

## **GOVERNANCE AND INDUSTRIAL CHANGE IN THE CONTEXT OF GLOBALIZATION**

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In the era of globalization, industrial change and development has brought a variance of unforeseen challenges to local governance. This phenomenon is especially evident in the context of regional development related to the establishment and operation of science parks. This paper aims to explore how good governance of the territories with a science park amid them was/can be/should be, how it affects the well-being of the communities, and how social inclusion can be accomplished in the process. Specifically, this paper examines the impacts a science park has on the governance of its surrounding areas, in terms of local finance, economic development, transportation, infrastructure, crime control, culture activities, and political and social settings. It also inquires into citizen participation in the local governance, and how governors involve the governed of different sectors to create partnership to contribute to a sustainable local development.

Near the end of the 20<sup>th</sup> century has seen the tide of globalization affecting almost every corner on the earth. A variety of international ties have been established that connect a region with the rest of the world. As predicted by Edward Lorenz's Butterfly Effect, circumstances are that local settings, including culture, economy, and even natural environment can possibly be affected by seemingly unrelated events happened in places of any distance. As a result, governing bodies of the localities often face challenges unseen before and have to manage to not only ride the wave of globalization but also to avert and remedy its negative impacts.

In the last few decades, countries have set up science parks in order to boost regional as well as national economies. After the successful experience of Silicon Valley in the United States, authorities of different nations chose domestic areas, built up infrastructure, and put incentives up to attract high-tech research and manufacturing firms to locate in the selected areas. Usually, proximity to universities and research institutes is an important factor in location decision of the park, believing that interactions between and among the firms within the park and the universities and institutes will benefit all. According to International Association of Science Parks, there were at least 250 science/technology parks around the world<sup>1</sup>. These parks and this specially planned industrial change are found to be of significant contribution to a nation's industrial development and its economy. However, according to experiences from the 1<sup>st</sup> science park in Taiwan established more than two decades ago, numerous social, economic, political and environmental effects from the park have made local governance of the surrounding areas a difficult mission, if not mission impossible.

Shitun District is located in the north-western part of Taichung City, Taiwan. It is 2nd largest district in terms of area and one of the rapid-growing ones. In 1972, it was populated with 50,000 residents, and more than doubled to nearly 120,000 in 1991. In 2001, its population had exceeded 175,000. In terms of transportation position, as the main street of the old downtown Taichung, Taichungkan Road has been extended outward and widened to be the primary and most important artery of Taichung City. Connecting Taichung City and Taichung Harbor, Taichungkan Road nowadays runs through old downtown area and Shitun District, making Shitun District the place where traffic must go through between Taichung City and Taichung Harbor. Furthermore, the Freeway # 1 that runs through Shitun District has also connected other areas of the country with it. Recently, construction of the Freeway #3 (2nd Freeway) has affirmed its pivot position as the window of Taichung City. In late 1980's and early 1990's, with radius development of the streets, and the emergence of department stores, hotels, Natural Science Museum, hospital centers, and a conventional industrial park along Taichungkan Road, business circles have gradually moved to areas surrounding highway ramp located in Shitun District.

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<sup>1</sup> <<http://www.iasp.ws/>>, accessed 2005/8/25.

In terms of industrial structure, Shitun District was mainly agricultural. With the development of Taichung Industrial Park, small and medium enterprises flourished with machinery, mechanical tools and light hardware as the primary industries, and they reached the peak of industrialization in the 1980's. However, with the gradual transformation of Taiwan's industrial structure as a whole and the rise of wages, a substantial part of the industry moved to mainland China. Thus, during the mid-1990s unoccupied factory buildings had taken significant parts of the Taichung Industrial Park. What globalization was seen in Taichung City and Shitun District was in the process of de-industrialization. However, after year 2000, a new phenomenon occurred, i.e., the re-industrialization process. Taichung became a center of optoelectronics industry, with several major companies located within and around Taichung City. Former conventional machinery enterprises that stayed also transformed and updated themselves to meet the need of global markets.

