

**Exploring the Political Roles of Chinese Think Tanks:
A Case Study of China's Three Gorges Project
Decision-Making**

Na Mi

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Thesis Committee:
Timothy W. Luke, Chair
Edward Weisband
Rupa Thadhani

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ABSTRACT

Since the establishment of People's Republic of China in 1949, Chinese think tanks have experienced significant development during the transformative process of China's political reform and modernization, and their influence has become more notable than before. However, think tanks historically have been given little attention by the public as well as social scientists in China, so scholarly study on Chinese think tanks is limited. This thesis explores the political roles and characteristics of Chinese think tanks by investigating the transformation and classification of Chinese think tanks from 1949 to the present. Furthermore, through a case study of one of the significant projects in contemporary China – the Three Gorges Project – this thesis examines the performance and influence of three Chinese nonpolitical think tanks – the Chinese Academy of Social Science (CASS), the Chinese Academy of Sciences (CAS), and the Chinese Academy of Engineering (CAE) on the process of government policy-making in China. Based on this analysis of Chinese think tanks, I draw the conclusion that professionalism and institutionalization are very urgent requirements for contemporary China's think tanks.

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Chapter One: Introduction

I. Think Tanks: A Bridge between Knowledge and Power

“If the influences of mass media can be called the fourth power, other than the *Executive*, the *Legislative*, and the *Judicial*, in Western countries, then, I am going to argue that the think tanks should be entitled the fifth power” (Ren, 2000:18-48). — Ren Xiao, a professor from Fudan University states his opinion about think tanks in this way. With the trend toward institutionalization and professionalism, think tanks have become more and more influential in Chinese policy-making. To this extent, I agree with Professor Ren’s opinion that think tanks can be called the fifth power. Not only in the Western world, but also in China, think tanks have grown to become a certain kind of notable force. The scientific expertise provided by various think tanks to the government for decision-making is indispensable in today’s China, directly relating to the enactment of policies. Nevertheless, although Chinese think tanks have become more high-profile and active and their status in the policy-making process is much more important, their influences upon the central government’s final decision are still very limited. Consequently, compared with the central government and Communist Party, this so-called “fifth power” seems weak. In fact, think tanks themselves do not possess power. The only reason they can be powerful is because think tanks seek to bridge the gap between knowledge and power. This function as a bridge imparts strength to think tanks.

“Think tanks are possessors of knowledge, and this can place them at the center of policy developments requiring expert advice and technical information” (Ladi, 1999:208). In other words, knowledge is one of the main tools made available by think tanks when they endeavor to influence government policy. On the one side, knowledge equals power. “It is an important political equation and one to keep in mind in the aspiration to ‘create and share knowledge’,” Diane Stone argued, “the significance of knowledge is that it informs, enables and empowers those who possess it and the institutions that are the embodiment of it” (Stone, 2000:241). On the other side, however, there is a gap between knowledge and power, too. Power is in the hands of policy makers, while experts and

specialists possess the knowledge. They belong to different realms. Accordingly, we need something to fill the space between knowledge and power. “Think tanks perform this task, a role which links the policy maker and academic, by conducting in-depth analysis of certain issues and presenting this research in easy-to-read, condensed form for policy makers to absorb” (McGann, 2005:12).

With regard to defining think tanks, I believe Sudarshan’s brief description is very straightforward: “Think tanks could be defined as policy research institutes that seek to set agendas and to contribute to governance by supplying information and expertise” (Sudarshan, 2000:87). However, it is difficult to define clear criteria to distinguish a “think tank” from a “research institute” since most research institutes would argue that they are independent institutes and are always engaged in policy analysis. In China, for example, policy analysis is merely a “part-time” job for most of the Chinese research institutes, which results in a difficulty in defining and classifying Chinese think tanks. “The operational definition of a think tank may have to vary from region to region” (McGann and Weaver, 2000).

When people discuss think tanks, we need to keep in mind one of the most important and active factors of think tanks — experts. “Experts are political actors, and think tanks are among the most active and efficient expert political institutions. Think tanks have certain advantages for making their work influential, advantages that enhance the political role of experts” (Rich, 2004:210). Experts, or the key think tank employees, implement the transformation from knowledge into power through think tanks. Their expertise can provide consultations to government programs, and can serve to guide policy change as well. As far as I am concerned, the essential objective of think tank experts is, through providing expertise and analysis, to assist government decision-makers in utilizing power scientifically, correctly as well as efficiently.

II. Why Chinese Think Tanks?

In China, on the one hand, “think tanks were generally low-profile actors in government’s policymaking process. Think tanks scholars developed important research and frequently used research and ideas for policy makers to assimilate, but these scholars rarely debated them publicly or in highly visible ways either with one another or with other influential actors in the process of policymaking” (Rich, 2004:7). The reason for such a situation is that the Chinese government always prefers its policymaking process to be unknown. Without information being revealed by either government or think tank experts, it is not easy for the public and social scientists to know much about think tanks. On the other hand, Chinese social scientists have long had difficulty in exploring the role of analysis and expertise of Chinese think tanks on the government policymaking process. From 1949 to present, there were very few accessible research papers regarding the role and influence of Chinese think tanks. It was not until November 7th, 2006, when the Pacific Seminar of China, the Chinese Academy of Social Science, and the Shanghai Institute for International Studies co-organized “the First Chinese Think Tanks Forum”¹ in Beijing, that Chinese think tanks appeared on the political stage, performing in front of the public. During this forum, the delegates from various Chinese research institutes and universities elected “the ten major think tanks of China.” *Ta Kung Pao*² reported that “this is the first time the Chinese think tanks appear in front of the public together.” This event was a milestone for Chinese think tanks’ evolution, showing that Chinese think tanks have walked in front of the curtain and are ready to exert their influence. Moreover, such an event inspired me to explore the actual influence and roles of Chinese think tanks in-depth. I hope to find some evidence indicating that the decision-making institutions and procedures in China have become a little bit democratic, scientific and transparent.

With regard to Chinese think tanks, they share some characteristics with the US think tanks: First of all, in China, the evolution of think tanks was greatly influenced by

¹ See editorial “The Rising of Chinese Official Think Tanks” [My Translation] in www.chinathinktank.cn on Feb. 19, 2007.

² Cited on Oct. 15, 2007 from <http://www.chinathinktank.cn/ShowArticle.asp?ArticleID=5069>

² “*Ta Kung Pao* is the oldest active Chinese language newspaper in China. It is based in Hong Kong and has been funded by the government of the People’s Republic of China since 1949. It covers a range of political, economic and cultural topics. *Ta Kung Pao* was regarded as a paper that published only positive news, to respect the PRC-HKSAR relationship. It has a favorable relationship with the Government, all Blue-Chips, and Pro-CPC parties.” Cited from Wikipedia, the free encyclopedia: http://en.wikipedia.org/wiki/Ta_Kung_Pao. Wikipedia is one source to consult in studies like this one, but it is not a definitive final resource for my research.

the current political environment. Secondly, the official think tanks always prevail in policy analysis as well as consulting services for the central government, exerting considerable influence in the early stages of the policy-making process. Third, the multidisciplinary integration of enhanced study is one of the key features of think tanks. Fourth, the impacts of individual expert in think tanks are remarkable (Rich, 2004; McGann, 1995; McGann and Weaver, 2000). On the other hand, Chinese think tanks have their own features as well. For instance, in the U. S., think tanks may be affiliated with political parties, governments, interest groups, or private corporations or constituted as independent nongovernmental organizations (NGOs) (McGann, 1995). By contrast, because China is a single-party communist country, think tanks can be simply classified as government affiliated, university-based, and privately owned (Shai and Stone, 2004:144-145). The situation in China results in Chinese think tanks that are not as aggressive as the ones in the United States. Seeking to maximize public credibility and political access to make their expertise and ideas influential in policy-making is not the major goal for Chinese think tanks. It is not because Chinese think tanks do not care about increasing their credibility and visibility, but because most of the Chinese think tanks are sponsored by or under the supervision of the central government; the limitation of their independence determines their dilemma. Even if the expertise and analysis these think tanks provide are unbiased, it is still hard to eliminate criticism from different fields.

