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# **REGIONAL INTEGRATION AND SUSTAINABLE DEVELOPMENT IN HONG KONG**

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#### Abstract

Overall development goal of the Greater Pearl River Delta (GPRD) region is to the emergence jointly as the most dynamic, internationally competitive, world-class city cluster of the Asia-Pacific region. To achieve this goal harmonious regional integration towards sustainable development is decisive. But, Rapid discordant economic integration resulted social and environmental squalor which denotes the adequate attention towards the necessity of harmonizes integration for sustainable development. So, the main aim of this paper is to prepare a harmonious integration model which will be useful for urban planners, policy makers and researchers who are directly or indirectly involved or willing to involve in the task of regional integration in Hong Kong. Literature review is the main source of information of this study. In this paper, firstly, regional integration of Hong Kong as well as the concept of sustainable development is described from theoretical point of view. Then, status of sustainable development in Hong Kong under regional integration is briefed. In this section, some challenges of Hong Kong are identified which hindering economic vibrancy as well as overall social progress and environmental soundness of Greater Pearl River Delta. After that, the reasons of mismatch narrated and finally in the way forward section integration model is prepared as well as some recommendations are suggested to overcome existing constraints and to facilitate sound regional integration and sustainable development of Hong Kong as well as the PRD in the longer term.

Keywords: Hong Kong, Pearl River Delta, regional integration, sustainable development.

### 1. INTRODUCTION

The Pearl River Delta Regions actually refers to nine cities in the Guangdong Province; and those are Guangzhou, Zhaoqing, Foshan, Dongguan, Huizhou, Shenzhen, Zhongshan, Jiangmen, and Zhuhai (Figure-1). These cities are the outlying cities along the Pearl River Delta and formed as a strategy for economic development. After the handover of Hong Kong and Macau back to China, the two cities are added to the Pearl River Delta Region to form the Greater Pearl River Delta Region.

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Source: Prepared by the authors, 2013

On the other hand, sustainable development first came up in 1987, along with the Brundtland Report by the United Nations World Commission on Environment and Development. It states that "sustainable development is development that meets the needs of the present generation without compromising the ability of the future generations to meet their own needs." The Planning Department of Hong Kong has provided a holistic definition of the criteria: "Sustainable development in Hong Kong balances social, economic and environmental needs, both for present and future generations, simultaneously achieving a vibrant economy, social progress and better environmental quality, locally, nationally and internationally, through the efforts of the community and the Government" (Ng, 2002, p.22). The three main pillars working towards sustainable development are social, economic and environmental. Social sustainability refers to rights that human is supposed to own, such as labor rights or voting rights. Environmental sustainability includes the ecology and natural resources of the earth and having the rights of their existence. Lastly, economic sustainability looks at the financial structure of development.

# 2. REGIONAL INTEGRATION AND STATUS OF SUSTAINABLE DEVELOPMENT IN HONG KONG

In the late 1970s there was a decisive change of Hong Kong's economic development strategy due to the adoption of the open door policy in China. It moves towards the financial and servicing sector. According to Chan (1998), "with the adoption of the open door policy in China, industries and factories of Hong Kong began to relocate to Shenzhen Special Economic Zone (SEZ) and the countries in the Pearl River Delta so as to benefit from the low production costs and various preferential policies". Due to the economic integration of Hong Kong (HK) with the Pearl River Delta (PRD) regions (figure-1) the economy of HK and the PRD regions is growing rapidly. According to the Globalization and World Cities Research Network in 2000, 2004 and 2008, HK ranked 3rd, trailing New York and London. According to

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Global Financial Centers Index 8 in 2010, HK joined London and New York as a genuinely global financial centre.

The socio-economic linkages between Hong Kong and the PRD are substantial. The majority of the Chinese population in Hong Kong have their roots in the PRD (Ng, Hui et al. 2007). Sung (2004) mentioned that in 2002, the 4.9 million incoming tourists from the PRD generated 1.4% of Hong Kong's GDP and 1.9% of Hong Kong's employment. Guangdong presently constitutes 40 percent of China's exports and HK businesses control 60 percent of Guangdong's export capability. Hong Kong companies employ between 10 million workers in the PRD, more than Hong Kong's total population of 6.8 million. According to Yue-man et al. (2004), Some 38% of the total industrial output in Western PRD is derived from firms funded by Hong Kong, Macao and Taiwan. Moreover, Hong Kong firms contributed over 66% of the total export from Western PRD, with 70% of the export in fact conducted through Hong Kong.

