

## **Sustainable Development and Land Use Planning in Taiwan**

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Nowadays, sustainable development has become a fashionable term not only in the industrial countries but also in the developing countries. However, what is the definition of sustainable development? There are several different answers to this question. The paper does try to re-examine the meanings of sustainable development firstly. Thus, it maintains that the promotion of sustainable development is because the developing models supported by the dominant western societies have met with severely crisis, and they do probably utilize the myth of sustainable development to prolong their hegemonic positions and to preserve their developing models.

The paper then supplies a different perspective of sustainable development. It argues that sustainable development should not only pursue a balance development between natural resource protection and economic growth but also need to exclude inequity within the political economic structure. Citizens and local communities should be empowerment to own a relative autonomous position related to the state government and business conglomerates. In addition, the concept of sustainable development should be stood on the epistemology and methodology, which are different from the dominant social paradigm. The paper argues that the power of choice should be kept in the hands of citizens, and democratic participation is the best way for the planning of a sustainable society.

Using the ideas developed above, the paper further examines the land use planning in Taiwan, especially focusing on the institutions for the development of industrial parks in Taiwan. The paper argues that those institutions are lack of the spirit of sustainable development, and they should be addressed in order to meet Taiwan's sustainability in the future.

**Keywords:** sustainable development, land use planning, empowerment, corporatism, partnership planning, industrial park.

## Preface

Sustainable development (SD) has become a fashionable term not only in the industrial countries but also in the developing countries. The Taiwan government also proclaims its future development should be the way of SD. Committees of SD have been established both in the Executive Yuan, the highest administrative unit in Taiwan, and the National Science Council. Many conferences have been called, and "the Agenda for 21 Century," which is based on the idea of SD has also been published in 1999. However, what is the meaning of SD? Have the ways of Taiwan's development made a great transformation in recent years? Is it possible that SD is used as an ambiguous ideology and a shield for the continuing pursuit of the old development paradigm? Furthermore, how can we distinguish the differences? These are the research questions this paper would like to explore.

The author argues that these research questions can be investigated from the land development institutions in Taiwan. It is because many physical and natural developments should be based on land. In addition, land use is also closely connected with Taiwan's political and economic development. Probably, the modification of the land use planning and controlling systems can realize whether we are on the way of SD or not. This paper is especially focus upon the institutional arrangement for the establishment of industrial parks, which have a filthy record of environmental pollution. The paper has seven sections: (1) diverse meanings of sustainable development, (2) critics of the mainstream's meaning of sustainable development, (3) the other thoughts of sustainable development, (4) economic and political background in Taiwan, (5) corporatism and partnership planning, (6) new land development institutions of industrial park, and (7) conclusions. The author finally maintains that SD is only used as a lip service in Taiwan. The development approach does not have major alterations because the land development institutions are not only kept intact but also supplied much more benefit toward the big conglomerates and local factions. The author also argues that without the change of the political and economic structures it is very difficult for the realization of SD in Taiwan.

## Diverse Meanings of Sustainable Development

It is important to examine the diverse meanings of SD in the beginning. The idea of SD was firstly submitted in the Cocoyoc Declaration in 1974. It was used to incite human attention to the ecological limits to natural resource depletion and economic growth. This concept was again utilized in the IUCN's (The International

Union for the Conservation of Nature and Natural Resources) publication in 1980 of the World Conservation Strategy (WCS). It included three definitions of SD:

- (a) Maintenance of ecological processes and life support systems;
- (b) Utilization of natural resources at rates which allow replenishment; and
- (c) Maintenance of genetic diversity. (Redclift 1987, 20; Qtd. from Wagle 1993; 315)

However, this definition was criticized by Khosla as "restricted itself to living resources, focussed primarily on the necessity of maintaining genetic diversity, habits and ecological processes," and "unable to deal adequately with sensitive or controversial issues—those relating to the international economic and political order, war and armament, population and urbanization (1987, Qtd. from Lele 1991, 610)." Agreeing with Khosla's argument, Lele maintained, "the WCS had really addressed only the issue of ecological sustainability, rather than sustainable development (1991, 610)." Later on, the United Nations Environment Program (UNEP) submitted its concept of SD.

- (a) Help for the very poor, because they are left with no options but to destroy their environment;
- (b) The idea of self-reliant development, within natural resource constraints;
- (c) The idea of cost-effective development using non-traditional economic criteria;
- (d) The great issues of health control [*sic*] appropriate technology, food self-reliance, clean water and shelter for all; and
- (e) The notion that people-centred initiatives are needed. (Tolba 1984; Qtd. from Lele 1991, 611)

Comparing with WCS's definition, UNEP's concept of SD does greatly expand its content. However, the objectives of SD were once again proliferated in the IUCN-UNEP-World Wildlife Fund sponsored conference on Conservation and Development in 1986. With heated debate, Jacobs and et al. (1987) summarized five broad requirements about the idea of SD.