In the last 30 years, Chinese think tanks have experienced a significant development and transformation and their influence has become more notable than before. In China, both the political and nonpolitical think tanks have occupied vital positions in the advisory system. Compared with political think tanks, the nonpolitical ones are easier to investigate since the access to the first and secondary materials is trouble-free. I believe that by examining nonpolitical think tanks to explore their political roles is more persuasive in analyzing the political access of think tanks as well as the relationship between the central government and nonpolitical think tanks in China. In addition, the original goal for the Chinese central government in establishing think tanks was to satisfy the demand for expertise in enhancing the national power through economic, science and technological development (Dai, 2005: 8-9). Accordingly, to investigate the nonpolitical academic think tanks may help to examine whether or not the central government

actually adopted the analysis and expertise from these think tanks. By these means, I can examine what are the authentic characteristics, influences and roles of Chinese think tanks on the government policy-making. Therefore, in this thesis, I chose the nonpolitical academic think tanks as my research objects and use the Three Gorges Dam Project as the case study.

The Three Gorges dam, first proposed by Sun Yat-sen and reaffirmed by Mao Zedong, has finally begun to take shape along the Yangtze River. If completed according to plan, it will become the world's largest hydroelectric power plant, damming the third longest river in the world and requiring the resettlement of over one million people. However, since the negative environmental costs of this economic take-off project is rigorous, from the proposal stage of idea of the Three Gorges Project till now, the controversies about it have never ceased. A great number of experts and specialists from different major Chinese think tanks studied this project and expressed their concerns about this possible environmental disaster. The conflicts between the Chinese Communist Party (CCP) and numerous think tank experts about whether or not to implement such a huge project on the Yangtze River have lasted over ten years in China, until the Three Gorges Project was enacted in 1992. In my view, the debates among the CCP and Chinese think tank experts over the Three Gorges Project are an interesting case study to explore the interplay between science and technology think tanks and government policy-makers. Through this examination I can examine the authentic roles that Chinese think tanks have played as well as their actual influences during the process of government policy-making.

III. Research Design and Methodology

In my study of think tanks in China, I will analyze archival data, journalistic interviews and reports, newspaper/Internet citations, and think tank publications which relate to the Three Gorges Project in China, in order to explore the actual influences and roles of the nonpolitical academic think tanks on the policy-making. I will focus on three

think tanks: the Chinese Academy of Sciences (CAS), the Chinese Academy of Social Science (CASS), and the Chinese Academy of Engineering (CAE).

(1) Analysis of Archival Data

This analysis will scrutinize many government reports as well as the statistics provided by think tanks themselves. By these means, I will examine the performance and influence of CASS and CAS on the proposal phase and feasibility study phase of the Three Gorges Project. At the same time, I will also study the work and impact of CAE after the enactment of this policy, since the CAE kept monitoring and evaluating the progress of the Three Gorges Project construction. The archival data I am going to examine includes various reports about the Three Gorges Project completed by different branches and research centers affiliated with the Chinese Academy of Social Science (CASS), the Chinese Academy of Sciences (CAS), and the Chinese Academy of Engineering (CAE); and archives of China Three Gorges Project Corporation.

(2) Analysis of Journalistic Interviews and Report

Some of the main Chinese newspaper outlets often publish editorials and reports about the development and performance of Chinese think tank. At times, they also analyze the relations and interaction between the Chinese government and the major think tanks. The resources will include *Chinese Social Science, Strategy and Management* as well as several English language academic journals, such as *China Quarterly*. I studied editorials and reports of these paper media in-depth. In addition, I plan to analyze several interviews of both pro-dam and anti-dam think tank experts published by Chinese and foreign publisher. For instance, I will be examining the role of think tanks through a discussion of the debates that took place from 1986 to 1989, with an emphasis on a 1989 book written about the Three Gorges Project called *Yangtze, Yangtze*. The book consists primarily of interviews with different high-level officials and well-respected scientists who had been closely involved with the Three Gorges Project.

(3) Examination of Newspaper/Internet Citations

The citations include (1) articles written by think tank personnel, (2) the findings of studies produced by think tanks, (3) substantive or political commentary by the “experts” at think tanks in news stories. I plan to survey some of the major newspapers and websites, such as *People’s Daily*, *Reference News*, *Nanfang Daily*, and www.chinathinktank.com, etc. By examining the think tank publications, I will try to gauge the performance of CASS, CAS and CAE and their real status during the policy-making process, to accordingly investigate the roles they have played, estimating their influence on the project.

IV. Chapter Outline

Chapter one presents a theoretical overview of think tanks as a bridge between knowledge and power. Based on Michel Foucault’s power/knowledge theory, this chapter analyzes the relationship between knowledge, think tanks, and power, emphasizing experts’ active influences in the process of transforming knowledge into power via think tanks. Moreover, this chapter explains the reasons for focusing on Chinese think tanks and why think tanks matter in China, and provides brief information of the Three Gorges Project as a case study. Finally, chapter one also introduces the research design and methodology used in this study.

Chapter two provides an overview of think tanks in China. First of all, this chapter will present a detailed account of the transformation of Chinese think tanks from 1949 to present, which includes four phases: (1) “Initiation” (1949 ~ 1966), (2) “Stagnation” (1967 ~1976), (3) “Renaissance” (1977 ~ 1989), and (4) “Initial Blossom” (1990 ~ present). This chapter describes the classification of Chinese think tanks which compared with the United States is more simple, including official think tanks, semi-official think tanks as well as privately owned think tanks. In succession, chapter two provides a brief overview for the ten major think tanks in China, and discusses three Chinese nonpolitical think tanks in details; they are the Chinese Academy of Social

Science (CASS), the Chinese Academy of Sciences (CAS), and the Chinese Academy of Engineering (CAE).

Chapter three discusses the case of the Three Gorges Project of China to examine and explore the characteristics, influence and political roles of Chinese nonpolitical think tanks. This chapter first provides the background of the Three Gorges Project of China. Then, the analysis focuses on the technical preparation period for this project from 1980 to 1986, presenting several discussions on think tanks' performance. Finally, an exhaustive feasibility study for the Three Gorges Project (1986 ~1989) is the second phase of this Three Gorges case study. Controversies among various think tanks over the project are pivotal in this section. Chapter three also briefly discusses the expertise and performance of the Chinese Academy of Engineering (CAE) during the construction process of the Three Gorges Project.

Chapter four, in conclusion, presents the findings of this study of Chinese nonpolitical think tanks study. This chapter summaries six characteristics of Chinese nonpolitical think tanks, based on the investigation of performance and influence of the Chinese Academy of Social Science (CASS), the Chinese Academy of Sciences (CAS), and the Chinese Academy of Engineering (CAE) in the Three Gorges Project. Moreover, in terms of the evidence provided in chapter two and chapter three, chapter four discusses the political roles of Chinese think tanks.

Chapter Two: Think Tanks in China

If “think tank” is an unfamiliar phrase for most of the Chinese people, then the idea of “brainpower” should be well-known. Brainpower played a significant role in the military and political activities of ancient China. Monarchs and emperors always valued the policy suggestions from their intellectuals’ brainpower. However, by selling their ideas to earn money, any brainpower was attached to a single monarch or emperor. In other words, in ancient China, the intellectual class was a dependent organization known as the mandarin. It was an advisory group with official expertise and criterion. Accordingly, ancient China’s intellectual class was different from the modern think tank, since the think tank is a product of modern society, providing information and expertise to the policy-makers and influencing public policy.

I. Transformation of Chinese Think Tanks

Regarding the evolution of Chinese think tanks, I outline four major phases of this transformation from 1949 till present. First phase – “Initiation” (1949 ~ 1966): examining the work of China’s “first generation” think tanks in this period. Second phase – “Stagnation” (1967 ~ 1976): the ten years’ Cultural Revolution suspended the development of Chinese think tanks.³ Third phase – “Renaissance” (1977 ~ 1989): Deng Xiaoping was back in power in 1977. Moreover, the Chinese Academy of Social Science (CASS) was established in this year as the national center for social science research, which, I believe, was the sign of renaissance of Chinese think tanks. The last phase – “Initial Blossom” (1990 ~ present): the “third generation leaders” of China’s Communist Party have paid more attention to consulting institutions in the process of policy-making. Therefore, the government has become more supportive of the development of think tanks.

³ About the first two phases of transformation: 1949~1966 and 1967~1976, I borrowed the classification from Dai, Zong, a Chinese scholar. And I outlined the third and fourth phases by myself.

