

# **Sustainable Development and Synoptic Intergovernmental Policy-making: A Public Policy Analysis with Reference to China**

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China's rapid economic growth during the past three decades of market orientation reforms has brought immeasurable benefits to the Chinese people. Incomes have increased, poverty has fallen, and health indicators have improved. Yet the same unbridled growth that has lifted millions out of poverty has also caused serious environmental damage. Currently the Chinese Government has acknowledged importance of a balance between growth and environment so as to ensure sustainable development and quality of life for the Chinese people. The Chinese leadership is striving to carry out "scientific development concept" which calls for sustainable development,<sup>1</sup> and build "a harmonious society" which emphasizes "harmonious coexistence between human and nature", meaning environmental harmony. However, the problem for the China's intergovernmental decision-makers is how to incorporate environmental protection into its economic policy-making and implementation. For this reason, it is imperative that the Chinese Governments at different levels should enforce synoptic public policies in socioeconomic development in order to realize sustainable development.

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<sup>1</sup> The Scientific Development Concept is the current official guiding socio-economic ideology of the Communist Party of China incorporating sustainable development, social welfare, a human-centric society, increased democracy, and, ultimately, the creation of a Harmonious Society.

## **Sustainable Development, Environmental Degradation and Market Failure**

Economic development is not only an economic process but also social and natural processes. The history of the human race in developing economy is essentially a history of utilizing natural resources. The means of utilizing natural resources fundamentally determines the concrete road or strategy of social and economic development.

Human history has demonstrated that the neglect of the environment in the process of industrialization, particularly the irrational exploitation of natural resources, has caused global environmental pollution and ecological degradation. It is through such bitter experiences that humankind has begun to comprehend the significance of environmental protection and coordinate economic growth with resources and the environment so as to ensure sustainability. By the early to mid-1980s, “sustainable development” was emerging as the catchword of an alternative social paradigm (The World Commission on Environment and Development, 1987; Gareth Porter and Janet W. Brown, 1996, p.24-26). Sustainable development is a perspective on environmental management that emphasizes the need to reconcile present and future economic needs through environmental conservation. This conception is vital to humankind’s development strategies because only if we insist on sustainable development can we incorporate economic growth with environmental protection.

Moreover, the objective of economic development or development strategies must be to increase standards or quality of living. The question is how we understand to be “quality of living”, and how we perceive “development”. The sustainable development paradigm emphasizes the need to redefine the term “development”. Our interest in people’s living standards as well as development can scarcely be brushed aside in favor of no-nonsense growth of GDP per capita, and this has called for a broader discussion of development strategies. To explain the nature of development strategies, Amartya Sen (1997, p42) wrote: “The nature of development strategies relates ultimately to the public evaluation of ends, as well as the assessment of economic and social means. The case for seeing preferences in the broader form is particularly important in this context.” Other economists, such as Nicholas Stern and Joseph E. Stiglitz, also present a *broader* set of objectives that should underlie development strategies. While all of the objectives may be summarized within the rubric of “raising living standards”, they go far beyond the standard objective of increasing GDP per capita. According to these objectives, an

important ingredient in living standards is the quality of the environment. Development strategies that accept the sacrifice of a clean environment today for large growth rates in GDP are generally being misled by, or deliberately overlook, the limitations on our measures of standards of living. Such policies are likely to be worse than “penny wise and pound foolish” (Nicholas Stern and Joseph E. Stiglitz, 1997, pp.254, 259).

Currently, the environment is one of the utmost human concerns. The sustainable development paradigm assumes the need for incorporating economic development with environmental protection, and greater equality not only between the wealthy and poor nations but also within the societies and between generations (intergenerational equality). Society can lose today and lose tomorrow, especially as the costs of clean-up are often a multiple of the costs of avoiding pollution in the first place. As we all live on this earth, and we have only one planet, we should all be concerned with its prosperity and survival, and safeguarding the interests of future generations. Only if it survives can we, the human race, survive; only when it prospers can we prosper.

