

The Significance and Implications of Establishing Marine Economic Development Pilot Zones in the Viewpoint of China's Marine Industry Policy

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중국 해양산업정책에서 해양경제개발 시범구 설정의 의미와 시사점

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Abstract : In recent years, Chinese government established 4 pilot zones at Shandong, Zhejiang, Guangdong, Fujian. The national marine development pilot zones policy is formed in order to promote development of Chinese marine economy, as if Chinese government selected 4 special economic zones as the policy experiment areas for economic structural reform at the beginning stage of reform and opening-up. This article utilizes the policy-making theory of Incrementalism Model and aims at searching for the essence, historical formation process, implementation state, implications of 4 Chinese marine economic development pilot zones policy. Moreover, the prospect of their future development is analyzed. The marine pilot zone policy has the following features: new development model with advanced industries and sciences & technology, highly civil participation, plural policy goals. These research results would be able to contribute not only to getting better understanding of China's marine industry policy, but also to drawing lessons for the construction of Korea's marine economic special zone in the viewpoint of policy transfer.

Key Words : Marine economic pilot zone, Marine economy, Policy formation, Policy transfer, Incrementalism Model

요 약 : 최근 중국정부는 해양경제개발에 초점을 두고 네 개의 해양경제개발시범구를 산둥성, 절강성, 광둥성, 복건성에 설정하였다. 등소평의 개혁·개방 정책이후 근래 해양경제개발시범구까지 중국의 해양산업정책은 현존정책을 부분적으로 수정·보완하는 연속적·점진적인 변화과정이었으므로, 본 논문은 이러한 정책변화를 잘 설명할 수 있는 이론모형으로 정책학의 점증주의모형(Incremental Model)을 이론적 틀로 하여, 새 중국 해양산업정책인 해양경제개발시범구 정책의 본질, 그 역사적 형성과정, 현재 집행상황, 이전과 다른 새로운 정책특징과 시사점을 발견함과 함께 미래의 점진적 정책변화도 전망·예측해 보았다. 과거 중국 해양산업정책과 차별화되는 새 정책의 주요 특징으로는 1)첨단산업과 과학기술을 포함하는 새로운 발전모형이라는 점, 2)고도의 민주적 참여가 보장된다는 점, 3)정책목표로 해양경제발전뿐 아니라 안보영토, 환경생태, 과학교육 등의 다양한 목표들도 포괄하고 있다는 점이였다. 향후 우리나라는 중국의 해양경제개발시범구 정책 특징에 대한 올바른 이해를 통하여, 최근 이슈화된 해양경제특구 설정관련 정책구상에서 바람직한 교훈을 얻어야 할 것이다.

핵심용어 : 중국 해양경제개발시범구, 해양경제, 정책형성, 정책전이, 점증주의모형

1. Introduction

During 30 years of the reform and opening-up, China has achieved rapid economic development, its land economy is the

center of Chinese economy. However, the role of Chinese marine economy has long been overlooked. Since the 1990s, Chinese government began to emphasize its marine economy and released a series of policies to promote development of marine economy. In 2011, Chinese government released a new policy of "national marine economic development pilot zones"(全國海洋經濟發展試

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點地區) and aimed at improving its marine economy.

This article aims at searching for the policy formation process of 4 Chinese marine economic development pilot provinces as the research object, analyzing every features and forecasting their future development prospect in the viewpoint of China's marine industry policy. For better researching this topic, many research methods were employed, including literature review, qualitative analysis (especially in-depth interview of the related experts).

The research of Chinese Marine Development Pilot Zone Policy would have as-following significances: firstly, since 1990s, China began to attach importance to its marine economy. Chinese government launched a series of policies and measures to promote marine economic development and optimize marine administrative system. The policy of "national marine economic development pilot zones" is the latest continuation of China's marine industry policy. Strengthening the research on Chinese marine economic development zones could help us greatly in understanding China's marine industry policy and penetrating its intentions of marine industry policy.

Secondly, Chinese government has long been used to launch of policy experiments in a certain area. As Chinese government gains experiences from the pilot areas, new policies will be promoted to other regions. In this manner, reform costs will be reduced effectively. At the beginning stage of reform and opening-up, Chinese government selected 4 Special Economic Zones(經濟特區) as the test areas for economic structural reform. At the present time, a similar thing happened to the establishment of Chinese marine economic development pilot zones. Strengthening the research on Chinese marine economic development zones could help us greatly in understanding China's decision habit of "pilot" and thus enhancing our ability of policy trend prediction to China's marine industry policy.

Thirdly, South Korea and China are two friendly neighboring countries separated by sea, so policy-making and implementation are much easier to influence each other quite quickly. The establishment of Chinese marine economic development pilot zones has already led to the construction of South Korean marine special economic zones. In this process of policy transfer from China to South Korea, strengthening the research on Chinese marine economic development zones could help us greatly in understanding China's successful experiences and lessons of failures, and thus promote the construction of South Korean marine special economic zones better.

2. Theoretical Background

: Incremental Policy Formation Model

Generally speaking, policy formation has many procedures to increase the effectiveness and feasibility of policy, which including goal-setting, policy alternative development, implementation, evaluation and transfer. For better recognizing and analyzing formation of policy, there are many theoretical models of policy formation, such as Incrementalism Model, Game Model, Political System Model and so on. They are very useful for us to understand and analyze China's policy formation. In these theories of policy formation, this paper tends to opt Incrementalism Model which made by the American scholar C. Lindblom (Lindblom, 1959; 1980) to analyze the policy formation of Chinese Marine Economic Development Pilot Zones.

