings indicate that individuals most likely to be aware of environmental issues are relatively young (18-27 years), belong to the higher socioeconomic groups, and have access to higher education. Environmental issues which are most widely known are on air and water pollution, and on health care.

Deforestation, waste management, soil erosion, river siltation, the ozone layer, endangered species, and the greenhouse effect are issues known to less than half of the respondents (Gonzales & Hofileña, 1993).

Mass media remains the greatest source of information for the respondents, particularly radio and print media. However, interpersonal sources of information appear also to be active sources of information on the Pasig River and other environmental issues, including the school, church and local government. It also appears that the issues which respondents are most aware of are those which media most often tackles, such as water pollution and health issues related to environmental conditions.

In the UNCED Summit, 172 of 178 nations attended, with 17,000 delegates coming from 7,156 NGOs from various countries represented. Philippine NGOs were highly visible. The Green Forum (Philippines) acted as co-chair of the International NGO Forum with the Brazilian NGO Forum and the Canadian Council for International Cooperation (Ragragio, 1993). At this alternative forum, some 39 "alternative treaties" were negotiated, between and among South and North NGOs.

The challenge to environmental advocacy groups continues. To begin with, concrete efforts have to be made to realize Agenda 21 in the country. A positive development in this direction is the creation of the Philippine Council for Sustainable Development through an Executive Order. It will provide the opportunity for government and the private sector to ensure that concepts and operational

implications of Agenda 21 are integrated in the planning, budget, and day-to-day decision-making processes of the executive agencies, as well as in local governments (Ragragio, 1993:10).

Finally, local NGOs will have to move quickly to develop the Earth People's Fund. This financing mechanism is designed to augment government's budgetary commitments towards enabling local communities and national groups to implement anti-poverty and sustainable livelihood strategies.

Social Science Contributions Towards a Sustainable Society

"Scientific facts related to environmental issues are complex. Understanding and solving environmental problems require insights from many disciplines. Its complexity dictates that specialists from relevant disciplines go beyond the boundaries of their own fields to communicate and share what they know and to discover what they do not know, to talk and listen."

(De Guzman et al., 1993:2)

Social science, following the principles of holism and interdependence in ecology, should make greater efforts to examine human society in relation to the rest of the Earth's ecosystems. The Cartesian dualism of mind being separate from matter should give way to the rediscovered reality that an organism cannot be dismembered and understood in its totality. "The whole is greater than the sum of its parts" expresses the perspective of social scientists in environmental research and advocacy.

1. Environment-Friendly Statistics

Since appropriate information is needed to make correct decisions towards sustainable development, the process of generating data for research and decision making should move towards making them relevant to ecological concerns. This new "research culture" is illustrated by the development of Environmental Statistics.

Think Global, Act Local

In 1977, the Marcos government made grandiose plans to construct a copper smelter plant in San Juan, Batangas, a coastal community with sustainable livelihood activities. The potential dangers of the plant to the townspeople's lives were studied by a concerned group of its citizens which led an information campaign among the villagers. They talked of the dire effects of a similarly-designed plant in Japanese communities. Experts were brought in to speak of the potential health and environmental hazards the copper smelter posed to the town of San Juan.

In the end, the government had to respect the townspeople's sentiment. They decided to construct the plant in Leyte province, instead, where there were no oppositors. Four or five years later, the incidence of respiratory diseases in Isabel, Leyte rose. Its once rich fishing grounds are gone. Families have been relocated from the plant site, and their livelihoods have been disrupted. Contiguous coastal towns, likewise, bear the ill-effects of the plant on their subsistence fishing activities (Velasquez, 1993).

The Bataan Nuclear Power Plant

Another clear example of the powerful impact of citizen action coupled with media support is seen in the decade long efforts of the Filipino people to oppose the operation of the Bataan Nuclear Power Plant (BNPP).

In 1979, scientists, provincial officials, and ordinary folk of the town of Morong joined hands with environmental advocates to inform the province and the country at large of the stakes in operating the plant. Documents were smuggled from the dictatorship's bureaucracy to show the extent of corruption, wheelings and dealings which Marcos' henchmen had engaged in to construct the plant in a site beneath which is an earthquake fault. The design of the plant itself was adjudged unsuitable by the most

reputable scientists of the State University. The citizenry's outcry was so loud that Marcos had to convene a committee to examine the suitability of the BNPP.

Marcos was ousted before the BNPP issue could be resolved. Emboldened by the democratic space in the Aquino administration, anti-nuclear advocacy groups multiplied. Soon, even politicians, legislators and members of the Cabinet joined the movement to oppose the BNPP. Foreign opposition to nuclear power came to express solidarity with the issues raised by local protectors. To this date, the BNPP has not been operated. Instead, it may be converted to a cycle plant, and the use of nuclear energy will be abandoned altogether.

Environmental statistics is the area of statistical science concerned with "the development and application of statistical theory and methods for the study of environmental phenomena which have direct or indirect effects on the quality of life" (De Guzman et al., 1993:4). It is principally concerned with determining how the environment affects our quality of life. It is involved in the study of various subjects, using statistical methodologies to advance understanding in these fields.

Any probabilistic or statistical advancement in theory or methodology (in fields such as agriculture, genetics, demography, epidemiology, and the like) is classified as environmental statistics (De Guzman et al., 1993:4). Hence, environmental statistics appears with various names, corresponding to the specific statistics in these fields, e.g. Biostatistics, Geostatistics, Econometrics, Psychometrics, etc.

The work of an environmental statistician should not be confined to making suggestions on analysis of data. Instead, a partnership must ensue with other researchers, where the statistician attempts to understand the underlying mechanisms of environmental phenomena and uses his/her expertise of the discipline to describe them mathematically (De Guzman et al., 1993:4). In this manner, the environmental statistician collaborates with other researchers to explain how air and water pollution, solid wastes and

other hazardous substances cause degradation to the surroundings.

The contribution of Environmental Statistics to Hydrology is illustrated below (De Guzman et al., 1993:6).

2. Indigenous Values on Person-Society-Nature Relations

Other social science disciplines have made deliberate attempts to embody the principles of ecological thinking in their researches. Anthropological science in the Philippines has contributed much in this respect. The work of Caballero (1993) and Duhaylungsod (1993), which have been extensively cited in this monograph, represents the thinking of eco-oriented anthropologists.

In their researches, they portray indigenous communities through an insiders' eye, rather than use "experts' lenses to depict cultures and histories. To do this, the researchers must have engaged in non-hierarchical and collaborative relationships with the community and their informants, echoing the indigenous perspective that 'I' and 'you' are relative in a human-spatial-cultural warp. Hence, both have rediscovered the ecological links traditionally existing between indigenous people and their surroundings. These findings have much to teach lowland scholars (and students thereafter) who have been reared in a culture which has relegated nature to commodity.

3. Interrelated Links between Human Behavior and Physico-Chemical Events

Another valuable contribution of the social sciences to the development of a sustainable society rests in their continuing interest to describe and determine the feedback and back-flow systems between society and its surroundings. The study of Cabrido (1993) on the food carrying capacity of the Philippine environment, given its present population growth, level of technology and environmental quality, represents efforts in this direction. Other studies have also attempted to determine the linkages between environmental quality, health and nutrition (Herrin, 1993; De Guzman et al., 1993), or between resource utilization, human settlements and economic development (Santos, 1993).

Still in this vein, researchers on community reactions to environmental crises have much to offer policy and decision makers. The sentiments of dwellers along the Pasig River, or of a cross-section of Philippine society, vis-a-vis various forms of environmental problems (Arroyo & Sandoval, 1993; Gonzalez, 1993) provide clues for relevant legislation, policy development, information campaigns and social projects.

4. Education on Ecology and Environmental Education

Finally, social scientists in the teaching profession participate in

Stochastic Processes in Hydrology

Hydrology is the "science that treats of the waters of the earth, their occurrence circulation and distribution, and their reaction with their environment, including their relation to living things" (from US Federal Council of Science and Technology, in De Guzman et al., 1993:6). Historically, hydrology began with the study of the rainfall-runoff process, the rise, fall and flow of rivers.

Most hydrologic processes are stochastic processes. For instance, the water level in a dam has been modeled as a Markov process. Many hydrologic information are time series data (De Guzman et al., 1993:6). With collaborative efforts, statisticians and hydrologists can better understand the behavior of water under different environmental conditions, and alleviate the effects of drought, flooding and power shortages on human groups.

multidisciplinary efforts to develop ecological values through formal education among the Filipino youth and studentry. Various colleges and universities already offer baccalaureate or post-baccalaureate degrees on environmental management (De Guzman et al., 1993; Reyes, 1993). Specific disciplines — such as Geological Sciences, Engineering, Epidemiology, Biology, Statistics — integrate ecological concepts and researches in their curricula (De Guzman et al., 1993).

Besides these individual institutional efforts, an Environmental Education Network of the Philippines has been formed by 16 university-level environmental study centers and a few NGOs. They work together to address problems spawned by population growth, poverty, and decades of environmental misuse in the Philippines. Through the network, the members will launch school-based educational and awareness programs. They also intend to collaborate with the DENR on activities geared toward sustainable management of our natural resources. Finally, the Network hopes to coordinate researches and initiatives among environmental and educational institutions in the country, and to link these initiatives with regional and global environmental programs (De Guzman et al., 1993).

V. Concluding Remarks

In this paper, an attempt has been made to describe theoretical, methodological and empirical trends in the Philippines on the subject of sustainable development. The information suggests that Filipino social scientists are deeply involved in direct efforts to study and interpret society-environment interactions. In many cases, their efforts have led to citizen action and policy review, towards improving the country's

approaches for sustainable development. Global perspectives have likewise been influenced by social science theory and research.

Despite these commendable efforts, much remains to be done in our country, especially in terms of generating public interest and awareness of environmental issues and their prospective solutions. Partnership efforts among and between social and natural science scholars also have to increase. Starting points for this enterprise can be provided by consultations which seek to clarify the unique contributions of each discipline towards a complete understanding of sustainable development. Collaborative researches, with significant impacts on policies and programs, should then be designed with a transdisciplinary framework for sustainable development.

Underlying these measures, however, is the presumption that sectors in society directly affected by changes in the environment participate fully in these activities, from planning to implementation and evaluation of specific program and policies. More importantly, it should be clear that they accept sustainable development projects as meaningful movements towards "a common future".

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A REEXAMINATION OF THE SOUND DEVELOPMENT AND ENVIRONMENTAL BETTERMENT GOAL OF THIRD WORLD COUNTRIES*

Carmencita T. Aguilar

I. Development Issues In Third World Countries

The countries of the Third World, immediately after political independence from colonial rule, pursued programs of nation-building and economic development to catch up with the modernization of the West. Handicapped by the lack of financial resources to start their development objectives, they took advantage of the generous offers of the developed countries to assist them in their development. In the process they entered into financial and cooperation agreements which, in effect, traded off their material resources to meet their development commitments. After three to four decades of development assistance, technology transfer, and technical and policy tutelage from developed countries, Third World countries still stand on the threshold of disillusionment.

The dream of achieving development and economic growth to improve the quality of life of their people did not happen. While their cities and other centers have been modernized as a result of development assistance and foreign loans, for many of them, the dream of economic growth and high real per capita income has not been possible. It appears that the development strategies of Third World governments as, advised by their

benefactors, have not worked effectively for them. These include state's supervision of economic planning, priority for industrialization, capital accumulation through local and foreign investments, availing of foreign loans for development, utilization of the latent labor force by shifting from agriculture to industry, export-oriented industrialization and manufacturing and expansion of foreign trade, among others. The Third World countries proceeded with their development on borrowed capitals thus becoming dependent through time.

Today, many Third World countries feel helpless, being faced with the issues of slow or negative economic growth, shortfalls in international trade, balance of payment problem, debt restructuring, and the IMF-WB Structural Adjustment Program. Where underdevelopment prevails, natural resources are depleted and their environment is degraded. At the same time, the social effects of underdevelopment such as unemployment, poverty, illiteracy, poor health and inadequate social services continue to bother them. Overpopulation aggravates their economic problems.

There are other issues that they have to contend with such as the pressure posed by market protectionism of the developed countries and affluent neighbors

as well as the demand of global competitiveness for trade survival. Political instability and cultural conflicts also prevail in some Third World countries.

In the Third World are low-income countries which, as World Bank records indicated, are housing 74 percent of the World's population. The average income of 65 percent of the population is only \$290.¹ Only 25 percent of the world's population live in developed countries.² But in terms of consumption of resources, developed countries use up at least 75-85 percent of the World's resources. While there had been resource transfers from the North to the South in terms of aid, loans and other material surpluses, the 1982-1988 record indicated that the South or the Third World had transferred at least \$85 billion of its resources to the North for the period.³

The resources that the North utilized and the maintenance of the population of the South contributed to the depletion and pollution of the environment.

The average annual economic growth rate of Third World countries during the 1960-1973 period was 6.3 percent. As they had availed of more foreign borrowings for their development, their average annual growth rate for the period 1973-1979 dropped to 5.2 percent and further dipped to 3.2% in the 1980s, owing to the high interest rates that the

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lenders charged.⁴ In the 1990s, the average growth rate is expected to rise to some 4.9 percent in anticipation of better export performance.⁵ The debt service requirement of the Third World has taken a heavy toll on their resources. Their income from production was hardly enough to pay for their loans. Some countries were able to pay only the interests on the loans, while others were faced with the problem of huge foreign debts.

This paper focuses on two issues, namely: (1) development based on huge foreign debt is not a sound policy; and (2) given the present state of depleted natural resources and environmental degradation in the Third World, there is a need to refocus their development strategy from industrial priority to agricultural productivity and sustainability.