It is impossible, however, to incorporate economic growth with environmental protection and realize sustainable development by the natural force of the market economy. Around the world, the recent 30 years have seen greater attention being given to the role of markets as an instrument of economic development. Responding to changed economic circumstances, governments’ perceptions of their own role in the management of the economies have shifted. As a result, many have withdrawn from direct involvement in economic development and reduced their intervention and control in market economy. In this process, however, it has been recognized that, left entirely to their own devices, markets may be either inadequate or inappropriate for a country’s overall economic and social development. In an ideal competitive economy, for instance, price should reflect the real costs to society of producing and consuming a given resource, but conventional free-market economic policies systematically underprice or ignore natural resources, which has caused environmental degradation. For this reason, the sustainable development paradigm points to the failure of markets to encourage the sustainable use of natural resources (Gareth Porter and Janet W. Brown, 1996, p.27).

Early discussions of market failures focused on externalities and public goods. In a market system, business firms seek profit maximization, and prices do not always reflect all the costs incurred in producing and using a product. As a result, resources are allocated to goods that would not be demanded in such large quantities were the true costs reflected in the prices. When a cost occurs outside

of the market transaction and is thus an externality (William P. Albrecht Jr., 1979, pp.37-38). In any market economy, the externalities usually produce negative outcomes rather than positive ones. As Joseph E. Stiglitz (1997, p.65) summarized:

*Pure public goods and goods with positive externalities will be undersupplied in the market, while goods with negative externalities--such as those generating pollution--will be oversupplied.*

Pollution or environmental degradation is just a major outcome of the externalities and market failure. Public policies that do not correct such market failure encourage overconsumption and thus the more rapid depletion of renewable resources and the degradation of environmental services. (Environmental services are the conserving or restorative functions of nature, e.g., the conversion of carbon dioxide to oxygen by plants and the cleansing of water by wetlands.) In a word, market economy can not incorporate economic growth with environmental protection and ensure sustainable development by itself, but often leads to more serious environmental problems. China's market orientation reforms have also brought the country an experience of market failure in environment protection.

China's economic reforms since 1978 have progressively unleashed market forces and produced rapid economic growth. The transition from a command to a market economy has produced economic growth rates that put China among the world's five fastest growing economies. At the same time, however, China's environment has deteriorated significantly. The reforms have introduced market incentives for local governments and enterprises to increase their profit, and local governments and industries are allowed to retain a percentage of profit to be used at their discretion. Out of this system has emerged an emphasis on profit maximization. However, local governments and enterprises are less likely to implement costly environmental protection measures because they directly affect their revenues.

Meanwhile, Gross Domestic Product (GDP) is highly emphasized by Chinese governments of all ranks since the reforms. To pursue high speed increase of GDP, economy is often developed at the cost of environment destroy. So such phenomena are very popular: forests are cut down for economy; illegal factories are permitted for local development. And behind them are the short sight policies of the

government driven by marketization.

Market forces also produce rapid urbanization and industrialization in China, which has generated enormous volumes of air and water pollution, lowering air and water quality. Between 1980 and 1995 China's urban population soared from 191 million to 352 million people, moving more Chinese closer to industrial smokestacks and residential emissions and increasing the number of people exposed to polluted urban air and water. Since 1980 surface water and ground-water have grown increasingly polluted because of increased emissions of industrial waste, municipal sewage, and agricultural runoff. Throughout China, over 90% of urban ground-water and 25% of surface fresh water resources are considered contaminated in the middle 1980s (Lester Ross, 1988, p.134). Urbanization has also tightened already short water supplies particularly in northern China, and has strained urban sewage treatment capacity. Till now, lakes, rivers and the air in many places in China are still polluted, some seriously, in spite of continuous efforts to control pollution.

## **Synoptic Planning and Policy-making for Sustainable Development:**

### **Government vs. Market**

Despite the magnitude of the environmental problem, China has an unprecedented opportunity to increase its environmental quality of life. Rapid economic growth makes clear water and air more attainable. High rates of investment can be used to develop cleaner, more energy-efficient industries. But these outcomes will not happen automatically. Hence it addresses a major question: What should China do to ensure that rising incomes translate into a higher environmental standard of living for current and future generations?

