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Prospects for Sub-Regional Cooperation in Fujian and Taiwan from Perspective of Urban Planning System: A Case Study of Pingtan Experimental Area

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Abstract: The pace of cross-border sub-regional cooperation is accelerating in the worldwide; ways of institutional cooperation guided by policy has become the trend of regional development gradually. The collaborative development of urban planning system is one of deciding factors in sub-regional cooperation. Fujian and Taiwan have deep connections and the strategic visions of cross-strait cooperation was formed. The approval of Pingtan Experimental Area provided conditions and spaces for the realization of cooperation and it proposed a new pattern of joint planning, development and management in the same year. Based on that, this study attempts to find and analyze the collaboration points which are significant to promote joint management by making a comparison of system of laws and regulations, system of operation and system of administration in urban planning system between the mainland China and Taiwan. Then we will build an operational framework of sub-regional cooperation based on the method of shift-of-context analysis. Related references are including: (1) Add necessary control requirements of building and land use into legal aspects; (2) Strengthen the connections between master plan and detailed planning; (3) Set up special departments for planning review under legal management in administrative cooperation; (4) Implement management for various lands in the same way to promote overall effective development of Pingtan.

1. INTRODUCTION

With the trends of economic globalization and regional integration are developing in parallel, cross-border sub-regional cooperation is speeding up gradually ([Cheema, McNally, & Popovski, 2011](#); [Wang, Yuejuan, 2014](#)). Sub-regional cooperation is a concept relative to region, it refers to a regional cooperation between adjacent areas in a country and the contents and projects are more flexible ([Qiu, 2015](#)). Urban planning system is the mechanism in sub-regionalism cooperation and the guarantee of its policy function is to make fair and reasonable allocation of social resources and public interests orientation ([Wang, Yu, 2009](#)). Since A.D. 230, there are deep roots and exchanges between the Mainland China and Taiwan (often

referred to as “both sides”), and their five geographical advantages (close in geographic sites, blood related, cultural background, commercial intercourse and laws) and complementary requirements of current development are promoters in cooperation. After 2000, both sides made great strides in relationship and economic cooperation. The growth of trade volume increased more than tripled in just ten years ([Economic and Social Survey Team of Pingtan Experimental Area; Statistics Office of Pingtan Experimental Area, 2014](#)). In 2003, China proposed the strategy concept of ‘Economic Zone on the West Side’ (shortly for ‘Economic Zone’) and the construction of Economic Zone launched officially. In 2009, [The State Council \(2009\)](#) promulgated ‘Opinions about Supporting to Accelerate the Construction of Economic Zone on the Western Coast of the Taiwan Strait in Fujian Province’ (shortly for ‘*Opinions*’) and Economic Zone was upgraded to a national strategy. In 2010, both sides signed the ‘Economic Cooperation Framework Agreement’ (shortly for ‘ECFA’) which means a new channel of economic cooperation was opened. Since then, how to open up a path to promote regional coordination development has been in-depth discussed by scholars on both sides. Finally, the path of ‘selecting an appropriate region as pilot area of cross-strait cooperation to provide a reference for joint development’ was formed gradually. Pingtan Experimental Area (shortly for ‘Pingtan’) emerged at a historic moment and proposed a grand plan of ‘joint planning, joint development, joint operation, joint management and share earnings’.

Sub-regional cooperation theories have been discussed in the context of regional development. Some scholars considered that ‘Sub-regional Economic Zone’ was more suitable for areas which had geographical proximity, historical connection, close in culture but separated politically and easier to establish cooperative development with different institutional background ([Rakhimov, 2010](#)). [Chi and Li \(1992\)](#) took Tumen River as a representative of ‘Transnational Economic Zone’ pattern which was taking export-oriented economy as the goal to joint development and this pattern explored an open institutionalization cooperation actively that excluded the impacts of partial political factors ([Chi & Li, 1992](#); [He, 2005](#)). [David \(2015\)](#) explored the ‘New Regionalism’ in the new situation which was facing to social conflicts and physical planning cohesion in regional co-regulation and it made a close coordination between physical planning and development plan of social and economic in different levels ([David, 2015](#); [Wu & Wei, 2004](#)). From these studies we can find, ways of institutional regional cooperation has become a hot topic and indicates the trend of sub-regional cooperation. As a significant determinant in sub-regional joint development, the collaborative of urban planning system is gaining more attention. The urban planning system in Fujian and Taiwan have distinctive characteristics respectively especially in the system of laws, operations and administration. Hence, there are existing various planning phenomenon (or means) under respective contexts.

Therefore, this study attempts to find and analyze the collaboration points which are significant to promote joint development and management in the case study of Pingtan by making a comparison of system of laws and regulations, system of operation and system of administration in urban planning system between the mainland China and Taiwan. Then we will build an operational framework of sub-regional cooperation based on the method of shift-of-context analysis. It may give references to decision-makers by providing inspirations to promote joint development and management on both sides effectively.

2. STUDY AREA

Pingtán County belongs to Fuzhou city, Fujian Province (Figure 1). After the whole county was planned to build Experimental Area (the only one national experimental area in China), it obtained administration privileges of cities under the jurisdiction of Fujian province directly. Thus, the overall development of Pingtán is managed by district council and should be reported to the State Council for approval under the system of urban planning of Fujian and local development requirements. Due to the location of remoted island and front frontier on both sides, the economic development and urban construction of Pingtán was lagging behind and lack of appropriate guidance policies. Based on ‘The Urban Master Plan of Pingtán County (2008-2020)’, the planning area of Pingtán is only 26.12 km² which was less than one-tenth of total area.