- (a) Integration of conservation and development;
- (b) Satisfaction of basic human needs;
- (c) Achievement of equity and social justice;
- (d) Provision of social self-determination and cultural diversity; and

(e) Maintenance of ecological integrity. (Qtd. from Lele 1991, 611)

This understanding of SD above inclined to the concept of social sustainability, and it was different with the former focus of ecological sustainability. Nevertheless, this was not the mainstream's comprehension of SD. The mainstream—the World Commission on Environment and Development (WCED)—tries to combine ecological and social sustainability, and it defines SD as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs (1987, 43)." Wagle maintains that this definition focuses on two dimensions: "a resource or environmental dimensions and a socio-economic or development dimension (1993, 316)." In the perspective of socio-economic dimension, the WCED report advocates overriding priority to the essential needs of the world's poor. In the perspective of resource dimension, the report reiterates limitations on the environment's ability to meet present and future needs. In addition, the WCED also indicated that there were eight critical objectives of SD:

- (a) Reviving growth;
- (b) Changing the quality of growth;
- (c) Meeting essential needs for jobs, food, energy, water, and sanitation;
- (d) Ensuring a sustainable level of population;
- (e) Conserving and enhancing the resource base;
- (f) Reorienting technology and managing risk;
- (g) Merging environment and economics in decision making; and
- (h) Reorienting international economic relations. (1987, 49)

The objectives are very extensive, and they include many important issues. However, it is probably because of the greatly expansion and ambiguous of the definition, which induces its supports from the mainstream. Referring to the points of (a) and (b), it is clear that economic growth is still the main spirit. Social justice, self-determination, and cultural diversity, which were proclaimed in the conference of Conservation and Development, are all lack of in the WCED's definition. However, with its great expansion and ambiguous of definition, Lele (1991, 613) indicates that SD is "a bundle of neat fix (metafix)", which will unite everybody whatever their concerns are. It is probably this reason that not only the developed countries but also the undeveloped countries all proclaim SD is the way for their future destination. This is why O'Connor argues:

There are few expressions as ambiguous as "sustainable capitalism" and such sister concepts

as "sustainable agriculture," "sustainable energy and resource use," and "sustainable development." This ambiguity runs through all of the most important discourses on economy and the environment today—U.N. and government reports, scholarly research, popular journalism, and green political thinking. Precisely this obscurity leads so many people so much of the time to talk and write about "sustainability": the word can be used to mean almost anything one wants it to mean. (1994, 152)

Therefore, it is important to note that the SD has become a popular ideology, and it can be used in many situations depended upon the users' intentions. Redclift also says "the strength of sustainable development lies in its ambiguity, and its range (1994, 17)." Therefore, it is very doubtful that people use this term by the same meaning. In addition, why the developed countries would like to support the idea of SD? Is it possible for the mainstream to use the SD as a way to prolong the old developmental paradigm? Can it become an ideological hegemony and induce the powerlessness of the underdeveloped and developing countries? Many critiques in the following section have indicated this shortcoming.

## Critics of the Mainstream's Meaning of Sustainable Development

Many researchers do question the meanings of SD. Redclift (1994, 17) indicates, "married to the idea of 'development', sustainability represents the high-water mark of the Modernist tradition." Scientific specialization and economic growth become key elements to support this tradition.

### *(1) SD is transferred into sustainable growth*

Both of (a) and (b) of the WCED's conception of SD are mainly concern with economic growth, which seemingly does not have any basic contradictions with ecological sustainability. In addition, economic growth becomes the major spirit of SD because it can remove poverty.

Absolute poverty ... in developing countries ... has been aggravated by the economic stagnation of 1980's. A necessary but not a sufficient condition for the elimination of poverty is a relatively rapid rise in per capita incomes in the Third World. It is therefore essential that the stagnant or declining growth trends in this decade be reversed. (WCED 1987, 50)

The only thing needed to be done is to change the quality of growth. Lele does question that "but was it not the fact that economic growth *per se* could not ensure the removal of poverty that led to the adoption of the basic needs approach in the 1970s (1991, 614)?" It means that it is very impossible that poverty can be removed if we continue the same economic development approach. This is exactly Herman Daly says:

The Earth's ecosystem develops (evolves) but does not grow. Its subsystem, the economy, must eventually stop growing, but can continue to develop. The term 'sustainable development' therefore makes sense for the economy, but only if it is understood as 'development without growth'...Currently the term 'sustainable development' is used as a synonym for the oxymoronic 'sustainable growth.' (1990, 45; Qtd. from Byrne and Hoffman)

It can not be accepted to transfer SD into sustainable growth, since the problem of poverty and ecological sustainability will not be addressed with the thinking of continuing progress.

## ***(2) SD emphasizes on technology determinism and organizational managerialism***

In order to reach the goal of sustainability, the WCED declares that "technology and social organization can be both managed and improved to make way for a new era (1987, 8; Qtd. from Byrne and Hoffman 1996, 7)." And, advanced technology and environmental managerialism becomes the problem-centred solution to future development. But, can technology and social organization solve the development problems for us?

One of the major characteristics of recent grassroots environmental movements in the U.S., according to Freudenberg and Steinsapir, is its "ambivalent attitude toward scientific technical expertise" (1992, 31). On the one hand, movement activists work closely with scientists and construct positive relationships with them. On the other hand, activists express their total disbelief of the jobs, which have been done by the scientists employed by industries or government. The image of technology, which has been labelled as a neutral and objective mechanism by the corporations and government is no longer accepted by the grassroots environmental movements. Freudenberg and Steinsapir say "environment activists rejects the image of science as a neutral force that pursues the truth no matter what its consequences" (1992, 32). Richard Norgaard (1988, 616) also indicates "few still think of technology as neutral with respect to values, organization, the environment or knowledge."