Since the market system cannot incorporate economic development with environmental protection by itself, there logically should be a non-market force to remedy this market failure. The most important non-market force is government. It should be recognized that markets and governments have different functions in social and economic development. In assigning responsibilities in the partnership relations, markets have primacy in the production and allocation of goods and services. But since markets often fail on their own to produce socially desirable outcomes, the government must play a role in helping markets to perform in pursuing its own development objectives. As Joseph E. Stiglitz (1997, p.92) wrote:

*The market is the engine of economic growth. The standard market model only partially captures its strengths, including its incentives to innovate. Yet in spite of its strengths, there are important instances in which private incentives are not well aligned with the public interest: firms may, for instance, produce too much pollution and invest too little in basic research. These market failures are significant enough that there is a role of government --in preserving and enriching the environment, ensuring educational opportunity, and promoting technology and basic research.*

In an attempt to correct the market failure, governments play a large role in all modern economies. Governments make and carry out laws and public policies, which can adjust or harness the externalities, spontaneities and blindness of market. A correct intergovernmental policy strategy may help incorporate economic development with environmental protection. As Amartya Sen (1997, p.43) said, “Open discussion of public policies and governmental strategies remain crucial even in a world that is increasingly doubtful about bureaucracy and the efficiency and usefulness of the state. Policy alternatives must be scrutinized and social opportunities assessed --and, ultimately, the market, as well as the government must withstand democratic critique. Scepticism of governance is not sufficient ground for limiting public participation in the market.” It is thus quite clear that environmental protection and sustainable development require governments to stipulate and carry out relevant public policies. As urbanization and industrialization grow rapidly, governments around the world are studying how to adopt effective measures to coordinate environmental protection with economic growth to attain the goal of sustainable development.

What policy strategy, then, should the government adopt so as to promote viable economic development and also enhance environmental protection? According to the theory of policy analysis, there is a distinction between two methods of planning and policy-making. Charles E. Lindblom (1977, p248) developed two models of society to elaborate on the difference of these policy-making methods. Model 1 might be called an intellectually guided society. It derives from a buoyant or optimistic view of man’s intellectual capacities. On a more pessimistic view of man’s intellectual capacities, Model 2 postulates other forms of guidance for society. Lindblom further argued that:

*From the distinction between the two models of the humanitarian society, which differ in their estimate of man's intellectual capacities, we can make a distinction between two methods of planning and policy making. One --appropriate to Model 1 --we shall call synoptic, calling attention to breadth and competence of analysis attempted in it. The other --appropriate to Model 2 --we shall call strategic, calling attention to its limited intellectual aspiration and the consequent need for an intellectual strategy to guide an inevitably incompetent analysis (C. Lindblom, 1977, p314).*

So we can find two pure patterns or methods of planning and policy-making. One is synoptic, which depends on human rationality and perceptivity to find the ultimate objectives and to develop overall strategies and comprehensive plans to achieve them. The other is strategic, which is sceptical about human's rationality and only make incremental steps though trial and error. Generally speaking, synoptic planning and policy-making has holistic, far-sighted and long-term goals, while the strategic one has no such goals but simply muddles through by piecemeal engineering. In a comparatively narrow sense, the former is called rational model or rationalism, and the latter incremental model or incrementalism (C. Lindblom, 1959; Hu Wei, 1995). Put in another way, Aaron Wildavsky (1979, pp.11, 109-113) regarded the distinction between these two methods of planning and policy-making as "intellectual cogitation" versus "social interaction". From a different perspective, we can either say it is market choice versus government action.

According to the above framework of analysis, sustainable development strategy is not like market choices, or most of the policy-making in "market-oriented polyarchies" (a term used by Lindblom, op.cit.) although governments can use some market incentives to promote environmental protection. It is due to the fact that market choices, as well as the policy-making in market-oriented polyarchal systems, are basically strategic and incremental, merely muddling through by trial and error. They can not resolve the environmental problem in a rational way. On the contrary, the serious pollution in today's world results, in a sense, from such strategic policy-making. In fact, environment protection is not a new human thinking. Though economists have long recognized the importance of environmental externalities (Pigou, 1932), only recently --when market failure, from life-threatening smog to dying lakes and rivers, become so apparent that they could no longer be ignored --have they become a major responsibility of government (Joseph E. Stiglitz, 1997, p.65).