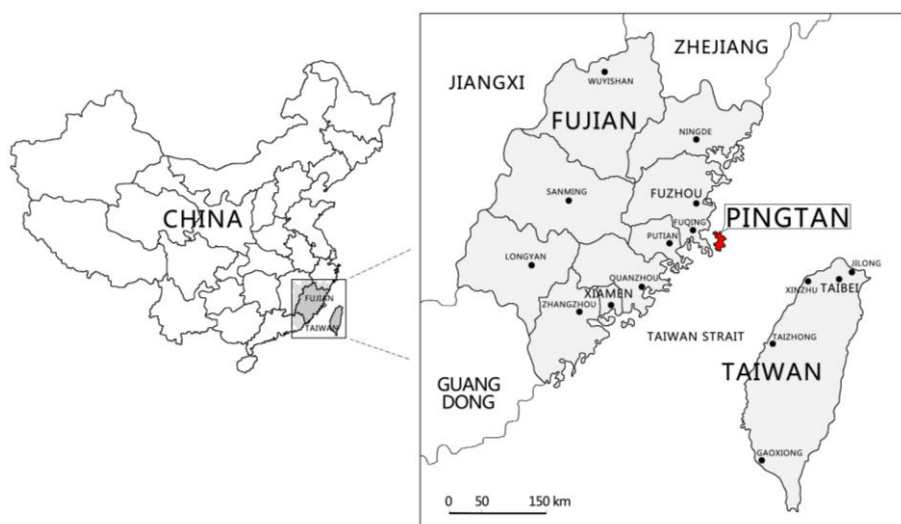


Figure 1. The location of Pingtan Experimental Area

In 2009, the master plan of Pingtán County was invalidated which had been implemented for only one year and the new master plan of Pingtán Experimental Area started to formulate. In July, the State Council issued ‘Opinions’ ([The State Council, 2009](#)) and proposed to ‘promote construction of Pingtán and makes it possible to build an experimental area that try first in cross-strait exchanges and cooperative and scientific development on Economic Zone’. In next years, both sides signed ‘ECFA’ ([The Chinese Mainland's Association for Relations Across the Taiwan Strait \(ARATS\) & Taiwan's Straits Exchange Foundation \(SEF\), 2010](#)) and ‘Service Trade Agreement’ ([2012](#)) (shortly for ‘STA’) which negotiated basic principles and working mechanisms in economy, trade, investment. Etc., and broadened channels of economic regional cooperation.

In order to implement these macro policies, the State Council approved ‘The Master Plan of Pingtán Experimental Area (2010-2030)’ ([Management Committee of Pingtán Experimental Area in Fujian, 2010](#)) and put forward a new cooperative of ‘Five Joins’. Its contents include a space framework of ‘one city, multi regions and groups aggregation’ and short-term construction plans were focusing on developing port-based economic and trade zone, central business district and tourism and leisure area in the southern of island. In 2011, the National Development and Reform Commission announced ‘Development Plan of Economic Zone on the Western Coast of

the Taiwan Strait' ([The National Development and Reform Commission \(NDRC\), 2011a](#)) and 'Master Development Plan in Pingtan Experimental Area' ([The National Development and Reform Commission \(NDRC\), 2011b](#)) that carried out cross-strait regional cooperation in Pingtan and explored a new pattern to develop a common home that joint construction, try first and scientific development in Pingtan by both sides. It also agreed to implement 'Open Island' and gave Pingtan more unique and preferential policies than any other special economic zones. Such as the pass model (risk classification management for customs check of goods, etc.), fiscal support (be duty-free or bonded for the goods from overseas which are related to the production, etc.), investment access (relax market access conditions for Taiwanese, etc.), finance and insurance (support to set up joint ventures, etc.), cooperation with Taiwan (allow to set up service institutions of Taiwan, etc.) etc. (Figure 2)

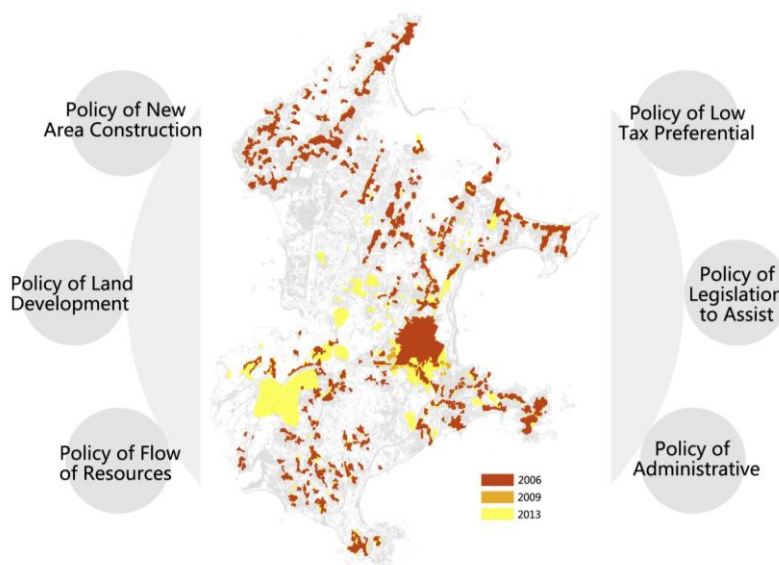


Figure 2. Land expansion of Pingtan Experimental Area and its policy-driven

Guided by the 'Master Development Plan in Pingtan Experimental Area' ([The National Development and Reform Commission \(NDRC\), 2011b](#)), Fujian provincial government design special policies in new area development, land, transportation and trade, tax, laws and management, etc. In particular, Fujian encourages Pingtan to learn advanced experience from Taiwan or the other countries, organize planning agencies on both sides to formulate special planning, establish a sound mechanism for regional cooperation to break the limit of administrative regionalization; gives priority to construction land and ensure land demands, especially the industry land for modern service; builds ports and provides convenient port services to move faster toward flow of people and goods, gives more preferential terms to Taiwan enterprises and products; implements fiscal and taxation independent and low tax regime in Pingtan and reduces business tax or preferential treatment for partial special enterprises; gives appropriate legislative authorities to Pingtan to make local laws and regulations, builds a green channel of judicial assistance between Fujian and Taiwan; sets up cross-strait cooperative commissions by agreement and confirm power sectors through legislation which including economic and social, development and construction, etc.

Fujian government issues a series of preferential policy and management details to thoroughly apply national policies. It supports the development of key industries and encourages intensive land use actively by the ways of preferential land price. In industry development, Fujian gives construction projects at most 70% of land use right price according to 'National Standards for the Minimum Transfer Prices of Land for Industrial Purposes' which meeting to national industrial policies, encouraged by Fujian and belong to major projects or provincial key projects in industry revitalization planning adjustments. About intensive land use, Fujian gives construction projects which meeting the relevant provisions of urban planning, using advanced technology or land-saving measures in designs or construction technique or investment intensity exceeding 10% of standards prices preferential from 3% to 10% according to saved land area or improvement of FAR. For general projects beyond the concentration areas planned by government, the minimum standards of selling lands will go up 10%.