Different with other theoretical models of policy formation, Incrementalism Model stresses that the nature of policy formation is nothing but continuation of past policy, it is only partial adjustment of past policy. Meanwhile, Incrementalism Model underlines that policy formation is a endless cycle that follows procedures of goal-setting → policy alternative development → implementation → evaluation → transfer → new goal-setting → new policy alternative development → new implementation → new evaluation → new transfer. Past lessons and experiences of policy are very important in this process to the formation of new policy. Moreover, the basic assumption of Incrementalism Model is limited resources for policy-maker, including time, information and fund. Besides that, Incrementalism Model emphasizes that political viability is a very important factor to consider in the process of policy formation, according to this theory, formation and implementation of policy ought to be a progressive course but not a sudden change, therefore policy should be sustainable and gradual for the sake of controlling unknowing risks.

In terms of China's current policy on Marine Economic Development Pilot Zones, Incrementalism Model is a powerful and appropriate tool to explain and analyze the policy of China's Marine Economic Development Pilot Zones. The reasons are presented below:

Firstly, the policy of China's Marine Economic Development Pilot Zones, by its very nature, is the continuation of past policy of reform and opening-up which made by Deng Xiaoping. Chinese government has been gained much experiences and lessons by introducing reform and opening-up in the past 30 years, on this foundation, Chinese government has been rolled

The Significance and Implications of Establishing Marine Economic Development Pilot Zones in the Viewpoint of China's Marine Industry Policy

out the policy of Marine Economic Development Pilot Zones from 2011. This policy explicitly proposed that its guiding ideology is Deng Xiaoping Theory(鄧小平理論), so the policy of China's Marine Economic Development Pilot Zones is a partial adjustment and development of past policy, but not a strategic innovative policy. In other words, the focus of attention of reform and opening-up policy in the past 30 years is China's land economy, but the policy of China's Marine Economic Development Pilot Zones is the product of focus transfer to marine economy of reform and opening-up.

Secondly, the policy of China's Marine Economic Development Pilot Zones is extremely consistent with the features highlighted of Incrementalism Model--pursuit of low political cost and political stability. "Maintaining stability is of top priority"(穩定壓倒一切) is the precondition of China's reform and opening-up, this principle has been kept by successive Chinese governments since it has been established by Deng Xiaoping. It is also established as the primary principle for the policy of China's Marine Economic Development Pilot Zones. Therefore the policy of China's Marine Economic Development Pilot Zones is very moderate, progressive and gradual. It has a strong political feasibility but not a radical reform. Based on this viewpoint, this paper predicts that the policy of China's Marine Economic Development Pilot Zones will be continued in the future.

Thirdly, China is a classical continental country in the past 2,000 years, how to regulate and develop continental economic, social and cultural development have always been a focus for China. Up until the end of 20th century, ocean has attracted attention by Chinese government, so decision resources of Chinese government for policy-making on marine development are very limited, either from lessons of marine economic development or regimes of marine interests protection, China has no sufficient experiences up to now. Limited decision resources is the basic assumption of Incrementalism Model as well as a realistic predicament to Chinese government for formatting, executing and evaluating its marine policy. On this basis, China has been adopted marine policies successfully and gradually for the order of controlling unknowing risks.

3. Policy Essence, Goals, and Demands

3.1 Policy Goals

Up to now, there is still no official definition of Chinese Marine Economic Development Pilot Zones, meanwhile, because

of short time of its enforcement, and the academic circles have no definition of Chinese Marine Economic Development Pilot Zones, too. Government-Industry-Academia focus on policy application and specific operation mainly. This paper suggests that the definition of Chinese Marine Economic Development Pilot Zones is "the regions which entitle to first try to reform under the authorization of China's Central Government, with the intention of promoting social comprehensive development of China's coastal regions and safeguarding China's maritime rights and interests by means of developing marine economy". Its essence is continuation and deepening of China's Reform and Opening-up policy which has been executed more than 30 years.

The reasons for defining Chinese Marine Economic Development Pilot Zones in such a description are: firstly, differently with the 4 China's Special Economic Zones which were established by Deng Xiaoping initially, today's Chinese government has different standard to decide which regions should be supported. In 2001, the then Prime Minister Zhu Rongji(朱鎔基) indicated that "Special Zones no longer are special, already there are no special preferential policies, they are in the same way all over China.....(the government) will give preferential policies take industry as the standard, but not take region as the standard." As to Chinese Marine Economic Development Pilot Zones, their breakthrough is marine industries and marine economy. All of the Chinese Marine Economic Development Pilot Provinces set their key marine industries, such as fishery industry, sea shipping industry, marine biological pharmaceutical industry and so on. Therefore, the primary purpose of Chinese Marine Economic Development Pilot Zones is developing their marine industries and marine economy. It can thus be seen that the policy formation and implementation of Chinese Marine Economic Development Pilot Zones is the latest partial adjustment of the policy of Special Economic Zone, it is extremely consistent with the Incrementalism Model, which claims that the lessons and experiences of past policy are the foundation of new policy.

Secondly, developing marine industries and marine economy is the starting point of Chinese Marine Economic Development Pilot Zones, but the final goals of Chinese Marine Economic Development Pilot Zones are well in advance of marine economy itself. Just as what Incrementalism Model indicates that policy formation is continuation of past policy, today's marine policy is the product of continuous development in the past. Basic on the experiences of single policy goal-setting from 1949 to earth

1980s and double goals-setting from early 1980s to 1995, the current policy of Chinese Marine Economic Development Pilot Zones is a comprehensive policy system, which contains plural policy goals:

To begin with, all of Chinese Marine Economic Development Pilot Zones focus on coordinated development between sea and land, furthermore, all of Chinese Marine Economic Development Pilot Zones assume important role to lead China's inland provinces into globalization in greater depth. So the establishment of Chinese Marine Economic Development Pilot Zones is for promoting China's land economy and improving China's inland provinces' level of opening-up, too.