II. Development Based On Huge Foreign Debt Is Not a Sound Policy

It is an accepted fact that the debt burden of countries is a hindrance to economic growth. The creditors are the affluent governments of developed countries, the banking institutions of the private sector and the international financial institutions which include the World Bank and the International Monetary Fund. Even while debtor countries were allowed to restructure their debts by their creditors, the problem of indebtedness still remains. The objective of Third World countries to generate income, savings and capital out of the loans, did not materialize. The International Monetary Fund (IMF) also imposed its Structural Adjustment Program (SAP) as a stabilization policy for borrower countries. The SAP includes such policies as trade liberalization, devaluation, deregulation, subsidy removal, export promotion, privatization,

open door to foreign investments and employment of the inactive labor force. While SAP aimed to provide economic reforms and development direction, its operation created negative effects like economic retardation.

Trade liberalization is good if the products of the country are competitive in the international market. It would mean entry of imported goods to the local markets, thus local products will have to compete with the imported ones. In most cases, local goods are edged out by the imported ones in the local market. In spite of the abundance of goods and commodities in the markets, prices of goods continue to escalate. The local industries, saddled with their problem on debt payments, and in meeting payment the demands of the labor sector for better salaries, will have to contend with the problem of producing quality goods to meet market demands. They are also faced with other problems like bureaucratic intervention, labor demands and increasing taxes. However, while there is an abundant supply of goods in the markets, products of local industries are not protected by the policy.

The IMF member countries had pegged their currencies to the U.S. dollar. As countries became more dependent on IMF financing for its balance of payments, their currencies had to face devaluation. As local currencies are devalued people may not be able to afford the prices of commodities. It will cost them more money to buy the goods that they need. Some Third World governments have also adopted a policy of arbitrary devaluation in order to provide a comparative advantage for their exports. The idea is to develop a more attractive market for local investors and foreign traders. It means that the exchange rate of local currencies as against the U.S.

dollar will be much lower in value than the value of other foreign currencies to buy similar products for export. For example, a dollar in the Philippines can buy more goods than what a dollar equivalent can buy in Thailand. Thus, Philippine goods of the same kind as Thailand's will have more comparative advantage.

The scheme will attract dollar earners but local consumers will be encumbered by high prices of goods. The people's purchasing power is only within the limits of their low salaries. Thus, there is no guarantee that foreign buyers will really patronize the goods of a country that adopts price incentive policy. On the other hand, the policy tends to be disadvantageous to buyers and manufacturers in the local market due to high cost of production. The impact of devaluation will then require the husband, the wife and older children to seek employment to support the family.

Third World governments are also forced to introduce policy reforms where there will be less government control in the affairs of private enterprises. Governments are also encouraged to privatize Government-Owned and Controlled Corporations (GOCCs) for more efficiency and productivity. Deregulation tends to be advantageous to countries because it will discourage corruption which is common in Third World governments. Caution must be taken, however, that legislations must provide adequate protection for local investors.

When a country borrows from the World Bank, it is required to adopt an open door policy in order to encourage foreign investors to develop its natural resources and absorb the labor force into the industries. From the standpoint of economic nationalism, local investors will have to compete

with foreign capitalists and the multinational corporations which may be detrimental to the interests of local investors. The foreign firms have many factors to their advantage. Aside from their efficiency, they are not dependent on borrowed capitals while local investors have to make both ends meet with their limited resources which are mostly borrowed from foreign banks. In the case of Asia, the top fifty corporations in the region are owned by 46 Japanese, two Australian and two South Korean firms. Out of 1000 leading corporations in the region, 70 percent are Japanese firms while the rest are owned by developed countries and NICs.⁶ Of the developed countries, the United States, Canada and Italy have foreign debts while Japan, Switzerland, Germany, France and Britain are debt-free. Among the NICs, Taiwan, Macau, Hongkong, Singapore and Brunei are not indebted.

Third World countries are also looking forward to improving their export capability. But they have to contend with the protectionist policy of developed countries, and the need to improve the quality of their products. Most of them have deficits in international trade. Some have more import than export trade, owing to their failure to earn foreign currencies to pay for their loans. The continuous trade imbalance compounded their problem on the balance of payments.

Some countries subsidize the production of grains and other basic commodities to bring down and stabilize the prices of goods. In Third World countries, the removal of this subsidy will mean higher prices.

One reason for the Third World government's hospitality to foreign investors is their expectation that with more business enterprises in their respective

countries, there will be more employment opportunities for their people. There will also be capital and technology transfers in the process. That is why most of these governments give more incentives to foreign investors. Unfortunately, despite the investments, labor is huge so not all can be absorbed by business enterprises. Thus, some highly-skilled workers can not even be employed. The economic recession in 1980s also caused retrenchment in companies. Thus, to solve unemployment, some governments export their workers. But since labor is a commodity, there were not enough protective measures for the workers. Oftentimes, therefore, we hear reports about how workers are maltreated in a particular country. Yet the incomes of overseas workers contributed significantly to the foreign reserve and are inputted as part of the countries' gross national product.

The idea behind the IMF's structural adjustment conditionalities was to make the economy more productive, flexible and dynamic, by utilizing the existing resources. The idea of stabilization would reduce the budget and the balance of payment deficits through fiscal measures. By providing more incentives to the private sector, there would be an increase in the production capacity and a more efficient use of resources. There would be a higher rate of investments which could expand production and international trade. Manufacturing would become competitive and responsive to national and international demands. The liberalization of trade and industry would also increase the demand for labor. A probable effect would be a shift of employment from agriculture to industry and prevent the underutilization of labor resources. Exports and inter-

national trade would be promoted which could earn the foreign currencies to pay for imports and balance of payments.

While SAP appeared to engender investments, such expectation did not take place in most developing countries. Investments remain limited for two reasons: the general economic recession itself was discouraging and political conflicts and instability in some Third World countries were discouraging to investors. The incentives given to industries created an impression that economic development only happens if there is industrialization. Agriculture was affected by the shift to labor and lands formerly devoted to agriculture were converted to industrial sites. The expanding population also utilized agricultural areas as part of the suburb and new urban centers.

One criticism of SAP is that, it did not consider much the social costs of adjustments. Any change in the economic setting will affect the households in terms of wages, income and prices of goods, and even the working conditions of workers. People's health and educational needs will also be affected. The problem seriously arose in some Third World countries when governments used the greater bulk of the national budget for servicing foreign debts. The budget for the social services like health, education, public transportation and social welfare were reduced. While the general population was deprived of the necessary social services, the most harmful effect was the marginalization of certain groups such as the poor and cultural communities. It had become worse for the poor women. In the rural areas of the Third World, poor women and their daughters remain the most deprived sector of the community.

The dilemma today is the

question of what the Third World countries do to put an end to foreign borrowing, and what development strategy they must adopt to bring about real development to their poor population. How can they achieve sustainable economic growth and at the same time pay their foreign debts? Some Third World countries sought debt relief by asking their lenders to write off their indebtedness which, of course, was denied. Others have demanded that the IMF should change its strategy and requirements for development; that World Bank should operate independently of the IMF and should be more altruistic by funding the development efforts of the Third World countries instead of serving as the instrument for imposing IMF regulations. Some recent requirements in development assistance by governments of developed countries are to democratize their political systems and provide human rights protection for their people, and adopt policies for the protection of the environment. These strings attached to development are very difficult issues to consider.

III. Agricultural Development And The Preservation Of The Environment

At this stage of Third World development, it has come to the point that the misuse of some technologies and the overutilization of natural resources have reached threatening proportions. The Third World is a hapless victim of rampant deforestation, soil erosion, desertification, pollution from toxic wastes, the contamination of the air and water, and excessive extraction of minerals. Like the condition in the industrial countries, there is threat of the thinning ozone layer and global

warming. While appeals for environmental awareness have been going on and efforts to control the degradation are also done through the United Nations-sponsored international meetings and collective agreements, the problem remains without immediate solution. The most convenient scapegoat for the environmental degradation in the Third World, is the poor population who are perceived to have consumed everything in nature. But the real culprits are the industries who conducted their operations without regard for the protection and the preservation of the natural resources. The Third World governments, in their desire to promote development, are equally guilty of neglect in providing legislations for the interest of their country and people. International declarations are only principles and intentions but the political will to provide protective legislations should be done by the governments in the national and local levels.

Sustainable development means the management of desirable economic growth that will satisfy the need of the population, protect the environment and the natural resources for the interest of the people and the future generations. The development policies of countries, therefore, must always place its

own people as the immediate beneficiaries. Because of the depleted forests almost all over the Third World, governments must launch massive reforestation programs by involving private sectors and the nongovernment organizations. They must make an accounting of their land and natural resources to determine the necessary measures for their rehabilitation and utilization. Environmental impact assessments must be required of the industries at their expense to determine whether their operations are detrimental to the environment. Business firms must also be required to provide themselves the necessary mechanism for pollution control and to pay the cost of social damages for their negligence. Poverty, hunger, and environmental pollution and depredation can be solved by encouraging the Third World population to return to agriculture. Green the world for economic survival and growth. Governments must revise their development plans to emphasize agricultural production as the priority goal and economic commitment of the government. The experience of prosperous and developed countries have shown that they have never abandoned primary attention to agriculture and food production while they pursue industrial advancement.

"Sustainable development means the management of desirable economic growth that will satisfy the need of the population, protect the environment and the natural resources for the interest of the people and the future generations."

Developed countries have continuously exported their agricultural products mostly to the Third World countries where food shortage is a constant problem. Third World countries must appreciate the importance of their lands and utilize them for agricultural productivity rather than dream of industrialization.

Many government leaders of Third World countries like to dream and hope that soon their countries will become NICs or newly industrialized countries. It is not bad to dream but the reality is that pursuing industrialization on borrowed capitals the way the development process in the Third World today are unfolding, will not bring about sustainable economic growth. Even the World Bank records reflect this. The most lucrative assets of the Third World are their lands and natural resources and the large population which also include the unskilled workers. What should be done is to cultivate their land for food production. Even unskilled workers can be harnessed for agricultural productivity which also means economic survival for themselves and their families. On the other hand, in industrial development, the industries tend to be selective and reject the unskilled workers seeking employment. With this present condition of economic deprivation, the ordinary man must be made conscious of what is decent quality of life in the context of the Third World development and what his role in it should be. Decent quality of life for the individuals means that they and their families must have sufficient food, clean and safe environment, good health, education and training, comforts of daily living,

and opportunities for personal growth and development.

IV. Conclusion

If only the Third World countries can feed their people and give them a decent quality of life, accelerate their agricultural production with enough surplus for the international markets, then the elusive goals of sound development may hopefully be achieved. By concentrating on agricultural productivity, planting will restore the natural resources that were depleted. The environment could be revived to a condition of safety. From this standpoint, the strategy for development for the Third World is not through industrialization but the revival of agricultural development and food production. The measure of development and economic growth, therefore, must be based on what is a decent quality of life of the people and not by the standard of gross national productivity and an unrealistic computation of per capita income. Third World countries must learn the lesson that development based on borrowed capitals will not bring progress for them. It is also hoped that debt restructuring can make room to absolve debtors who have already paid the principal of their loans. It is hoped that Third World development based on new perspective towards agricultural productivity and less foreign indebtedness can bring progress for themselves and global society.

Notes

¹World Bank Development Report (New York: Oxford University Press, 1989), Table 1.

²UNICEF, The State Of The World's Children (Oxford: Oxford University Press, 1989), Table 1.

³World Commission On Environment and Development. Our Common Future (Oxford: Oxford University Press, 1987).

⁴World Bank. World Development Report (New York: Oxford University Press, 1989), pp.29-30.

⁵DSE. Development And Cooperation (Frankfurt, Germany, Deutsche Stiftung fur Internationale (October, 1992), p.6.

⁶Asiaweek Magazine (December 1992), pp.25-40.

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ECONOMIC REFORMS AND DEMOCRATIZATION IN THE PHILIPPINES

Gilberto M. Llanto¹

ABSTRACT

The non-violent 1986 EDSA revolution restored democracy in the Philippines. With the return of democracy, the Philippines embarked on the road to recovery and growth. Economic policy reforms were introduced and the economy responded positively. Real GNP grew at an average 5.3 percent per annum in 1986-1990 in contrast to the negative growth rates of 8.7 percent and 7.1 percent in 1984 and 1985, respectively. From a high level of 50.3 percent in 1984, the inflation rate was brought down to an average rate of 7.3 percent in 1986-1990. During this period, extreme political forces attempted to overthrow the elected government but the people's firm commitment to democracy did not waiver. The country witnessed a peaceful turnover of the helm of government from the Aquino to the Ramos administration in 1992.

However, the initial gains were not sustained because of the failure to address the fundamental structural flaws of the economy and to directly confront the issue of poverty. Policy inconsistencies and an orthodox stabilization program in 1990-1992 brought recession. The momentum of the structural reforms was temporarily halted as the government yielded to powerful pressure from the protected business sector and the elite. Growth prospects were sacrificed to bring down inflation, cut the budget deficit and improve the balance of payments. The government failed to plan an adjustment program for the affected domestic industries and to design viable safety nets for the vulnerable groups.

The new administration faces a fresh window of opportunity to take decisive policies that will change the structure of the economy and introduce both efficiency and equity. The government must seize the moment and act decisively to prime the economy for growth and equity. The paper lists those economic policy reforms that must be immediately undertaken to slay the dragon of poverty and stagnation.

I. Introduction

This paper discusses the recent Philippine experience with economic policy reforms under a democratic setting that was restored during the non-violent EDSA Revolution in early 1986. It shows the gains made by the Philippines with the return of democracy but argues that sustainable growth and development in the Philippine context will be difficult to achieve without the correction of fundamental flaws in the economic structure and without serious attention to equity and participatory development. The package of recommendations made in this paper seeks to correct those fundamental flaws and

prime the economy for growth. Initial gains were evident during the economic recovery phase but these were not sustained because of the failure to address the structural flaws and to directly confront the issue of poverty. The current poverty situation is a reason for genuine alarm. De Dios, et. al. (1993,p.3) observed that "poverty in the Philippines today has assumed the dimensions of a crisis." As of 1991, the National Statistical Coordination Board (NSCB) reported that there were about 4.8 million families whose annual per capita income fell below the annual per capita poverty threshold (Table 1). This is a serious

problem not only because of its implication to the stability of society but also because of the terrible consequences on individuals. Economic growth has been sluggish and the economy's failure to get out of the pit has swollen the ranks of the unemployed and the underemployed even as a severe power crisis worsened the situation because of the closure of factories, a reduction in investments and a general slowdown of the economy.