Charles Piller agrees with this argument in his research of community defiance in the U.S. He indicates that science and technology are by no means neutral objects because they are controlled by an irresponsible system (1991, 15):

What does the prevalence of Nimbyism tell us about the way science and technology are administered in our society?...It suggests a more fundamental cause—the dominance of an autocratic, profligate, and often irresponsible system for managing the science and technological enterprise.

In their study of the Three Mile Island nuclear accident, Goldsteen and Schorr not only confirmed this argument but further identified the deterioration of community values because of citizens being deceived by technology and corporations. The authors found that residents who lived around the TMI nuclear power plant were taught to believe in “rationalism grounded in a belief in science rather than emotion” (1991, xvi-xvii):

However, this “rational” relationship between community and corporation has not worked for many communities. They have not shared in the rewards; they have been deceived, their rights trampled and their concerns dismissed. Communities are learning that corporations have been allowed to represent their interests without sufficient accountability and social responsibility. They have not considered community values.

That the deterioration of the quality of life in communities and the request for a safe and healthy environment draw citizens and environmental activists’ ire that technology is not a neutral factor, which they can depend upon. Technology, which has been wrongly taken as a neutral actor in industrial and capital society, has profound implications for the value choices that society will make. Through grassroots environmental movements, the environmental activists discover that technology has an inherently political feature.

That technology has political features has been argued by Langdon Winner, Dorothy Nelkin, and Michael Edelstein, among many others. They indicate that technology not only plays a political role but also helps the industrial and governmental sectors to restrain citizens’ participation in the decision-making process. Langdon Winner indicates that technical things have political qualities. He says that the structural implications of technology have not only extended into the technology domain but also extended into social and political realms. Winner says (1988, 42-43):

The things we call “technologies” are ways of building order in our world. Many technical devices and systems important in everyday life contain possibilities for many different ways of ordering human activity. Consciously or unconsciously, deliberately or inadvertently, societies choose structures for technologies that influence how people are going to work, communicate, travel, consume, and so forth over a very long time....[T]he adoption of a given technical system unavoidably brings with it conditions for human relationships that have a distinctive political cast—for example, centralized or decentralized, egalitarian or inegalitarian, repressive or liberating.

Technologies do not allow flexibility and choices, which are different from those of its designers. Winner says “to choose them is to choose unalterably a particular form of political life” (1988, 42). Unfortunately, the power to choose technologies is not equally distributed in industrial society. In fact, most citizens are excluded from the decision-making process. Winner says the power is controlled by “an elite of highly trained technicians, planners, and managers, masters of ‘state techniques,’ who bring the whole into fine tune (1977, 256).”

To preserve the domination of technical value and the efficiency of the economy, Michael R. Edelstein says that state regulators “frequently act to insulate the market from the potentially disruptive and destabilizing effects of full citizen participation (1986/1987, 89).” Administrative procedures “are designed to avoid unfettered citizen involvement (1986/1987, 89).” Even those citizens who are invited to participate are “merely a token part of the process (1986/1987, 89).” Likewise, Freudenberg and Steinsapir also indicate, “government and industry often seek to convert what are fundamentally political issues into scientific and technical questions that require expert study rather than democratic decision-making (1992, 32).” Dorothy Nelkin further explains this point (1974, 2):

Specialized bureaucrats that develop technical projects function according to a formal system of rules and procedures designed to fulfil narrowly defined objectives. Decisions are made on the basis of specialized technical competence, and there is little tolerance for the uncertainties and unpredictability that wider citizen involvement is likely to introduce. Bureaucrats assume that their plans reflect a broad public consensus on the ultimate value of technical progress. They identify their actions with the public interest and seek to maintain their autonomy and remain insulated from the political process.

The administrative procedures are designed to sustain the independence of bureaucrats and to prohibit citizen involvement. The values of liberty, justice, or



equality are all excluded from regulators' technological considerations.

The citizens' exclusion from the democratic processes is not accepted by local communities, which are seriously polluted by industrial production. Many grassroots environmental movements have emerged since the 1970s and are willing to voice their grievances. In one sense, these movements can be described as one kind of human choice against the authoritarian system or the totalitarian state and a way to bring back the autonomy of community. In their research on the nuclear accident at Three Mile Island, Goldstein and Schorr concluded (1991, 214):

The new paradigm accepted by communities states that science and technology will accord communities a better life if people interject their values into the risk assessment and decision-making process. The advances of science and technology have social costs. Consequently, the impact of such advances must be weighed in advance by the people who will feel their adverse consequences. People must take an active role in protecting their communities since industry and government have priorities which are inconsistent with those of the community.

They further indicate that "there should be democratic participation in the decision-making process regarding environmental risks....Technological decisions must be incorporated into the democratic process" (1991, 218). Above all, technology cannot be excluded from political operations and must be decided by democratic participation. And, this is the reason that Byrne and Hoffman (1996, 7) indicate, "this [sustainable] issue cannot be resolved by technological or organizational 'fixes'."