From this perspective, sustainable development should mainly depend on synoptic planning and policymaking although there must be mixed methods in any real societies. That means the government should take more active steps for environmental conservation, but not only follow the lead of market and make decisions without anticipation and cogitation. To ensure the sustainable development, government must not only enforce regulations, taxes and other mechanisms that impel private actors to take account of environmental consequences, but also carry out those investments that cannot be promoted by market incentives but that are productive from a broader environmental perspective.

Actually, sustainable development strategy is synoptic itself because through intellectual cogitation, it has apparent far-sighted and long-term goals. The famous Brundtland Report, which popularized the term “sustainable development” and gave the new paradigm momentum in replacing the dominant paradigm of development, defined sustainable development as development that is “consistent with future as well as present needs” (The World Commission on Environment and Development, 1987, p.25). Moreover, sustainable development strategy is also holistic and comprehensive since it believes that economic and sociopolitical development objectives interact one another. As a UNDP report for China put it: “Economic and social development objectives are interrelated. If China's sustainable development goals are to be achieved, these objectives must be promoted concurrently, and in a manner designed to ensure an urban/rural balance and advance social equity. If this dual approach is not adopted, danger exists that economic progress may be achieved at the expense not only of environmental degradation but also social disorientation and political instability.” (UNDP, 1993)

Therefore, China's government must play more important role in environmental protection to overcome the market failure, and elaborate a synoptic development strategy to ensure sustainable development. However, policy-making concerning growth and environment in different levels of governments, especially in the local governments, is still strategic but not synoptic. As a result, the gains in the environmental protection have been mostly negated by the rapid growth of the market economy though past efforts have somewhat reduced pollution per unit output. Therefore, the main question now is how to make and implement more rational and synoptic public policy to effectively incorporate the market economic development with environmental protection.

### **Incorporating China's Growth with Environmental Protection:**

## **A Synoptic Perspective for Intergovernmental Policymaking**

According to the synoptic method of planning and policy-making, China should pay more attention to the intellectual competence that humans have accumulated through the experiences and lessons in a long period in regard of growth and environment, but no longer muddle through by trial and error on environmental issues. As Chinese leader Hu Jintao put it in the 17th CPC Congress in 2007:

*We must adopt an enlightened approach to development that results in expanded production, a better life and sound ecological and environmental conditions, and build a resource-conserving and environment-friendly society that coordinates growth rate with the economic structure, quality and efficiency, and harmonizes economic growth with the population, resources and the environment, so that our people will live and work under sound ecological and environmental conditions and our economy and society will develop in a sustainable way.*

Achieving these goals will require some short term sacrifices. To keep consistent with present as well as future needs, it is necessary to have correct, wise and synoptic ideas of environmental policy-making. Sometimes developing countries treat the protection of environment as a luxury --something that advanced economies can afford, but they cannot. The evidence, however, is that the cost of inadequate environmental protection are enormous --the health cost of contaminated water, for instance, may be very large --and it is often extremely expensive to reverse environmental damage. At the same time, the incremental costs of protecting the environment may be relatively low (Joseph E. Stiglitz, 1997, p.94). As the saying goes, "Prevention is better than cure." From a long-term view, "cure after pollution" will cost more than appropriate prevention.

As a matter of fact, China has already suffered for the enormous cost of environmental damage. According to a report (Vaclav Smil and Mao Yushi, 1998, p.12), China's total income loss as a result of environmental degradation in 1992 was up to 380.24 billion yuan, which represented 18.8% of China's total national income (2022.3 billion yuan in 1992). This loss is attributable to: natural resource degradation --1.9% (38.89 billion yuan); environmental pollution --4.9% (98.61 billion yuan); and deforestation --12.1% (242.74 billion yuan). In 2006, China's pollution problems cost the country more

than US\$200 billion a year, roughly 10 percent of the country's GDP--- US\$2.26 trillion for 2005, according to a top official of the NEPA (China National Environmental Protection Agency).