Real GNP had negative growth rates in 1984-1985 but recovered during the initial years of the Aquino administration. A severe recession in 1991-1992 brought about by a confluence of flawed

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policies, a worldwide economic slowdown and the aftermath of several unsuccessful coup attempts which drove away investments and foreign capital resulted in a real GNP growth rate of less than 1 percent in 1992 (Table 2). Failure to seize the moment to correct those fundamental structural flaws will surely consign the economy to a "long period of stagnating incomes and growing joblessness" (De Dios, et al., *Ibid.*, p.6) which will resurrect the threats from both the extreme right- and left-wing political forces, endangering once more the recently hard-earned gains of the non-violent transition to democracy.

Section II of this paper gives a perspective of recent (1986-1992) Philippine growth and development within the economic and political framework heralded by the return to democracy. It notes that the restoration of the democratic processes and institutions paved the way for economic recovery by ensuring political stability. The government through its 1987-1992 Medium Term Development Plan laid down the framework for growth and development. After a brief period of economic growth, the economy faltered because of flawed policies and the capture of economic policy making by powerful self-serving interest groups. The neglect of growth-inducing policies which will at the same time address equity and poverty issues threatens the long-term competitiveness and growth of the economy. The paper argues

that without a drastic reorientation of economic policies to correct fundamental distortions and structural flaws, the economy will be hard put to even catch up with the rest of the newly industrializing countries in the region. I submit that the adoption of growth cum-equity-inducing economic policies and the democratic processes and institutions will open avenues for sustained growth and development in the immediate future.

Section III discusses the role of local government decentralization and participatory development in growth and development. Here I point out that collective welfare should be foremost in the policy reforms and interventions that must be pursued not only by the national government but also by the local government units (LGUs) and that people-oriented local governance will be the vehicle to promote these reforms. A dispossessed and hungry populace will become restive in the face of economic growth that is primarily appropriated by the elite and allied interest groups.

There must be a consistency between the reforms adopted at the national and local levels. Harnessing the people's latent force to influence the craft economic policies which will make the economy competitive and income distribution more equitable is an important strategy to undertake. The political empowerment of the people will complement the structural reforms which are meant to stimulate growth and

address the equity and poverty problems. This begins at the local level.

In Section IV, I argue that a reorientation of the macroeconomic policies away from their contractionary bias to more growth and equity orientation will be imperative in the immediate future to arrest the continuing decline of real incomes and the worsening of the poverty situation. Indeed, economic policy reforms have a significant role in changing the economy's structure which has long been dominated by the interests of a minority.

II. Recent Economic Performance Following the Return of Democracy

Political and economic reasons triggered the peaceful EDSA revolution. The severe balance-of-payments crisis of 1993 and the assassination of former Senator Ninoy Aquino set into motion the galvanizing force which united people from all walks of life — the middle class, the masses, business and landed elite and eventually, the military into a common cause: the downfall of the dictatorial regime of Mr. Marcos and the restoration of democracy. The succeeding government of Mrs. Corazon Aquino swiftly restored the democratic processes and institutions and pursued economic reforms to bring about economic recovery and put the economy back along the growth path. A new Constitution was written which sought to strengthen the democratic processes and institutions in the country and to neutralize any adventurism with non-democratic political regimes. Mangahas and Arroyo (1990) noted the many "firsts" in the 1987 Constitution. They observed that popular participation is now a part of the basic law of the land through provisions which allow for a new

I submit that the adoption of growth cum-equity-inducing economic policies and the democratic processes and institutions will open avenues for sustained growth and development in the immediate future.

system of popular legislative initiative, referendum and recall. Decentralization in local government and the creation of the autonomous regions in the Muslim parts of Mindanao and the Cordilleras are provided for in the Constitution. Eventually, the 1991 Local Government Code which mandates comprehensive local decentralization and devolution of certain national government powers and functions of local governments, was passed by Congress and signed into law in 1990. Local elections in the autonomous regions also took place, paving the way for increased local autonomy in those areas. Another "first" in the Constitution is the provision for the reservation of several seats in the House of Representatives for sectoral representatives: those representing women, labor, the peasants, urban poor, the youth, indigenous cultural communities and other sectors. The New Constitution also guarantees the public's right to information, the workers' right to self-organization and collective bargaining and mandates agrarian and urban land reform. It provides for the equality of women, protects the legacy of tribal minorities and recognizes people's organizations and nongovernmental organizations (NGOs).

Free elections were called and with the encouragement by the government, people's organizations and nongovernmental organizations (NGOs) took a more active stance vis-a-vis policy-making. They participated actively in policy debates. The Philippine NGOs are grassroots organizations and are oriented towards community development. They have assumed a greater role in policy advocacy and have identified several areas of concern

such as agrarian reform, foreign debt, people empowerment, human rights violation, militarization, environmental issues, urban reforms, labor advancement, gender issues and cultural minority issues. With this policy advocacy orientation, the NGOs and people's organizations hope to be able to convince government to adopt more populist-oriented policies, particularly economic policies which consider the welfare of the masses.

Because of the people's firm commitment to democracy, several attempts by extreme political forces to overthrow the elected government did not prosper. The people's faith in democracy did not waver and the country witnessed a peaceful turnover of the helm of government from the Aquino to the present Ramos administration. Within this political framework a number of important economic reforms were introduced following the 1987-1992 Medium Term Development Plan² which put a large emphasis on an agro-industrial development strategy, decentralization of governmental structures, privatization and greater involvement of the people in decision-making through the people's organizations and NGOs participation in policy debates.

At the onset of the Aquino administration, attention was given to economic measures which would revive the economy. The response was positive growth after a period of stagnation under the former administration. Liberalization, deregulation and privatization were pursued in an effort to stem the rapid decline of the economy. Among the reforms that were introduced were the dismantling of the sugar and grains monopolies, the trade and tariff reforms to make domestic

industries more competitive, the privatization of several government-owned and controlled corporations and a comprehensive agrarian reform program. Pump priming led to economic recovery in 1987-1989 as the economy positively responded to the stimulus (Table 2). Real GNP grew at an average 5.3 percent per annum in 1986-1990 in contrast to the negative growth rates of 8.7 percent and 7.1 percent in 1984 and 1985, respectively. From a high level of 50.3 percent in 1984, the inflation rate was brought down to an average rate of 7.3 percent in 1986-1990.

In 1990 to 1992 a stabilization program agreed upon with the IMF was pursued which increased interest rates, tightened credit and reduced the fiscal deficit to 2.1 percent of GNP in 1991 and 1.2 percent of GNP in 1992 from its peak level of 5.2 percent of GNP in 1986. The government reduced public spending on infrastructure and investments. The demand reducing measures cut the growth of domestic liquidity, controlled inflation to single-digit levels and reined in the fiscal deficit. Total consolidated public sector deficit was reduced from 5.3 percent of Gross National Product (GNP) in 1990 to only 1.6 percent in 1991 and 1.9 percent in 1992 (Table 2). To cut down the fiscal deficit, a nine percent import levy to raise revenues was resorted to by the government and spending cuts were implemented. Because of the lack of political will to impose direct taxes on incomes, wealth and real property and consumption taxes on the rich, the government had to use a regressive measure such as the import levy which collected huge revenues but put domestic industries on a tailspin. Lim (1992) cited a Department of

²Its forerunner was the Policy Agenda for People Powered Development which enshrined the populist concern of the Aquino government.

Trade and Industry report that the import levy was expected to reduce investments by 21 percent in 1991. The cost, thus, of stabilization was a deep recession which cut into the growth prospects of the economy.³

On the other hand, there was a reduction in foreign debt service under the Aquino administration which opted for a strategy of paying the foreign debt and using "market-based mechanisms" to reduce the extensive foreign debt burden, a legacy of the former Marcos administration. Some commercial foreign debt were converted to official external debt; some private external debt were transformed into public external debt; and part of the interest payments on the external public debt were converted into public external debt. Borrowing from external sources was reduced but domestic borrowing increased sharply which exerted pressure on domestic interest rates.

A conjunction of inconsistent policies arising from the clash of interests among affected parties, and the refusal by government to adopt progressive policies such as direct taxation of income and wealth, removal of protection of inefficient industries and devaluation to stimulate exports and domestic industries, among others, led to a double-digit inflation in the early 90s and once more threatened to bring about a balance-of-payments crisis. When the ugly heads of high inflation and a balance of payments deficit coupled with a huge fiscal gap arose, the government implemented a traditional and orthodox stabilization program which called for spending cuts and high interest rates, no doubt motivated by some agreement with multilateral financing institutions. Following the orthodox solution, high-yielding Treasury bills were

"In perspective the more accurate statement would be that the government yielded to the powerful pressure exerted by the protected business minority to resist the liberalization and deregulation in the economy when such threatened to bring potential harm to their immediate interests."

issued and the banks' reserve requirement was raised. The latter increased the intermediation costs and exacerbated the already tight credit situation in the economy. The net result was a credit squeeze as surplus units of the economy chose to invest in Treasury bills instead; only prime clients (i.e., the big and established borrowers) to the detriment of small and medium firms, small businessmen and farmers, were able to access credit from the formal financial markets. The spending cuts which were applied mostly to infrastructure and capital investments further weakened the productive capacity of the economy.

The interesting phenomenon at this time in the politico-economic history of the Philippines was the return of traditional politicians to the decisionmaking and policy making arena who found natural allies in the powerful elite minority. It must be recalled that the 1987 Constitution provided for political and economic opportunities for the majority of the impoverished masses. The recognition of people's organizations and nongovernmental organizations, the mandate to decentralize and give ample powers to local government units and the expressed desire for agrarian reform are some of the manifestations of the people-orientation of the Constitution. However, when the interests of the masses and those of the powerful

minority clashed, the more conservative elements in government sided with the latter. In perspective the more accurate statement would be that the government yielded to the powerful pressure exerted by the protected business minority to resist the liberalization and deregulation in the economy when such threatened to bring potential harm to their immediate interests. The failure of the government to plan an adjustment for the affected domestic industries and to design viable safety nets for vulnerable groups such as the urban poor and marginal farmers and fishermen also contributed to the resistance to change. The powerful elite capitalized on these short-term adjustment problems to thwart the restructuring of the economy.

To illustrate,⁴ financial liberalization was most welcome to the concentrated banking industry for as long as the objective was to free the interest rates and to reduce intermediation costs through such measures as lowering the reserve requirement, eliminating the gross receipts tax on banks and the loan quotas, which force banks to lend to targeted sectors (the agriculture and agrarian sectors). However, the call for liberal bank entry into what is considered as an oligopolistic industry (Tan 1989; Lamberte 1992) was not of course supported by the banking industry. An illustration of the

⁴For lack of space, I give only two illustrations: the experience with trade and the financial liberalization.

concentration of the banking industry is shown in Table 3. Tan (1989) computed an increase in the Herfindahl Index from 0.0452 in 1982 to 0.0741 in 1988 and a similar increase in the Comprehensive Concentration Index from 0.1157 in 1982 to 0.2470 in 1988. These increases are quite significant and only show the increasing concentration of the banking industry. Instead, a big issue was made of the high-yielding Treasury Bills and various government interventions in financial intermediation as reasons behind the huge spread between deposit and lending rates and the generally high interest rates. Thus, one witnessed the strong lobby by the banking sector and the small borrowers, peasants and farmers for a reduction of the high interest rate levels but curiously, the stated cause of the high rates is distortionary government intervention but no mention was ever made of the concentration of the industry itself which would then merit separate economic policies such as more liberal branching and bank entry policies.

Another experience was that of trade and import liberalization. Trade liberalization which is intended to make domestic industries more competitive, is implemented through tariff reforms and import liberalization. The first phase of the import liberalization program was in 1981-1983, and the second in 1986-1989. The Philippine experience with trade liberalization shows how a growth-inducing and a job-creating policy (and therefore, promoting equity) can be derailed by the effective lobbying

of affected groups with help ironically, from those sectors who stand to ultimately benefit the most from the economic reform. The initial action was to lift quotas for raw materials, fruits, agricultural products and some intermediate inputs. The immediate impact, therefore, was on agricultural producers such as fruit growers, corn farmers who obviously objected against the policy. Through effective lobbying, protected industries (which have become relatively inefficient) succeeded in postponing to the second phase the liberalization that would have affected them. The latter succeeded in joining hands with those initially affected, with much support from the popular media, to raise the specter of lost jobs and increasing unemployment as a net result of trade liberalization. Lim (1992) who pointed this out further commented that the implicit rule of sequencing is to liberalize first those areas with high distortion which, in the Philippine context, consist of protected industries before those of the more competitive and small and medium scale sectors are touched. But this sequencing rule was never followed.

The costs of protecting inefficient domestic firms are high. Using data from the 1988 Census of Establishments, De Dios (1993) showed that the protected industries, on the average, consist of large firms, use the most capital-intensive technologies, have the highest share of foreign equity and are the most concentrated as measured by the high value-added concentration ratios. A typical example is the

assembly production industry such as the car industry (Table 4). After measuring the distortions, costs and transfers among groups arising from the industry's protection scheme composed of a combination of tariffs on imported vehicles and parts, import restrictions and local content and compensatory export requirements in the Car Development Program, De Dios (1993) found out that losses to car buyers are between P2.7 to P2.8 million a year; transfers from buyers to assemblers, P711 million to P744 million; and efficiency losses, P163 million to P327 million. In the components market, the transfers to manufacturers range from P93 million to P96 million while the efficiency losses are between P2.5 million to P4.9 million.³ Thus, the protective regime keeps car prices artificially high, maintains costly domestic production of car and car parts and transfers huge amounts to special interest groups.