In the next place, developing marine economy by relying on science and education(科教興海) is an important principle of Chinese Marine Economic Development Pilot Zones, the execution of Chinese Marine Economic Development Pilot Zones policy involve a number of scientific and educational problems, for example, actively cultivate better system and mechanism to promote the development of marine science and technology, vigorously raising the marine talents, all of 4 pilot provinces selected a group of maritime departments and majors of universities and institutes to support.

Furthermore, Chinese Marine Economic Development Pilot Zones take on the task of protecting marine ecological environment, too. According to their own plan, all of Chinese Marine Economic Development Pilot Provinces focus on improving their marine environment, Fujian(福建) plans to expand its Class I and Class II sea area in offshore waters to 65 % in 2015; Zhejiang(浙江) intends to expand its clean sea area to 15 % in 2015; Guangdong(廣東) wants to improve its water standard rate of environmental function zone in offshore waters to 90 % in 2015.

In addition, all of Chinese Marine Economic Development Pilot Provinces aims to reform their integrated ocean administrative systems, they intend to strengthen their administrative ability of law enforcement bodies, technical supporting, policy-making consultation, public services and so on. Last but not the least, the establishment of Chinese Marine Economic Development Pilot Zones also assume a vital role of safeguarding China's marine rights and interests. To sum up, the policy goals of Chinese Marine Economic Development Pilot Zones are promoting social comprehensive development of China's costal areas and safeguarding China's marine rights and interests. It is a mixture with multiple purposes.

Thirdly, as a country with the feature of powerful government—weak society, Chinese government, especially the Central Government, wields enormous influence over all Chinese social undertakings. Some Chinese scholars defined that Special Economic Zones of China was “diverse regions which entitle to first try to reform under the authorization of China's Central Government(Chen and Huang, 2010).” Just like Deng Xiaoping established 4 Special Economic Zones initially, the founding of 4 Chinese Marine Economic Development Pilot Provinces benefits come from powerful supporting of ex-President Hu Jintao. The support of supreme leader of country and central government is the prerequisite for establishment of Chinese Marine Economic Development Pilot Zones. It is very important to understand policy essence of Chinese Marine Economic Development Pilot Zones.

3.2 Policy Demands

First of all, Marine economy is becoming increasingly important for China. Development of land has been the core part for China's reform and opening-up since 1979. With the unbalanced growth model of “point-line-plane overall(點-線-面全方位)(Gong and Kim, 2013),” Chinese land economy has been developed rapidly. However, 21st century is the century of ocean and blue civilization, marine economy is becoming increasingly important for China. China's GOP(Gross Ocean Product) reached more than 38,000 billion yuan at the end of the “Eleventh Five Plan” period, and it represented 9.9 % of China's GDP (this number was only 17,700 billion yuan at the end of the “Tenth Five Plan” period). Most importantly, sea-related employment personnel already reached 33.5 million, in other words, coastal areas of China is now one out of ten employment personnel relied on marine economy. Therefore, promoting development of marine economy for China is not only a economic issue, but also a key political issue to maintain social stability.

Second, the Chinese government actively pushes the development of marine economy. With the rapid development of Chinese marine economy, the Chinese government has been paid more and more attention to development of marine economy. In March 16th, 2011, China has been set out its <Outline of the Twelfth Five-Year Plan for National Economy and Social Development>(國民經濟和社會發展第十二個五年規劃綱要), and the central government has been decided to promote development of marine economy by optimizing industrial structure and strengthening integrated ocean management, Also, marine tourism

The Significance and Implications of Establishing Marine Economic Development Pilot Zones in the Viewpoint of China's Marine Industry Policy

industry, maritime transportation industry, fishery industry, marine oil and gas industry, marine electric power generation industry and marine biological pharmaceutical industry has been identified to be key fields for development of Chinese marine economy. In September 16th, 2012, the State Council has been put <Marine Economy Development of the Twelfth Five-Year Plan for National Marine Economy Development Plan in the Twelfth Five-Year>(全國海洋經濟發展“十二五”規劃) to promote the development of Chinese marine economy. According to this plan, economic development, technical innovation, structural adjustment and environmental protection are 4 major goals of Chinese marine economic development.

Third, Chinese marine economy faced many problems in the process of rapid development. In 2003 and 2008, the State Council approved <Outline of Development Plan for National Marine Economy> and <Outline of Development Plan for National Marine Affairs> successively and required ocean exploitation activities must obey these two outlines, but in practical terms, because the provisions of two outlines were too abstract and lack of operability, these two outlines were not being followed. Combined with the lack of managements experiences in the central government level and pursuit of interests in the local government level, many problems occurred increasingly. System was imperfect, and structural contradictions became prominent. Marine environment was damaged seriously, and scientific innovation ability was too inadequate to promote further development and transform the mode of Chinese marine economy. The amount of marine scientific and technological talents could not cope with the demands for the development of marine economy. However, related policies and measures were unsound. These were hindered healthy development of Chinese marine economy seriously and received close attention from the central government. Introduce new policy with strong operability under direction of existing two outlines was desperately needed for China.