1. “Initiation”: 1949 ~ 1966

Initially, China’s “first generation” think tanks were modeled on Soviet-style research institutes. With regard to the *Soviet-style* think tank, broadly speaking, there were three different levels of think tanks: “First of all, those under the tutelage of the Academy of Sciences offered the greatest degree of intellectual freedom, followed by the universities. Secondly, there were the institutes attached to and supplying information for particular ministries, but having little influence over the policy-making process” (Sandle, 2004:122). Finally “there were those institutes within the Soviet Communist Party (CPSU) itself, usually staffed by political consultants and engaged in work relating to broader ideological and political questions”(Hough and Fainsod, 1979; Krastev, 2000a: 280). According to Sandle (2004), “although the structure, size and functions of these Soviet Union think tanks varied, they did possess a core of common features. All researchers were employees of the state, and their lifestyles were relatively privileged. Furthermore, the institutions were comparatively large bodies, employing up to 700 staff. Thirdly, these think tanks were highly specialized entities designed to cover all aspects of the study of a particular topic or region” (Sandle, 2004:122). Fourthly, “there was little or no competition between them; consequently they enjoyed a monopoly of research expertise and information” (Antonenko, 1996:1). Finally, “all policy-making was tightly controlled by the leading bodies of the CPSU, notably the Central Committee and the Politburo. Knowledge, power and policy-making were fused within one massive hierarchy” (Sandle, 2004:122).

With the establishment of People’s Republic of China in 1949 and the emulation of the Stalinist Russia in the 1950s, China founded its own research institutes mostly simulating the Soviet model except that China’s research took place outside universities. “Along with receiving considerable Soviet assistance in the form of visiting experts, training, and equipment, the Chinese also adopted the Soviet system of scientific and technological organization. This system tended to deemphasize the role of research in the universities and stress the centralization of research in institutes under an Academy of Sciences, with high priority given to research related to military and heavy-industry

needs” (Goldman & Simon, 1989:7). From the 1950s to the mid-1960s, the Chinese Academy of Sciences (CAS), the first research institute of China founded in 1949 in Beijing, “played a central role in China’s scientific research” (McGann and Weaver, 2000:235).

However, from 1949 to 1966, “under Mao Zedong’s regime, the impact of first-generation think tanks on either domestic or foreign policy was very limited” (Shai and Stone, 2004:146). On the one hand, the number of official and semi-official research institutes was small. Other than CAS which is the comprehensive research center in natural and technological science, there were only four other research institutes founded throughout this period: Chinese People’s Institute for Foreign Affairs (CPIFA) founded in 1949 in Beijing; China Institute of International Studies (CIIS) founded in 1956 in Beijing; China Institute of Contemporary International Relations (CICIR) founded in 1960 in Beijing; Institute of Russian and East European Studies (IREES) founded in 1964 in Beijing (Shai and Stone, 2004:155-162). On the other hand, the working process of these research institutes was not very professional. Most of the time, they merely played the role of information filter and data analyst, rarely providing advice to the top leaders. “The style of policy-making was highly personalized since political power was concentrated in the hands of a few top CCP leaders under the command of Mao” (Shai and Stone, 2004:146). Chinese scholars always call this kind of policy-making style “slapping the head,” which vividly reflects the scene when those top leaders made their decision: without experts’ analysis and advice, the top leader just made the decision based on his experience or his likes and dislikes, suddenly slapped his forehead and said “alright, let’s do it in this way!” Such behavior sounds ridiculous, but it was true since a great number of senior communists have repeatedly mentioned this scene in their memoirs. In sum, the influence of think tanks in this “Initiation” phase was very limited. They did not truly participate in the consultation.

2. “Stagnation”: 1967 ~ 1976

The ten year *Cultural Revolution* suspended the development of Chinese think tank. At that time, “the doctrinal style of decision-making reduced the impact of specialized

and professional bodies in the process” (Tai, 1987:105). From the beginning of the Cultural Revolution to the late 1970s, “policy-making was strongly determined by the communist leaders’ ideological considerations” (Tai, 1987:105), which led to a non-institutionalized policy process. Scholars and intellectuals could not work normally since “an atmosphere developed where professionalism and intellectualism were held to be bourgeois and dangerous” (Tai, 1987:105). Nobody showed respect toward those experts because of the threat from *the Gang of Four*.⁴ Throughout the Cultural Revolution, all research work ceased.

The case of the China Institute of International Studies (CIIS) exhibited the cruel situation of most of Chinese think tanks in this era of upheaval. The CIIS was dormant from 1967 and only reactivated in 1979. It was forced to stop working when the Cultural Revolution started. All of the staff were dismissed and transported to faraway villages to undertake hard labor work in order to “start with a clean slate.” Since 1979, with the support of Chinese government, CIIS has been able to rebuild its staff and reestablish itself as a leading policy research institution. China Institute of Contemporary International Relations (CICIR) is another example. It was shut down during the Cultural Revolution and only regained its full strength in 1980 (Shai and Stone, 2004: Appendix).

In sum, “one consequence of the Cultural Revolution was the absence of a generation of scholars ... This trend was not reversed until Deng Xiaoping reached the pinnacle of the power structure in 1978” (Shai and Stone, 2004:146). By the same token, the development of Chinese think tanks was stagnated during this ten year period. The ten years’ Cultural Revolution brought China nothing except degradation and damage.

All in all, in the first two phases of Chinese think tanks’ transformation, under Mao, “the advice of experts was overlooked, and from 1965 rejected as ideologically incorrect” (Tai, 1987:106). Hence, “the impact of think tanks on both domestic and foreign policy-making under Mao was limited. This was partly because the style of policy-making was highly personalized, concentrated in the hands of Mao and a few top leaders in the central

⁴ “The *Gang of Four* was a group of Communist Party of China leaders in the People’s Republic of China, led by Madame Mao Jiang Qing, who were arrested and removed from their positions in 1976, following the death of Mao Zedong, and were primarily blamed for the events of the Cultural Revolution.” Cited from: http://en.wikipedia.org/wiki/Gang_of_Four, in April 30, 2008.

organs of command” (Tai, 1987:104-105). This meant that in the process of policy-making, “Mao was totally dominant and made almost all of the ‘big decisions’ ” (Barnett, 1985:7). One Chinese researcher “described policy-making as taking place within a ‘feudal framework’: policies and research agendas were decided upon at the top, with little input from the lower echelons and research institutes” (Tai, 1987:105). This “feudal framework” in Mao’s era determined the expertise and analysis provided from all kinds of think tanks meant nothing for those top communist leaders. The only reason for establishing policy research institutes was that Mao needed a professional group to gain access to comprehensive information, and to filter abundant raw data from different fields. He required information regarding different issues and events to support him dealing with the troublesome international conflicts. A pool of processed information was what Mao wanted but not advice from experts. He liked to make the final decision himself based on his own judgment. Therefore, throughout the first and second phases of the transformation of Chinese think tanks, the process of policymaking was very unscientific and optional.

3. “Renaissance”: 1977 ~ 1989

“The celebration of science and technology in the political culture of the post-Mao era was more than just an ideological stopgap measure. It represented an important shift away from a random and seemingly whimsical approach that dominated policy formulation during the chaotic years of the Cultural Revolution” (Boland, 1998:35).

The key Central leaders such as Deng Xiaoping, Hu Yaobang, Zhao Ziyang and Deng Liqun “believed that the policy research they were receiving from traditional Party department and state ministries was inadequate for rapid economic reform and China’s entry into an increasingly complex world. They required policy options that were more empirically-based, less ideologically and bureaucratically hidebound, and more-innovative and cosmopolitan” (Tanner, 2002:560). These post-Mao leaders, particularly Deng Xiaoping and his supporters, “are committed to making better use of the nation’s intellectual resources in order to achieve modernization. They have called for the Party and government to rely more on experts and expertise in formulating their policies”

(Halpern, 1989:158). Consequently, in May 1977, Deng Xiaoping called on the Party to better utilize the intellectuals' expertise and trained personnel in order to promote scientific decision-making. He argued that "we must create within the Party an atmosphere of knowledge and respect for trained personnel. The erroneous attitude of not respecting intellectuals must be opposed" (Halpern, 1989:158). Deng Xiaoping believed the communist party should admit its wrong attitude and behavior of disrespecting the experts and specialists, as well as their expertise during the Cultural Revolution. To respect the experts is to respect knowledge, therefore, to obtain the goal of scientific decision-making.

After that, "many efforts were made to realize change at all levels of government – changes that were consistent with the pragmatist's credo: 'seek truth from facts' " (Boland, 1998:35). For instance, in 1977, according to the requirement of central government, the Chinese Academy of Social Science (CASS) was established as the national center for social science research. "CASS positions its research between purely academic and policy studies and places priority on economics, social and political development, international relations, and legal issues" (Muta and Noda: 1996:355-356). The establishment of CASS was a significant milestone for the development of Chinese think tanks, indicating the renaissance of think tanks in China and the rise of professional social science focused think tanks.