### ***(3) SD pursues economic efficiency***

With the environmental degradation around the world, the economic development model supported by the neo-classical theory has met with serious challenges. Paradoxically, the emergence of sustainable development in one sense does try to prolong the leadership position of neo-classical theory. It is because the "environmental economics has sought to extend Neo-Classical theory, by encompassing the environment, and attaching monetary values to losses in natural capital.... It is also recognized that 'optimality' refers only to economic uses and efficiency, and effectively excludes any social goals for conserving resources (Redclift 1994, 25-26)." Therefore, Redclift says, "environmental economics leaves the Neo-Classical paradigm intact (1994, 27)." Thus, economic efficiency does again become one of the main objectives of SD, and the goals of citizens' participation and social self-determination are all vaporized. Economic efficiency dominates in

the capitalists' world market.

In addition, it is because of the invention of informational technology and the division of labour in the world that capitalists can disperse the places of their production and management according to the requirements of world market. Capital can easily flow across the boundaries of nations, and how to attract footloose capital to stay in specific locations has become one of the most important issues for central and local governments in every country. In the pursuit of economic efficiency, communities and places are the same as commodities and can be discarded when they lose the value to be exploited. It is the exchange value, not the use value, to be recognized by those multinational corporations. The communities will be degenerated when they can not benefit in the sense of exchange value. This is one of the major problems took place for those old cities in the US and UK. The importance of the cities and communities for their citizens is totally disregarded under this kind of belief. Everything, including workers, citizens, and natural resources, must operate through the mechanism of market. When some specific urban communities do not have market superiority comparing with other places, some scholars (Hanson 1983, Hicks 1983, Savas 1983) then argue that those old cities and communities are dying, and this direction is irreversible.

But many scholars (Warren 1990, Tabb 1982, Glickman 1983, Friedland 1983, Barnekov, Rich and Warren 1981) have challenged the view of superiority of market efficiency. For example, Glickman (1983, 308) argued that cost-benefit analysis used to support the efficiency claimed for profit maximizing spatial decisions of capital fails to account for the "social costs borne by both people and places." Clark (1983, 161-5) also maintained that economic efficiency cannot be proven superior to spatial equity by appealing to economic models. Warren (1990, 553-4) further indicates "social justice is an alternative to capital accumulation as the goal of urban policy...The need for the relative autonomy of place from both the national state and capital increasingly is treated as a normative requirement and necessary means to achieve social justice." Smith and Judd (1984, 190) also proposed an alternative set of ideas and practices anchored in placeness that would provide an ideology for "the defence of community against the transformation of meaningful places by rapid growth and capital accumulation." Our concern with policy should reflect the problem of creating effective urban governance, equitable economic development and a national appreciation of cultural and social diversity. This problem is difficult in its own right, but will be impossible if we delimit the definition of policy success to economic efficiency.

## The Other Thoughts of Sustainable Development

With the critiques above, the SD supported by the WCED can be described as very conservative, and it does not concern with many key issues of the SD. Redclift and other scholars maintain the SD should contain the following important characters. And the most important issue is to address the internationally and national political economic structure.

### ***(1) The change of internationally and nationally political economic structure***

Redclift suggests that the problem in achieving SD is related to "the overriding structures of the international economic system, which arose out of the exploitation of environmental resources, and which frequently operate as constraints on the achievement of long-term sustainable practices (1987, 199)." In order to remove of poverty it is very important to care about the poor people and to put their need as priority. But, Redclift (1987, 36) asks "how can this priority be pursued at the local level while the effects of international development systematically 'marginalizes' them?" Therefore, power relationship between the poor and the wealth should be re-examined. It is also because of this reason that SD should have very important meaning from the perspective of politics. Redclift indicates, "the political aspects of development extend to sustainable development options which can only be achieved through political changes at the local, national and international level (1987, 36)."

### ***(2) Citizen participation and social equity principles***

Only with the change of power relation mentioned above does citizens' participation of the poor become meaningful. Redclift further indicates the important of citizen participation. He says:

The rethinking of environmental economics, and the incorporation of sustainable criteria within the management framework of development projects...cannot work successfully unless it is matched by much greater local involvement in environmental management decisions....Ultimately, sustainable development is only practicable when it is endorsed by local communities and groups, whose own experiences of managing the environment are forged through contact with outside development agencies, government departments and local policy institutions. (1994, 13)

Although the Agenda 21 reflects a willingness to have some structural changes at the international and national levels, however Redclift says "this has not been translated into workable programmes to encourage more popular participation in environmental

management, nor into concrete changes in the way international organizations work (1994, 190)." Nevertheless, Redclift's arguments are accepted by the NGO groups, which submit six principles of SD. They directly try to address the fundamental issues in SD.