All these system contexts support Pingtan's development in the phase of start-up. Because the development of Pingtan is accelerating under the guidance of policy documents which focusing on the joint construction and development on both sides, the collaboration of urban planning system of two places is inevitable to a great extent. Mainland also gives sufficient relaxation of policy and freedom to explore. These basic contexts call for analyzing differences of urban planning system in Fujian and Taiwan and finding collaboration points to improve the environment of a large number of state-owned and Taiwan-funded enterprises are drawn into Pingtan.

3. METHODOLOGY

3.1 Sub-regional Cooperation Theory

Sub-regional cooperation theory is an extension of traditional regional cooperation in a new phase of development. The prime minister of Singapore Zuodong Wu first proposed the 'Growth Triangle' theory in 1989 for the construction of multinational economic development zones ([Ooi, 1995](#)). American scholar [Scalapino \(1999\)](#) put forward a concept of "Natural Economic Territories" in the case of economic cooperation between the Pearl River Delta and Hong Kong, etc. According to related studies, in this paper, sub-regional cooperation means two or more countries or regions set a certain geographical area aside and created an organism of highly economic coordination to promote economic development ([Nadalutti, 2014](#); [Katircioglu, Kahyalar, & Benar, 2007](#)). Conditions of forming the sub-regional cooperation among different areas were including geographical proximity, economic complementarity and possibility for mutual coordination among governments ([Yu, P., Cai, & Lu, 1999](#); [Chou, 2006](#)). The relationship between the Mainland China and Taiwan conforms to basic conditions and ideas of sub-regional cooperation theory, which can be used to promote regional integration and joint development.

3.2 Shift-of-Context Analysis

In this paper, the core of sub-regional cooperation is the coordination in institutional aspects according to literature review. The contents of analysis for this study are urban planning system and the range is two provincial

regions which cross administrative boundaries. Relevant principle data sources for determining urban planning system on both sides come from district government materials and rigorous literature review. Meanwhile, Shift-of-Context Analysis ([Leung, 2003](#)) is used as a basic method in this study.

The Shift-of-Context Analysis is a kind of comparative method focusing on relationships between planning phenomenon (or referred to means, hereafter called means) and contexts in two or more countries and regions. The key point of comparison between two places is the process of shifting one means to another. The context of different places has particularity and they are not easy to change. The operation relations can be described as followed. Place A and place B have different planning means in their contexts. It is necessary to make an appropriate research for plasticity and some planning means need to be adjusted when use it in place A from place B. Because of contexts of place A is hard to change in this process, the special region background and policy become significant basis and criterion of analysis of plasticity. Revised planning means is the key point for studying from one another and planning collaboration between place A and place B (Table 1.):

Table 1. The relevant variables, relations and process in brief

Variables
<ul style="list-style-type: none"> • Four variables: <ol style="list-style-type: none"> 1. Phenomenon (means) of place A 2. Context of place A 3. Phenomenon (means) of place B 4. Context of place B • Two relations: <ol style="list-style-type: none"> 1. Relationship between phenomenon (means) and context of place A 2. Relationship between phenomenon (means) and context of place B
Operational Modes
<pre> graph LR subgraph Place_A [Place A] MA[Means A] <--> CA[Context A] end subgraph Place_B [Place B] MB[Means B] <--> CB[Context B] end MA --> P[Plasticity] P --> MB CA --> Pol[Policy] Pol --> CB </pre>
Basic process
<ol style="list-style-type: none"> 1. Confirm the means of place A. Distinguish every details and level of this means and decide which one is most important. 2. Identify the context factors of place A that related to its means. Distinguish the nature and impact of every factor and decide which one is most important. 3. Analyze the relationships between the means and background of place A. Focus on the fit, conflict and tension between means and background. 4. Move the means of place A to place B just as it was and distinguish which context of place B will be led or depended on when the means of place A is used in place B. This part usually called as mental experiment. 5. Analyze the ‘possible relationship’ between the means of place A and the context of place B. Especially the possible fit, conflict and tension. 6. Research for the ‘plastic’ of the means. Find out the limitation that can be amended on the premise of not changing the particularity of this means. 7. Shape a means that fit for the context of place B. Make an assumption that the background factors are not change and shape a means that best fit, least conflict and lowest tension for the context of place B.

By using this method in the research for cooperative development in Fujian and Taiwan, the basic framework and process can be organized as followed (Figure 3):

1. Determine the overall objective of cooperative development by Fujian and Taiwan in Pingtan: joint planning and construction. Find key differences of urban planning system on both sides by the comparative analysis.

2. Analyze key context factors behind the differences of urban planning system and their relationships.

3. Make a hypothesis of 'possible relationship' after the shift of key points in urban planning system and research for 'plasticity' according to the special region background and policy in Pingtan.

4. Build the framework of cooperative development in Pingtan based on the shift of feasible urban planning system which is both advantageous to the optimization of urban planning system in the context of mainland and meet the planning means of Taiwan properly.

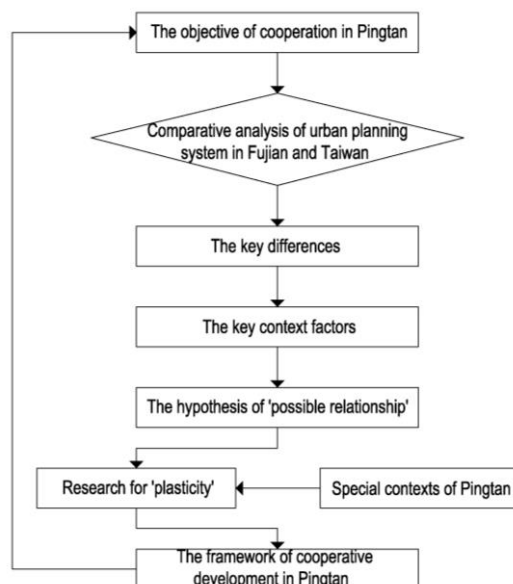


Figure 3. The Basic Framework of Cooperative Development in Fujian and Taiwan

4. RESULTS

4.1 The Comparative Analysis in Taiwan and Fujian

4.1.1 The System of Laws and Regulations

The system of laws and regulations is the basic guarantee of urban construction and its characteristics are mainly embodied in structure, functions, purposes and core contents.