Since then, Chinese leaders "began to re-evaluate the abilities of experts and specialists, placing their particular emphasis on the establishment of think tanks in order to facilitate the progress of the 'four modernizations' proposed by Deng Xiaoping" (Shai and Stone, 2004:146). As a result, a fairly extensive institutionalized expert advisory system has been created within the political bureaucracy. For instance, in 1981, a significant official think tank was created - Development Research Center (DRC) which is affiliated with the State Council. Since then, various kinds of research institutes have been established. From the central government to the local governments, spreading through every ministry and organ, a fundamental official consulting network system was fashioned. Consequently, the influence of research institutes has gradually increased. According to state statistics, by the end of 1985, in China there were 830 political research institutes with 26,500 professional researchers (Zhang, 1989).

Later in July 1986, Vice-Premier Wan Li made a much-cited speech that reaffirmed the role of scientific and technological advice in government policy making. “It is imperative to promote the practice of leaders’ constantly exchanging ideas, communicating, and discussing questions on an equal and democratic basis with researchers and with those who have diversified knowledge and practical experience. Every leading department should have its own research group to rely upon in making policy decisions” (*China Exchange News*, 1987: 15.3 and 4:17). The involvement of scientists and technical experts in matters of policy would assure that final decisions would be more scientific and rational, compared with the highly personalized policymaking style in Mao era. In other words, it engendered considerable progress for the development of Chinese think tanks.

4. “Initial Blossom”: 1990 ~ present

In the 1990s, with the accelerating pace of electronic communication, it became even more difficult for policymakers and the public to gain a comprehensive understanding of contemporary issues. Think tanks have been increasingly required to bridge the gap between raw information and relevant data, as well as scholarly research and policy consultation. The third generation leaders of the CCP have been aware of the significance of think tanks on the policymaking process. In 1990, the Sixth Conference of the Thirteenth National Congress of the Communist Party of China claimed that the CCP should pay attention to and enhance the research on policy-making and policy-consulting from research institutes. “It is the first time the ‘Third Generation’ emphasizes the significance of research institutes clearly” (Mu, 2004). Since the early 1990s, the number of think tanks has increased significantly. In terms of the statistics of the *National Soft Science Survey*, by 2001, there were about 2,500 policy research institutes in China, and more than 35,000 experts were engaging in various kinds of think tanks, over 10% of them being senior researchers in their own field. From 1990 to 2000, these think tanks have successfully provided analysis and expertise for 2,700 projects.⁵ Also, China’s think tanks have increased their academic contacts with their Western

⁵ See archive of the *National Soft Science Survey* (my translation) in 2001.

counterparts by exchanging perspectives and ideas with experts abroad. A 2001 computer search, for example, revealed at least 118 foreign press interviews over the preceding five years with international relations scholar Yan Xuetong, until recently affiliated with one of China's most important think tanks, the China Institute of Contemporary International Relations (CICIR).⁶

Moreover, in the past two decades, there emerged several privately owned think tanks as well, such as Unirule Institute of Economics, the World and China Institute, Shanghai Law and Economy Institute, as well as Zero Survey Company. Furthermore, there were a lot of research centers established by different universities. For instance, the Center for Economic Research at Beijing University, the China Center for Economic Studies at Fudan University, and the China Financial Policy Research Center at Renmin University of China. In sum, after the Opening-Up of China, think tanks developed quickly. Think tanks now occupy an important place in the bureaucratic process, with direct channels of contact and influence through personal meetings, the commissioning of reports, and participation in *ad hoc* groups with top decision-makers.

II. Classification of Chinese Think Tanks

Since the Reform and the Opening-Up Policy in 1978, generally, most of the Chinese scholars agree to classify Chinese think tanks as the official think tanks, the semi-official think tanks, as well as the privately owned think tanks (Shai & Stone, 2004:144-145).

First, based on the policy-making requirement, the Chinese government established the following special research institutes called *the official think tanks*: the Development Research Center of the State Council of China (DRC), the Chinese Academy of Science (CAS), and the Chinese Academy of Social Science (CASS). Here, the CAS and the CASS can also be called academic official think tanks because of their academia

⁶ According to a Lexis-Nexis search, 23 January 2001, World News/Asia-Pacific sources database.

characteristics. These government research institutes “provide direct service to the government by formulating policies and implementation procedures, and consulting on specific policies. The majority of such activities are directly authorized by the government, either by the State Council or by individual ministries” (Luo, 1991:71). Their research is usually related to current legislation or policy issues.

Secondly, university-based think tanks are formally affiliated with a university or college and usually appear as centers or institutes concentrating in the social sciences. Since most of the major universities and colleges are sponsored by the government in China, these university-based think tanks have special “demand and supply” connections with the government (Shai and Stone, 2004; Luo, 1991). Accordingly, people classify this type of think tank into *the semi-official think tanks*. Examples of the university-based think tanks are the Center for Economic Research (CER) of Beijing University, and Asian Economic Research Institute (AERI) at Shanghai University of Finance and Economics. In addition, some certain independent research institutes belong to these semi-official think tanks as well. Although these independent institutes are mainly authorized by the government, such institutes can also undertake their own research activities. The two most important independent research institutes are the China International Studies Center (CISC) and the China Institute of International Studies (CIIS). The research projects of the former focus mainly on international studies, such as evaluating the world political situation for the purpose of making foreign policy suggestions to China’s government (Shai & Stone, 2004). The latter institute was founded in 1956 and its priorities are international politics and the world economy. “Research findings, apart from those for publication, are distributed to departments, organizations and other research institutes” (Luo, 1991:72).

Finally, *the privately owned think tanks* are sponsored by the non-governmental organizations. For example, the Unirule Institute of Economics, which was jointly founded in July 1993 by five economists, Dr. Hong Sheng, Prof. Yushi Mao, Prof. Shuguang Zhang, Dr. Gang Fan and Dr. Shouning Tang, together with Beijing Universal Culture Co. has been devoting itself to cultural and economic prosperity. The revenue of the institute mainly comes from social donations and provisional grants on a project basis from institutions at home and abroad. Such projects include assigned researches from

clients, training programs and other services provided.⁷ Since 1990, several privately owned think tanks have emerged and their development is remarkable. Although these privately owned research institutes are efficient in providing analysis and expertise, however, they still cannot compete with those Chinese government think tanks. Various government restrictions as well as the limitation of accessible information and data constrict their influence.

Such categorization indicates the basic and universal classification of think tanks — official, semi-official and privately owned (Shai and Stone, 2004:144). In reality, however, the boundary between official and semi-official think tanks is blurred. Above all, all institutes affiliated with the government are classified as *official research institutes*. “These institutes are in a vertical bureaucratic relationship with their official sponsoring agency,” which means that among these institutes, “horizontal co-ordination of policy research is weak and research products are transferred upwards, not downwards” (Glaser and Saunders, 2002:600). On the other hand, scholars classify university institutes as *semi-official think tanks* because “to a large extent they are close to and mainly supported by governmental organizations” (Shai and Stone, 2004:144). As far as I am concerned, such a blurred boundary between official and semi-official think tanks is a notable features of Chinese think tanks, one which has drawn great criticism from both Chinese and Western scholars.

III. Major Think Tanks in China

After the *First Chinese Think Tanks Forum* which was held in Beijing on November 7th, 2006, Chinese academia elected “the ten major think tanks of China,”⁸ they are Chinese Academy of Social Science (CASS), Development Research Center of the State Council of China (DRC), Chinese Academy of Sciences (CAS), PLA Academy of Military Science, China Institute of International Studies (CIIS), China Institutes of

⁷ Cited from Unirule Institute of Economics official website: <http://www.unirule.org.cn/English/AboutUnirule/About%20Unirule.asp>, downloaded on April 3, 2008

⁸ Cited from *China's Peace Forum* online source, “Revealing China's Ten Major Think Tanks.” Downloaded from: <http://forum.china.com.cn/ciicbbs/read.php?tid=86044> on Oct. 15, 2007. [My Translation]

Contemporary International Relations (CICIR), China National Committee for Pacific Economic Cooperation (PECC), China Association for Science and Technology (CAST), China Association for International Strategy (CAIS), and Shanghai Institute for International Studies (SIIS) (see **Table 1** in page 20). Most of these think tanks are official or semi-official research institutes and supported by different ministries and they have had considerable influence on the Chinese government decision-making process in recent years. Besides, for this think tanks forum, the major measurement of ranking is based on the amount of policies and consultations they provided to the government, and their influences on politics, economy, culture, military, as well as foreign affairs, etc.