- (a) The principle of cultural and social integrity of development: This requires that development grow from within, and not to be imported from the outside.
  - (b) The ecological principle: This insists upon sustainable forms of resource utilization.
  - (c) The solidarity principle: This calls for equitable access, distribution, and exchange among all people.
  - (d) The emancipation principle: This entails empowerment and participation of the underprivileged and marginalized sections of the society.
  - (e) The non-violence principle: This seeks development in a peaceful manner in a direct as well as in a structural sense.
  - (f) The principle of error-friendliness: This is inherited to allow for mistakes without endangering the integrity of the eco-systems and resources base.
- (Court 1990, 136)

Therefore, the core issue in SD is not merely the provision of basic human needs of the poor but to create an equitable social structure, which serves the ends of citizen participation and cultural and social integrity.

### **(3) *New institutional building***

The SD could be based on a new epistemology which totally different from the Modernism. Technological determinism and economic efficiency, which are worshipped in the Modernism should be addressed to a new understanding. Norgaard indicates:

The call for sustainable development resonates with the rise of new understandings of environmental systems, technology, social organization, knowledge, values and their interplay. These new understandings reject the modern belief that these realms can be understood separately, that they do not interplay. Thus we will not simply be implementing new technologies but will have to grapple with a transition in beliefs as well. (1988, 614)

Knowledge, according to Norgaard, "is a part of the 'patchwork quilt' of the cultures around the globe. Furthermore, each patch is complex. No one way of understanding it is sufficient and, even with multiple ways, we will periodically be

surprised (1988, 615)." This new idea of knowledge is supported by the Ecologist, who further indicates it is important to build up "open and accountable institutions that restore authority to commons regimes—a struggle which requires increasing the bargaining power of those who are currently excluded or marginalized from the political process (1993, 193)." Whose voices should be counted in these institutions? The Ecologist indicates that those institutions should "open up more space for the commons by denying that any single social whole—whether culture, language, livelihood, art, theory, science, gender, race or class—has a right to assert privileged status over, and thus to enclose, all others of its type (1993, 192)." Yeh, Jiunn-Rong also has the same argument. He maintains, "in order to make sustainable development meaningful in the real world, it should be construed to incorporate the role of institutions that actually make choices in the cause of national development (1994, 268)."

## Economic and Political Background in Taiwan

The new land development institutions in Taiwan have been established in the late 1990s and, their creation is deeply related with economic and political development. During the time of spectacular economic growth in the 1970s and 1980s, the labor cost in Taiwan increased, and the country gradually lost its international competitive edge in labour-intensive markets. In response to this situation, the government began to promote capital-intensive industries, such as petrochemicals, machinery, steel, electronics, and other high-technology industries. The government even established a Science-Based Industrial Park in Hsin-chu in 1980, wishing it to become Taiwan's Silicon. And a new one in Tainan has been constructing nowadays. The government hopes the new transformation to such capital-intensive industries can help it to establish a new international comparative advantage. However, the achievement of economic growth has dampened in recent years. Chang, Political Vice Minister of Economic Affairs, indicates:

Since the last half of 1995 our economy has been affected by tensions across the Taiwan Straits, weak demand in the domestic market, and increasing competitive pressures in the international market. We have begun to see a slowdown in our domestic economic development, and we can see a number of bottlenecks and challenges ahead. (1996,61)

The government plans to speed up the readjustment of industrial structure, making Taiwan a "technology island" which uses a high level of industrial technology to turn

out high-value-added products. According to Chang (1996), the major strategies for accomplishing this include the reinforcement of high-tech development projects, the provision of assistance for the upgrading of conventional and labor-intensive industries. However, the readjustment of industrial structure is not an easy job, and the governmental industrial policy is still linger between conventional and new technological industries. For example, the polluted petrochemical industry which caused many seriously environmental protests in 1980s and 1990s (Hsu and Byrne 1996) was classified as conventional industry and should be disregarded in the future. However, the sixth naphtha cracking plant received government's greatly financial support and has begun to operate recently. The plan for the construction of the seventh naphtha cracking plant, which will be located at an environmental sensitive area was also received government approval lately\*. Ironically, the Chinese Petroleum Corporation (CPC) even plans to construct Taiwan's eighth naphtha cracking plant in the future.

Until recently, the development of Taiwan has been controlled by the state, which wielded hegemonic power over civil society. The state, in turn, has been totally controlled by the ruling party—Kuomintang (KMT)—which retreated into Taiwan in 1949 after its failed battle with the Communist Party in mainland China. Confronted by the opposition party, Democratic Progressive Party (DPP), and the civil society since the late 1980s, the KMT tried to strength its political position by focusing on business relations with capitalists. Tending to the needs of its business partners and local factions, it was able to remain the dominant force in Taiwan's political system (Wang 1993, 89-93). The political transformation has been from authoritarianism to corporatism in which the state increasingly relies on close alliances with large industrialists.

How to improve domestic investment environment for capitalists in order to revive Taiwan's economy has become the most important goal for the government.