4. Formation Process

4.1 History Revisiting : Incremental Policy Change

It is worth revisiting development history of China's marine policy briefly when we elaborate and analyze the policy formation of Chinese Marine Economic Development Pilot Zones. Because the development history of past marine policy is the foundation and precondition for today's marine policy according

to the theory of Incrementalism Model. Roughly speaking, China's marine policy has undergone 3 stages since it was created in 1949:

The first stage, from 1949 to the beginning stage of reform and opening-up (in the late 1970s and in the early 1980s). At this stage, since China devoted its great attention on regime construction and class struggle, combined with opposing diplomatic relationship between China and most of western countries, China focused on building a powerful navy and protecting safety of mainland China only (Huang et al., 2013), economic value of ocean had not been given sufficient attention. Particularly, Mao Zedong(毛澤東) hold a view that “the war is inevitable” since 1960s, ocean's military function was further stressed.

The second stage, from the early 1980s to 1995. At this stage, Deng Xiaoping changed old strategic estimate on global situation, he thought that “world war is avoidable” (Deng, 1994) and China should keep economic development as the central task, thus China's marine policy changed greatly, ocean's military function was steadily watered down and its economic function was steadily valued. At this stage, China began to emphasize protection of marine interests (but not the war in Mao's day), more than that, ocean absorbed China's attention as the resource base and sea-lanes to support national economic construction and to attract foreign capital, talents, science and technology and advanced managerial experiences. But from the overall, the marine policy at this stage still had strong colour of continent consciousness. Ocean was still regarded as an appendage of continent.

The third stage, from 1996 up to now. China has been joined United Nations Convention on the Law of the Sea(UNCLOS) in 1996, China owns manageable marine space of about 3 million square kilometers according to UNCLOS, the concept of “Blue Territory” became a new concept for Chinese from that moment, the old concept of territory was completely broken, ocean has been treated as land territory but not a resource base and sea-lanes only, which was demanded to support the economic development of mainland. At this stage, China began to call ocean development as “marine affairs”(海洋事業) and stressed that marine affairs related to “vital national interests”. Also, China's marine industry policy was beginning to be the core part of China's marine policy at this stage. Promoting development of its marine industry and marine economy is the leading factor for China's marine industry policy and whole marine policy.

4.2 Formation Process of New Policy

Precisely because the current marine policy of China values marine economic development greatly, the policy of Chinese Marine Economic Development Pilot Zones comes into being. The introduction of this new policy is progressive but not a sudden inspiration.

In May 9th, 2003, the State Council approved <Outline of Development Plan for National Marine Economy>(全國海洋經濟發展規劃綱要), it was the first national plan for marine economy since 1949, furthermore in 2008, the State Council approved <Outline of Development Plan for National Marine Affairs>(國家海洋事業發展規劃綱要), it was the first general systemic national plan for whole marine affairs. The policy focus of China's marine policy have been turned into a new model completely that taking economic benefits as the core of whole marine policy and reconciling other plural purposes simultaneously.

Under the direction of these two outlines, the policy of Chinese Marine Economic Development Pilot Zones stepped into a formation stage. This stage contains 4 sub-stages--promoting stage, project-reporting stage, starting stage and implementing stage. And this policy formation process is responding the major perspective of Incrementalism Model, which claims that the process of policy formation is not an entirely rational process, policy formation is not the product of analysis but the product of political interaction. The policy formation of Chinese Marine Economic Development Pilot Zones is exactly the product of political interaction between the central government and local governments.

Promoting stage : In the pattern of powerful state and weak society of China, the promotion of national leaders is a significant factor for policy-making. In April 2009, ex-President Hu Jintao(胡錦濤) visited Shandong Province and indicated that “energetically develop marine economy, scientifically exploit marine resources, cultivate marine superior industries, build Blue Shandong Peninsula Economic Zone(山東半島藍色經濟區)”. According to this indication, establishment of marine economic development pilot zones was further valued.

Project-reporting stage : Under the instruction of Hu Jintao, the central government decided swiftly that appointed National Development and Reform Commission(國家發展和改革委員會) as the leading body for the policy-making of Chinese Marine Economic Development Pilot Zones. Then some coastal provinces formulated their own marine development plan and specific

projects and submitted to National Development and Reform Commission, the latter discussed and researched these plans and projects and formulated a summary report--<Report of the Relevant Issues on Starting the Policy of Marine Economic Development Pilot Zones>(關於開展我國海洋經濟發展試點工作有關問題的請示)--to the State Council and won permission in March, 2010. At this point, the policy of Chinese Marine Economic Development Pilot Zones has already taken shape initially.

Starting stage: On July 9th, 2010, the central government held a special meeting--Starting Meeting of National Marine Economic Development Pilot Zones(全國海洋經濟發展試點工作啟動會議), the meeting announced that Shandong, Zhejiang and Guangdong were identified as the pilot zones firstly (Fujian was identified in 2012). The central government required these pilot zones should be “experimental plots” and “pioneer” for the development of Chinese marine economy, meanwhile local officials of these 3 pilot zones put forward some proposals to the central government, too. Besides that, central government officials discussed draft unitary plan for development of marine economy with local government officials.

Implementing stage : After a full discussion between the central government and local governments about the working plan of marine economic pilot zones, National Development and Reform Commission formally announced that the policy of Chinese Marine Economic Development Pilot Zones stepped into implementing stage in July, 2011. Due to lack of experiences of ocean management, planning period of all pilot zones will expired in 2020 totally. The central government will evaluate the implementing effect of current policy by then and formulate new marine policy on that basis. Therefore, there is a strong need to understand the implementation of the policy of Chinese Marine Economic Development Pilot Zones because it plays a big role in shaping future marine policy.