The planning system of laws and regulations in Fujian is composed of two levels from central to local in a centralized system. In national level, Fujian follows a horizontal system which consisted of basic laws, matched laws, related laws and corresponding technical specifications and it is a basis to build local planning regulations. In particular terms, Fujian takes the 'Urban and Rural Planning Law' as the basic law to direct lower regulations and involving principle provisions that covering planning formulation, management, operation and development control, etc. This part is assisted with administrative regulations and measures on planning formulation, approval and management to improve detailed rules by making related technical specifications and standards. In addition, some related laws are also significant legal basis in urban construction. Like laws involving the land ownership and management: 'Land Administration Law' and 'Cultural Relics Protection Law' etc.; construction of important urban facilities:

'Regulations on Administration of Urban Roads' and 'Construction Law' etc.; environment and social security in urban: 'Environmental Protection Law' and 'Civil Air Defense Law', etc. Under the national macro-control, regions develop appropriate local planning regulations according to local needs to improve the management of urban planning. Like in Fuzhou, the capital city of Fujian Province takes 'Regulations of Fuzhou Municipality on Administration of City Planning' as the core of local regulations and assisted with management measures and technical specifications which contains cultural preservation, roads and greening construction, land and new area development to constitute the mainly regulatory network system that from top to bottom at present stage. In this system, planning regulations are defining two planning acts: urban planning operation (formulation and approval) and administration to achieve the purposes of strengthen urban planning management.

Different from Fujian, the system of laws and regulations in Taiwan has three main parts: urban planning, architecture management and land use control. Based on the 'Urban Planning Law', 'Building Act' and 'Regional Plan Act', Taiwan takes a large number of urban planning laws, building construction laws and land use laws as auxiliary laws. Related laws are concerning on the environmental protection, housing and common pipeline. Eventually Taiwan makes detail operating requirements of laws' contents by related enforcement regulations. All these formed a specific system of urban planning laws ([Han, Shi, & Hu, 2001](#)). Local governments in counties or cities set appropriate autonomous regulations of urban planning implementation to fulfill requirements of laws system. For example, Taipei City obeys the 'Autonomous Regulations of Urban Planning in Taipei' to assist the implementation of basic laws and enhance the environmental quality of city life. Taiwan takes three basic laws as a basis of laws system in urban planning at the same time and focusing on the relationships among urban planning, building management and land use control. According to 'Urban Planning law', urban planning should be implemented the buildings management in accordance with 'Building Act' after it was announced and the land use or zoning plans should be controlled by the license requirements and building tools. In land use control, Taiwan has introduced dozens of special decrees that covering all aspects of land expropriation, registration, planning and management and highlights the protection of non-urban land and agricultural land released in urban planning. The urban planning system of laws in Taiwan is more detailed in regulations of resources management and covering more spaces that reflecting the tendency of urban planning (Figure 4).

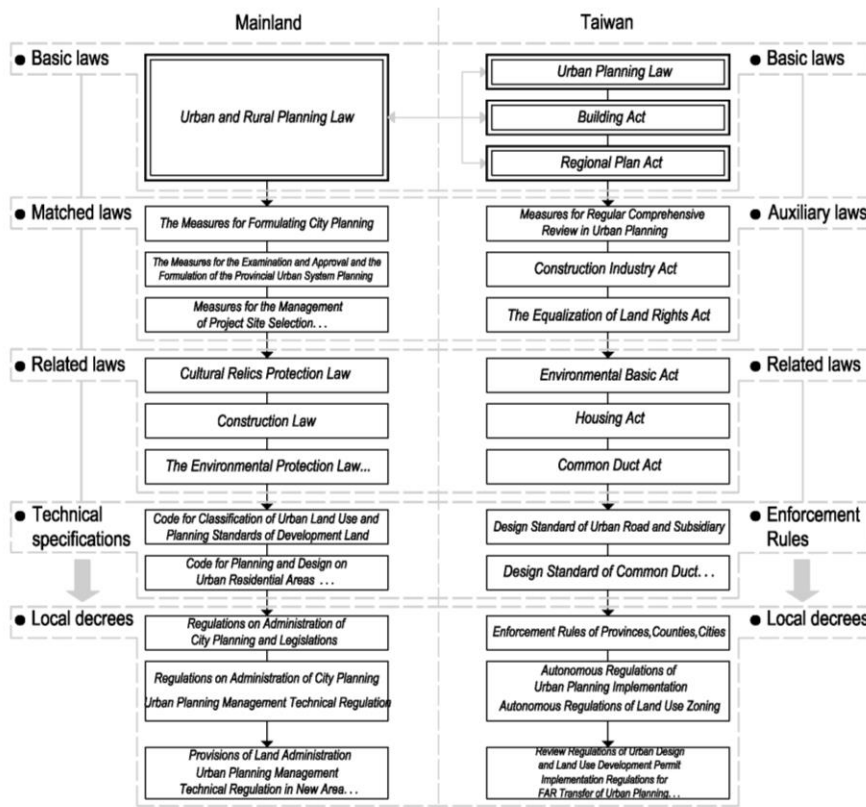


Figure 4. The comparative of urban planning system of laws and regulations in mainland and Taiwan

4.1.2 The System of Operation

The urban planning system of operation has mainly two parts: planning formulation and planning review. Its characteristics will be comprehended from planning types, function effectiveness and the process of administrative review in formulation.

4.1.2.1 Planning Formulation

Contents of urban and rural planning in mainland include urban system planning, urban planning, town planning, township planning and village planning. Urban planning and town planning are consisted of master plan and detailed planning. The backbone system of formulating in Fujian is a statutory planning system of 'Urban Master Plan---Zoning Plan---Detailed Planning' and make guidelines and rules of regulatory detailed planning in each zone. In practice, Fujian establish planning support system which involve previous surveys and subsequent constructive planning. Therefore, the way of 'master plan---detailed planning' is used in planning formulation in Fujian. First, the master plan determines the planning natures, scale and spatial development strategies. Then it takes administrative areas as the special units of planning and management. Finally, the control requirements of these units will be broken down into each block. The regulatory detailed planning and site detailed planning are used to determine the indexes of develop control and guidance of urban design respectively in this process. In current system of formulating, approved detailed planning and statutory plan are legal basis of guiding urban construction and new area development

directly and implement urban planning management through the full coverage of regulatory detailed planning to all blocks. The deadline of master plan is normally 20 years and it takes a long time to complete it from formulation to approval generally.