In addition, in terms of the “research interests” of these ten major think tanks (**Table 1**), I classified these think tanks into four groups (see **Table 2** in page 21), which shows that among these ten think tanks, CASS and DRC are the primary policy consultants for the Central Committee and the State Council, with great influences on the domestic and foreign policy-making of China. Secondly, CIIS, CICIR, PECC, and SIIS focus their attention on the study of foreign policy, and directly provide intelligence support to the country’s foreign policy decision-making. Third, PLA Academy of Military Science and China Association for International Strategy (CAIS) belong to the military think tanks, offering military strategies and policies for the PLA’s future development. Finally, as science and technology research groups, CAS and CAST are the central research institutes that provide scientific and technical expertise and analysis to the government. The content of **Table 2** indicates that for the Chinese government, both the domestic development and international relations are highly significant. In the domestic dimension, the Central Committee and the State Council require numbers of broad advices on how to carry out political institution reform and increase government performance; in the international dimension, the Chinese government hopes to obtain a mass of reliable and unbiased expertise during the process of foreign policy-making.

Table 1: Ten Significant Think Tanks of Current China

<i>Think Tank</i>	<i>Research Interests</i>	<i>Type of Institute & Periodicals</i>	<i>Date Established & Location</i>
Chinese Academy of Social Science (CASS)	Economics, Social and Political Development, International Relations and Legal Issues	Government	1977 Beijing
Development Research Center (DRC)	Policy Consultation for Government	Government (State Council)	1980 Beijing
Chinese Academy of Sciences (CAS)	Natural Science, Biology and Biotechnology, Environmental Science, etc.	Government	1949 Beijing
PLA Academy of Military Science	Military and Application Theories	Affiliated to Central Military Commission	1958 Beijing
China Institute of International Studies (CIIS)	World Economic Situation, Interrelations among Major World Powers	Government	1956 Beijing
China Institutes of Contemporary International Relations (CICIR)	International Economic and Current Strategic Issues, Domestic Economic Development	Government (State Council) <i>China Development and Reform</i>	1960 Beijing
China National Committee for Pacific Economic Cooperation (PECC)	Economic Development and Cooperation in Pacific Area	Government	1986 Beijing
China Association for Science and Technology (CAST)	Science and Technology	Semi-official	1958 Beijing
China Association for International Strategy (CAIS)	International Strategy, International Security, World Economy	Non-Governmental Academic	1979 Beijing
Shanghai Institute for International Studies (SIIS)	Current International Affairs, Particular interests in Asia-Pacific, Europe, US, Japan	Government (Foreign Ministry) <i>SIIS Journal</i>	1960 Shanghai

Notes: cited from Shai and Stone (2004), "The Chinese Tradition of Policy Research Institutes," Appendix: major research institutes in China, 155-162.

Table 2: Consultation from Ten Significant Think Tanks

<i>Think Tanks</i>	<i>Consultation</i>
Chinese Academy of Social Science (CASS)	The primary policy consultants for the Central Committee and the State Council. For both domestic and foreign policy.
Development Research Center (DRC)	
China Institute of International Studies (CIIS)	Focusing on the study of foreign policy
China Institutes of Contemporary International Relations (CICIR)	
China National Committee for Pacific Economic Cooperation (PECC)	
Shanghai Institute for International Studies (SIIS)	
PLA Academy of Military Science	Offering military strategies and policies for the PLA's future development.
China Association for International Strategy (CAIS)	
Chinese Academy of Sciences (CAS)	Focusing on scientific and technical research for important projects
China Association for Science and Technology (CAST)	

In following paragraphs, I will introduce three nonpolitical think tanks in detail. They are ranked as the top Chinese think tanks, and they are the chief focus of my case study of the Three Gorges Project.

1. The Chinese Academy of Social Science (CASS)

The Chinese Academy of Social Sciences (CASS) was established as the national center for social science research in 1977. “It is made up of thirty-two research institutions and fifteen research centers with five thousand research staff, two publishing houses (for books and journals), and a graduate school” (Muta and Noda, 1996:355). When necessary, research units are established for limited time periods for

interdisciplinary research topics.⁹ Presently, six institutions are focusing on economics (industrial economics, finance and trade economics, rural economics, quantitative and technical economics, and demographic economics), and eight concentrate on international and world affairs.¹⁰ Regional studies such as American and Japanese Studies have been added recently. There are about one hundred CASS-affiliated research associations and societies including the National Association of Social Science.

CASS manages twenty-four formal exchange programs, mostly with European institutions. In the Asia Pacific region CASS frequently interacts with such organizations as the Japan Society for Promotion of Science, the Korea Foundation, the Institute of Southeast Asian Studies (Singapore), the Council for Social Sciences and the International Development Research Center (Canada), and the Australian Association of Social Science. It also has working relationships with the Korean Sejong Institute, the Korea Development Institute (KDI), and Japan's National Institute for Research Advancement (NIRA) (Muta and Noda, 1996:349-366).

“CASS positions its research between pure academic and policy studies and places priority on economics, social and political development, international relations, and legal issues” (Muta and Noda, 1996:355). “Investigation has been the basic approach of CASS’ effort ... In formulating or evaluating development strategy, or in presenting policy-oriented research findings, these investigations provide the government and relevant departments with reference materials which may be the basis for policy decisions” (Luo, 1991:73). “In addition to the projects authorized by the state, CASS can also conduct projects for enterprises and companies, cooperate with international organizations and foreign academic institutions, and provide consulting services to other organizations and institutions” (Luo, 1991:73).

CASS's main source of financial support has been the government. As a result of recent reforms, however, the government now “encourages CASS to raise its own funds from other sources such as overseas foundations and newly emerging ‘private business sectors’ ” (Muta and Noda, 1996:355). It receives annual support from the Japan Foundation, particularly in the form of book purchases.

⁹ See details from CASS official website: <http://www.cass.net.cn/about/wyjk.htm>, downloaded on Nov. 28, 2007. [My Translation]

¹⁰ Ibid.

2. The Chinese Academy of Sciences (CAS)

According to "the Organization Law of the Central Government of the People's Republic of China" approved on September 27, 1949,¹¹ the Chinese Academy of Sciences (CAS) was set up under the administration of the State Council, as a government institution for the management of the nation's scientific research. CAS is a leading academic institution and comprehensive research and development center in natural science, technological science and high-tech innovation in China. Moreover, CAS was the first official think tank of China.

In March of 1954, the central government described its basic policy for science development and, for the first time, put forward the principle of building up the national scientific research system with the CAS at its core and also including institutions of higher education and other research organizations of industries.¹² The instruction is as follows: "The Chinese Academy of Sciences is the national center for scientific research and focuses on the scientific research within its own institutions. In addition, it should also keep a close contact with the scientific researchers around the country, and help coordinate the scientific research of various sectors."¹³

Currently, "under CAS there are five Academic Divisions, 108 scientific research institutes, over 200 science and technology enterprises, and more than 20 supporting units including one university, one graduate school and five documentation and information centers. They are distributed over various parts of the country. 12 branches of CAS were established in Shanghai, Nanjing, Hefei, Changchun, Shenyang, Wuhan, Guangzhou, Chengdu, Kunming, Xi'an, Lanzhou and Xinjiang."¹⁴ Beside, "CAS has a total staff of over 58,000, of whom 39,000 are scientific personnel according to 2000 figures."¹⁵ In CAS, the main forces are organized to serve the national economic and social development, while a crack team is retained for the basic research and high-tech innovation. "CAS members have made their scientific talents and counsel available on

¹¹ See CAS official website: <http://english.cas.cn/eng2003/news/detailnewsb.asp?InfoNo=20971>, downloaded on Mar. 12, 2008.

¹² Ibid.

¹³ Ibid.

¹⁴ Cited from CAS official website: http://english.cas.cn/eng2003/page/about_03.htm, downloaded on Mar. 12, 2008.

¹⁵ Ibid.

important national development issues having scientific and technological content” (Cao and Suttmeier, 1999:555). For example, academicians in CAS have been very active on the feasibility study, construction consultation as well as debates over the Three Gorges Project.