It should be recognized that the Chinese government has done much in policy-making for sustainable development in the past years, especially in the 1990s. In 1983, the government declared environmental protection a basic national policy and formulated three policy principles for controlling pollution; In 1992, China among the first nations to act on the Rio agenda, issued "Ten Strategic Policies for Development and the Environment", and the government also formulated "China Environmental Protection Action Plan"; In 1994, the State Council approved "China Agenda 21 --White Paper on Population, Environment and Development", which lays out major policies for sustainable development; In 1996, the State Council approved "Ninth Five-Year Plan for Environmental Protection for 2010", a first in national planning history; And in 1997, the government announced that China would phase out leaded gasoline by 2000. Still, much remains to be done.

As a synoptic planning and policy-making, sustainable development strategy is a big systematic engineering project, which is not only a question of natural science but also a question of social science. All the variables in growth and environment are related to one another and influence one another. On the one hand, it is vital for China to rely on scientific and technical advancement to protect the environment when the policy and legislation are improved and input is strengthened. On the other hand, this process depends not only on the advancement of science and technology, but also the improvement of public policy-making.

To incorporate economic growth with environmental protection, the decision-makers, first and foremost, should apply modern scientific and technical means to find the optimum development pattern. Generally speaking, China is still in the stage of economic growth with extensive resource consumption. Such an industrial and agricultural growth pattern with high consumption and low efficiency not only consumes large amounts of resources but also leads to environmental destruction.

In managing the economy, therefore, decision-makers must be far-sighted for the protection of resources and must not seek high output and high output value at the cost of natural resources. To this end, the Chinese government has raised a strategy of "changing production pattern and practicing clean production" in the 1990s. Therefore, it is imperative to apply modern science and technology to raise the utilization rate of resources and change the industrial structures. Yet carrying out this strategy would be a long-term process because it is difficult for China to change the current growth pattern as a whole

in the near future. At present, dependence on coal is a prime cause of pollution and contributes to global as well as local climate change. It is necessary to promote energy conservation and efficiency in domestic and industrial use, clean coal technologies, and alternative renewable sources of energy.

As a long term plan and strategy, developing eco-industry and eco-agriculture is a good way for sustainable development. As synoptic planning and policy-making, Chinese government should encourage and ensure eco-development both in industrial and agricultural sectors. In contrast to reducing the production of industrial waste in clean production, eco-industrial economy aims at the recycled use of industrial waste, especially among different trades. By establishing eco-industrial parks, all the firms that produce waste in the park may easily exchange materials and energy. For instance, in one such park in Denmark, there is an electrical power plant, an oil refinery, a sulfuric acid works and a cement plant. They exchange materials in terms of energy, water and waste products. The electrical power plant supplies vapor to the oil refinery, a pharmaceutical works and the city proper. At Mercedes-Benz, all auto parts are manufactured in a closed system in which either new parts are made or materials are exchanged, saving energy and resources.

While optimizing its growth pattern, China should also take effective steps to curb the existing environmental degradation. Estimating pollution-related damages to health, worker productivity, and agriculture, environmental priorities for intergovernmental policies should point to the air pollution, water pollution and acid rain. Addressing these challenges will require a new strategy for environmental protection that reflects China's increased market orientation, dynamic growth patterns. Currently, it is eager to establish priorities for public policy, which must include (1) governing market to make polluters pay; (2) investing in for a brighter future; and (3) planning and regulating effectively (The World Bank, 1997b, pp.76-80; 1997a, pp.104-110).