Taiwan's urban planning development turns to improving the efficiency of formulating and approval after the technological transformation and post-industrial economy (Xie, 2012). It formed an urban planning formulation system of 'Comprehensive Development Plan in Taiwan---Regional Planning and Department Construction Development Plan---Comprehensive Development Plan in Counties, Cities and National Park Plan---Urban Planning'. In this system, regional planning was separated from urban planning formulation system and used as upper planning to guide the comprehensive development plan of counties, cities and urban planning. The scope of urban planning is covering city (town), township (streets), special area and all these plans need to follow the program from main plan to detail plan (in the case of township, streets and special plan, main plan and detail plan can be merged together). Master plan is development visions and detail plan is practice standards. They have nearly the same operation procedure and detail plan increases concerns in urban design and land use management. As the basis for the implementation of urban planning, detail plan must be completed within two years after master plan was released. The ways of formulating from master plan to detail plan have some features especially in programming. Only when the relevant indicators of public facilities land (such as parks, playgrounds, green area, squares, children's playground, etc.) in master plan reaches the legal target, the detail plan can be organized. The construction of public facilities must be completed within five years after detail plan was released. Taiwan gives sufficient attention to needs of daily life and the improvement of overall function in urban. Another characteristic of Taiwan's urban planning is the mechanism of 'Comprehensive Review' in the process of formulating. Planning authorities need to operate it in at least three or five years and carry out relevant land use changes according to development situation, especially the land of public facilities. Changes need to be written into current plans in the form of provision. The main plan and detail plan are joined closer whether in time or contents and space scope is contained layer by layer which makes relatively clear corresponding relationship between upper and lower plans (Figure 5).

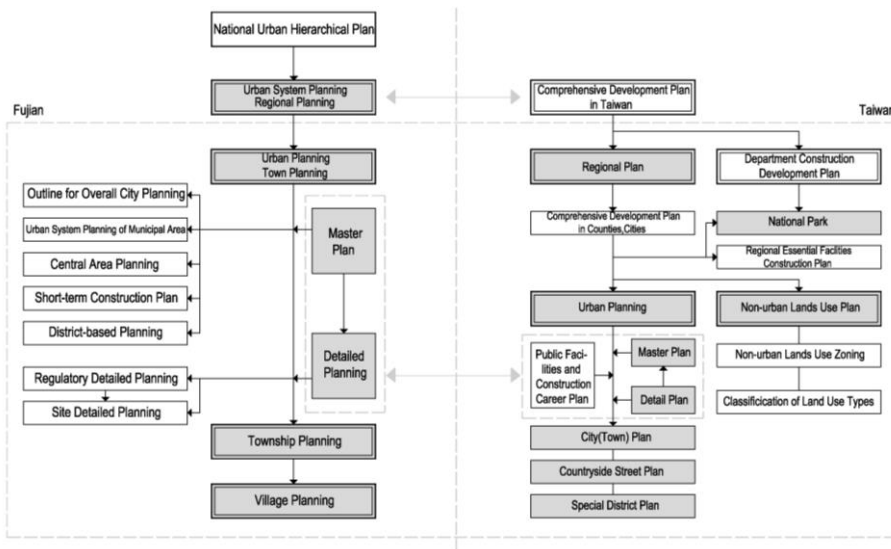


Figure 5. The comparative of urban planning system of formulation in Fujian and Taiwan

4.1.2.2 Planning Review

The urban planning administration system of Fujian is in the framework of state administration. Governments set up departments of urban planning, urban construction, land management, etc. Local development and reform commission or urban and rural construction committee are mainly in charge of establishing related policies. Functions of land and resources bureau and urban and rural planning bureau are practicing formulation of land and urban resources, the supervision of planning management and implementation is consulted with the other relevant departments, like environmental protection bureau, etc. Under the approval mechanism of government-led and multi-sectoral participation, planning administrative departments in government at all levels are responsible for the formulation and review of urban planning in the administrative range (master plan and detailed planning). The review process contains the sector review by relevant sectors and technical review by experts and reported to upper governments for approval. For unqualified results will be sent back to formulation organs to adjust and reorganize reviews regularly.

The administrative system of Taiwan is relatively streamlined and practicing a vertical leadership. According to the '*Urban Planning Law*', the urban planning authorities from top to bottom are the ministry of interior, special municipality or county (city) government and township, town or city office. All levels of authorities set urban planning commissions to take responsible for planning review works of Taiwan, county, city, township and town. Special types of land use are coordinated by zone development authority ([Shi, Liao, & Qin, 2009](#)). The urban planning reviewed by committee will be sent back to governments for checking in two ways: passed after revised and passed as original. Finally it will be reported to committees at higher level for deliberation. It is a basic flow of urban planning formulating and review in Taiwan (Figure 6). The biggest feature is that the work of planning formulating and review are separated by governments appropriately and review works are focusing on public display and community participation in planning period. Staffs of constituting the urban planning commission are including governments, elected and business representative, scholars or experts and the other social groups that formed an urban planning mechanism of economic, urban and land experts are responsible for reviewing and making decisions ([Zhu, 1999](#)).

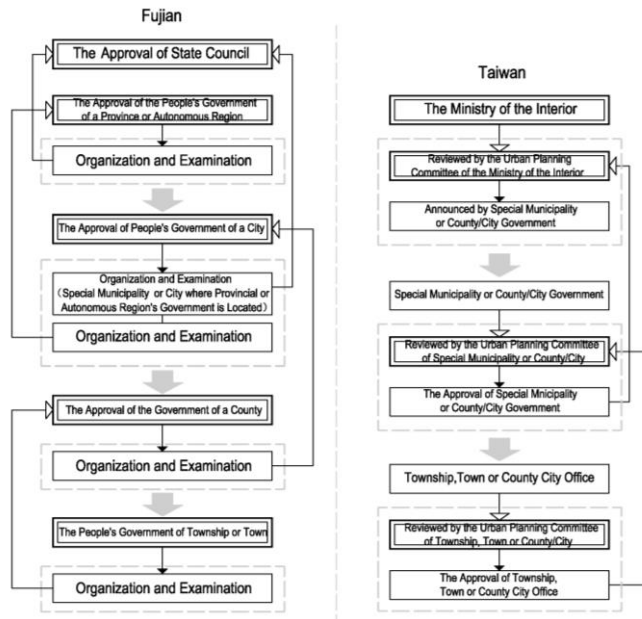


Figure 6. The comparative of urban planning system of review and approval in Fujian and Taiwan

4.1.3 The System of Administration

The core of urban planning management is the system of reviewing development projects based on various types of urban planning and it focuses on discussing issues about land development, public interest, etc.