3. Chinese Academy of Engineering (CAE)

As early as 1955 when the Chinese Academy of Sciences was established, a division of technology sciences was also set up in the Academy. Since the 1980s, scientists, engineers and the public figures actively have given suggestions for establishing an engineering academy. After that, during the Fifth Session of the Seventh Chinese People’s Political Consultative Conference (CPPCC) National Committee and the Sixth General Assembly of the Chinese Academy of Sciences (CAS) in 1988, many members of CPPCC and CAS again made proposals and suggested an Engineering Academy be set up as soon as possible. The State Council paid close attention to the proposal, and approved establishment of the Chinese Academy of Engineering in 1994.¹⁶

The CAE is a national and independent organization composed of elected members with the highest honor in the community of engineering and technological sciences of the nation. Its missions are to initiate and conduct strategic studies, *provide consultancy services for decision-making of nation’s key issues in engineering and technological sciences* and promote the development of the undertaking of engineering and technological sciences in China and devote itself to the benefit and welfare of the society.¹⁷ Here, I highlighted the sentence which describes one of CAE’s mission as providing consultancy services for decision-making because only the CAE formally declares their think tank’s function through the official website. In addition, CAE also emphasizes their first major functions as:

Bringing into full play the integrated advantages of its members who act as a group in multi-disciplinary, inter-departmental and inter-industrial, to take part in the decision-making for the national and regional economic development and social progress, undertake the studies,

¹⁶ Cited from CAE official website, “The Founding of the Chinese Academy of Engineering.” <http://www.cae.cn/english/aboutcae/index.jsp>, downloaded on Mar. 12, 2008.

¹⁷ Cited from CAE official website, “Mission and Functions of the Academy.” <http://www.cae.cn/english/aboutcae/index.jsp?subCid1=missions>, downloaded on Mar. 12, 2008.

consultancy and evaluation of strategies for the construction of key projects and high-tech industries, and provide the central and local governments with suggestions for top-priority fields of development and orientation of key investment.¹⁸

Compared with CAE, although CASS and CAS are both famous official think tanks in China, and have been acknowledged by the Chinese government, they never clearly proclaim their think tanks' function to the public. Only the CAE claims its mission of providing consultancy services for decision-making of the government on its official website. By contrast, most of the time, CASS and CAS just implement their consultancy services task silently, without announcing and advertising. They rarely formally allege themselves as policy analyzer and advisor. As far as I am concerned, that is the obvious distinction between the old fashion think tanks and new think tanks established after 1990s in China. The new think tanks are more active and eager to interplay with the government as well as the public, preferring to make their work transparent and well-known. I believe this is a good signal to indicate a positive trend of institutionalization for Chinese think tanks. Moreover, the new think tanks, such as CAE also participate in the important national projects' decision-making process, exerting their influential impact.

On the other hand, CAE not only pays more attention to the advertising of its advisory function, but also applies itself to provide high quality analysis and expertise. Among the seven special committees,¹⁹ there is a consulting activity committee in CAE which is focused on planning, organizing and coordinating the consultation and evaluation works of the Academy. The objective of setting up such a consulting activity committee is to "maximize the collective wisdom and trans-disciplinary, trans-departmental and trans-regional superiority of CAE's members as a team, to actively carry out studies and put forward opinions and suggestions on the State's development strategy and policies of S&T and economy, as well as on key issues related to major

¹⁸ See Chinese Academy of Engineering official website: <http://www.cae.cn/english/aboutcae/index.jsp?subCid1=missions>, downloaded on Mar. 12, 2008.

¹⁹ "The Chinese Academy of Engineering set up inter-divisional special committees to enhance works in certain fields and coordinate matters concerned." The seven special committees include Environment Committee, Scientific Ethics Committee, Consulting Activity Committee, Academic and Publication Committee, Industrial Committee on Engineering Science and Technology, Membership Policy Committee, and Education Committee. See details from <http://www.cae.cn/english/aboutcae/index.jsp?subCid1=specialcommittees>, downloaded on Feb. 22, 2008.

engineering technologies.”²⁰ In terms of CAE’s report, their study and advisory services have played an important role in maximizing the participation of the members in the macro decision-making of the State. Therefore, compared with DRC, CASS and CAS, CAE is more successful when acting as a government think tank, since CAE’s working process is close to the criteria for modern think tanks.

IV. Conclusion

In terms of the discussion in this chapter, it is clear that the official think tanks now are in the policy mainstream. That government sponsored and affiliated think tanks operate well and attract more attention from public and social scientists. The result of “the ten major Chinese think tanks” election has indicated that. The Chinese government has invested great amounts into the construction of think tanks, acknowledging the significance of analysis and expertise offered by the professional think tanks to the development of economy, science and technology. Since the Chinese government believes a good advisory system relates to the growth of national power, it must control this system tightly. That is the reason why the Chinese government insists on supporting most of the major think tanks in China, whether they have a political or nonpolitical focus. Accordingly, Chinese think tanks have an inherent close connection with the central government as well as the Communist Party. Because China is a single-party state, the central government and the Communist Party are often the same political formation. The Chinese official think tanks take responsibility for the government. Acting as the policy advisor of the government decision-maker is one of the important missions for Chinese think tanks.

Besides, the Chinese official think tanks have another priority: they can possess abundant research resources since they work for the government. Access to all kinds of information and raw data is not a problem for them, which makes the official think tanks more prevailing in the competition with those non-official or privately owned think tanks.

²⁰ See Chinese Academy of Engineering official website: <http://www.cae.cn/english/studyandadvisory/index.jsp>, downloaded on Feb. 22, 2008

Official think tanks are the predominant groups that have opportunity to participate in significant policy-making of China, whereas, other think tanks do not have the same chance. Therefore, it is hard for non-official think tanks to exert their influence as much as the official think tanks in China.

Both the political and nonpolitical think tanks occupy vital positions in China's advisory system indicating that those nonpolitical think tanks also have political influence on the Chinese government's policy-making. I refer to the nonpolitical think tanks as the science and technology focused academic think tanks. In terms of the nonpolitical think tanks, because they possess important political impact, to a certain extent, they are influenced by the political factors as well. In China's case, even the nonpolitical academic think tanks also have a political aspect. This is the reason why I chose to explore the political roles of nonpolitical think tanks through study of the Three Gorges Project.

Chapter Three: The Three Gorges Project

After the 1980s, with the implementation of “open policy,” the working function and activities of Chinese think tanks became more open. As the first official think tank of China, CAS has displayed its significant influence only gradually. Since achieving modernization is the first goal of Deng Xiaoping leadership and his successors, developing the science and technology and accordingly enhancing the whole country’s economic and comprehensive strength is very urgent. The CAS and CASS undertook this major task and interacted with its sub-institutes and the central government frequently. As a result, since 1980, a fairly extensive institutionalized expert advisory system has been created surrounding CAS and CASS, providing analysis and expertise to the important social, science and technology issue and policy-making of the Chinese government. In this chapter, I will use the Three Gorges Project of China as an example to examine and explore the characteristics, influence and political roles of these think tanks during the policy-making process. Because the Three Gorges Project is one of the significant projects in contemporary China, relating to a certain extent the destiny of economic and political development of China, the participation of think tanks to this project means a lot for both the state and the communist party.

I. Review of the Three Gorges Project

The world’s third longest river, the Yangtze (Changjiang),²¹ runs 6,300 km through an area of 1.8 million square kilometers. “With a total drop of 5,500 meters, it has an estimated potential water energy capacity of 208 million kilowatts, of which only 3 percent has been tapped so far. The section between Chongqing and Yichang runs 650 kilometers and drops 130 meters at the Three Gorges area, which consists of the Qutang, Wu and Xiling gorges, and the valleys of the Wushan Mountains between Sichuan and

²¹ The name *Yangtze* is derived from Yangzi Jiang, which is the Chinese name for *Changjiang River*’s lower reaches, specifically, the stretch between Yangzhou and Zhenjiang. Because *Yangtze* was the name first heard by missionaries and traders, this name was applied in English to the entire river (*Changjiang River*).

Hubei provinces. The torrents of the Yangtze tumbling down the narrow gorges for 200 km present a majestic landscape that attracts 1 million tourists each year. It is also an ideal place for a dam and electric power station” (Han, 1986:16). However, because of its size, physical complexity, population density, and economic dominance, the Yangtze River basin poses special problems. “Flood control, through dikes, damming, diversion and storage, river training, and other means, is but one element in the constant struggle to balance ever-increasing need for additional productive land with the inevitability of land loss from control measures. These issues take on even greater urgency today in the context of China’s economic modernization” (Boxer, 1988: 95-96).