First, China's government should harness the market to work for the environment, not against it. Market forces have provided the foundation for the economic growth of the past two decades. Properly harnessed, they can be major allies for a cleaner future. Synoptic policy-making is different from market decision, but it can utilize market mechanisms for sustainable development. This will require, for example, adjusting prices to cover economic costs and incorporating social costs of pollution through taxing environmental externalities. Correct valuation and pricing of resources is the key to a sustainable economy. It is necessary to develop and adopt resource pricing policies which reflect environmental and social costs and develop and use economic and fiscal instruments for environmental

management and pollution control. Moreover, the use of fines and tradeable permits in environmental regulation not only ensures that environmental benefits are achieved at the lowest cost, but reduce the temptation to use regulatory mechanisms as a competitive device (Joseph E. Stiglitz, 1997, p.84).

Secondly, China's government should harness growth for the environment. This will require creating incentives to elicit investments with the largest environmental benefits for future generations. Public investment is also important for this purpose. Several investments require government coordination; others require government to absorb risks that private investors will not accept. As Nicholas Stern (1997, p.168) said: "Government must take responsibility for many of these investments often, but not always, paying for them out of the public budget." China's public investment on pollution control will have to double, to about 1% of GDP. However, the costs are small relative to the future costs of cleanup if action is delayed. Furthermore, today's sacrifices are small relative to the enormous improvements in the quality of life that will accrue to future generations.

And last but not least, China's government should harness the intergovernmental administrative capabilities to the cause of the environment. This will require providing better laws and regulations at the national level as well as ensuring far-sighted planning and pollution enforcement in regional and local levels. All the discussions above of synoptic method of planning and policy-making relate to this point. However, the most difficult thing in synoptic planning and policy-making lies in enforcement.

### **Enforcement: Ensuring Policy Consistency between the Central and Local Governments**

The major obstacle for China to overcome with the synoptic planning and policy-making is enforcement. This problem is not unique to China, it is evident in most developing countries. Joseph E. Stiglitz (1997, p.92) said: "The challenge facing many developing countries is that while market failure is more pervasive, governments' ability to correct those failures may be more limited." The Chinese government has recently carried out much valuable work in environmental protection and sustainable development and achieved success in planning, formulation of legislation, and also practical implementation. However, China still faces some very worrying prospects for the environment: it is better in parts yet gets worse as a whole. The key problem lies in intergovernmental enforcement. As Qu Geping (1989, p.28-29), the famous former leader of NEPA wrote:

*Although environmental protection has become an integral part of central and local planning, its implementation has been ineffective. Funds have not been allocated, and it has lacked the security of an established system. Overall, environmental control is weak, regulations lack soundness, and supervision is not strict. Where organizations have been established, they are not appropriate to the situation. Many have insufficient staff and inadequately trained personnel.*

Furthermore, enforcement difficulties come from many other aspects. From an intergovernmental perspective, China's increasing localism and local interests are big obstacles for environmental enforcement. Compared with the central government, the local governments, especially those at lower level, are not active enough in carrying out the environmental policies. As former State Councilor said, at the Second National Environmental Law-making Conference in Beijing, that China so far has only built a legal framework for environmental protection and there are still many areas that have not been covered. "While strengthening the environmental protection legislation, the work will focus on improving legal enforcement."

The very problem at present is that Chinese central government does not possess enough capabilities to enforce the environment laws and policies. China's reform since 1978 has experienced a process of decentralization, which has made environment protection very difficult though it did stimulate the country's economic growth. China's decentralization has been generally regarded as positive. It might be true for economic growth, but not for environment protection. As Bridget Williams demonstrated, China's decentralization of both agricultural and industrial reforms has increased its pollution problems (Bridget Williams, 1994, p.13). Among others, the expenditures of the central government only account for about one third of the total government expenditures, and the revenue of the central government only makes up 7% of China's GNP, which is among the lowest percentage for the governments' share of GNP in the world. It has caused the government to lack funds to protect the environment and provide the necessary public goods.

What is more, it has been rather difficult for China's government to implement its policies and regulations because public administration and public policy are fragmented across different levels of governments as a result of serious localism----usually regarded as "fragmented authoritarianism", a

standard framework used to analyze Chinese politics developed by Kenneth Lieberthal (1992). For example, at present river basin management is a pressing concern in China's environmental protection. But as things stand, divided jurisdictions across municipalities and provinces have not worked to the environment's advantage. An integrated river basin management system under strong leadership is needed to implement water policies ranging from extraction rights to pollution abatement. Yet there is no such strong leadership because of devolution and localism. Although the central government's planning and policy-making regarding growth and environment are overall synoptic, currently the local governments' planning and policy-making are still generally strategic.