Some cross border problem and malpractices among the PRD cities such as: problem of "Gortex border"; growing competition from Yangtze River Delta1 (YRD) and destructive competition within Pearl River Delta Region are wasting valuable resources of PRD region and hindering sustainable economic growth. According to Sung (2004), It has often been stressed that there is a problem of "Gortex border" between Hong Kong and the Mainland/PRD, i.e., while Hong Kong's talents, capital, and tourists are free to flow to the Mainland/PRD, reverse flows are controlled. This asymmetry allegedly leads to the "hollowing out" of the Hong Kong economy, as Hong Kong loses its talents, capital, and consumption expenditure to the Mainland without adequate compensating inflows. According to Miu (2005), constraints that Restrict the economic growth of PRD Region is the growing competition from Yangtze River Delta (YRD). The rapid economic growth in YRD in the past decade has established the region as a competitor of PRD region. Due to the lack of unified planning and inter-city co-ordination within the PRD regions has slowed down its economic growth. There is a growing competition for foreign investment between the Pearl River Delta and Yangtze River Delta. The Foreign Direct Investment (FDI) flows into the YRD have been rising at a faster rate than those into PRD region. At the same time, the amount of goods exported from the YRD is also increasing more rapidly than is the amount exported from PRD (Chan 2002). Miu (2005) mentioned that cities in the PRD, like Hong Kong, Guangzhou and Shenzhen, are competing with each other to be leader of the region. Traditionally, Asia's economic centers (Hong Kong, Seoul, Singapore, Taipei, and Tokyo) have competed with each other. These cities often attempt to outbid each other for Olympic Games, corporate headquarters and, most recently, the new Hong Kong Disneyland theme park. Guangdong and Hong Kong, like the rest of Asia, also

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<sup>&</sup>lt;sup>1</sup> The YRD region consists of Shanghai municipalities and some 15 cities in Zhejiang and Jiangsu Provinces

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compete with each other (Hildebrandt 2002). These kinds of competitions are meaningless and wasting valuable resources and funds. (Zhu 2004) The oversupply of airports within the PRD region can be known as one of the typical examples of destructive competition.

With the economic development and regional integration of Hong Kong with the neighboring cities, environmental deterioration as well as diverse environmental problems began to emerge due to rapid urbanization in the PRD regions. Chan (2002) mentioned that, the more vibrant the local and regional economy are, the greater the challenges it poses upon the environmental sub-system.

Uncontrolled technocentric development and insufficient infrastructure as well as lack of funding, low public awareness and few environmental movements in the PRD regions are some of the major obstacles of sustainable development. Pearl River Delta is home to five fairly major airports-two of which are "hardly doing anything at all." Hong Kong and Guangdong must avoid such waste and environmental destruction. There is a great need for adequate water and solid waste processing investment and planning in the region. Despite being a developed city on par with Tokyo and Singapore. Hong Kong still suffers from inadequate infrastructure for wastewater and solid waste disposal (Hildebrandt 2002). The biggest roadblock to solving environmental problems in Hong Kong is a lack of funding. Options are constrained by preferences for continued economic autonomy and its great wealth-accepting money from the Chinese government would implicitly obligate Hong Kong to follow Beijing's directions, while multinational lending organizations like the World Bank and Asian Development Bank would not chose to operate in such a rich area (Hildebrandt 2002). The general population in Hong Kong grossly neglects environmental problems. Public awareness is low due to the lack of enough environmental "champions" to affect large-scale change. Environmental movements in the Pearl River Delta region are "few and far between." One significant problem for nongovernmental organizations (NGOs) is a lack of expertise. Too often green groups do not possess the necessary scientific knowledge to accompany their advocacy work, making themselves vulnerable to criticism (Hildebrandt 2002).

Since the beginning of regional integration soon after the adoption of the Open Door Policy, the environment of the PRD has been taking some tremendous pressure. Ng affirms that "...cities are situated in the PRD, an ecological stressful region as a result of its rapid economic growth since China adopted a open-door policy in late 1978" (Ng, 2002, p.10). As a lot of the policies implemented for the purpose of regional integration are solely for economic development, the social and environmental aspects of sustainable development have always been ignored. Polluted materials produced by the factories rarely have standards and guidelines on the waste management procedure; this allows

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polluted material to remain in the downstream and the estuary of the Pearl River. Labor rights is another controversial issue in the region; factory workers have to work long hours with little pay.