5. Current State of four Marine Pilot Zones Implementation

According to Incrementalism Model, policy formation is an endless circle, which operates at following procedures: goal-setting → policy alternative development → implementation → evaluation → transfer → new goal-setting → new policy alternative development → new implementation → new evaluation → new transfer. From this circle we can find that implementation of

The Significance and Implications of Establishing Marine Economic Development Pilot Zones in the Viewpoint of China's Marine Industry Policy

policy X could provide experiences and lessons for the next policy Y. Therefore, the policy formation is the product of interaction of policy-making and implementation.

This applies the same to the policy of China's Marine Economic Development Pilot Zones, it can be said with certainty that the formation of this policy will necessarily constantly revised and improved during the process of implementation and re-making because China has no sufficient experiences on operating ocean. In fact, the policy of China's Marine Economic Development Pilot Zones provides basic principles and guidelines mainly, and thus it allows for too great a leeway on the operational level to local governments, From the official names of 4 marine economic development pilot zones, we can see that China is not afraid of making mistakes and hopes to gain experiences on operating ocean eagerly. Accordingly it is very necessary to elaborate and analyze implementation of the policy of China's Marine Economic Development Pilot Zones, so that we can further study the future prospect of the policy of China's Marine Economic Development Pilot Zones.

There are four marine pilot zones(at Shandong, Zhejiang, Guangdong, Fujian) where have established by Chinese central government from 2011 to 2012. Table 1 shows the brief overview of four Chinese marine development pilot zones.

5.1 Blue Shandong Peninsula Economic Zone (山東半島藍色經濟區)

Shandong is the first province that determined to be a Marine Economic Zone and it is set as the component of Bohai Economic Circle(環渤海經濟圈). At the same time, it is still set as pilot region of China-Japan-South Korea FTA. Shandong's advantage of marine economy lies in its strong scientific and technological strength, where many important research institutions are located in Shandong, such as Marine Research Institute of Chinese Academy of Sciences(中國科學院海洋研究所), Ocean University of China(中國海洋大學), the First Marine Research Institute of State Oceanic Administration(國家海洋局第一海洋研究所) and so on. More than 50% of talents are in Shandong, the contribution rate of scientific and technological progress reached more than 60%, theses numbers are twice the national average of China(Zhang, 2011). Compared with other pilot provinces, Shandong has a greater advantage in the fields of marine science and technology investment, marine science and technology output(Xu, 2012).

With the support of strong scientific and technological strength,

Table 1. Overview of four Chinese Marine Economic Development Pilot Zones

Region (State)	Publish time	Official Name	Plan period	Target cities
Shandong	2011.1	Blue Shandong Peninsula Economic Zone (山東半島藍色經濟區)	2011-2020	Qingdao(青島), Dongying(東營), Yantai(煙台), Weifang(濰坊), Weihai(威海), Rizhao(日照), Wuli(無棣), Zhanhua(沾化)
Zhejiang	2011.3	Zhejiang Marine Economic Development Demonstration Zone (浙江海洋經濟發展示範區)	2011-2020	Hangzhou(杭州), Ningbo(寧波), Wenzhou(溫州), Jiaxing(嘉興), Shaoxing(紹興), Zhoushan(舟山), Taizhou(台州)
Guangdong	2011.8	Guangdong Marine Economic Comprehensive Test Zone (廣東海洋經濟綜合試驗區)	2011-2020	Guangzhou(廣州), Shenzhen(深圳), Zhuhai(珠海), Shantou(汕頭), Huizhou(惠州)
Fujian	2012.11	Blue Fujian Strait Economic Test Zone (福建海峽藍色經濟試驗區)	2012-2020	Xiamen(廈門), Zhangzhou(漳州), Quanzhou(泉州), Fuzhou(福州), Putian(莆田), Ningde(寧德), Pingtan(平潭)

Shandong is promoting its industrialization of marine science and technology, sophisticated marine industries, accelerating its growth of new marine industries, sea food processing industry, petrochemical industry and so on. Moreover, Shandong is valuing its utilization ratio of sources and its fishery modernization very much. And Shandong owns advanced marine science technology, so scientific education and talents are another important key field for Shandong. Blue Silicon Valley(藍色矽谷) of Shandong is being constructed in Qingdao, and it is the most important base for scientific education and talents for Blue Shandong Peninsula Economic Zone. It includes more than 60 major programs and 1 billion yuan of total investment. As the matching measures, National Quality Inspection Center of Marine Equipment(國家海洋設備質檢中心) and Qingdao, Shandong University Campus(山東大學青島校區) are under construction. In addition, Shandong has been set out preferential policies on land utilization, administrative charge, infrastructure construction, financial reform and support, to attract investment and talents and so on. As the

result, in October 22nd, 2013, more than 340 scientific and talents projects has been settled in Qingdao.

5.2 Zhejiang Marine Economic Development

Demonstration Zone (浙江海洋經濟發展示範區)

Zhejiang Province has the most abundant resources of islands in China. According to statistics, the islands of Zhejiang Province, an area of 500 square meters up to 2,878, the number of islands ranked first in the whole country. As the one of Chinese Marine Economic Zones, Zhejiang embedded another national pilot zone in itself---Zhoushan Islands New Area(舟山群島新區). Therefore, Zhejiang owns huge advantage in terms of getting support from central government. Zhejiang is focusing on improving its comprehensive economic strength, international competitiveness and sustainable ability. Its specific policies exploit and utilize marine space resources, protect and utilize ocean comprehensively, participate in international competition and cooperation in a broader and deeper magnitude. We can use “one center, four demonstration zones” to express Zhejiang’s developing goals, “One center” means Zhejiang is constructed into a international logistics center for major goods; “four demonstration zones” means Zhejiang is constructed into islands-oriented development and opening-up and reform demonstration zone, sophisticated marine industries development demonstration zone, land-ocean coordinated development demonstration zone, marine ecological civilization and clean energy demonstration zone.