Why are the local governments not active in implementing the environmental policies and laws? The key problem lies in the inconsistency of responsibility between local government, enterprises and environmental protection targets. As the governments have not detached themselves from the enterprises and corporations, the local governments' main goal is to promote the economic growth and maximize profits. No local governments are willing to take active steps to abate the pollution problem and protect the environment since the costs of action are generally concentrated and short-term, while the benefits are diffused and long-term. Every local government hopes others cut back on their pollution without doing so themselves. Hence, environmental public goods are always undersupplied. In the World Bank's report *Clear Water, Blue Skies --China's Environmental in the New Century*, the environmental policy implementation of local governments is also stressed:

*As in many countries, regulatory enforcement has been the weak link in China's system. In recent years the National Environmental Protection Agency and national ministries have been closely monitoring the enforcement of environmental laws. But to be successful, monitoring and enforcement must take place at the local level. Local governments face a tradeoff between protecting the environment and safeguarding the financial and employment performance of local firms. As a result pollution generally exceeds China's own standards. (The World Bank, 1997a, p.8)*

Currently the local governments at all levels are still playing a tremendous and special role in economic and social affairs. The local governments are the representatives of the central government or the superior government, and at the same time they are the guardians of local economies and interests.

This multiple role of local governments makes its financial expenditure multiple. In addition to the costs to maintain the normal operations of the governments, they will have to share the expenditure of local public affairs and of endeavors designed to promote local economic development. Local governments have to depend on local economy, especially the growth of local enterprises, for financial balance and the fulfillment of these multiple roles. In the current relations between local government and local companies, the governments depend heavily on the firms for many social roles. For instance, firms share the governmental responsibility of employment and social security. This is more evident in China's underdeveloped areas.

Under the current system, the financial pressures make it impossible for local governments to monitor the local firms and to have significant input into environmental protection. On top of this, financial and employment pressures from the local governments have a negative impact on the behavior of the firms. When the financial pressures are too great, the government will have to shift them onto the firms, restricting their capital accumulation and development. Even if some of the firms are willing to transform their work processes and reduce pollution to the environment, they have no financial means to do it. To do a good job of environmental protection and the implementation of sustainable development strategy, these relations should be straightened out through restructuring. It is necessary to put in order the relations between government and firm by means of the market mechanism and the reform of the enterprise system to make them the genuine legal entity and body corporate in market competition. The local governments, through political and economic reform, should change their role from all-powerful socioeconomic controllers to highly efficient, low-cost bodies that exercise macroeconomic management, guidance and service so as to create the market conditions for fair competition and ensure the coordinated development of economy, society and environment.

To change the role of government and put in order the relations between government and firm, the key lies in reforming their relations of interests and making local governments the genuine representatives of national and social interests. It is necessary to reform finances so as to relieve the local governments of pressures and lower their economic dependence on local firms. At present, government expenditure should be cut by all effective means, such as by staff-cutting, anti-corruption, and by clarifying the role of local governments to make them responsible for correcting market failure but not utilizing market for their own interest. Clean environment should depend on clean government. Under China's current situation, only the central government can make such correct decisions and push

the local officers to do so.

It is necessary for the central government, therefore, to play more important roles. Decentralization will do no good to China's sustainable development, and we should not confuse decentralization with marketization in the context of China's current reform. Although pollution results from the externalities of markets and it requires government to correct market failure, China needs further reforms of market orientation so as to separate the government from enterprises. However, more market does not mean less government, and neither does more government mean less market. The key to the question lies in differentiating the functions of market from that of government. Milton Friedman once said that China had "both too much government and too little" --too much in production and investment control and too little in the rule of law, macroeconomic management, and provision of public goods and services (J. Rohwer, 1996, p.141). Obviously, the crux lies in the mix-up in functions of governments and markets. The local governments, to some extent, take the place of markets and lower their functions to the market level so that they are unable to effectively correct the market failure and provide public goods. For this reason, marketization is still necessary and beneficial to China's modernization and sustainable development. But decentralization is quite different as it will encourage the local governments to involve themselves more in local economy and enterprises.