TABLE 1 - SOCIO-ECONOMIC, ENVIRONMENTAL AND SPATIAL DEVELOPMENT PROBLEMS IN THE HONG KONG-PEARL RIVER

Hong Kong	Trans-boundary	The Pearl River Delta
- Rapid loss of manufacturing jobs,	- Rapid economic integration between	- Rapid industrialization an
rising unemployment and increasing	Hong Kong and the PRD has led to	urbanization have degraded the land of
social polarization	many environmental, social and	'fish and rice'. Rich agricultural land ha
- However, population growth resulting	physical planning problems	been converted to industrial uses; th
from immigration from China, most are	- Pollution problems in the PRD cannot	natural environment has bee
for family reunion purposes because	be contained within the Delta itself.	contaminated by air, water, nois
many lower class men in Hong Kong	They have reached an alarming state	pollution; and wastes have bee
could only afford to get married in China	and, unless concerted efforts are made	produced
- The existing urban fabric and quality	soon, the region will not be sustainable	- Massive construction of infrastructur
of human resources have become	in the future. Air pollution, among	has led to environmental problems an
'limits to capital'. Major regeneration is	others, is a case in point	created financial burden for loc
urgently required to equip the city for	- Because of the discrepancy of	authorities
another round of capital accumulation	economic developments in Hong Kong	- Floating population has been an issu
- For Hong Kong to become a	and the PRD, many social problems,	in the Delta for decades now, which ha
knowledge based society, we have to	such as second wives, parallel goods	led to all sorts of social problems
improve the quality of life and move	trading and various crime-related	- Similar to Hong Kong, different par
towards high-tech industrial	activities, take place	of the Delta have undergone variou
development, building on the strength	- So far, the economic integration has	degrees of economic restructurir
as a financial centre	primarily been 'market-led'. The public	leading to all sorts of 'destructive
- However, environmental stress, visibly	sector has been more proactive in	creation' along with evident soci
expressed in forms of pollution and	fostering regional co-operation in recent	polarization
degradation of the natural environment	years, especially in building	- As all the local authorities would like
as a result of decades of economics-	infrastructure to overcome frictional	attract more investment, they have
biased development, is dampening the	space. However, the practice of 'one	entered into a vicious cycle
attractiveness of Hong Kong for	country, two systems' has introduced	competition and local protection
overseas investment	considerable barriers and obstacles for	duplicating efforts and wastir
	the region to co-operate and learn to	resources in the race to attract foreig
	build up trust in regional development	investment

Source: Chan (1998); Ng (2002); Ng et al. (2007)

To indicate the existing situation of environmental problems, it is important to look at some statistics. "Statistics show that cultivated area had decreased from 14.5 to 10.7 million mu from 1980 to 1993 ... The amount of farmland per capita had dropped from 0.62 mu in 1991 to 0.42 mu in 1993 ... Planned development zones amount to 34% of all land areas, or 78% of at land areas in the PRD ... However, a

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lot of these 'development zones' are not really developed, leading to serious waste of valuable land resources and soil erosion problems" (Ng, 2002, p.10). From these figures, we can conclude that land for crops have been dropping at a rapid rate in a short amount of time; this indicates that the region may have to depend on other regions on food supply. The developed land has been increasing ever since, which implies a serious loss of green space in the region. Despite the loss of farmland caused by the building of factories that produce more pollution and harm the environment of the region, the decrease of crops production also leads to the risk of inadequate supply of food. Further, the decreasing supply of land may also impact on the recent rapid increase in food cost. These are other factors to prove social un-sustainability/imbalance/inconsistency in the region. However, According to Sung (2004), The public is concerned with many social problems of integration, namely, illegal migrant workers, crime, public health etc.

### 3. REASONS OF MISMATCH

Lacking of appropriate government initiative towards sustainable development is also one of the major problems of Hong Kong. Though the planning department of Hong Kong has plan to expand the existing express way as well as to establish Inner city high speed railways and it also has urban cluster coordinated development plan of the PRD, all are isolated and only covers physical aspect. Moreover, The PRD urban cluster cooperative development plan to 2020 referred to above was approved in 2005 without Hong Kong and Macao's participation (Yeung 2010). Nevertheless, when the high speed railways project will be fully completed, the journey between Hong Kong and Guangzhou can be completed in 48 minutes, as opposed to the present two hours (Yeung 2010). These initiatives undoubtedly appreciable but only covers one aspect of regional integration and sustainable development. It neither cover environmental and social issues and subsequently, nor meet the overall goal of the sustainable development.