Zhejiang has been set out <the Twelfth Five-Year Plan for Marine Major Economic Development Construction Projects of Zhejiang Province>(浙江省“十二五”海洋經濟發展重大建設項目規劃), It provides many preferential terms for developing marine economy: firstly, the government invests 1 trillion yuan to the construction of infrastructure, ecological conservation and new marine industries, and 0.66 trillion yuan will be invested during the Twelfth Five-Year period. Secondly, the government offers preferential financial policies to support development of marine economy in the fields of fiduciary loan, financial reform, financial cooperation and so on. In July 5th, 2011, 16 provincial financial institutions signed a strategic cooperation agreement with Zhoushan(舟山) Municipal Government, and Zhoushan will get more than 43 billion yuan to construct land reclamation, improve its logistics industry and shipbuilding Industry. Thirdly, the government offers preferential tax policies to support development

of marine economy. Bureau of State Taxation of Zhejiang Province published <關於推進海洋經濟發展的若干意見> in July 24th, 2011, and 19 preferential tax policies offered to support development of marine economy in the fields of new industries development and structural adjustment, coastal infrastructure consolidation, energy saving and environment protecting subsidies and so on. In order to support its marine economic development further, Zhejiang is focusing on carrying out its policies conscientiously, strengthening measures for investment attracting, strengthen matching measures for marine environment protection and administrative reform, for example, strengthening construction of related laws, rules and regulations, strengthening reform of administrative system and optimizing administrative approving system.

5.3 Guangdong Marine Economic Comprehensive Test Zone (廣東海洋經濟綜合試驗區)

For Guangdong Marine Economic Comprehensive Test Zone, it consists of 1 core district---Pearl River Delta(珠江三角洲), 2 growing points---East Guangdong Area and West Guangdong Area, 3 marine economy cooperation circles---Guangdong, Hong Kong and Macau Circle, Guangdong and Fujian Circle, Guangdong, Guizhou and Guangxi Circle, 3 major marine economic body regions---Optimized Development of Marine Economy of Pearl River Delta(珠江三角洲海洋經濟優化發展區), East Guangdong Key development Area of Marine Economy(粵東海洋經濟重點發展區), West Guangdong Key development Area of Marine Economy(粵西海洋經濟中重點發展區), 3 marine protection and development belts---coastal zone, offshore area and deep waters. Guangdong has identified 177 key construction projects, their total investment is estimated at 1 trillion yuan. For promoting the development of marine economy, starting next year, China International Marine Economy Exposition(中國國際海洋經濟博覽會) will be held annually in Zhanjiang(湛江) and Zhuhai(珠海) in rotation. It will expand the international influence of Guangdong Marine Economic Comprehensive Test Zone effectively.

Moreover, because of excellent geographical location, Guangdong is cooperating in ocean shipping industry, logistics and warehousing industry, marine equipment manufacture industry and islands development with Hong Kong and Macau. Guangdong has been confirmed that ocean shipping industry, fishery industry and shipbuilding industry are key objects of its

The Significance and Implications of Establishing Marine Economic Development Pilot Zones in the Viewpoint of China's Marine Industry Policy

financial support. And new marine industries, such as marine biological pharmaceutical industry, harbor-oriented industry, marine construction equipment industry, are key fields for Guangdong in the future. Guangdong's GOP will increase to 15,000 billion yuan and it is supposed to be a powerful province of marine economy by 2020.

5.4 Blue Fujian Strait Economic Test Zone (福建海峡藍色經濟試驗區)

According to the political will of central government, Fujian is supposed to be the major base of marine equipment manufacturing and assembling industry and marine tourist shipping industry in the southeast China. In order to develop Fujian's marine economy, State Council has been offered many supporting policies in the fields of investment, finance, zones, industries, scientific education, talents, utilization of sea, environment, islands, policies toward Taiwan, opening-up and so on. And new marine industries---like marine biological pharmaceutical industry, marine equipment manufacturing industry, desalination of sea water and comprehensive utilization, marine tourist shipping industry---are key industries of Fujian.

In addition, develop oil and gas in Taiwan Strait is another key field. Promoting development of marine economy by zones and bases are important method for Fujian. Nowadays, Shougang Corporation(首鋼集團) has been invested 200 billion yuan to Longjiao Bay(隆教灣) to construct coastal tourism integrated project center on marine tourist shipping. Also, international tourist shipping base in Xiamen(廈門) is being built, tourist shipping industries in Xiamen-Zhangzhou-Quanzhou(廈門-漳州-泉州) are developing rapidly with the combination of tourist shipping's research, production, transaction services and leisure sports.

Training and introduction of talents is a important support field, too. Fujian is constructing Pingtan Maritime University(平潭海洋大學) and Pingtan Islands Development and Protection Research Center(平潭海島開發和保護研究中心). Besides that, Fujian values its harbor infrastructure construction greatly, service capabilities of port areas are improving and optimizing. Fujian is also set up a Blue Industry Investment Fund(藍色產業投資基金) to promote development of marine economy. With the China's largest potential on constructing 100,000-300,000 tons ports, Fujian fully expects to be international shipping center in Southeast China in the future.

6. Finding out New Features and Implications

As can be seen from the development history of China's marine policy, formation and implementation of the policy of Chinese Economic Development Pilot Zones is the latest development at the third stage of China's marine policy. It is not only the concreteness of existing marine policy(the existing marine policy before the introduction of policy of Chinese Marine Economic Development Pilot Zones focus on macro direction and too abstract), also it is a breakthrough for China's marine policy. This evaluation is conforming the stress of Incrementalism Model of current policy is the continuation and partial adjustment of past policy.