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\* The seven naphtha cracking plant is located at the Binnan industrial complex, which will commit Taiwan well into the next century to a CO<sub>2</sub>-intensive industrial system. Byrne and Lin indicate the Binnan project is not only a costly choice but also a technological choice. They maintain:

If launched, the developers estimate in their environmental impact assessment completed for the project that it will add nearly 28 million tons of carbon to national annual releases. Measured at 1990 levels (the international benchmark set by the UNFCCC), this is equal to a stunning increases of 25%. With Taiwan as the 24<sup>th</sup> largest source of CO<sub>2</sub> emissions in the world and with its emissions already growing—*pre-Binnan*—at one of the fastest rates in the world (over 8% per year), the Binnan project places in serious jeopardy the ability of the country to meet international standards being set for the world economy. (1999, 2)

It tries to remove obstacles to major private investment projects. For example, Chang indicates:

The government has established a special task force to deal with large investment cases involving more than 5 billion New Taiwan dollars each. This task force meets weekly to review problems facing these projects and to do away with outmoded regulations that obstruct industrial development. To solve problems of land acquisition and the supply of electricity and water, we are speeding up the provision of industrial land and assisting the private sector in developing industrial zones and mixed commercial/industrial zones, we have opened up electricity generation to private investors, and we are promoting the development of water resources to meet the needs of industry. (1996, 63-64)

The big business conglomerates become the major partners with the state in their pursuing of Taiwan's economic growth. Although many protests from local communities concerning with environmental deterioration, the government tries to use its hegemonic power to supply land with much cheaper prices than the market has to them. It is clear that there is a cooperative relation between the state and big business conglomerates.

## Corporatism and Partnership Planning

The most commonly meaning of corporatism is concern with the relation between interests and the governing apparatus. A formal organization represents a major economic or professional interest before state officials within the framework of an official institution. Philippe Schmitter defines corporatism as:

A system of interest representation in which the constituent units are organized into a limited number of singular compulsory, noncompetitive, hierarchically ordered and functionally differentiated categories, recognized or licensed (if not created) by the state and granted a deliberate representational monopoly within their respective categories in exchange for observing certain controls on their selection of leaders and articulation of demands and supports. (1974, 93-94)

Schmitter uses the term of "monopoly" to describe the state-group relationship of corporatist. Only one group is given the right to speak for a specified category of people. However, the characteristic of monopoly in the implementation of corporatism does not receive special attention. On the contrary, it has been

beautified as the partnership relation between public and private sectors in the area of planning. Furthermore, it has been defined as citizen's participation from the civil society in Taiwan. For example, Wu (1993, 7-8) uses the idea of corporatism to explain the necessity of partnership between public and private sectors. Regardless of the characteristic of monopoly by a few large business conglomerates, he maintains that the partnership relation can be recognized as citizen's participation. The same implication of corporatism in Taiwan can be seen in the other Wu's (1994) research.

As a matter of fact, it is a trend in the conservative thinking to use partnership to disguise the true meaning of corporatism. In their research of British's planning system, Tim Brindley, Yvonne Rydin, and Gerry Stoker (1996, 197) argue that "public sector budget constraints now combine with an almost hegemonic view that the public sector benefits from working with the private sector; the result is that in practice partnerships of various types dominate the planning." They indicate:

Partnerships become a more significant mechanism for generating and, at the same time, implementing policy; and this includes partnerships between public and private sectors, between governmental and quasi-governmental agencies, and again with non-governmental organizations, between the voluntary and business sectors, and so on. This generates new concerns about the meaning of democracy and brings us on to the new social context for planning. (190-191)

However, researchers who misuse partnership as the new trend for planning do not consider the power relationship between the state and the civil society. Structural, institutional and ideological factors are ignored or de-emphasized. Non-participation or inaction in this formulation is not in and of itself a political problem. Political inaction can be interpreted as reflecting a pervasive sense of satisfaction with the consequences or operations of a given political process. The failure to consider relative power at the structural level instigated Peter Bachrach and Morton Baratz (1970) and others to offer a new approach to the study of power. Bachrach and Baratz have argued, "power is exercised not just upon participants within the decision-making process but also towards the exclusion of certain participants and issues altogether" (Qtd. in Gaventa, 9). Exclusion occurs through the mobilization of bias in the political process. As one writer has summarized:

Political organizations, like all organizations, develop a 'mobilization of bias. . . in favor of the exploitation of certain kinds of conflict and the suppression of others. . . . Some issues are organized into politics while others are organized out.' And, if issues are prevented from arising, so too may actors be prevented from acting. The study of politics must focus



‘both on who gets what, when and how and who gets left out and how’ - and how the two are interrelated. (Gaventa 1980, 9)

Bachrach and Baratz (1970) argue that the study of power must include consideration of the barriers to action upon grievances and must consider the structural and institutional obstacles to effective action to redress grievances. Citizens who lack of economic and political power are excluded in the processes of decision-making because of the monopoly relation of corporatism. High socio-economic status groups can dominate political decisions not only by direct participation in the political system but also by the structural exclusion of the less powerful groups. In addition, public officeholders also favour those dominant groups because they are motivated by a desire for career success (Stone 1980). Stone further indicates that elite groups have a contextual or situational influence on political life, and it is embedded in the social structure and is removed from open competition among groups and politics in the public view. As a result, partnership planning which copies the idea of corporatism does not increase citizens’ participation; on the contrary, it restricts people to join in the political system. The new development institutions of industrial park in Taiwan can demonstrate this statement.