The peaceful and credible elections held in May 1992 facilitated the smooth transition of government. This, together with the efforts of the Ramos administration to continue the program of promoting openness and competitiveness of the economy, has rekindled a new confidence in the Philippine economy. The renewed hope is shown for instance, by recent survey findings of the Social Weather Stations which indicated that the Economic Sentiment Index was 105 for the nation in December 1992 (See Figure 1). This has risen from 88 in February, 93 in April and 102 in September. The improvements were seen mainly in the rural areas. It also increased in Urban

³Natural disasters such as the 1990 earthquake and the recent eruption of Mt. Pinatubo as well as the power outages were also responsible for the low growth of the economy. Coupled with the stabilization measures, the end result was a recession.

⁴The current exchange rate is P28: US\$1.

Luzon from 108 to 122 but fell in Metro Manila from 132 in February to 130 in December (Mangahas 1993).⁶ The general optimism is due to the initial attempts by the current administration to resuscitate the economy. For instance, the foreign exchange market was further liberalized. Exporters can now keep all the proceeds from their exports unlike before when they could only retain two percent and before the liberalization, 40 percent (see Yap 1993). A Central Monetary Authority was recently established replacing the old Central Bank of the Philippines which has been rendered ineffective in its monetary management by large deficits. The government established the National Unification Commission which seeks to forge peace with the different rebel groups and the Presidential Commission to Fight Poverty which will come up with policy measures and interventions to reduce the extent and depth of poverty. For the first time in Philippine development planning, there is a concrete commitment to reduce poverty incidence from the current 40.7 percent (1991 figure) to 30 percent by 1998 (see 1992-1997 Medium Term Development Plan). It remains for the government to exploit the windows of opportunity and goodwill that are presented to every new administration by taking decisive policies that promote growth and equity.

III. Local Government and Participatory Development in Promoting Growth and Equity

The 1991 Local Government Code tries to give concrete meaning to the long aspiration by local areas for autonomy. The immediate

objectives are to promote and encourage local participation in development and to foster efficiency in the economy since overcentralization and overbureaucratization of the national government have had ill effects on resource allocation and incentive generation. Lim (1992) pointed out that the Philippines being a former colony of Spain and the United States inherited a highly centralized political and administrative bureaucracy which suited the requirements of the colonizer and initially, of the economy immediately after independence from these colonizers. Local institutions and authorities may have been weak or non-existent which required a strong central government to promote growth and development. However, over time a highly centralized structure seems to have become less effective in meeting the changing demands of local development, especially with the current emphasis on local initiative and participation. The government established regional development authorities and regional development councils but a good part of decisionmaking and resource allocation still emanated from the central government in Manila. The passage of the 1991 Local Government Code meant that certain functions and responsibilities of national agencies will be devolved to local government units (LGUs) with the assurance that these LGUs will have control over much of the local resources

and will have an increased share in the national tax collections. The LGUs will now be primarily responsible for local planning and delivery of services and the implementation of developmental projects (see Lim 1992). The Code also gives local citizens the potential to control LGU through such political tools as the referendum, recall and initiative. Corrupt and incompetent LGU officials can, thus, be removed by popular will from office without having to wait for the next round of local elections.

The devolution will cover several major government agencies such as the Departments of Agriculture, Health, Environment and Natural Resources, Social Welfare and Development, Public Works and Highway, Education, Culture and Sports and Transportation and Communications. Among the devolved services, facilities and regulatory functions are the following: agricultural extension and on-site research; implementation of community-based projects and enforcement of environmental laws; delivery of social welfare services; construction and maintenance of school buildings, public works, infrastructure funded out of local funds; delivery of field services, hospital services and other health services; tourism facilities and tourism promotion/development; inter-municipal telecommunication services for provinces; reclassification of lands; enforcement of the national

“It remains for the government to exploit the windows of opportunity and goodwill that are presented to every new administration by taking decisive policies that promote growth and equity.”

⁶The Social Weather Stations (SWS) Index of Economic Sentiment consists of the average of: (a) percentage who do not self-rate as poor, (b) percentage who have gained over the last year, (c) percentage who are optimistic of gaining next year, (d) average percentage who have recently purchased a major home furnishing or appliance, repaired or improved the house, invested in an income-generating activity and (e) average percentage who plan to spend on times above soon. Since 1986 the SWS has conducted surveys to compute this index which has been regarded as a barometer of well-being.

Local government capability must be built up and local resources must be shored up, especially those of the lower income LGUs, in order to assure continuity and improvement of the delivery of the devolved functions and services.

building code; real estate trade and business and others. Decentralization will, thus, transfer major functions and responsibilities to the LGUs.

An important provision of the 1991 Local Government Code is the recognition of the role of people's organization, NGOs and the private sector as significant agents in local development consistent with the framework laid down by the 1987 Constitution. The Code provides for their direct involvement in local special bodies; the delivery of basic services and facilities; joint ventures and cooperative programs; financing, construction, maintenance, operation and management of infrastructure projects, among others. Local special bodies include the Local Health Board, the Local School Board, the Local Peace and Other Council, Local Development Council, the Local Prequalification, Bid and Awards Committee and the People's Law Enforcement Board. Organizations and cooperatives of marginal fishermen and similar entities are given preferential treatment in certain areas. Likewise, the private sector, the NGOs and people's organizations can participate in build-operate-transfer (BOT) agreements covering infrastructure projects. These provisions of the 1991 Local Government Code are an implementation of the constitutional mandate to give due recognition to the people's organizations and NGOs' role in nation-building.

Local decentralization has laudable objectives. However,

several outstanding issues have to be addressed for its implementation to be meaningful. As observed by several authors (Lim 1992; Manasan 1992 and Llanto 1992), there leaves much to be desired in the capability of the different LGUs to implement the goals of decentralization. The LGUs are a heterogeneous lot; municipalities, for example, are categorized into six income classes, with varying local executive abilities and dedication to the job. It will be an entirely novel experience for many of these LGUs to start the initiative on carrying out devolved functions and delivering local services. Because of poor revenue performance, a good number of these LGUs have been dependent on the central government for resources and directions. It will take, therefore, a huge effort to start them on the road to self-direction and self-reliance. Local government capability must be built up and local resources must be shored up, especially those of the lower income LGUs, in order to assure continuity and improvement of the delivery of the devolved functions and services. The LGUs and the national government have to come up with a workable compromise on the issue of the internal revenue allotments, i.e., the share in the national taxes. While the 1991 Local Government Code gives a bigger share — from 30 percent in 1992 to a maximum 40 percent in 1994 and onwards — the national government can reduce it to a minimum 30 percent, as provided by the same Code, whenever the national government

faces extreme fiscal constraints such as those imposed by a huge national government fiscal deficit. A workable sharing formula must be clearly identified in order to avoid a possible awkward situation which lower income LGUs might face should they no longer be able to efficiently implement the devolved functions and responsibilities because of resource constraints. This is a pressing issue because public expectations of local government units' ability to provide quality local governance have recently risen.

On the other hand, decentralization cannot be divorced from the structures, institutions and political power play in society (Lim 1992). Decentralization is supposed to transfer responsibilities and resources to the local people who presumably have a better sense of how to chart and promote local development. It would be the height of naivete to assume that efficiency and equity considerations follow with decentralization. The fact is that, local elite and power groups have a strong edge in capturing and appropriating for themselves the benefits (and power) that decentralization may bring. If these interest groups are well-entrenched in the local economy, it would be necessary for the national government to come up with countervailing policies and strategies to diffuse the power and economic concentration in the local areas. The inclusion of people's organizations and NGOs in the local lawmaking bodies, the *sanggunians*, and other local special bodies is a step in the right direction. Their presence may dampen the monopolistic elements in the local government councils. However, the common perception is that many of the local powerful interests have already gained a foothold in the LGUs and they may increase their effort to

consolidate and strengthen their power base not only in their local municipalities but also in their respective provinces. The organizing and advocacy effort of the local people through the people's organizations and genuine NGOs needs support by the central government and by civic-conscious groups. Their attempts to develop their own skills, knowledge and solidarity must not be denied but instead, supported by the national government.

On the other hand, because the incentive to form NGOs is there, the traditional politicians have also started to organize their own NGOs. Briones (1992) warns that if appropriate monitoring and controls are not in place, the provision of the Local Government Code giving preferential treatment to NGOs can be easily used for personal gain by unscrupulous members of the local communities and the people will be the ultimate loser. It is heartwarming to note, however, that the legitimate NGOs realize the situation and have started to examine their ranks and come out with self-policing policies.⁷

The role of NGOs and people's organization in local development has been organized and included in the Local Government Code. Some LGUs have worked with these organizations for local development. However, in some instances, there is mutual distrust of each other for several reasons. Some LGUs question the public accountability of the NGOs and people's organizations who also compete for resources that are available from the national gov-

ernment and foreign sources. On the other hand, because of the failure of local governance, the NGOs and people's organizations who have engaged in development work and delivery of basic services, view traditional politicians with suspicion. The LGUs and these organizations must work together to eliminate the distrust and biases and to strengthen their combined capacity to promote local development.⁸

IV. Economic Policy Reforms for Growth and Equity

I started this paper by pointing out the grave situation of poverty in the Philippines. The main point that I wish to make is that, while the country has found political freedom, its meaning may rapidly be expended if the country continues to stagnate. A growth-only and growth-first set of economic policy measures that hope to let economic progress trickle down to the poor will be undermined by the explosive sociopolitical situation that extreme poverty creates. For this reason, a firm commitment and action to strike at the fundamental structural flaws of the economy and the existing poverty condition must be made. Past economic strategies have been biased against the use of abundant Philippine labor and have discriminated against exports, small and medium scale firms and agriculture. The economic stabilization program resulted in cuts in infrastructure spending and domestic investment while the huge foreign and domestic debt service further constrained the

growth capacity of the economy. The causes of low growth and poverty are as much policy-induced as structural. Philippine observers (De Dios, et. al.; the Presidential Commission to Fight Poverty; the Fellows at the Philippine Institute for Development Studies) have pointed out the following as primary reasons: (a) lack of employment and livelihood opportunities due to low economic growth and high population growth; (b) low productivity of labor because of the low literacy level and the presence of so many unskilled labor; (c) unequal distribution of wealth and access to resources; (d) lack of or poor access to social services such as quality education and health services; and (e) the poor state of the environment and degraded resource-base.

The general conviction is that now is the opportune time to seize the moment and boldly get the economy out of the rut. Clearly, a break from traditional and sometimes inconsistent policies must be attempted. To do this, the main strategy is growth-and equity-oriented economic package that will take advantage of the current low inflation rate and the large stock of international reserves at the Central Monetary Authority. The economic policy package consists of micro-economic policies which address the fundamental problems of low growth and stagnation and structural flaws, and macro-economic policies and interventions that will help ensure the sustainability of growth and

⁷NGOs basically have grassroots and community development orientation. In the Philippines they have also involved themselves in policy advocacy over a number of important issues such as debt, environment, human rights, social justice. A recent significant development is the effort to unite different NGO networks for joint action and cooperation and to distinguish the legitimate NGOs from the thousands of similar organizations. In December 1991 during the first National NGO Conference, the Caucus of Development NGO Networks (CODE-NGO) was formed (Briones 1992).

⁸Briones (1992) believes that government and political leaders cannot and will not, of their own accord, bring the goals of participatory democracy, decentralization and genuine people empowerment. She advocates for the people's own effort and advocacy to make these goals a reality.

address directly the poverty situation.⁹ The following must be immediately done:

- * Generate employment rapidly through a growth-oriented spending program. Revival of investment and the creation of more jobs will be necessary in the face of widespread unemployment and underemployment. Expenditures on power, roads and ports, irrigation and storage facilities and communications are imperative. The economy has been deprived of too much overhead social capital for a long time and it cannot hope to revive without creating the means that will open economic opportunities.
- * Improve revenue collection by strict enforcement of tax laws and by imposing equity-enhancing revenue laws. The government cannot afford to be lax in tax administration. It must also consider taxes on luxury consumption, more credible real property taxation, user charges, higher fees for use of resources and stiff penalties for pollution and tax evasion.
- * Encourage investments by bringing down the lending rates through a relaxation of the monetary targets. Promote a vigorous domestic resource mobilization and introduce more competition in the banking industry.
- * Promote equitable access to natural resources and their efficient use. The government must improve its implementation of environmental laws and regulations. To this end, community-based resource management programs and the right social pricing for resources should be used to promote equity and optimal use of these resources,

respectively.

- * Continue those reforms that will make inefficient industries more competitive and less concentrated, such as tariff restructuring and more liberal foreign investment regulations.
- * Use the exchange rate policy as a competitive tool to promote export-oriented industries and agriculture and at the same time, provide the funds for a social safety net for affected sectors such as the urban poor and consumers. Part of the gains from a devaluation can be taxed in order to create a social fund that will finance the safety net and adjustment costs of industries.
- * Pursue agrarian reform while at the same time imposing progressive land taxes to create incentives for dispersion of agricultural lands. Land conversions and land valuation must be addressed by the government through a rational land use policy that will consider the requirements of both agrarian reform beneficiaries and modern industry. The land tax will also generate much-needed revenue for the government's social safety nets and the increased spending for infrastructure, especially power.
- * Provide basic social services to address the primary health care, family planning, elementary education, supplemental feeding, housing, water and sanitation needs, especially of the poor. The country's ultimate source of growth and development is its human capital and immediate steps must be taken to arrest the decline of the quality of this resource.
- * Undertake micro enterprises and livelihood projects that are

designed and targeted to the real poor. Skills and technology training, credit and other technical assistance must be provided to the poor who are more than willing to invest time and effort to upgrade their levels of skills and knowledge. The economic opportunities that can be provided by the livelihood projects will answer the real poor's immediate basic needs and will help bring them to the economic mainstream.