In short, it is indispensable to coordinate intergovernmental policies and remedy the policy inconsistency between the central and local governments. This requires it to manage the relations between the central and the local governments, and strengthen the ability of central governance against the localism in order to carry out the synoptic policies and regulations, while separating the government from enterprises. As a synoptic plan of further economic and political reform, China should realize an organic combination of political democratization, economic marketization and intergovernmental integration. Only by this can the China's government coordinate decision-making at the national level to implement, monitor, and ensure policy consistency among different levels of government.

## **REFERENCE**

Albrecht Jr., William P. 1979. *Economics*. Second edition. Englewood Cliffs: Prentice Hall.

Hu, Wei. 1995. "The Comparative Advantage of China's Development --An Analysis Beyond Pure Economic Perspective". Beijing: *Strategy and Management*, 5.

Hu, Jintao. 2007, "Hold High the Great Banner of Socialism with Chinese Characteristics and Strive for New Victories in Building a Moderately Prosperous Society in All Respects----Report to the Seventeenth National Congress of the Communist Party of China on October 15, 2007"

Lieberthal, Kenneth G. 1992. "The 'Fragmented Authoritarianism' Model and Its Limitations." pp.1-30 in *Bureaucracy, Politics, and Decision-Making in Post-Mao China*, edited by Kenneth G. Lieberthal and David M. Lampton. Berkeley: University of California Press.

Lindblom, Charles E. 1959. "The Science of Muddling Through". *Public Administration Review*, 19:79-88, 1959.

Lindblom, Charles E. 1977. *Politics and Markets*. New York: Basic Books.

Pigou, A.C. 1932. *The Economics of Welfare*. Fourth edition. London: Macmillan.

Porter, Gareth and Janet Welsh Brown. 1996. *Global Environmental Politics*. Boulder/Oxford: Westview Press.

Qu, Geping. 1989. "Environmental Protection in China: A Brief History". *Chinese Geography and Environment*. Fall/Vol. 2, No. 3.

Rohwer, J. 1996. *Asian Rising*. London: Nicholas Brealey Publishing.

Ross, Lester. 1988. *Environmental Policy in China*. Indiana University Press.

Sen, Amartya. 1997. "What's the Point of a Development Strategy?" *Development Strategy and*

*Management of the Market Economy*. Oxford: Clarendon Press.

Smil, Vaclav and Mao Yushi. 1998. *The Economic Costs of China's Environmental Degradation*. Cambridge: American Academy of Arts and Science.

Stern, Nicholas. 1997. "Macroeconomics Policy and the Role of the State in the Changing World". *Development Strategy and Management of the Market Economy*. Oxford: Clarendon Press.

Stern, Nicholas and Joseph E. Stiglitz. 1997. "A Framework for a Development Strategy in a Market Economy". *Development Strategy and Management of the Market Economy*. Oxford: Clarendon Press.

Stiglitz, Joseph E. 1997. "The Role of Government in the Economics of Developing Countries". *Development Strategy and Management of the Market Economy*. Oxford: Clarendon Press.

UNDP (United Nations Development Programme). 1993. *Opportunities and Challenges*. Special Report for the China Council for International Cooperation on Environment and Development (CCICED).

Wildavsky, Aaron. 1979. *Speaking Truth to Power--The Art and Craft of Policy Analysis*. Boston: Little, Brown and Company.

Williams, Bridget. 1994. "Environmental Concerns as China Modernizes". *Journal of Northeast Asian Studies*. 13:13-30 Fall.

World Bank. 1997a. *Clear Water, Blue Skies --China's Environmental in the New Century*. Washington, D.C.

World Bank. 1997b. *China 2020 --Development Challenges in the New Century*. Washington, D.C.

World Commission on Environment and Development. 1987. *Our Common Future*.