What is more important, Central Taiwan Science Park (CTSP) was located in the Taichung City and Taichung County neighboring area, with its major part inside Taichung City limit. Its primary tenants include optoelectronics, integrated circuits, computer and peripherals, telecommunication, biotechnology, and precision machinery industries. It has thus far attracted famous companies, like ProMOS Technologies ( ProMOS ), a leading advanced semiconductor memory producer, AU Optronics, the world's third largest manufacturer of large-sized thin-film transistor liquid crystal display panels (TFT-LCD), and Corning, located or even operating in the park.

What has been witnessed is that in the past half century Shitun District has experienced agriculture, industrialization, de-industrialization, and re-industrialization. Population mobilization in and out was regional and domestic, and has now been more and more internationalized and globalized. All these changes and shifts have been manifest in spatial structure, social structure, social lives, and urban and local governance. Research is needed to review from a historical point of view and sort past development on one hand, and on the other hand to investigate and record the impacts and effects that CTSP has brought and will bring to Shitun District.

There have been three trends in the change of modern governance. First of all, variety of actors involved in the policy making process is enlarged. More democracy and new forms of participation are called to safeguard the affected stakeholders' participation in the policy making process. Authority of the central government towards non-state actors is declined. Second, more policy instruments are applied. New instruments are of less command and control, and more economic, flexible, and cooperative between government and target groups. Thirdly, the importance of the level of national policy making is decreasing. International as well as sub-national levels are gaining more importance.

In terms of urban governance, how does Taichung City government govern? Especially after the establishment of CTSP, is the model of governing changed? With the prevailing concepts of public participation and social inclusion, and citizen's cry for high quality and efficiency public services, governments have faced new challenges in local governance and public management.

Rapid urbanization, industrialization, and industrial development in the past few decades has made metropolitan areas in Taiwan over-populated, and has put pressure on its environmental sustainability. Thus, to satisfy spatial needs in various kinds of development and to increase land use efficiency in order to lessen negative environmental impacts, central and local governments in Taiwan have utilized policies, developmental planning, and land use regulations in order to effectively lead to healthy development in metropolitan areas. Numerous models of urban planning and governance have been suggested, including merging of local governments, metropolitan governments, regional governmental council, metropolitan service management agency, etc. However, with dramatic changes in the social, economic and political contexts, existing systems of territorial planning and related regulations and policies do not satisfy the needs of modern planning and spatial development. New public means are essential for guiding metropolitan and community development. To this end, we need to investigate the roles public governance has played in the past and to map out new governing strategies for now and the near future.

Taichung is a newly developed and continuously growing city. During the last decades Shitun District experienced expansion and growth unseen before. In the past few years, set-up and operation of large enterprises in the CTSP has unpredictable impacts and influences on the development and community lives of Shitun District. From the community organization network point of view, Taichung City government is the converging point of all kinds of institutes in Shitun. Shitun District Office is the node of local community developmental affairs, connecting sub-district neighborhood administrative offices, community development associations, and other community organizations. Therefore, in the governance and development of Shitun District, actors include central government, Taichung City government, Shitun District Office, 39 sub-district neighborhood administrative offices, residents and citizens, community organizations, non-profit organizations, community development associations, local businesses and local politicians. Governance is an outcome of these actors' networking, interaction, collaboration and confrontation. This study examines how these multiple players form issue networks or policy communities, interact, cooperate, exchange resources and information, and establish formal or informal internal self-regulating rules of game to make policies and implement Shitun regional and community development.

Globalization has brought positive as well as negative impacts to Taiwan's economy. Globalization brings up an overall increase in averages of income, living quality, etc. However, it also creates local problems due to regional varieties. Effects of the interaction between global community and local communities have led to contradictions and controversial issues in national development, regional and urban development, social development, and functioning of communities. This contrast of and conflict in globalization vs. national development and globalization vs. localization undoubtedly is very much worth attention from social scientists and researchers. It is related to macro, global phenomenon as well as micro, day-to-day living. Therefore, observation from a community/regional point of view as a research focus provides a more direct and profound interpretation of how Taiwan has experienced the impacts and challenges of globalization, and how it has continuously adapted and evolved in industrial composition, social structure, community life and public governance.