- * Local government units must work with the NGOs and people's organizations to create location-specific schemes to alleviate poverty.
- * Impose progressive real property taxes and more efficient use of user charges at the local level to raise resources to finance the delivery of the devolved basic functions and services.

These proposals are not entirely new. Many Filipino scholars and experts have advocated such policies which will transform the Philippine economy, put it on a competitive footing with neighboring economies and arrest the secular decline which is mainly responsible for much of the poverty and unemployment. However, the bottom line is political will. The government must have the courage to make a radical break from its preoccupation with "stabilization" and to embark on growth and equity oriented economic measures. More importantly, the collective welfare of the majority must be the guiding beacon of economic policies and not the self-serving interest of a minority. To do less than this reminds us of the

The government must have the courage to make a radical break from its pre-occupation with "stabilization" and to embark on growth and equity oriented economic measures.

⁹These macro and micro policies and interventions have been discussed and recommended by a large number of scholars and experts in their respective professional fields in a workshop on "Development Issues in the 1990s" sponsored by the Philippine Institute for Development Studies in Tagaytay City on 12-13 June 1993. I participated in this workshop which also provided inputs to the De Dios et al. volume, "Poverty, Growth and the Fiscal Crisis." I reiterate here our policy recommendations.

inaction portrayed by that famous fable by Aesop: "after all is said and the doing needs to be taken, the assembled mice cannot seem to define who is it among them that will hang the warning bell around the enemy cat's regal neck." Somebody — and that is government — must slay the dragon of poverty and stagnation.

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SWS INDEX OF ECONOMIC SENTIMENT

PHILIPPINES

NCR

OCT86	100	142
MAR87	150	163
OCT87	117	142
MAR88		142
SEP88	96	142
FEB89	100	142
JUL89		124
SEP89	100	138
APR90	96	133
AUG90		121
NOV90	88	121
MAR91		104
JUL91	76	100
SEP91		121
NOV91	92	121
FEB92	88	132
APR92	93	122
SEP92	102	151
DEC92	105	130

Table 1
Annual Per Capita Poverty Threshold and Incidences of Families By Region, Urban-Rural, 1991

REGION	PHILIPPINES			URBAN			RURAL		
	Annual Per Capita Poverty Threshold ^a (P)	Number of Poor Families ^b	Incidence ^c (%)	Annual Per Capita Poverty Threshold (P)	Number of Poor Families ^b	Incidence ^c (%)	Annual Per Capita Poverty Threshold (P)	Number of Poor Families ^b	Incidence ^c (%)
PHILIPPINES	7,350	4,379,620	41	8,439	1,913,654	32	6,238	2,965,965	49
N.C.R.	9,471	245,018	15	9,471	245,018	15			
A.O.N.C.R.	7,004	4,634,602	45	8,037	1,668,637	39	6,238	2,965,965	49
C.A.R.	6,574	85,666	38	8,156	16,467	24	5,862	69,199	44
Region I	8,123	332,014	49	8,677	128,973	50	7,754	203,041	49
Region II	7,072	210,977	43	9,089	51,369	43	6,406	159,608	43
Region III	8,293	394,612	33	9,291	220,423	31	6,923	174,188	35
Region IV	8,083	613,452	38	8,980	250,948	30	7,131	362,504	46
Region V	6,436	461,776	56	8,175	155,069	62	5,471	306,708	54
Region VI	6,345	499,975	47	7,138	155,319	38	6,174	344,655	52
Region VII	5,650	383,210	42	5,990	116,653	29	5,375	266,557	53
Region VIII	5,240	269,471	43	5,986	74,333	39	4,914	195,138	42
Region IX	6,937	329,225	55	7,651	88,380	48	6,640	241,144	58
Region X	6,564	378,170	55	7,355	147,044	48	5,990	231,126	61
Region XI	6,529	394,416	48	7,507	166,486	43	5,667	227,929	51
Region XII	6,913	281,339	51	8,302	97,172	55	6,214	184,168	49

^aBased on the consumption patterns of families within the + or - 10 percentage points of the subsistence incidence of the preliminary result of the 1991 FIES. Thresholds were weighed with FIES population, urban and rural.

^bThe annual per capita income required or the amount to be spent to satisfy the nutritional requirements (2,000 calories) and other basic needs.

^cThe number of families whose annual per capita income fall below the annual per capita threshold.

^dThe proportion of families whose annual per capita income fall below the annual per capita poverty threshold.

Source: Technical Working Group on Poverty Determination, National Statistical Coordination Board.

Table 2
Some Macroeconomics Indicators, 1984-1992

INDICATOR	1984	1985	1986	1987	1988	1989	1990	1991	1992	FQ
Real (1985 Prices) GNP Growth Rate (%)	(3.72)	(7.06)	4.15	5.10	7.16	5.73	4.53	0.23	0.99	0.92
Real (1985 Prices) GDP Growth Rate (%)	-7.32	7.31	3.42	4.78	6.25	6.96	2.70	-0.65	0.01	(0.17)
Inflation Rate (CPI, %)	50.34	23.11	0.75	3.79	8.76	10.60	12.67	17.69	8.90	8.07
T-Bill Rate (91 days, %)	30.53	26.81	14.43	11.39	14.67	18.64	23.67	21.48	16.02	13.21
Current Account Balance (billion US Dollars)	(1.12)	(0.10)	0.95	(0.44)	(0.39)	(1.46)	(2.70)	(1.03)	(0.92)	
Current Account Balance/GNP (%)	(3.47)	(0.34)	3.06	(1.36)	(1.11)	(3.93)	(6.96)	(2.66)	(2.54)	
National Government Deficit (billion Pesos) / GNP (%)	1.98	2.00	5.20	2.50	2.90	2.10	3.50	2.10	1.20	0.00
Consolidated Public Sector Deficit (billion Pesos) / GNP (%)		6.51	5.20	1.90	3.70	4.20	5.30	1.60	1.90	
Unemployment Rate (%)	6.20	7.10	6.70	11.20	9.60	9.20	8.40	10.60	10.20	8.30
Population Growth Rate ^b (%)	2.49	2.47	2.44	2.41	2.38	2.34	2.30	2.26	2.21	2.19

Sources: National Statistical Coordination Board

National Statistics Office

Central Bank of the Philippines Department of Finance

Table 3
MARKET SHARE AND MEASURES OF CONCENTRATION

RANK			TOTAL ASSETS (TA)		MARKET SHARE IN TERMS OF TA		GROWTH RATE OF TA		REMARKS
1982	1988	FIRM NAME	1982	1988	1982	1988	1982-1988 %		
1	2	Bank of the Philippine Islands	9,119.6	26,282.0	0.0773	0.1232	188.0		
2	3	Metro Bank	8,453.1	25,729.0	0.0717	0.1206	204.4		
3	6	Allied Bank	8,012.1	9,470.0	0.0679	0.0440	18.1		
4		Republic*	6,576.3	7,879.0	0.0558	0.0369	19.8		
5	5	UCPB	6,495.9	16,173.0	0.0551	0.0758	149.0		
6	1	Far East Bank and Trust Co.	6,260.4	28,093.0	0.0531	0.1317	348.8		
7	4	PCIB	6,032.6	19,676.0	0.0511	0.0922	226.1		
8	12	Interbank	5,309.2	7,274.0	0.0450	0.0341	37.1	Investment from AMEX Closed	
9		Manila Bank	5,286.9		0.0448				
10	17	Traders*	4,934.9	3,851.0	0.0418	0.0181	(22.0)		
11		Family Bank	4,600.8		0.0390			Merged with BFI	
12	11	RCBC	4,448.2	7,604.0	0.0377	0.0356	71.0		
13	13	China Bank	4,131.4	6,015.0	0.0350	0.0282	45.6		
14	15	Security Bank	3,912.6	4,666.0	0.0332	0.0219	19.3	Bought by PCIB Closed	
15	12	IBAA	3,636.5		0.0308			Investment from Nova Scotia	
16		Pacific	3,619.0		0.0307				
17	7	Solid Bank	3,267.8	8,837.0	0.0277	0.0414	170.4		
18	14	PBCOM	3,049.8	5,010.0	0.0259	0.0235	64.3		
19	8	Equitable	2,908.0	6,190.0	0.0247	0.0384	181.6		
20		Producers*	2,894.2		0.0245				
21	18	Philbanking	2,629.4	3,699.0	0.0223	0.0173	40.7		
22	19	Union Bank	2,575.1	3,690.0	0.0218	0.0173	43.3		
23	20	Prudential*	2,474.2	3,121.0	0.0210	0.0136	26.2		
24	21	Associated*	2,191.3	2,518.0	0.0186	0.0118	14.9		
25	9	City Trust	2,118.8	8,098.0	0.0180	0.0379	182.9		
26	16	Philtrust	1,283.1	3,938.0	0.0109	0.0185	206.9		
27	23	Puapinas	1,145.3	1,425.0	0.0097	0.0067	24.4	Investment from bank of Tokyo	
28	22	ComBank (now Boston Bank)	587.3	2,150.0	0.0050	0.0101	266.3	Investment from Boston Bank	
TOTAL			117,954.5	213,388.0					
Herfindahl Index (HI)*					0.0452	0.0741			
Comprehensive Concentration Index (CCI)**					0.1157	0.2470			

*Government-acquired or in difficulty, now in process of privatization or rehabilitation.

**HI is calculated by squaring and summing the share of industry size accounted for every firm in the industry.

***RI is calculated by multiplying each firm's share of industry size by the firm's rank, with firms ranked in descending order of size.

****CCI is calculated by adding the market share of the largest firm in the industry to a summary index covering the remaining firms in the industry.

Sources: Tan, Edita, "Bank Concentration and the Structure of Interest UP School of Economics Discussion Paper No. 8915, 1989.

Table 4
INDUSTRIAL SECTOR AVERAGES

Sector	All Manufacturing	Protected Sector	Liberalized Sector	Unprotected
Average Number of firms	83.0	53.0	100.0	54.0
Employment/Firm	74.0	111.0	72.0	52.0
Compensation/Employees (P000)	37.0	54.0	34.0	30.0
VFA/Firm (P0000)	7728.0	23784.0	5935.0	2373.0
VA/Firm (P000)	11392.0	26916.0	10120.0	3984.0
VFA/Employees (P000)	104.0	214.0	82.0	46.0
VA/Employees (P000)	153.0	242.0	140.0	77.0
Tariff	34.7	31.8	37.3	26.7
VACR 1983	58.5	68.1	54.6	60.4
VACR 1988	61.9	68.2	60.6	59.3
Foreign Equity	5.5	13.1	3.9	2.8

VFA is the value of fixed assets

VA is value added

VACR is three-firm value-added concentration ratio

Source: De Dios, February 1993.

In early 1993, almost two years after the eruptions of Mt. Pinatubo, a British journalist visited an Ayta community in San Felipe, Zambales. Up until then this journalist had heard only of horror stories that usually come in the wake of massive disasters. But he wanted to find out for himself if there was any success story worth telling, if there was any bright spot in the Mt. Pinatubo laharscape. And in San Felipe, Zambales, he saw the stirrings of an Ayta community rising from the ash-covered hills. Towards the end of his visit, he asked the community whether in ten years they would have fully recovered. One of the Ayta leaders answered, "Ten years is too long."

Given their generally un-availing experience with relief and rehabilitation in the evacuation centers and relocation areas, as well as the unpredictable behavior of the volcano and lahar movement, the answer was most confident and optimistic.

What was behind the optimistic and confident answer? This paper is an attempt at a brief reply. By this brief reply, we hope to demonstrate, if only tentatively, that communities have in themselves the capacity to turn disasters into opportunities for self-determination and environmentally sustainable living.

In September 1991, after several evacuation centers, four households decided to return to their former village in Banawen of Barangay Maloma, San Felipe, Zambales. Before the eruptions of

Mt. Pinatubo, Banawen was a flourishing Ayta community of about 65 households. Their economy was based on wet rice cultivation plus agroforestry. They did some fishing in the nearby streams that fed the Maloma River. Occasionally, they hunted wild pigs and deer. They traded some of their products for goods they themselves could not produce. As some of the elders would put it, "naroong lahat ang aming pangangailangan".

The volcanic eruptions forced them out of the village into evacuation centers and relocation sites as well as villages of relatives least affected by ashfall.

Upon their return to Banawen, the four households built their houses on the hillsides since the former village site and the ricefields were already covered by lahar. Led by Mang Andres, a very literate Ayta with some experience in community organizing work before the volcanic eruptions, the group wrote up a rehabilitation plan. They presented the plan to both governmental and nongovernmental organizations then working in Zambales and in the general area of Central Luzon but to no avail. "Ni isang plastic na plato, wala kaming nakuha", Mang Andres said.

But in November 1991, they got 18 cavans of rice from the Central Luzon Ayta Association, the regionwide organization of Ayta, with whom they have affiliated. Instead of distributing all of the rice for home consumption, they exchanged two

cavans for rice seeds and started to experiment (mag-eksperimento) whether they could grow rice in the already lahar-covered fields. Simultaneously, they started planting root crops on the hillsides and planting practically all seeds of fruits and vegetables they could lay their hands on. They were establishing nurseries in scattered places — one square meter here, three square meters there, until they have patches of seedlings of papaya, nangka, kasuy, mango, calamansi and others.

Later, they were able to convince two Metro Manila-based NGOs to pay them a visit. Convinced of the determination of the early returnees, the two NGOs provided material support such as farm and carpentry tools, vegetable seeds, rice and canned goods, as indicated in the rehabilitation plan of the group. In the dialogues between the group and the two NGOs, it was agreed upon that the rehabilitation program is also an *exit program* — i.e., a program designed to simultaneously build the capacity of the community to determine for itself the content and direction of its own development and make the two NGOs unnecessary. It is therefore an exit program for the NGOs.