Indeed, the idea for the Three Gorges Project has been contemplated by several generations of Chinese leaders. Moreover, this issue has had a long history of dispute. “It was Dr. Sun Yat-sen (1866-1925), pioneer of the Chinese Democratic Revolution, who first conceived the idea of building a water conservancy project at the Three Gorges” (Han, 1986:16). He discussed the possibility of using the Three Gorges to generate electricity and improve navigation on the Yangtze in his book *A Programme for National Construction* published in 1921.²² He had repeated this proposal on many occasions. In the 1920s, with instructions from Sun Yat-sen, the Nationalist government looked into the possibility of building a dam in the three Gorges area of the Yangtze River.

“Beginning in the 1930s, the Kuomintang government began to research the Three Gorges Project, announcing its feasibility and compiling the *Survey Report on the Three Gorges Reservoir on the Yangtze River, Economic Report on the three Gorges Reservoir Area*, etc. Then, a contract was signed with the US Bureau of Reclamation for the latter to take charge of the reservoir’s design” (Yao, 1992:17). “In the 1940s, China invited American water resources specialists to examine the possibilities” (Han, 1986:16). In the same period, more than 50 Chinese engineers and technicians were sent to the United States to participate in the project design. The economic and political problems, however, arising from the Japanese war and the civil war of China delayed the progress of this project.

²² Some archives stated that in 1918, Dr. Sun Yat-sen had suggested, in his book *Strategy for State, Part II: Industrial Plans*, a scheme to “improve the upstream from here”, that is, “a dam should be set here to let ships go downstream and use the water resource as power.”

After the establishment of People's Republic of China in 1949, with the request of Communist leaders, the Three Gorges Project was once again placed on the agenda and feasibility studies were conducted on many occasions. "The Yangtze floods of 1954, which left 30,000 people dead and one million people homeless, brought an unprecedented sense of urgency to damming the Three Gorges" (Ryder and Barber, 1993:3). Chairman Mao Zedong "vowed to speed up preparations for the dam, and the Yangtze Valley Planning Office²³ was established to conduct specific design and feasibility studies for the Three Gorges Project, as well as to develop an overall plan for water resource development within the entire Yangtze River basin" (Ryder and Barber, 1993:3).

In 1958, after lengthy deliberations by the Ministry of Water Resources and Electric Power, the central government announced that the Three Gorges Dam would be built, but not immediately. Concluding that flood control alone could not justify the dam's construction, they set about redesigning the dam as multi-purpose, for hydropower and navigation as well as for flood control. More studies then evaluated the project in terms of the dam's additional functions (Ryder and Barber, 1993: 4).

Since that time, hundreds of government agencies, bureaucracies, and academic bodies participated in detailed studies on all aspects of this project. However, for a variety of reasons, the Three Gorges Project never reached the stage of actual implementation, merely remained a controversial issue. The Great Leap Forward²⁴ from 1958-1960, the three years' natural disaster (1959-1961), and the ten years' Cultural Revolution suspended the course of study on the Three Gorges Project.

In February 1982, Qian Zhengying²⁵ communicated the instructions from the central government that Three Gorges Project be listed in the recent national plan. On November 24th, Deng Xiaoping talked of the future Three Gorges Project in a meeting

²³ The Yangtze Valley Planning Office is now called the Changjing Water Resources Commission

²⁴ "The Great Leap Forward was the name given to the Second Five Year Plan which was scheduled to run from 1958-1963, though the name is now generally limited to the first three years of this period. Mao unveiled the Great Leap Forward at a meeting in January 1958 in Nanning. The central idea behind the Great Leap was that rapid development of China's agricultural and industrial sectors should take place in parallel. The hope was to industrialize by making use of the massive supply of cheap labor and avoid having to import heavy machinery. To achieve this, Mao advocated that a further round of collectivization modeled on the USSR's "Third Period" was necessary in the Chinese countryside where the existing collectives would be merged into huge People's communes." Cited from: http://en.wikipedia.org/wiki/Great_Leap_Forward

²⁵ Qian Zhengying, former-Minister of Water Resources and Electric Power, Vice-Chairwoman of the Seventh, Eighth and Ninth National Committee of the Chinese People's Political Consultative Conference and responsible for water resources management and macroscopic decision-making on water problems. Cited from: <http://www.cae.cn/english/member/detail.jsp?id=470>, downloaded on Feb. 22, 2008

that “I myself prefer to the lower dam scheme. Be determined once be assured, do not hesitate.”²⁶

By 1983, the Yangtze Valley Planning Office had completed a feasibility study recommending that a 175-meter-high dam with a 150-meter reservoir level be built with construction beginning in 1986. In 1984, the State Council approved the project ‘in principle’ which meant that the project would be formally adopted as a key investment in the Seventh Five-Year Plan (1986-1990) pending the approval of the National People’s Congress at their spring session in 1985. Before this could happen, however, the municipality of Chongqing criticized the 150-meter-high reservoir level and called for a 180-meter reservoir level instead. And so began another round of criticism (Ryder and Barber, 1993:6-7).

At that time, “opposition to the Three Gorges Project gained increasing national and international attention when the Chinese People’s Political Consultative Committee (CPPCC) conducted a 38-day field trip in 1986 to gather opinions about the dam” (Ryder and Barber, 1993:7). Since the CPPCC is the highest policy advisory bodies in China, and at the same time, one of the decision-making institutions of China, the CPPCC’s attitude determined the fate of the Three Gorges Project. “Eminent CPPCC members visited eight cities that would be affected by the dam and convened over 40 open forums to hear from all concerned ministries and bureaus, from experts and scholars, and from local and national CPPCC members” (Ryder and Barber, 1993:7). After this trip, these CPPCC members submitted their findings to the Central Committee of the Communist Party and the State Council, with a report titled *The Project Should Not Go Ahead in the Short Term*. “The CPPCC conclusions generated a heated debate within China, prompting the National People’s Congress to call for further deliberations and to exclude the project from the Seventh Five-Year Plan (1986-1990)” (Ryder and Barber, 1993:6).

Despite this exclusion, the Chinese government did not give up this proposal. During 1986, the State Council commissioned a final exhaustive feasibility study to be conducted under the supervision of the State Planning Commission. Then, the largest and widest re-examination of the Three Gorges Project began in 1986:

Over a period of about thirty months, a total of 412 specialists and scholars came from various important academic think tanks and government ministries to re-examine 14 special

²⁶ See details from the website of China Three Gorges Project Corporation, http://www.ctgpc.com.cn/en/history/history_a.php, downloaded on Mar. 2, 2008

subjects including geological and seismological difficulties, the projects' main structures, hydrology, flood control, silting, navigation, power systems, machinery and electronic facilities, resettlement of the inhabitants, environmental impact, construction, an investment estimation, comprehensive planning and an overall economic appraisal (Yao, 1992:17).

This exhaustive feasibility study was completed in 1989 and the conclusion was that the Three Gorges Project “was technologically feasible and economically reasonable, that it was better to build it than not to do so and that an early construction of the project was more beneficial than a later one” (Yao, 1992:17). The Project has three major parts: the large dam across the Yangtze, the hydroelectric power houses and the navigation structures. In addition, the main development objectives of the three Gorges Project are: to protect the middle and lower reaches of the Yangtze from flooding; to supply electricity, mainly to eastern and central China with some export to eastern Sichuan; to improve navigation conditions in the Yichang to Chongqing section of the Yangtze; and to develop a reservoir that can be used to develop the fisheries industry, promote recreational activities and provide favorable conditions for the South-North Water Transfer project. Including the preparatory period, the construction will last for 17 years (Wang, 2003:34-38).

On the afternoon of April 3, 1992, 2,633 National People's Congress (the highest state body and the only legislative house in China) deputies gathered in the Great Hall of the People to make a final decision on the Three Gorges Projects. “The vote was 1,767 in favor, 177 against, with 644 abstentions. Some 25 deputies did not vote at all. Hence, the Three Gorges Project, a key issue discussed and debated for the last several decades, had finally been approved and entered the stage of implementation” (Li, 1992:24). In January 1994, the construction of the Three Gorges Dam started.

II. Technical Preparation by Research Institutes before 1986

Because the Three Gorges Project is one of the most important construction projects for China, the Chinese central government has put a great effort on the study and preparation of this project, concentrating almost all of the relative research institutes'

strength to work on the proposal. From 1980 to 1986, there were “more than 300 research institutes, universities and enterprises that had already taken part in the research related to the Three Gorges Project” (Han, 1986:20). I believe only the Chinese government could ask for various kinds of research institutes to work together on such an exhaustive study.