In the viewpoint of introduction and development of China's marine policy, the policy of Chinese Marine Economic Development Pilot Zones has the following features:

Firstly, new development model with advanced industries and science & technology. In the past, Chinese marine economy focuses on traditional marine industries mainly, such as fishery, salt industry, maritime transportation and so on, its marine economy was lagging behind with very unreasonable marine industrial structure. In the <Outline of Development Plan for National Marine Economy> which made in 2003, the central government regarded development of advanced marine industries as one of the major guiding principle, the Outline demands "Vigorously adjust and modify traditional marine industries, actively cultivate rising marine industries, accelerate the development of high-tech industries which could promote development of marine economy". Under the direction of this regulation, the policy of Chinese Marine Economic Development Pilot Zones values advanced marine industries and marine science greatly. Some rising industries are regarded as key industries, such as islands tourism industry, houseboat industry, marine biopharmaceutics industry, industry of sea water desalination and multipurpose utilization and so on. Meanwhile, under the direction of "implementing the strategy of ocean qualified personnel, improving the overall personnel quality" regulated in <Outline of Development Plan for National Marine Affairs>, all of pilot zones established principal of "revitalize ocean through science and education"(科教興海), thus the central government and local governments support many ocean universities and departments greatly.

Secondly, highly civil participation. Different with the theory of Rationalism Model, Incrementalism Model is very democratic,

it does not deliberately exaggerate the factor of knowledge and technology in the process of policy-making, it stresses participation greatly(Liang, 2003). In China, most of policies, including marine policy, are allowed few civil participation in the past. At the level of marine policy, this situation began to transform in 2008 by the introduction of <Outline of Development Plan for National Marine Affairs>, the outline demands:“by the year 2020, (one of the) development goals is strength the ocean consciousness of people generally”, under the direction of it, the policy of Chinese Marine Economic Development Pilot Zones break through the old style of “policy-making and executing only belongs to government” in the field of marine policy for the first time. The central government and local governments of pilot zones are vigorously publicizing ocean consciousness to civil. Besides that, represented by Shandong’s marine culture festival(海洋文化節), local governments are keen on actively carrying forward their own marine culture. But, of course, the participating mechanism for the public is not perfect enough still. For China, it’s a gradually improving and strengthening process.

Thirdly, plural policy goals. From 1949 to early of 1980s, defense security was the only goal of China’s marine policy at that moment; from early of 1980s to 1995, China’s marine policy began to bias toward marine economic development, double goals--marine interests protection and marine economic development--replaced the single goal previously, meanwhile, China also began to pay some attention to marine environment protection. And from 1996 up to now, China values marine environment protection strongly, reform marine administrative and enhance regional linkages also became into important policy goals of China’s marine policy. <Outline of Development Plan for National Marine Affairs> notes that by the year 2020, China’s ocean building ought to be achieve “digital ocean, ecological ocean, safe ocean, harmonious ocean”. “digital ocean” means Hi-Tech for marine data-acquisition, detection and marine administration; “ecological ocean” means high-protection of marine environment and sustainable production mode; “safe ocean” means improving fighting ability of marine disaster as well as protecting national marine interests effectively; “harmonious ocean” means harmony between man and marine environment, land and ocean, exploitation and conservation, developed regions and developing regions. Under the direction of it, just as elaboration in the chapter 3 of this paper, the policy of Chinese Marine Economic Development Pilot Zones has plural policy goals based on the requirements of China’s marine policy.

7. Forecasting Future Prospect

For China, the establishment of marine economic development pilot zones is a novelty, so it is worth paying attention to their future prospect. All of planning time for 4 Chinese marine economic pilot provinces is from 2011 to 2020 (Fujian is 2012-2020), but considering China’s actual political, economic and social situations, the policy of marine economic development zone will not end in 2020, furthermore, China’s marine economic development pilot zones have an expansive tendency.

7.1 Coexistence of Growth and Challenge

China’s marine economic development pilot zones will achieve a rapid growth in terms of their marine economic development. But in the meantime, they will face many new problems in the future. So it is highly necessary to Chinese marine economic development pilot zones to adjust their marine policies continuously. China has achieved great social and economic progress since the implementation of reform and opening-up policy during the past 30 years, but in essence, China’s economic development model still is a government-dominated model. Chinese government owns huge public resources. Once this huge public resources are concentrated on a certain economic sphere by Chinese government, a rapid growth in a partial economic sphere will appear. In terms of current policy of Chinese marine economic development pilot zones, its policy-designing and policy implementation are quite reasonable, the government’s attention will inevitably lead to a high concentration of capital and talents in these marine economic development pilot zones, there are grounds for believing that Chinese marine economy will be developed rapidly in the future. However, owing to lack of experience of marine administration, China will face a lot of problems in the development process of its marine economy. Therefore, the current policies of Chinese marine economic development pilot zones are still imperfect and will continuously adjusted in the future. In this process, evaluation of policy is very important because it will lead to a new goal-setting and new implementation according to the policy cycle of Incrementalism Model, correctness of evaluation will affect the success or failure of future's policy.

7.2 Long-term Persistence

There can be little doubt that the current Chinese marine economic development pilot zones will endure for a long time.

The Significance and Implications of Establishing Marine Economic Development Pilot Zones in the Viewpoint of China's Marine Industry Policy

Although the planning time for all of 4 marine economic development pilot provinces end in 2020, Chinese marine economic development pilot zones will play more and more important role in the process of Chinese economic development because of China's complex development environment and arduous development task. In other words, the current marine policy is continuation of past policy and it will affect new policy in the future.