Since then, subsequent activities have led to the gradual return to Banawen of the former villagers (as of last count this July, there are already 51 households). They have also organized themselves into the *Samahan ng mga Ayta sa Banawen*, which was recently registered with the

*Chairman, Sentro Para sa Ganap na Pamayanan and Member, 1986 Philippine Constitutional Commission.

Securities and Exchange Commission.

In addition to their By-laws, they have formulated their *Batas Pambaloob* to govern the implementation of their programs and projects. They have revised their community plan to include, in addition to their existing family and communal livelihood projects and functional literacy program, a community-based health program and a forest rehabilitation program. They have also organized a women's group which will run its own programs and projects. All of these, on their own. Well, with a little help from their friends. In the last dialogue between the community and the two NGOs, it was agreed upon that the material support shall continue up to the end of 1994. Again, the community has expressed confidence that by then they shall be well on the way towards self-reliance.

Too good to be true? Even the two Metro Manila-based NGOs themselves are surprised. Pleasantly. Between their first visit to the area in early 1992 and

the last visit this July, the NGOs have spent not more than 10 days in the field, an indication of the degree of independence of the community and the NGOs' confidence in the Ayta association to run their programs and projects. But there are problems. Internally, the organization feels it is still weak. They feel they need more Ayta with leadership, managerial and technical skills. Of these are the usual problems arising from personality differences and occasional differences in project implementation. But they are addressing these and have already lined up training activities until the end of 1994.

An overarching problem has to do with the State's recognition of ancestral land rights. The Ayta strongly feel that government has been woefully remiss in translating the numerous Constitutional provisions in support of the rights of indigenous cultural communities (or indigenous peoples and *katutubo* as organized groups now prefer to call themselves) into appropriate laws and policies. Still, with their

heightened awareness of their human and constitutional rights and their newly found organizational strength, they continue to protect their ancestral lands and the remaining forests and other resources. Recently, they confiscated the chainsaw of an illegal logger and sought the intervention of the Department of Environment and Natural Resources for continued support in their struggle to protect their ancestral lands. They continue to rehabilitate the degraded hills by planting fruit trees, Casuarina or agoho, bamboo, tiger grass, bananas and kadios (*Cajanus* spp). They plan to plant some more as seedlings become available. Plans are afoot to retrieve the indigenous medicinal plants for their herbal gardens.

All told, as they continue to protect their ancestral lands and make them productive, they do so no longer simply as victims of disaster but as a people strengthened in their newly-found organization and proud of their Ayta heritage. ■

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THE POLLUTION AND FLOOD CONTROL PROJECT FOR THE NAVOTAS-MALABON-TULLAHAN-TENEJEROS RIVER SYSTEM

Edwin T. Alejo

The Issue

This study looks into the implementation of the **Pollution and Flood Control Project for the Navotas-Malabon-Tullahan-Tenejeros (NMTT) River System**. The concern of this study is to determine the administrative capability of the organizational structure that implements the project. The effectiveness of the project implementation was assessed by examining the implementing structure of the project, the nature of leadership in bringing about the project and the management of the fiscal resources of the projects.

This study is done to see how the policy of the Philippine government to revive our country's biologically dead rivers has been implemented. In 1988, *Diliman Review* featured a report of the National Environmental Protection Council (NEPC) on the state of pollution of our major rivers and lakes as follows:

1. **Laguna Lake**, Southeast Asia's biggest lake (90,000 hectares), is in semi-eutrophy (dying). The increase of mineral and organic nutrients in its waters has reduced the dissolved oxygen in the lake, producing an environment that favors plant over animal life.
2. **Manila Bay** has exceeded its allowable water-quality parameter maximum for shellfish beds, bathing, and fishing.

3. **The Pasig River** carries an estimated 55% of its organic load in the form of domestic sewage, including refuse. Out of 313 industrial plants along the banks of the Pasig-San Juan-Marikina River Systems, 138 pollute the water in varying degrees. As a result, several breeds of fish have been killed and the water has become unfit for bathing, washing and other domestic uses.

4. **Tenejeros and Tullahan**, in Malabon, are the most polluted rivers in the country today, receiving various types of solid and liquid waste from about 20 factories along their banks.¹

A 1990 publication of the Haribon Foundation showed that "of the 384 major river systems and 59 lakes of the Philippine fresh waters, a total of 40 rivers, including all the rivers of Metro Manila, are now considered biologically dead due to pollution."²

Against this background, the Rivers Revival Program was conceived and implemented. The Program "aims to resurrect dead rivers and institute steps to prevent heavily-polluted rivers from

further degradation. It has for its initial project the revival of the Navotas-Malabon-Tullahan-Tenejeros river system, a 27-kilometer waterway that runs from the La Mesa Reservoir in Novaliches emptying westward towards Manila Bay.³ With the launching of the NMTT Project, it was assumed that the revival of the NMTT river system may serve as a step towards the rehabilitation of other major river systems in the country.

However, the implementation of the Phase I period of the Project (1989-1992), as evaluated by this study, reveals that the goals of the project were not realized as a result of an ineffective administration, primarily because of lack of necessary preparation for the project. The components of administrative capability, such as internal organizational structure, leadership and management of fiscal resources, were used to determine with specificity this ineffective implementation. The internal organization structure was characterized to be highly

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¹ Lingkod Tao-Kalikasan for the Philippine Federation for Environmental Concerns. "A Primer On Environmental Issues: The Philippine Setting", *Diliman Review*, vol. 36, no. 2, 1988.

² "Signs of Strain", *UPDATE*, Vol. 5, No. 8, March-April 1990, Haribon Foundation, Philippines.

³ Department of Environment and Natural Resources (DENR). Mission, Thrusts, Programs, and Organization, DENR, Philippines.

complexed, the implementing agencies being unprepared to utilize the advantages of an inter-agency coordination. Leadership within the structure was evaluated to be weak and uncommitted. This was clearly shown through the lack of political will among the local government officials and by the resignation and lack of commitment on the part of government agencies. Finally, the management of fiscal resources as a component was easier to evaluate as there was no definite overall budget for the project since the targeted sources of funds, foreign grants, loans and departmental budget, did not materialize.

On the whole, however, a project, in spite of its ineffective administration, may be calculated to be successful depending on whether or not it has accomplished its objectives necessary for the attainment of its goals. In this instance, the very poor performance of the implementing agencies of the Project was fatal to its success. Their failure to maximize the advantages of a decentralized and coordinative mechanism of an inter-agency structure has led to ineffective administration and implementation of the Project.

Significance of the Study

The rationale and significance of this study can be understood in two ways: one is in the context of the rivers' biological degeneration, and the other endeavors to contribute to the effective implementation of the

Rivers Revival Policy. Since the NMTT Project is aimed at rehabilitating the NMTT river system which is deemed vital to the Rivers Revival Policy, this study shall analyze whether the NMTT structure as an administrative mechanism is capable of fulfilling the objectives of the Project.

Background

Philippine environmental management policies such as those focusing on the maintenance of the quality of water and air evolved since the promulgation of Republic Act. No. 3931 in 1964.

The Act declared, as a national policy, the maintenance of reasonable standards of purity of waters and air with their utilization for domestic, agricultural, industrial and other legitimate purposes.⁴ To enforce this policy, R.A. 3931 provided for the creation of the National Waters and Air Pollution Control Commission (NWAAPCC). However, with the accelerative phase of the country's industrialization program and continuous environmental pollution, this Act was amended in 1976 by Presidential Decree No. 984.⁵ The amendment, also known as the "National Pollution Control Decree of 1976", aimed for the strengthening of the enforcing structure, i.e., the NWAAPCC which was later renamed as the National Pollution Control Commission (NPCC). The primary responsibility of the NPCC then was the enforcement of the pollution control law which included formulation of environ-

mental standards and measures particularly for industrial establishments that contribute to pollution.

In the same year, the Water Code of 1976⁶ placed the utilization, development, conservation and protection of water resources under the control and regulation of the National Water Resources Council (NWRC). The Code prescribed that "beneficial use of waters requires regulation as to its withdrawal or abstraction rate from existing resources. Interdependence of land and water resources was recognized by the Code through provisions on flood and plain management, interbasin water transfer, watershed and reservoir management and environmental effects of water resources activities."⁷

On June 10, 1987, the key agencies in environmental management — the National Environmental Protection Council (NEPC),⁸ created by Presidential Decree No. 1121 and tasked with policy formulation, research, coordination of inter-agency activities and implementation of the Environmental Impact Assessment System, and the National Pollution Control Commission (NPCC) — were abolished through Executive Order No. 192.⁹ Their were then integrated into the new Environmental Management Bureau (EMB).

Under the policy of sustainable development, the Department of Environment and Natural Resources (DENR), during the term of Secretary Fulgencio Factoran, prioritized concentrated

⁴Republic Act No. 3931, "An Act Creating the National Water and Air Pollution Control Commission," enacted during the Fifth Congress of the Philippines (June 18, 1964), II B. No. 3554.

⁵Presidential Decree No. 984, "Providing for the Revision of R.A. 3931, commonly known as the Pollution Control Law, and for other purposes," August 18, 1976, Malacanang Manila.

⁶Environmental Management and Education in the Philippines Today, *Enviroscope*, Vol. VI, Nos. 3 and 4, July to Dec. 1986, Manila.

⁷Ibid., p. 5

⁸Ibid.

⁹Executive Order No. 192, "Providing for the Reorganization of the Department of Environment, Energy and Natural Resources, Renaming it as the Department of Environment and Natural Resources, and for other purposes," approved on June 10, 1987.

forestry and urban pollution as major items in its overall program. Part and parcel of the urban pollution scheme, the DENR spearheaded the Rivers Revival Program which aimed to resurrect dead rivers and institute steps to prevent heavily-polluted rivers from further degradation.

The Rivers Revival Program was primarily based on the existing conditions of our water resources, especially the current state of our river systems. It is an unfortunate reality that in spite of the presence of numerous environmental management policies, environmental degradation has continued at an alarming rate. One of the effects of this environmental neglect and complacency is the biological degeneration of the Philippines' major river systems. In fact, out of the 384 major river systems and 59 lakes, a total of 40 rivers, including all the rivers of Metro Manila, are now considered biologically dead due to pollution.¹⁰

Of these biologically dead rivers, the Navotas-Malabon-Tullahan-Tenejeros river system is declared as the dirtiest and most polluted river system. This situation has led to the launching of the Pollution and Flood Control Project in 1987 for the said river basin as an initial project for the Rivers Revival Program.

The Memorandum of Agreement (MOA)

On November 17, 1987, a Memorandum of Agreement for the NMTT Project was signed by and among nine (9) government agencies, five (5) local govern-

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ment units, and two (2) private organizations.

As a summary, the Agreement rested on the following principles:

"WHEREAS, the Navotas, Malabon, Tullahan, Tenejeros river system is grossly polluted by both domestic and industrial wastes;

WHEREAS, the flood problem of the said river system is continuously deteriorating due to unabated encroachments, squatting and disposal of solid wastes;

WHEREAS, the pollution and flood problems of the said river system have created medical and health hazards;

WHEREAS, there is a need to stop the further degradation of the said river system to ensure the health and welfare of people within its drainage area; and

WHEREAS, there is a need for concerned effort among concerned government and private entities to ensure better coordination and cooperation for effective implementation of the river system's pollution and flood control program."¹¹

The NMTT River System¹²

The NMTT river system is a 27-kilometer waterway that runs from La Mesa Reservoir in Novaliches emptying westward towards Manila Bay. The NMTT river system as well as its tributaries are the following:

1. NMTT River System
 - Navotas river
 - Tullahan river
 - Malabon river
 - Tenejeros river
2. NMTT River System Tributaries
 - Muzon-Dampalit river (tributary of lower Tullahan-Tenejeros rivers)
 - Polo-Santolan river (tributary of upper Tullahan-Tenejeros rivers)
 - Pinagkabalian river (tributary of mid-Tullahan-Tenejeros rivers)
 - Maralla river (tributary of Navotas river)
 - Pagasa Kailogan river (tributary of Muzon-Dampalit river)

Environment-Related Problems

A survey of the DENR showed that in 1987 there were about 111 identified major industries and commercial firms with water pollution-related effluents within or along the riverbanks of NMTT. The major industries identified consisted of the following: "three (3) beverage plants, twelve (12) chemical plants, about 37 food manufacturing plants, fifteen (15) commercial hog and/or chicken farms, five (5) paper mills, and about 24 textile mills. A signi-

¹⁰"Signs of Strain," *op. cit.*

¹¹Memorandum of Agreement for the NMTT Project.

¹²The NMTT Pollution and Flood Control Program (Rivers Revival Program) for the Navotas-Malabon-Tullahan-Tenejeros River Basin. Framework Plan (1989-1992, First Phase).

ficant percentage of these factories have highly polluted effluents which discharge partially treated or totally untreated wastewaters into the river systems.¹¹

Domestic wastes contributed by the residents were also seen as a major cause of the river's deterioration. Some of the residents of the areas do not have septic tanks thus waste matter goes directly into the river. Residents usually throw raw garbage directly into the river because of lack of proper disposal site and irregular garbage collection. Garbage collection is made more difficult because of the narrow streets of the areas.

Encroachments within and along the riverbanks, about 11,000 makeshift homes,¹² further the accumulation of domestic wastes in the river, also because of lack of proper disposal facilities.

Above all these, the Project also underscored the lack of environmental consciousness and responsibility among the residents. The improper disposal of wastes was reflective of this environmental apathy.

The NMIT Project Framework Plan

Project Objectives

As embodied in the approved Framework Plan, the two general problems dealt with by the Project were pollution and flooding problems in the described areas. The primary objectives were reduction of pollution load in the river system and elimination or, at least, minimization of flooding in the study site.