The urban planning management in Fujian is a permit system called 'One Proposal, Two Licenses' to reach the control and guidance for various development activities. It is nearly all development activities involving location for construction project; land use plan and building construction need to apply for corresponding planning permissions through multiple review and approval by different levels of urban and rural planning authorities. Types of permits are proposal for site-choosing, license for construction planning and license for project construction planning. The main targets of development permission have two categories, construction of new area, expansion, renovation and buildings or structures and construction of infrastructures including roads, pipelines and the other facilities. Detailed contents are following local regulations and technical documents (Xiao & Zhao, 2005). The system of 'One Proposal, Two Licenses' is a kind of planning tool to realize space adjustment in the level of detailed planning (regulatory detailed planning and site detailed planning) and urban planning administrative departments are responsible for the implementation of development permission. Due to specific contents of permissions are not very clear at the statutory level that give departments wide discretions in planning review which increase the flexibility of planning control but a low administration efficiency and impacts on human factors.

Taiwan chooses different system of planning management for urban land and non-urban land based on land classification. Within the scope of urban planning, Taiwan implements control of land use zoning which is mainly used in detail plan according to urban planning law and local planning rules. The contents of land use zoning control are using zoning (residential area, business district or industrial site...), control of building density (the highest building density, the tallest building height, the maximum FAR...), control of

using characters (compatibility assessment...), activities do not comply with zoning restriction (repair, change, migration...) and the other aspects (parking lot, advertising signboard...) (Yu, X. & Peng, 2001). Any developments in territory need to confirm with the regulations in land use management to achieve expected land use type of original plans that benefit to orderly development to a certain degree and avoid overmuch human manipulations in land use development. For the system of non-urban land management in Taiwan is similar to Fujian, but still some differences in specific arrangements. The stage of development permits can be separated into three steps based on development process and the division of labor that in accordance with time strictly. Land developers need to apply for 'planning permission' when they change land function or intensity. Approved indicators are properties (public service, commercial projects or both), regional conditions, scale, intensity and impacts to public facilities, social economy and natural ecological environment. The second stage is 'development permission' which contains construct required public facilities; fill excavation, street or blocks design and boundaries, etc. The final part is 'building permit' which can be applied after the front two licenses are satisfied (Jin & LV, 2013). This kind of system of land use management which different from urban and non-urban land is easier to build different landscapes in urban development (Figure 7).

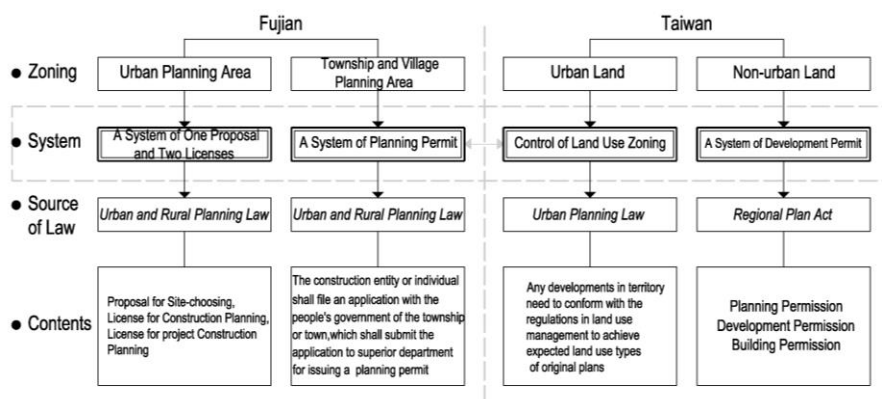


Figure 7. The comparative of urban planning system of administration in Fujian and Taiwan

4.2 Context Factors and Relationships

Based on the differences analysis, the key points of planning means in Taiwan are mainly in planning laws and regulations, ways of planning formulation and review, land use control which corresponding to context factors.

1. Pay attention to building and land use control in the system of laws and regulations. The percent of residential land, commercial land and industrial land in urban land use constitution of Taiwan is lower (less than 20%) which brought high FAR and multiple function in the limited land resource utilization which caused the corresponding building and land use control is particularly significant in urban planning.

2. Focus on time limit and planning preconditions (public facilities) in the process from main plan to detail plan. Taiwan adopted capitalist institutions and private ownership of land which caused the land development must give priority to the construction of public facilities land after requisitioning land from citizens. At the same time, the purposes of implementing strict

requirements on time limit in urban planning is to satisfied the demands for communal enterprise and protect public interest.

3. Work of planning formulation and review are separated appropriately. Taiwan government implements the management system of separation of legislative and execution and balance of power. The planning authority is led by local governments and used as auxiliary way of giving guidance to achieve the decentralization of power. That is why Taiwan using a way of setting up specialized urban planning committee to improve the scientific of planning.

4. Give play to land use control of non-urban and urban land respectively. More population with less land and the tensions between population and land are the current situation of Taiwan. Taiwan emphasizes the sustainable utilization of soil resources and divides most of lands into non-urban land. Especially nature and living environments in Taiwan are frequently threatened by disaster in recent years which brought continuous improvement of urban and non-urban land control methods. The system of land use zoning is used strictly in urban land to achieve the implementation of statutory planning and intensive land use.

4.3 Analysis of ‘Plasticity’ Based on Policy

‘Plasticity’ is the core of the shift-of-context analysis and is analyzed for the purpose of institutional cooperation. It means the possible points that can be combined in policies of two places based on various urban planning systems. Shifting the idea of urban planning formulation and management from Taiwan to Pingtan, some changes will appear between planning means and contexts and the special background and development policy of Pingtan will become basis and criterion of analysis of plasticity (Figure 8).