## New Land Development Institutions of Industrial Park

Industrial parks in Taiwan, especially for those filthy petrochemical industrial complex always link to serious air, water and noise pollution. For example, the wastewater treatment plant was not able to handle the volume of wastewater produced by the petrochemical industrial complex. The volume and toxicity of wastewater after treatment was so great that the government resorted to directly dumping the plant’s discharge into the ocean. It was this polluted situation which caused many violently environmental protests in the late 1980s (Hsiao, 1998; Hsu and Byrne, 1996). This paper then assumes that the way for the development of industrial parks, especially for the petrochemical industry therefore can probably be evaluated as an important indicator for Taiwan’s future sustainable development.

Industrial parks in Taiwan can be classified into three different types, depending on which state agencies approve their establishment and development. Firstly, it is the Ministry of the Interior (MOI), whose authority of the development of industrial parks is derived from the Law of Urban Planning and the Law of Regional Planning. Secondly, the Ministry of Economic Affairs (MOEA) does also have the authority to

develop industrial parks, and its power is come from the Statute for Encouragement of the Upgrading of Industry (SEUI), whose forerunner is the Statute for Encouragement of Investment (SEI). Thirdly, it is the National Science Council (NSC), which are responsible for the big Science-Based Industrial Park, for example the Hsin-chu Science Park. At this moment, the NSC tries to create a second Science-Based Industrial Park at Tainan. However, it should be noted that the MOEA also plan the science park, which is named as the Intellectual Science Park and whose scale is much smaller than the Science-Based Industrial Park. This paper is basically focused on the second category since the MOEA has become the key player for the development of Taiwan's industrial parks recently.

Nevertheless, land use planning and controlling system in Taiwan should be briefly introduced in advance. Land in Taiwan is classified into two basic categories: one is the urban land, the other one is the non-urban land. Within these two categories the government further plans them into several land use zones. For example, the urban land can be designated as residential, commercial, industrial, and other specific zones. The Law of Urban Planning is used to regulate the urban land, and the Law of Regional Planning is used to control the non-urban land. And, the state agency to implement the above two laws is the MOI. It is noted that the power of land use planning and controlling systems is strictly hold by the national and local governments, and citizens do seldom have power to participate in the drawing up of urban planning. The only power they are bestowed is that they can submit their different opinions within 30 days after the urban plan has been decided and formally opened to the public by the government. Citizens are normally powerless in the land use planning (Chen 1991). However, with the change of political situation from authoritarianism to corporatism since the 1980s, local factions and the big conglomerates employ their political power to influence the land use planning toward their benefits. It is because land price will have a great leap if the land with low market value can be re-plotted into high market value use. Land development therefore is concealed with a great windfall. Examining land development in the Taipei County in the 1980s and 1990s, Chen (1995) concludes that land use planning is basically controlled by the state, local factions, and big conglomerates. Citizens and local communities are all excluded in this system. It is also this reason that land use planning is full of political corruption.

In addition to the MOI, land use planning and controlling systems in Taiwan are interrupted by the MOEA, specifically in the development of industrial parks. The MOEA employs the SEI and SEUI to affect Taiwan's land use. The SEI was implemented from 1960 to 1990, and its major objectives were to assist the acquisition of plant sites, and to provide tax exemptions and deductions. In the

period from 1960 to 1980, industrials in principle could establish their plants in agricultural zones if their applications had been approved by the Industrial Development Bureau (IDB) of the MOEA. As a result, many industrial plants scattered in the rural areas and produced industrial pollution, and natural environment was seriously deteriorated. To address this problem, the Law of Regional Planning had been regulated in 1974, and the Comprehensive Development Plan of Taiwan Areas had also been adopted in 1979. Both of them required strictly land use control and asked industrial plants locate in the designated areas.

The policy allowing plants to locate at anywhere therefore had been changed in 1980 when the government addressed the SEI. The new policy asked new industrial plants could only be located at the industrial parks planned by the government. The first edition of the SEUI instituted in 1991 to substitute for the SEI abided by this principle. Not only the new industrial plants could only be established in the industrial parks developed by the IDB, but also the expansion of the old industrial plants had been halted in their original locations.

However, this policy was altered in 1995 in the new revision of the SEUI. The industrial plants could annex their surrounding agricultural land in order to expand their plants if their plans could be approved by the IDB. It is also very important to note that in the case of the development of the new industrial plants, the planning power is released to some important sectors, and the state is not the only planning agency any more. The IDB, industrialists, land owners, state-owned or private corporations used to develop industrial parks can designate a specific area to be the new industrial park and ask for governmental approval.

The administrative processes for its development deserve for detailed examination. The IDB will first prepare a development principle for the industrial parks, and this principle need to be approved by the Executive Yuan. Developers of new industrial parks should submit their development plans, which should include the report of environmental impact assessment directly to the MOEA and ask for its permission. The MOEA will consult with the state planning agencies in the MOI and also ask for their co-approval. With the endorsement from the MOEA, the IDB then can require local governments (counties) to change their original urban or regional plans immediately. It is at this stage that local government is involved into the development procedures. Surprisingly, these MOEA-approved development plans do not need to be firstly endorsed by local governments or local communities, according to the formally legal processes. Ironically, local governments are required to implement those burdensome jobs of land acquisition for the developers. This probably was the reason why many protests emerged from local communities against the construction plans of the sixth and seventh naphtha cracking plants.