More precisely, the following were enumerated in the Framework Plan of the Project as the

target objectives:

- "1) To eliminate, if not minimize, the perennial flooding of the Malabon-Navotas-Valenzuela area;
- 2) To increase the rivers conveying capacity of the NMIT river water quality;
- 3) To eliminate, if not minimize, the floatable solids coming from squatter families along the riverbank and domestic solid waste coming from street canals and mains;
- 4) To eliminate, if not minimize, domestic sewage from reaching the river system, to treat by stages the domestic sewage load or its tributaries;
- 5) To eliminate, if not minimize, untreated industrial waste from reaching the river system; to require all industrial firms to transfer to another site or else build adequate wastewater treatment facilities;
- 6) To minimize other visual pollution within the river area such as squatter shanties, structures encroaching the river banks and other debris; and
- 7) To maintain regular operations and construct pertinent civil structure to normalize the pollution load reduction from domestic sewage, solid and floatable waste debris and industrial waste; and to maintain and operate the flood control structures and facilities."¹³

Project Strategies

The following were the strategies of the project:

- "1) The flood control components shall be treated separately from the purely pollution load reduction activities and vice versa;
- 2) The common components between flood and pollution control such as dredging operations shall be assessed

separately to determine the reduction as far as flooding is concerned and as far as lowering the pollution load and its effect in increasing the dissolved oxygen content of the river system;

3) The pollution loads from domestic sewage, solid waste and industrial waste shall be converted to its equivalent absolute kilogram of Biochemical Oxygen Demand (BOD) and this parameter shall be used to determine percentage lowering of the pollution loads and target objectives;

4) The pollution load reduction shall be phased as follows;

- 1989 to 1992
- 1992 to 1995
- 1995 to 2000

5) All previous studies and foreign grants on flood and pollution control shall be reviewed and the practical and implementable programs shall be incorporated to the integrated plan or scenarios, avoid duplication of efforts; and

6) The Program shall involve all sectors; government, non-government agencies involved in the program, local government, nongovernment organization (NGO), and the people/firms affected by the action program. The Public Information Committee shall concentrate on utilizing tri-media schemes for all action programs to be accepted by all sectors."¹⁴

1. Implementing Organizational Structure

Because of the interrelated environmental tasks inherent in the problems of the NMIT river system, the DENR deemed it vital to include the participation of the government and private sector. As mentioned above, the implementors of the project were

¹¹*Ibid.*, p. 5.

¹²*Ibid.*, p. 1.

¹³The NMIT Pollution..., *loc. cit.*

¹⁴*Ibid.*, p. 6.

composed of 9 government agencies, 5 local government units, and 2 private organizations. These were the following:

1. Department of Environment and Natural Resources (DENR)
2. Department of Public Works and Highways (DPWH)
3. Department of Education, Culture and Sports (DECS)
4. Department of Health (DOH)
5. Philippine Commission for the Urban Poor (PCUP)
6. Metropolitan Manila Commission (MMC)
7. Metropolitan Waterworks and Sewerage System (MWSS)
8. National Housing Authority (NHA)
9. Laguna Lake Development Authority (LLDA)
10. City Government of Quezon City
11. City Government of Kalookan City
12. Municipality of Malabon
13. Municipality of Navotas
14. Municipality of Valenzuela
15. Philippine Chamber of Commerce and Industry (PCCI)
16. San Miguel Corporation (SMC)

To carry out the mandate of the Memorandum of Agreement, the NMTT Structure was created which consisted of the Steering Committee and seven (7) Task Forces. The Steering Committee is composed of the Secretary of the DENR as the Chairperson, Secretary of the DPWH as the Vice-Chairperson, a Secretariat, and government agencies, Local Government Units, and private organizations as members. The seven Task Forces are grouped in accordance with the line of work of the member government agencies as follows:

1. Task Force on Industrial Waste — DENR, LLDA, LGUs
2. Flood Control and Riverbank Relocation — DPWH

3. Health and Medical Services — DOH, LGUs
4. Domestic Sewage — MWSS
5. Solid Wastes — MMA
6. Squatters — NHA, LGUs
7. Public Information — DECS, SMC

In a meeting held on September 1, 1988, a Project Management Office (PMO) under the DENR was added in the structure which was tasked with project monitoring and management.

Administrative Capability of the Implementing NMTT Structure

1. The NMTT Internal Organization Structure

The NMTT internal organization structure was characterized by the involvement of nine (9) government agencies, five (5) local government units, and two (2) private organizations. The following were the members of the NMTT structure:

1. Department of Environment and Natural Resources (DENR)
2. Department of Public Works and Highways (DPWH)
3. Department of Education, Culture and Sports (DECS)
4. Department of Health (DOH)
5. Philippine Commission for the Urban Poor (PCUP)
6. Metropolitan Manila Commission (MMC)
7. Metropolitan Waterworks and Sewerage System (MWSS)
8. National Housing Authority (NHA)
9. Laguna Lake Development Authority (LLDA)
10. City Government of Quezon City
11. City Government of Kalookan City
12. Municipality of Malabon
13. Municipality of Navotas
14. Municipality of Valenzuela
15. Philippine Chamber of Commerce and Industry (PCCI)
16. San Miguel Corporation

(SMC)

Based on an interview with former Secretary Fulgencio Factoran, this composition was derived from an obvious imperative for an inter-agency coordination as there were numerous environmental-related problems inherent in the biological degeneration of the NMTT river system. For example, it was not possible to undertake the objective of pollution load reduction without considering the problems of domestic/solid wastes, industrial wastes, and squatting along the riverbanks of NMTT. Such decision also took into the failure of most environmental management programs and projects in the past to generate multi-agency support needed for an integrated solution to environmental problems.

In describing the NMTT structure as an administrative mechanism, one apparent characteristic was the presence of a higher degree of complexity. Because of its inter-agency nature, the NMTT structure was made intrinsically complex. With an expanded departmental designation, a larger degree of horizontal differentiation follows. This means diversity, in terms of task orientation and specialization, within the organization increases. This was shown through identification and specification of the different tasks involved in the implementation of the NMTT Project as described above. Hence, it is easy to conclude that one defined problem in the implementation of the NMTT project is the NMTT complex structure itself without a responsible implementing agency.

Based on an analysis of performance reports and interviews, the major impact brought

about by this type of complexity or differentiation was the difficulty of interaction among differentiated groups. The task forces' responsibilities were limited to monthly meetings, until this became quarterly, and eventually, annually. At the same time, close monitoring of actual performance was not possible. Actual performance was in fact merely based on reports submitted by each task force. Because of a larger degree of differentiation, there seemed to have a "my-objective-your-objective" attitude among member agencies or task forces. Therefore, it may be said that, the end goal of the NMTT project was differentiated from mere attainment of individual or departmental tasks/objectives. This was aside from the fact that each government department has a program of its own to accomplish. On the whole, commitment to give priority to the NMTT project was not completely extended.

In a similar manner, spatial dispersion or locational separation between and among autonomous member agencies and organizations enhanced the degree of complexity and affected coordination among NMTT members. Though all members were located in Metro Manila, the fact that the NMTT structure is composed of 9 government agencies, 5 local government units, and 2 private organizations tasked with different objectives, coordination and monitoring of activities became difficult. In fact, Malabon Municipal Engineer Ulysses Tumbocan, attributed the failure

of the project to the lack of coordination. For instance, the task of the Municipality of Malabon to relocate the squatters residing along the riverbank was made difficult because of less coordination with the National Housing Authority. Likewise, former DPWH Secretary Fiorello Estuar identified minimal coordination as a stumbling block against an effective conveyance of information.

On the other hand, the vertical differentiation, as an indicator of complexity in the NMTT structure, composed of the Chairperson, Vice-Chairperson, Secretariat, Project Management Office, and the Task Forces were not essential, because of their autonomous position.

Formalization, as a second element of structural assessment, is clearly defined in the NMTT Memorandum of Agreement and Framework Plan. Jobs/Tasks within the structure are highly formalized or standardized corresponding to the different related problems needing attention. Formalization is initially considered a positive element in the design of the NMTT structure as it provided defined boundaries of tasks and responsibilities among members. However this same formalization or standardization of tasks leads to differentiated perceptions of the goals.

The last element of structural description is centralization. Centralization, in its strict definition, was not much an issue in the implementation of the NMTT Project. This was because

of the autonomous position or responsibility granted by the Memorandum of Agreement to each agency or task force in the NMTT structure. Similar to vertical differentiation, the depth of the structure is not characterized by centralization in terms of decision making. Decision-making processes in the NMTT Project involved the participation of all members. However, conflict in authority or jurisdictional conflict emerged between autonomous groups. For example, immediate implementation of industrial pollution laws and regulations was retarded because of a jurisdictional conflict between the DENR/PMO and the LLDA. According to Engr. Cherry Rivera, DENR or specifically the PMO encountered this conflict during a monitoring of industrial pollution in Kalookan and Quezon City which were under the jurisdiction of the LLDA. As a consequence, the investigation and action of the PMO were endorsed to the LLDA. According to Engr. Rivera, this process hindered instant and direct response to emerging problems.

2. Leadership

This second component of administrative capability was described and assessed in view of the following indicators:

- 2.1 Capability of key administrators and staff to generate and mobilize political, administrative, and clientele support.

As an initial step, the DENR was capable of gathering support

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from various government agencies and private organizations, including the nongovernment organizations (NGOs) and private organizations for the conceptualization and implementation of the Pollution and Flood Control Project for the NMTT river basin. This, as already stated above, resulted to the creation of the NMTT structure characterized by inter-agency coordination. However, as expressed by Fulgencio Factoran, the DENR failed to completely achieve the commitment of the officials of the local government units to effectively carry out their tasks in their own respective municipalities, which by no other reason, was triggered by lack of political will on their part. These municipal officials, at that time, were not resolved to the idea of relocating registered squatter families for the reason that they did not want to become politically unpopular to the residents of the area. However, Malabon Municipal Engineer Ulysses Tumbocan defended that the inability to relocate squatter families was due to lack of resettlement areas. At any rate, the task of relocation of squatters was not achieved.

The NMTT structure as a whole also failed to get executive and legislative support which resulted, primarily, to a weak budgetary capability and feeble political support.

Most importantly, support of local residents and environmental NGOs was not maximized. The NMTT Project relied merely on the information-education campaigns executed by the DECS and San Miguel Corporation. Eventually, information campaigns were not sustained due to the uncommitted leadership of the DECS. The DECS requested to withdraw as Chairperson of the Task Force on Information. The Task Force on Information was

totally crippled by the resignation of the San Miguel Corporation from the NMTT structure due to budgetary constraints on their part.

Moreover, it seems ironic that support was solicited from the "The Senators' Ladies" and "Boy Scouts of the Philippines" which were designated or classified as NGOs. This researcher WHO does not intend to undermine the potential capabilities of the above mentioned groups, however, also wonders why the noninclusion of effective environment NGOs such as the Haribon Foundation, Green Forum, Save the Earth Movement, etc.

2.2 Capability to facilitate, anticipate, plan, allocate, and manage program requirements.

The program requirements of the projects were basically affected by budgetary constraints. As a purpose of interagency coordination, the requirements that were needed in the implementation of differentiated departmental tasks were derived through the inter-phasing of department funds. In other words, a significant percentage of the agencies budget was set aside specifically for the NMTT Project. However, this did not prove successful or effective as seen from the results.

2.3 Capability to motivate a competent working task force.

Based on the personal evaluation of Factoran, Estuar, Rivera, Villaluz, Bucsing, Castasus, and Tumbocan, competence or administrative capability, in its simplest meaning, was a given factor among the staff and personnel within the NMTT structure. However, during the project implementation, this capability was weakened by an important factor: political will on the part of the key officials. This factor, as the informant revealed,

affected the motivation of the working force. For example, after the initial general meeting, the key officials did not attend the succeeding meetings. The presence of key officials would have been an effective motivation for the working committees.

3. Management of Fiscal Resources

Management of fiscal resources for the NMTT Project entailed (1) identification of estimated and actual budget; and (2) determination of management of funds.

The total cost estimated for the NMTT Project was P738.83M. This budget was expected to come from the following sources:

- 1) Government agencies regular budget
- 2) Special agency budget
- 3) Foreign grant
- 4) Foreign loan

Foreign grant and foreign loan did not materialize. However, the NMTT Project depended on the Italian and Dutch Grants extended to DENR-Environmental Management Bureau (EMB) for the Metropolitan Manila Region (MMR) Environmental Improvement Study for results. The MMR was a larger study conducted in 1990 which included the NMTT river system.

The cost estimates of project components were as follows:

	P M	SUS M
1. Special Agencies Budget	445,310	
2. Foreign Grants	13,997,395	
3. Foreign Loan	123,809	
	445,310	13,997,395

Equivalent Total in Pesos =
P738.83 M

The management of funds was to be carried out by member government agencies. Since there

was no definite budget allocated for the NMTT Project, all member government agencies were expected to set aside part of their respective regular departmental budget for the NMTT Project.

Prior to 1991, the DENR-Central office was the agency assigned to manage the funds for the DENR-PMO. However, this task was transferred to DENR-NCR. All activities were closely monitored by a Financial Project Office (FASPO).

Other member government agencies did not include in their report actual funds allotted for the project. Hence there was no basis with respect to the management of funds at the departmental levels.

To clearly show the budgetary constraints which confronted the NMTT Project even just for the miscellaneous operating expenses, the annual financial requirements and actual budget release are as follows:

Table 2. NMTT Financial Requirements and Actual Budget Release (In Thousand Pesos)

YEARS	1988	1989	1990	1991	1992	TOTAL
MOE*	600	18	60	18	18	756M
RNDS						
RE-LEASED	—	605	400	550	518	2,163M

*Miscellaneous Operating Expenses

Based on the financial data gathered, the actual budget used for the NMTT Project was too far from the estimated budget needed in order to completely carry out the entire plan for the NMTT river

system. Even the financial requirements based on the existing funds were not met.

General Conclusion and Recommendations

Conclusion on the Implementation of the Project

It is concluded that ineffective administration caused the failure of the Project to achieve its goal of rehabilitating the NMTT River System. Ineffective administration is manifested, primarily, in the lack of necessary preparations for the Project. The following observations will help expound this claim:

First, the NMTT Project had no clear feasibility or background study.