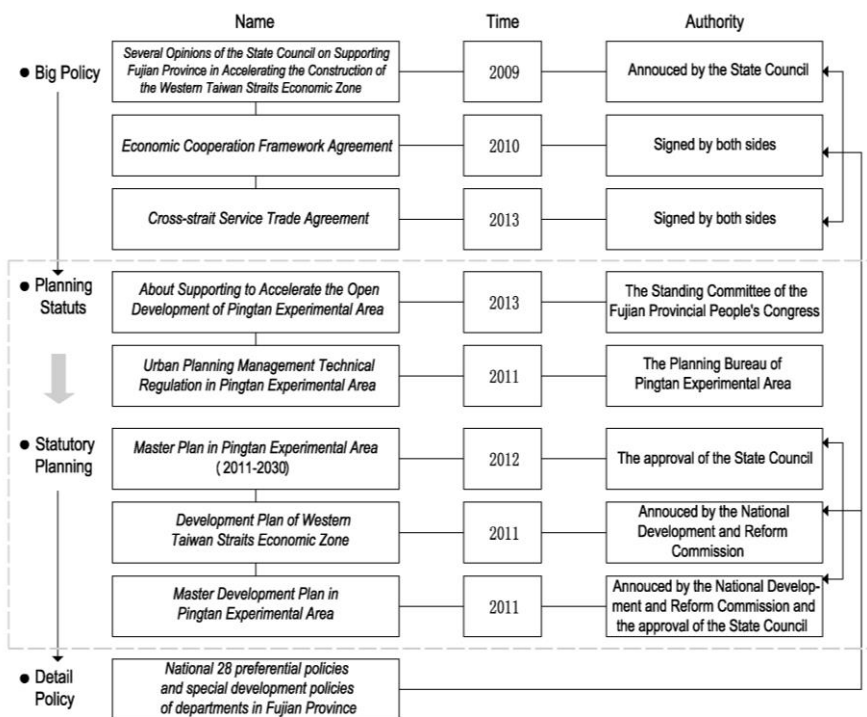


Figure 8. The structure of mainly development policies of Pingtan Experimental Area

First, urban development of mainland gives priority to the construction land and the percent of residential land, commercial land and industrial land are relatively high. Land use types are comprehensive covered and called for integrated mixed land use moderately and slightly which cause stress on land functional organization and less attention is paid to building and non-construction land. As a new area which located in Remote Island, Pingtan has much in common with Taiwan in development conditions. It is necessary to improve the system of laws and regulations in planning, building and land control in the early days of development. When using the concept of variety regulations in Pingtan, the strategy of 'Try First' and administration privileges of city furthers its legislation and take different approaches in the level of urban planning according to the *'Decisions About Supporting to Accelerate the Open Development of Pingtan Experimental Area'* (shortly for *'Decisions'*). The Management Committee of Pingtan Experimental Area can apply to local legislation by the way of drawing attention to Fujian Provincial People's Government.

Second, urban statutory planning in Pingtan is following the patterns of mainland and distributed into three levels of master plan (including short-term construction plan), regulatory detailed planning and site detailed planning. Pingtan implements the public ownership of land and it is not free to use unless applying for approval. But its land development emphasizes on public interests under socialism. According to the present *'Urban Planning Management Technical Regulation in Pingtan Experimental Area'* (shortly for *'Technical Regulation'*), the main contents of short-term construction plan is important infrastructure and public facilities building and keeping a defined sequence. It is feasible for Pingtan to give priority to construct public facilities in land development to improve whole function and quality of life. The other hand, the relationship between master plan and detailed planning can be standardized in the guarantee of local legislation, especially the management of time limit.

Third, the administrative of mainland relies on omnipotent government and planning review and approval are full organized by governments at all levels and departments. Before the *'Pingtan Experimental Area Ordinance'* is formally publicized, the major provision of Pingtan is the *'Decisions'* which was constituted by Fujian Provincial People's Conference of Representatives. It is presented to explore various managing patterns to improve management efficiency and scientific, especially the breakthrough in administrative system and set up departments according to actual demands. It can be considered to separate parts of technical functions from the administrative commission of Pingtan and establish special departments dealing with planning review in the future directions of reform. This will give full play to involvement of Taiwan and improve management effectiveness.

Finally, Pingtan and Taiwan have similar development conditions in land control, like land resource constraints. As a Remote Island, Pingtan needs to consider about disaster prevention in the urban development. The land use classification in Fujian is far from Taiwan according to basic laws in mainland; the mode of non-urban land use control of Taiwan is difficult to be copied. But lessons about land use intensively and efficiently can be shifted to land use control of Pingtan under the support of local legislation. It is encouraged to learn the mode of city governance from Taiwan. According to management methods of non-construction land in *'Technical Regulation'*, refines types of land conservation and special land use area appropriately. It

is necessary to enhance the implementation of statutory planning strictly in construction land management and optimize the license system.

5. DISCUSSION

5.1 Basic Idea

Building the sub-regional cooperation framework is mainly based on the differences of urban planning system in Fujian and Taiwan and their ‘possible relationship’ and ‘plasticity’. Fujian’s planning management is combined with central control and local auxiliary through links of the system of laws, planning formulation, review and implementation management. The urban planning system of laws and regulations in Fujian is a national four-class horizontal system which based on ‘*Urban and Rural Planning Law*’ and guided by local regulations. Planning formulation is using the way from master plan to detailed planning and achieves planning management by the full coverage of regulatory detailed planning. Planning achievements are inspected and reviewed by urban planning departments of government and all projects are implemented according to development permits of ‘One proposal and Two Licenses’. The central government has strong and direct impacts on system building and policy guidance for local governments and management, but also leaving some rooms for special administrative units.

Taiwan takes statutory regional plans as upper guides for local planning and following ‘*Urban Planning Law*’, ‘*Building Act*’ and ‘*Regional Plan Act*’ as bases to build the system that from regions to locals. Planning formulation is using the way of ‘Master Plan---Detail plan’ and guiding area development through the time limit and a set of temporal constraints clearly. Planning achievements are reviewed by urban planning commissions after formulating by departments of government and using the control of land use zoning and development permit to urban and non-urban land respectively. In overall, the urban planning system in Taiwan has many similarities with Fujian but existing differences in contents of special operation because of the social system, local characteristics and stages of development, etc. The development of Pingtan is in the background of Fujian’s planning system. Therefore, integrated differences of planning system in Fujian and Taiwan into Pingtan’s planning system construction appropriately and learn from each other in the operation will provide an enabling environment of joint planning, development and management.