Moreover, lack of Effective sustainability evaluation tool and limitation of existing ordinances as well as top-down policy making approach and lack of opportunities to have mutual learning are hindering sustainable development of this city. The most unpleasant thing is that, Hong Kong does not have an Agenda 21 (Ng, Hui et al. 2007). In a study on Sustainable Development in Hong Kong for the 21st Century (SUSDEV21) published in 2000, Sustainability Evaluation Tool (CASET) was proposed. However, CASET is not intended to "provide a verdict as to whether a proposal is sustainable, nor will it mandate how conflicts or trade-offs should be resolved (Ng, Hui et al. 2007). Hong Kong enacted the Environmental Impact Assessment (EIA) Ordinance in 1998 which only covers the environmental

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aspects. Policy-making in China also operates in a highly stratified and top-down fashion, with minimal, if any, public participation. The Chinese administration system has been gradually tightening the bureaucratic control and more performance criteria have been used to evaluate local officials (Burns 2003). However, most of these criteria attach priority to economic growth rather than sustainable development (Ng, Hui et al. 2007). The 'one country, two systems' formula for Hong Kong's reunification with China has resulted in a lack of integration and opportunities to have mutual learning of one another's institutional set-up and culture among the various local authorities in the region (Ng, Hui et al. 2007). An environmental working group was set up between Guangdong and Hong Kong but this working group is issue-driven and "never progressed beyond a forum for discussion" (Hills and Roberts 2001). According to Chan (2002), the trade-off between economic growth and protecting the environment is neither on the local authorities' planning agenda nor a concern of the foreign investors, whose main interest is in immediate returns.

As we can grasp from the above data, we can prove that economic growth is the dominant mode of development in the Pan-PRDR; whereas social and environmental development are very limited. The China's Agenda 21 can briefly decipher the reason. Ng asserts that "China's Agenda 21 argues that "it is necessary to change the old and unsustainable development patterns currently being used in China" (State Council, 1994, p. 7), at the same time, the document maintains that "for a developing country like China, the precondition for sustainable development is development ... Only when growth rate reaches and is sustained at a certain level, can poverty be eradicated, people's livelihood improved and the necessary forces and conditions for supporting sustainable development be provided (State Council, 1994, chapter 2, emphasis added)" (Ng, 2002, p.24). The original Agenda 21 re-emphasize the three pillars of sustainable development and that has to be carried out in a holistic manner. However, China's Agenda 21 stresses on economic development which comes in the first place, while conservation for culture and ecology would come at a later stage. To sum up, the China's agenda 21 is the dominant killer of social and environmental sustainability in the Pan-PRDR.

The Hengqin Economic Cooperation District is an agreement between Macau and Zhuhai. This plan covers the economic, social and environmental developments in the Hengqin development strategies. Within the agreement, there are eighteen main strategies in the agreement and six of them fall under the ecological development strategy. This apparently looks like a good news to sustainable development in Pan-PRDR. However, if you look closer to the context, two out of the six strategies under ecology actually focus on the economic development: eco-tourism and a cycled-economy. It is true that eco-tourism is a way to work towards environmental and economic sustainability and it is an

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ideal occasion that regional sustainable developments are welcomed. Yet, how many more of these types of sustainable development under regional integration are currently available?

As it is obviously that the development in the Pan-PRDR mainly concentrates on the economic development, yet we believe the fortune of a city do counts more elements. Ng argues that "city's wealth should not be measured in economic terms alone. Social and environmental capital is also important. To nourish different types of capital, social equity, equity in governance and equal opportunities are essential" (Ng, 2002, p.8). From the above argument, it is explicit that social and environmental capitals are parts of the wealth of a city. Decision makers and planners in the Pan-PRDR should re-consider the planning strategies that have been or will be implemented in the region. Although some of the wrong-doings cannot be chased back, there must be some measures that can be done to alleviate the situation. From the above analysis, we will conclude that there is a mismatch between economic, social and environmental development in the region. Yet, there are room for improvements for existing planners and decision makers to re-consider and further drive the development into a correct and balance track.

### 4. THE WAY FORWARD

For way forward, Hong Kong government needs to develop a sustainability framework with appropriate indicators and deep integration as well as strategic plan with spatial mapping for the harmonious progress and to maintain the long term sustainable development.



FIGURE 1 - MODEL OF SUSTAINABLE GPRD INTEGRATION Source: Prepared by authors after synthesis of literature

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A regional "spatial mapping" also needs in order to identify areas that are suitable for development and those that simply should not be touched. Change the mentality of Chinese government from market driven economic growth and to develop an expanded mode of cooperation between Hong Kong and PRD are crucial for sustainable development. An expanded mode of cooperation between Hong Kong and other delta cities need to be considered from the present pattern of dialogue between the central and Guangdong government.

For instance, Hong Kong has the strengths in higher education development and hence the export of education programmes to other PRD regions should be considered. Mitigation of the existing socio cultural problems should be managed through deep integration, i.e., coordination and cooperation on both sides of the border. The Hong Kong SAR Government needs to take immediate measures to respond to the emerging challenges and to work out a strategic plan capable of embracing the needs of sustainability of Hong Kong as well as the other PRD Regions. At the time of sustainable ecocentric strategic plan formulation economic growth, quality of life and environmental protection needs to give equal importance.

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