To begin with, Chinese government has set its criteria for selection of support areas, industries, rather than regions, which are the most important standard to be supported by government. While in China, as the new economic growth point, marine economy has just started. China almost has 3 million square kilometers blue territory, which this figure probably accounted for about 30% of its land area, but China's GDP is just 10% or so of its GDP, so Chinese marine economy has enormous developing potential. Next, China is confronted with the complex marine political environment, nasty sovereignty disputes covering Yellow Sea(黃海), East China Sea(東中國海) and South China Sea(南海). Solution of these problems is time-consuming and extremely difficult. As a result, Chinese marine economic development pilot zones will endure for a long time because of their political functions.

7.3 Internal Policy Transfer

According to Incrementalism Model, policy formation is a endless circle with cyclical procedures. As to one circle of policy formation, policy-makers must confront two policy effects---success or failure. The latter one will lead to a policy introspection for the order of correcting policy; the former one will give satisfaction to policy-makers. And as to a experimental policy which implemented in pilot zones, their successful experiences will transfer into other policy fields of pilot zones and other regions.

Four Chinese marine economic development pilot provinces will deepen their current policies and diffuse them into other social areas. To promote its development of marine economic development pilot provinces, China establish a lot of matched measures, including administrative system reform, financial reform, fiscal and tax reform, scientific and educational system reform, environment protection, external links and so on. Meanwhile, all of Chinese marine economic development pilot provinces focus on upgrading urbanization and income level of residents. Thus it can be seen, that developing marine economy

is not the only purpose of Chinese marine economic development provinces, but Chinese government prefer to promote comprehensive social progress and development of China's coastal regions. The implementation of these policies will affect other fields, for example, the reform of marine administrative system is likely to diffuse into all of administrative system.

7.4 External Policy Transfer

Chinese government will expand the number of marine economic development pilot zones in the future and publicize pilot area's successful experiences to other regions. For China, marine economic development pilot zones has a very important significance, therefore, China will inevitably establish new marine economic development pilot zones in the future. As to current Chinese marine economy, appear "3 major and 3 smaller" pattern, except traditional 3 major marine economic zones (Circum-Bohai Sea region, Yangtze Delta and Pearl River Delta), there are still 3 smaller marine economic zones---West Coast of Taiwan Straits, Beibu Gulf Zone(北部灣地區) and Hainan Island Region(海南島地區), so Guangxi(廣西) and Hainan(海南) will be added in marine economic development pilot zones. Besides that, in November, 2010, Chinese government made an investigation for marine economy in Shandong, Zhejiang, Jiangsu(江蘇), Shanghai(上海) and Guangdong, but until now, Jiangsu and Shanghai still not be added in marine economic development pilot zones, so they are the main concern objects for the expansion of Chinese marine economic development pilot zones. Of particular concern is Tianjin(天津) where was added as the 5th marine economic development pilot zones in September, 2013, it is the first marine economic development pilot zone of municipality, also it is the second time to expand Chinese marine economic development pilot zones by Chinese government.

Last but not least, all of official names of 4 Chinese marine economic development pilot zones are "Demonstration Zone" or "Test Zone", it can thus be seen that marine economic development pilot zones are "experimental plots" for China, once gain successful experiences, Chinese government will publicize them to other coastal areas or even inland areas. This is the most important real connotation of Chinese economic development pilot zones.

8. Conclusion

According to review of development history of China's marine

policy and theory application of Incrementalism Model, it is clearly that the policy of Chinese marine economy pilot zones is a continuation of China's reform and opening-up policy, meanwhile, it is a continuation of China's marine industry policy, too. In recent 20 years, ocean became more and more important for China, marine economy became a new economic growth point for Chinese economy, and maritime security became a important foundation stone for China's national security. In such a case, China will pay more and more attention to its marine economic development pilot zones. For another, Chinese marine economic development zones have their own characters, developing goals and functions, Therefore when debating this topic, it is noteworthy that Chinese marine economic development pilot zones are not monolithic, their different features, goals and functions lead to different roles in the process of development. As for the policy future of Chinese Marine Economic Development Pilot Zones, implementation of current policy will affect its success of failure, in other words, evaluation of current policy will affect goal-setting and implementation of future policy greatly.

On the other hand, the policy of Chinese Marine Economic Development Pilot Zones is the product of interaction between the central government and local governments. In this process, the top leader's promotion is impetus of policy formation, on this foundation the central government plays a role of formulating general plan and macro guidance, local governments are responsible for presenting detailed data and sub-development plans. One in particular is local governments wield huge power to perform concrete measures. On this basis, local governments will provide full feedbacks of policy implementation of marine economic development to the central government, it will be an invaluable help to the central government for formulating new marine policy. Suffice to say, there is a cooperative and complementary relationship between the central government and local governments in this cyclic process of policy formation and implementation.

The research project of Chinese marine economic development pilot zones still have a broad research prospect, because of limitations of this study, there is no deeper analysis to the questions of "how the policy of current Chinese marine economic development pilot provinces transferred to other regions", "who and why transfer these policies to other regions", "what factors might cause success or failure for the policy transfer of current Chinese marine economic development pilot provinces", "what

role does the Chinese Marine Development Pilot Zones play in the whole Chinese marine economy under the implementation of this new policy". The future research will focus on these questions with the theoretical perspective of policy transfer and consultation of other scholar's literatures. Besides that, the future research will also pay much attention to the policy transfer from China to South Korea in terms of their marine economic development pilot policy.

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