5.2 Construction of Cooperation Framework

5.2.1 Improve the Guarantee of Local Laws and Regulations

Strengthen the legal construction is a necessary means to ensure the joint management and improve planning effectiveness. The localization of laws is the guarantee for the construction of system of laws and regulations in Pingtan. List related contents to clear legal provisions of planning system which including planning formulation, review and administration in the level of local laws by using administration privileges of city. Pingtan has similar development conditions with Taiwan. It should reflect the importance of intensive development in the process of optimizing local regulations. By adding necessary control requirements of building and land use into legal

aspects, especially for the joint participatory building control in height, roads, distance etc. and multifunctional land use zoning development, etc., which is benefit for providing mechanism protection of cooperative development in Pingtan.

5.2.2 Adjustment of Operation Mechanism

5.2.2.1 Strengthen the Connection of Planning Formulation from Master Plan to Detailed Planning

The planning formulation of Pingtan under the background of sub-regional cooperation should meet requirements of regional development based on the connection with planning system of Taiwan. Fujian can learn several planning means from the way of ‘master plan---detail plan’ in Taiwan under the system of formulation and many mandatory indicators should be emphasized in the preparation of master plan. Meeting requirements of whole functions before formulating detailed planning (especially for regulatory detailed planning) to enhance the flexibility of lower plans. For example, relevant local regulations about indicators of public facilities in master plan are forced to reach the legal target before detail planning is organized. Strengthen the connections between master plan and detailed planning, such as taking strict management of time limit from completing master plan to detailed planning and leading development stages in regulatory detailed planning that meeting the ways of Taiwan’s planning and improve the efficiency of Pingtan’s construction.

5.2.2.2 Take Relatively Independent Planning Review

The process of reviewing and approval after the planning formulation also has significant impacts on improving planning rationality. Taiwan’s planning administrative departments are relatively streamlined which belongs to linear vertical leadership. But two important sectors of planning formulation and planning review are separated appropriately. Governments set up special urban planning committees for planning review and focus on the diversity of members. It is a way to improve the management effectiveness, but it is difficult to arouse the enthusiasm of local authorities for development. Fujian carries out a multi-sectoral management which regards local governments as the corpus. But there existing opposite results: high enthusiasm of departments but unclear responsibilities and low efficiency. Pingtan needs to consider about setting up special departments for planning review under legal management in administrative cooperation and improve the scientific and public participation of planning formulation and review, especially for the full participation of Taiwan’s representatives actively.

5.2.3 Implement Unified and Strict Land Use Management

Management system is a key point of planning implementation smoothly and effective management after formulating and review. Due to the land use development mode of planning-central, Fujian easily emerges problems of actual constructions break through existing planning without necessary legal protection. Taiwan implements unified management of urban and rural land. According to regional planning, land resources are divided into urban and non-urban lands and managed by different system. Especially in urban land,

all development projects must be conducted in accordance with land use control and whatever goes against expected land use types of existing planning are not allowed. This way is benefit to the urban construction defers to statutory planning but easily causes the excessive diversity of urban landscape. Hence, the management of Pingtan should keep principles of reasonable statutory planning and increases the general formula requirements under the management pattern of case basis appropriately by setting up standards. Implementing management for all kinds of land in a same way to promote overall effective development of Pingtan (Figure 9).

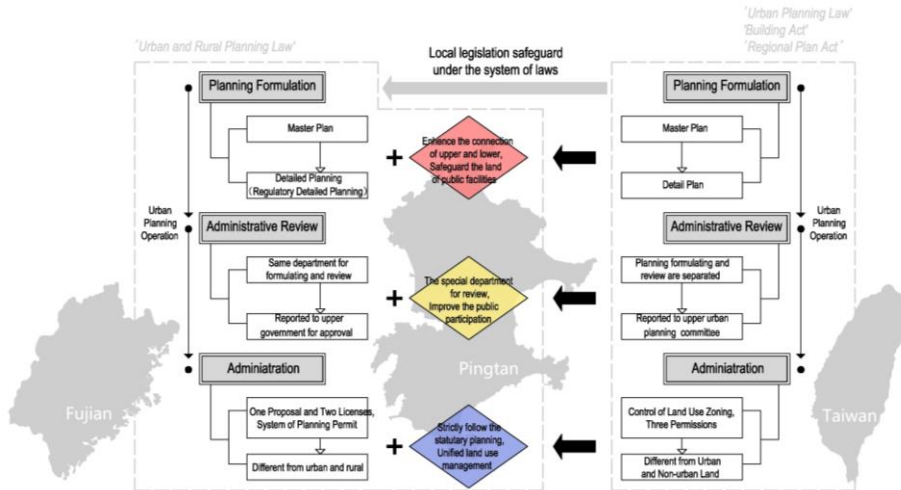


Figure 9. The framework of cooperative development of Pingtan Experimental Area

In addition, Pingtan needs to guarantee the effective operation by deepen following aspects in the guidance of sub-regional cooperation framework. It is necessary to make a combination with Fujian and vast heartland in industrial development on the basis of economic cooperation; inheritance Pingtan's historical and cultural traditions to achieve the depth of docking of both sides; combine with goals of building smart city in Fujian province and fully embodies the importance of the idea of wisdom in Pingtan; finally protect Pingtan's great natural environment and put some sustainable development suggestions like economical or intensive into practice when Pingtan is in rapidly construction to realize mutual benefit of new area development on both sides.

6. CONCLUSIONS

This paper takes Pingtan as a case study and analyzes the specific circumstances of cross-strait urban planning system. It also conducts beneficial research on the sub-regional cooperation and joint construction of new area which provides the theoretical support to cross-strait joint development in Economic Zone on the West Coast of the Taiwan Strait. The construction of Pingtan should start with urban planning system, especially in the initial stage of development of new area and provide excellent environment and system safeguard for expanding cross-strait cooperation and moving into a large number of Taiwanese businessmen. By building the cooperation framework which including urban planning system of laws, operation and administration to promote rapid prototyping of sub-regional cooperation and improve the efficient use of regional resources. Finally

achieve the sustainable collaborative development of Pingtan Experimental Area and Economic Zone on the West Coast of the Taiwan Strait.

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