In an interview with former DENR Secretary Atty. Fulgencio Factoran, former DPWH Secretary Engr. Fiorello Estuar, and Secretariat/PMO Chairperson Engr. Cherry Rivera, it was asked whether a feasibility study on the NMTT river system was conducted. Factoran replied with a sense of uncertainty. Estuar stated that he was only aware of the NMTT Framework Plan when he assumed office in 1988. Rivera, on the other hand, admitted that there was none, and even stated that the project was based on the existence of an NMTT Framework Plan which upon presentation and approval was readily implemented. The uncertainty on whether or not a feasibility or background study was ever conducted is a manifestation that no known prior preparations were undertaken.

Second, the extreme budgetary are constraint of the NMTT Project is reflective of the same lack of preparation.

From the entire NMTT report it was observed that the Project proceeded without a certain budget. This was, more or less, validated by the "expectation" of foreign grants while the project was ongoing. As a result, the project depended on the regular budget of the involved government agencies which, as manifested by their poor performance of tasks, did not help in the implementation of the project.

Third, the lack of equipment and resettlement sites manifests that no prior coordination with vital government agencies was made.

Resettlement areas are well-known problems since the emergence of squatter families. Therefore, prior coordination on the subject of development of relocation sites should have been made if the objective of relocating squatter families was to be implemented. However, in the course of the implementation of the Project, the problem of the inavailability of resettlement sites emerged as a major stumbling block. Futile discussions on the development of relocation areas at the time of the execution of the tasks is a manifestation of the unreadiness of the Project for implementation.

The lack of necessary equipment was an ironic reality in the implementation of the NMTT Project. The lack of bancas necessary for the collection of floatable solid wastes was identified by the MMA as their major problem in the implementation of their tasks. This seems not a justifiable reason since, with or without the NMTT Project, the collection and elimination of solid wastes within its jurisdiction remain as an MMA actual task. Hence, it is ironic to

It is concluded that ineffective administration caused the failure of the Project to achieve its goal of rehabilitating the NMTT River System. Ineffective administration is manifested, primarily, in the lack of necessary preparations for the Project.

say that the inavailability of equipments served as a major impediment.

Fourth and last, the impact of the complexity of an inter-agency coordination was not anticipated.

According to Stephen Robbins, the consideration of an inter-agency composition ensures a higher degree of complexity. To deal with this complexity, a sophisticated control mechanism is necessary. In the case of the NMTT Project, the Project Management Office (PMO) was created as a control mechanism for coordinative functions. However, PMO was not able to effectively perform its task because of the following reasons:

(1) Performance of other functions aside from coordinative tasks.

The PMO was created originally to manage, coordinate and monitor the activities of member agencies or task forces of the NMTT Project. However, given these tasks, the PMO also performed the tasks of the DENR to reduce pollution load from the river system. Hence, its coordinative tasks were not emphasized.

(2) Coordinative functions were made difficult due to a large degree of separation of tasks among government agencies and the assumption of an autonomous position in terms of the implementation of their tasks. Moreover, coordination of separate tasks was made more difficult because PMO did not have sufficient authority vested as by the Memorandum of Agreement, nor was it recognized by the implementing agencies to direct or supervise the implementation of the various stages of the Project. In fact, PMO is not a separate coordinating body, but is a part of the DENR. Hence it could not effectively perform its coordinative function as it had to

perform at the same time the specific tasks delegated by the DENR.

(3) No system of accountability was made.

Recommendation

It is recommended that further review of the Rivers Revival Policy be undertaken for the purpose of specifying major priorities, extent of the rivers revival problems and viable strategies. Lessons learned from Phase 1 of the NMTT Project should serve as guidelines for the reconsideration of the approaches employed in order that costly mistakes be avoided. Reconsideration of approaches includes a stronger coordinative mechanism or a specific government agency with the particular tasks of managing and monitoring the implementation of such project. This is in view of the inevitability of an inter-agency coordination for the purpose of solving the environmentally dead rivers of the Philippines.

In addition, the role of "environment NGOs" in this undertaking should be explored as they can provide intelligent and realistic recommendations towards the resolution, or at least, prevention of the biological degeneration of our major river systems.

Most importantly, the fatal results of pushing through with the implementation of the Project without a definite budget should serve as an enlightening experience. Sole reliance on departmental budget proved futile as government agencies themselves need greater budget allocation for their own tasks. Hence, it is necessary that target sources of funds are identified and actual budget is acquired before implementation.

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PSSC NEWS

PSSC AT 25

1993 was a busy year for the Philippine Social Science Council (PSSC). What with its activity-filled Silver Jubilee celebrations highlighted by the success of the Third National Social Science Congress held in December. Adding life and color to this milestone were: the National Symposium on Environment and Sustainable Development: Social Science Perspectives on January 29-30 where issues on Environment and Sustainable Development were examined from the perspective of the social sciences; the Valentine's Day Celebration graced by some 50 social scientists who displayed their dancing talents; and the Banahaw Trek where two of the scores of religious cults and indigenous organizations that abound in Mt. Banahaw, the "Ciudad Mistica" and the "Tatlong Persona, Solo Dios", were visited by noted social scientists.

To emphasize its concern for the environment and in solidarity with the global campaign for greening, the PSSC Secretariat, officers and building tenants undertook a tree-planting activity in September. Various hardwood trees, including the important nim tree, were planted around the PSSC building.

Also started in 1993 to mark the Silver Jubilee was a project on the history of PSSC by Dr. Bonifacio S. Salamanca of the Philippine Historical Association. A short version of the history appeared in the Silver Jubilee Program in which PSSC is described as "a novelty in the Philippine context", having been

formed "to promote and enhance the development of the social sciences in the Philippines, upgrade their associations, hone their members' research skills and thereby enabling them to be of greater service, individually and collectively, to the country."

On December 9 and 10, the PSSC co-sponsored the Third National Social Science Congress (NSSC III), along with the National Research Council of the Philippines (NRCP), the Pi Gamma Mu International Honor Society (Alpha Chapter), and the UP College of Social Sciences and Philosophy. In an Executive Order, President Fidel V. Ramos designated December 6 to 10 as Social Science Week while the Department of Education, Culture and Sports passed a memorandum allowing faculty from state colleges and universities to attend the Congress on official time. Thus, along with the PSSC's multi-media campaign to play up the event, a total of 348 delegates attended the Congress.

A unique feature of NSSC III was its deliberate design to bring social practitioners, teachers and students together to discuss the strategies and interventions which social scientists have attempted or utilized towards attaining sustainable development. A post-Congress activity was held on December 11, a half-day session with provincial delegates to plan for a year-long series of activities as a follow-up to the Congress. Among the planned activities were: (1) Follow up regional roundtable discussions of Congress issues; (2) Course

development and regional training on social science teaching; (3) Preparation of textbooks and reference materials; (4) Exchange and study visits; and (5) Social science data base and information network.

Meanwhile, Volume 1 of the Philippine Encyclopedia of the Social Sciences was formally launched in a simple ceremony on December 15 at the PSSC Auditorium. It was graced by social scientists, academicians, writers, booksellers and students. The volume is devoted to the disciplines of history and statistics, prepared by the Philippine Historical Association (PHA) and the Philippine Statistical Association (PSA), respectively.

Along with the launching of the Social Science Encyclopedia, the Silver Jubilee Celebration of the PSSC ended with the Silver Jubilee Awards Night to honor PSSC member institutions, as well as to recognize distinguished individuals who have been exemplars of competence and dedicated service. The Philippine Statistical Association and the Philippine National Historical Society bagged the Best and Second Best Institution Awards, respectively. In the Best Journal category, the Philippine Geographical Society topped the first place; and the Philippine Statistical Association, Second Best.

Fr. Francis C. Madigan was accorded the Outstanding Foreign Social Scientist Award while Irma J. Gonzales and Emily Tuzon were given PSSC Secretariat Service Awards. ■

PSSC CO-SPONSORS SOCIAL SCIENCE AND MEDICINE CONFAB

The Philippine Social Science Council (PSSC) co-sponsored the Second Social Science and Medicine Conference in Asia and the Pacific (APSSAM) held on 23-27 May 1994 at the PSSCenter. Some 150 delegates from 14 countries contributed to the success of the conference which was made possible through the efforts of the Philippine Organizing Committee, chaired by Dr. Pilar-Ramos Jimenez of De La Salle University, of which the PSSC is an active member.

Dr. Juan M. Flaviey graced the Opening Ceremonies as Keynote Speaker. Famous for his good sense of humor and wit, Dr. Flaviey amused the audience with his parables that immortalized his rewarding experiences with the barrio folks. He lauded the initia-

tives of the organizers in bringing together the great minds of social sciences and medicine. He underscored the vital and indispensable role that social sciences play in helping the people to have a greater access to government's health services, by bridging the gap between medicine as a science and folk medicine. He urged the delegates to take the lead in giving "health for more" in their respective countries.

Social scientists and medical practitioners from Australia, Bangladesh, China, India, Indonesia, Lao APK, Malaysia, Sri Lanka, Thailand, Vietnam and the Philippines comprised the bulk of the delegates along with the guests from Thailand, observers from Canada and USA, and representatives of the Ford Foundation, the International Development Research Center (IDRC) and the International Forum for Social Science in Health (IFSSH). The

delegates discussed in simultaneous workshops various issues delving into policy-related studies, traditional medicine and pharmaceuticals, gender, sexuality and reproductive health, tropical and infectious diseases, child health, and the elderly/ageing.

The highlights of conference were the launching of the Asia and Pacific Network for Social Sciences in Health; an exposure trip to a center for mental patients in Dampol, Plaridel, Bulacan and to Zambales where the delegates viewed some lahar-devastated areas; and the Asia-Pacific Night where the delegates were feted by the organizers. The Asia-Pacific Night featured a cultural presentation that showcased the talents of the foreign participants. Set against Filipiniana background, songs, poems and dances, reflective of the respective cultures of the delegates, set a festive and jubilant mood for the occasion. ■

PRESS RELEASE

PSYCHOLOGY BOOK ON WELLNESS OUT

The Ateneo de Manila University has recently released *Essence of Wellness*, a collection of theses and dissertations in counseling and clinical psychology set in layman's terms. The book emphasizes wellbeing and mental health rather than illness. It covers such topics as the history of Philippine clinical psychology, the uses of hypotherapy, a phenomenal analysis of anger, running as psychotherapy, colors and personality, and extra sensory power (ESP).

Essence should be of interest to students of psychology as well as general readers who will find the studies useful for daily living.

The book is available at the Ateneo Press at Loyola Heights, Q.C. and at leading Metro Manila bookstores. It is edited by two important figures in psychology in the country today, Mrs. Carmela D. Ortigas and Dr. Ma. Lourdes A. Quisumbing of the Department of Psychology of the Ateneo de Manila. ■

BOOKS ON ILOKO LITERATURE

The Ateneo de Manila Press has just released *Silang Nagigising sa Madaling Araw* (Dagiti Mariing iti Parbangon) by Constante Casabar, translated from the Iloko by Reynaldo Duque; and *Zarzuelang Iloko: Mga Salin sa Filipino*, compiled and with an introduction by Mario G.R. Rosal. Both have been chosen as

representatives of Iloko literature in the continuing Panitikan series, a project being undertaken by the Ateneo Press, the De La Salle Press, and the UP Press under the supervision of Dr. Bienvenido Lumbara.

Silang Nagigising contains the complete text of the Casabar novel in Iloko, and a translation in Filipino. The original novel is one of about twenty written in Iloko by Casabar, and is a strong commentary on the turbulent political milieu of the Ilokos in the 1950s. *Zarzuelang Iloko* is a collection of four Ilokano zarzuels and their translations also in Filipino, with an introduction to Ilokano drama.

Both are available at the Ateneo Press at Loyola Heights, Q.C. and at leading Metro Manila bookstores. ■

(The following are excerpts of written messages which the Philippine Social Science Council received on the occasion of its Silver Jubilee.)



Pres. Fidel V. Ramos

"I congratulate the PSSC for its track-record as a federation of national social science councils that has contributed significantly to the molding of public opinion on social issues affecting the national interest. Through its research, training, professionalization, and dissemination and utilization of research findings that are relevant to the needs of the country, the PSSC has proven its dedication and commitment to its avowed mission of bringing Filipino social scientists into the mainstream of the nation-building centers of business and government, thereby consolidating the resources of our local social scientists as net contributors to the national vitality."



Prof. Carmencita T.
Aguilar

"Within the span of 25 years, the PSSC has been performing its task of supporting the social scientists and their organizations by providing research incentives, training capabilities, publication support, conference assistance, fora for academic and professional papers, international linkages, opportunities for advanced researches and venues for scholarly interactions and exchanges.

"On the occasion of the silver jubilee celebration, it is just and fitting to acknowledge with appreciation our predecessors who have served and contributed to what the Philippine Social Science Council has become today. I also recognize those social scientists presently serving the PSSC in promoting the interests of the social sciences both in the academe and the country today."



Dr. Amaryllis T. Torres

"To some extent, I can say with surety that we in the PSSC have done our best to live up to our goals. Researches, dialogues with both the public and private sectors, publication, and public advocacy on matter of national and cultural concern have marked our effort through the years.

"It has been a privilege and a pleasure to have served as your President during the Silver Jubilee Year of the PSSC. I thank all of you who have lent individual and organizational support to the various projects of the PSSC these past 25 years. May we continue in our concerted efforts to infuse an interdisciplinary framework in our interpretations and explanations of Filipino society and culture."



Prof. Ruben F.
Trinidad

"In this historic moment, allow me to express my sincere and deep gratitude to those who have laid the strong foundation of the PSSC, and to those who unselfishly nurtured it to what it is now. In particular, PSSC is grateful to its benefactors, social scientists, PSSC officers and members, and the Secretariat staff. Congratulations to all on the occasion of our Silver Jubilee!"

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