The second case to violate the land use planning and controlling systems is the mixed commercial/industrial zones (MCIZs). In order to restructure Taiwan's industry and to promote economic development, the government stipulates an administrative order named as the development and management of mixed commercial/industrial zones in 1994. MCIZs are planned to locate at suburban areas and to accompany a variety of industries, such as lighting and repairing industries, research laboratories, transportation and storage industries, industrial and commercial services, shopping malls, and etc. According to the administrative order, developers of MCIZs can submit their development plans directly to the MOEA and ask for its "recommendation" to local governments. After receiving MOEA's recommendation, developers can then ask local governments to change their original urban or regional plans.

Since land use planning in Taiwan is strictly controlled it is difficult to rezone land to utilization other than their original plan without governmental supports. With the expansion of the metropolitan areas, the agricultural land in the suburban area is forced to change to other uses. In the meantime, a great windfall is always accompany with the redrawing of urban and regional plans. Those major capitalists who can supply 5 billion New Taiwan dollars and want to invest the MCIZ would pursue the central government's recommendation. They do not need to be restricted by the Law of Urban Planning or the Law of Regional Planning. Therefore, the original institution of land use planning system is disregarded and even abandoned in the case of the MCIZs' plan (Li 1994).

The third case is the Draft of the Law of Comprehensive Development Plan (DLCDP). The Council for Economic Planning and Development (CEPD) of the Executive Yuan initiated the draft of the Law of Comprehensive Development Plan (DLCDP) in 1995 in order to totally restructure Taiwan's land use system which contains comprehensive development planning, regional planning, urban planning, and zoning of non-urban areas. Originally, governmental agencies which own power to regulate those planning activities include the central government, Taiwan provincial government (and Taipei and Kaohsiung special municipalities), and county governments. The DLCDP plans to eliminate the level of regional planning. Although each county government can design county comprehensive development plan according to the DLCDP, the final decision for the plan to be realized is still hold by the central government.

According to the DLCDP, Taiwan's land use planning and controlling systems will be switched from the zoning system to the planning permit system. The DLCDP divides Taiwan's land into two categories: one is the restricted development area, the other is the development area. The former is defined as the ecologically

sensitive areas, environmental protection areas, or national defence areas. In principle, these restricted areas will not be developed unless the state has a specific protection and construction plan. The latter is those areas, which can be developed. Public or private sectors can submit their development plans to the states. Whether these plans can be approved or not is not depended upon the zoning system but by the administrative discretion. According to historical experiences of land control in Taiwan, it can be predicted that the big conglomerates and local factions which have good relations with the state will definitely benefit from this new system.

In order to regenerate domestic investment environment and to help large business conglomerates to compete in the international markets, land development institutions deriving from the idea of corporatism become the new fashion in Taiwan's planning system. Partners to cooperate with the public officials are restricted to those high socio-economic groups. Large business conglomerates threaten to move out their capital unless the state willing to supply an environment which benefits for their capital accumulation. A hegemonic and monopoly relation has been established among the state, local factions, and large business conglomerates. It seems that new institutions for land development of industrial park are offered especially for those local faction and conglomerates' interests.

## Conclusions

When the SD becomes a famous term for future development in the world, the meaning of SD should be carefully examined before to unconditionally accept it. In this paper, the author examines the diverse meanings of SD and finds that there are so many different definitions of it. Although it basically contains social and ecological sustainability, its objectives are still very various and full of ambiguous. Therefore, it is depended upon whom to define it. The author argues that the WCED's definitions of SD are very conservative. The WCED tries to transfer SD into sustainable growth; it also emphasizes on technology determinism and organizational managerialism. In addition, economic efficiency is still the only and the best way for the evaluation of future development. But, these views cannot be accepted by many researchers. The authors supplies the other thoughts of SD, and they are mainly focus on the change of internationally and national political economic structure. It is also necessary to construct a participatory institution based on a new understanding of epistemology.

With the theoretical background, this paper uses the land development institutions, especially focus on industrial park, as an important criterion to evaluate

whether Taiwan's development path is on the way of SD or not. The author investigates the new revision of SEUI, the MCIZs, and the DLCDP, and finds the result is very negative at all. It is because a political system of corporatism has been established in Taiwan. Partnership planning is misused and does not consider the power relationship between the state, capital, and civil society. The state depends upon capital accumulation through commodity production and, for this reason, must stand ready to help capital accumulation. As Claus Offe puts it “state actors must be interested-for the sake of their own power-in guaranteeing and safeguarding a ‘healthy’ accumulation process” (1984, 120). Thus, capitalist enterprise and the state are jointly bound to try to impose commodity and exchange relations on local communities and individual citizens. The capitalist state intervenes in order to facilitate the transformation of social activities into commodities. In this policy, the fate of local communities and environmental resources is to be determined by their exchange value rather than their social value as places of shared activities and commitments. Local communities and citizens are therefore excluded from the decision-making processes, which basically pursue higher economic growth and capital accumulation. Partnership planning becomes a planning system without partners from the civil society. The SD is used only for a lip service, and the old development paradigm is kept intact.

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