The Wuhan-based Yangtze River Planning and Utility Office of the Ministry of Water Resources and Electric Power, for instance, was “responsible for controlling and developing the river, as well as for programming and designing some of China’s major hydropower and water conservancy projects” (Han, 1986:20). To perform its responsibility, the office has designed the Gezhouba Hydropower and Water Conservancy Project. Moreover, “ever since the office was established in 1956, the office has studied the Three Gorges Project. Among its 12,000 employees, more than 4,700 are engineers and technicians, including 89 senior ones, working in the office’s associates – one hydroelectric and water conservancy scientific research institute and seven sub-offices in charge of programming, key project design and construction, machinery and equipment, reservoirs, hydrology study, surveying and construction” (Han, 1986:20). Their research, particularly in silt removal, has impressed many foreign visitors.

Another example, “in 1985 alone, under the auspices of the State Science and Technology Commission, 310 items presented by the office were studied, including silt removal, navigation, hydro-engineering, large engineering machinery and equipment, large electricity-generating sets, automation of extra-high voltage power transmission and transformation, influence on ecological environment and stipulations of relevant policies, geology and earthquakes, economic and social development programs for the area and the overall evaluation of the project’s economic returns” (Han, 1986:20).

In addition to the local/regional think tanks, the national research institutes actively participated in the study of this project too. For instance, since 1984, the Chinese Academy of Science (CAS) has organized 38 research units nationwide, more than 600 experts to conduct comprehensive investigation on the Three Gorges reservoir. Based on their study, CAS research group completed several reports, such as “The Ecological

Impacts of Construction of the Three Gorges Project,” “Report on the Feasibility of 150-Meter-High Reservoir Level of the Three Gorges Dam,” and “Atlas for the Environment of the Three Gorges Dam in Yangtze River” (Liu, 2002), etc. Since the CAS has the best experts and specialists in science and technology, and access to abundant resources from the Chinese government in order to complete this comprehensive study, the findings of CAS’s investigation is reliable and persuasive. Therefore, the study results of CAS are very influential not only in the Chinese academia, but also for the government decision-makers.

Various kinds of research institutes have accumulated large archives of technical data over years of hard work. In the field of hydrology, for example, “they have collected and tabulated hydrological records dating back more than a century and historical records dating back more than a millennium” (Han, 1986:20). From these they have gotten a clear idea about the change in the Yangtze River’s flow and silt deposits. Furthermore, “they have conducted painstaking geological surveys of possible construction sites for the dam, and provided the geological data for selecting the final location at Sandouping. In silt control, they have also conducted several large model tests and experiments and found solutions to the problem of silt deposits” (Han, 1986:20).

In addition, regarding the ecological and environmental impact study for the Three Gorges Project, although several scholars and people criticized that the Chinese government as well as the project design committee had paid less attention to this issue, in fact, it has received much support from the central government. Since the 1950s, the CAS, the State Science and Technology Commission, and the National Environment Protection Agency have carried out monographic studies on ecological and environmental factors related to the Three Gorges, “such as: reservoir inundation and resettlement; sedimentation; seismology; reservoir bank stability; underground water level soil erosion; forest vegetation; rare flora and economic flora; wild animal and rare animal; public health; schistosomiasis and epidemic diseases” (Dai and Wang, 2006:16). After years of study, the CAS and its sub-institutes completed reports such as “Report on the Key points of the Yangtze Valley Planning and the Preliminary Design of the Three Gorges Project”, “Report on the Environment Impacts of Construction of the Three Gorges Project” and “The Environment Impact Report for the Three Gorges Project” (Dai

and Wang, 2006:16). Moreover, in 1984, the ecological and environmental impact study for the Three Gorges Project “was listed as one of the key scientific and research projects of the CAS and the State and Technology Commission” (Yao, 1992:24).

The Three Gorges Project, such an enormous project estimated to cost more than 10 billion Yuan (US\$ 2.7 billion), has drawn attention from foreigners and overseas Chinese round the world as well, favoring technical communications and cooperation between those experts and scholars. “Since July 1985, more than 10 governmental and nongovernmental delegations from the United States, Japan, Sweden, Belgium, Singapore and Hong Kong have visited China for on-the-spot investigations and discussions on the project” (Han, 1986:16). After the discussion with the Chinese experts from various research institutes, Darrell W. Weber, a senior official of the US Department of the Interior, Land and Water Resources’ Bureau of Reclamation, claimed the Three Gorges Project “would be one of the most beneficial in terms of scale and social effects compared with similar projects round the world” (Han, 1986:16). Other experts, however, disagree with Weber. “They point to the environmental damage the dam would create and recommend that the project be cancelled or at least postponed” (Han, 1986:16).

On the other hand, throughout the process of technical preparation, “individual academicians have also been active on both sides of the debates over the Three Gorges Dam project. While a number of scientists and engineers, especially those in the water resource and electric power fields, have supported the project, its potential ecological, cultural, and social impacts have also brought objections from the Chinese scientific community” (Cao and Suttmeier, 1999:555). Those who are CAS members in the CPPCC have requested that the project be reevaluated. “In 1983, led by Zhou Peiyuan, a CAS member and then-CPPCC vice-chairman, a group of scientists and engineers undertook a major feasibility study that concluded such a project was not feasible scientifically and economically. The scientists succeeded in holding up the project for at least two years, forcing the government to revise it” (Cao and Suttmeier, 1999:555-556).

By contrast, on the side of advocates, there were a great number of think tanks members who stand out in support of this project. The CAS member Li Zhennan, for

instance, the chief engineer for the Three Gorges Project from 1956 to 1983, told the reporter of *Beijing Review* that “he thinks the project will, despite drawbacks, prove worthwhile. The Three Gorges reservoir will destroy a vast amount of farmland. That damage, however, is worthwhile because of the economic benefits the project will bring later on” (Han, 1986:22).

Conclusion:

Throughout the technical preparation phase of the Three Gorges Project, various think tanks, especially the CAS have put great efforts into the investigation and analysis of this complicated project. First of all, acting as information filter, the CAS worked arduously for years on the abundant raw data collection from geological and seismological aspect, hydrology and flood control aspect, as well as environmental impact. Based on the filtering of these plentiful raw data, the CAS members did analysis about the feasibility of construction of this project, completing reports such as “Report on the Key points of the Yangtze Valley Planning and the Preliminary Design of the Three Gorges Project”, and “Report on the Environment Impacts of Construction of the Three Gorges Project.” In addition, after these think tank experts had drawn the conclusion that this reservoir construction was feasible, they continued to work on planning the procedure of construction. For example, the economists from the CASS estimated the comprehensive investment of the project and at the same time expressed their concern “the investment estimates will vary, depending on when the calculations are made and on the scale of construction and the interest rate during the construction period” (Lu, 1994:223).

Second, as policy advisors, these think tanks tried their best to offer the government an optimal measure about how to control the flood in the middle and lower reaches of Yangtze River with a minimal cost to the economy, social development as well as environmental impact. At the same time, CAS also made great efforts in assisting the government to figure out how to take advantage of the Three Gorges Dam to generate electric power and benefit the navigation. The government cannot estimate and foresee all kinds of advantages and disadvantages of the project; therefore, expertise from think

tanks seems pretty significant. At the early stages of the policy-making process, CAS and CASS functioning as policy advisors are highly appreciated. On the other hand, as policy advisors, think tanks not only provide advocacy to the proposed policy, but also warn the government about any possible negative impacts of this construction. Zhou Peiyuan and his research group's opposition have forced the government to revise the proposal of the Three Gorges Project, which indicated the importance of experts' consultations on another side. Acting as policy advisors, think tanks should provide unbiased and reasonable analysis and advice to the policy-makers.

In addition, as brainpower, think tanks have the mission of introducing any new ideas to the policy-makers as well. Based on their investigation and expertise, if experts find out any possible or better resolution for the project, it is their responsibility to bring forward these new thoughts. Providing alternatives is one of think tanks' tasks. The debate in early 1986 about the 150-meter-high reservoir level and a 180-meter reservoir level was the result of a new idea raised by research institutes.

At last, individual intellectual influence was remarkable throughout the technical preparation. Qian Zhengying's proposal made the central government consider enacting the Three Gorges Project. By the same token, Zhou Peiyuan's opposition to the project forced the government to reconsider the construction, too. On the one hand, such events show that the members of think tanks were very active and serious in their research. On the other hand, it also indicated that the central government encouraged different voices from think tanks, taking their advice seriously. Yu Shizhong, a deputy of CPPCC once said that "we think highly of the views of these experts and scholars. Even opposite views are helpful to the feasibility studies of this project" (Han, 1986:24).

In sum, throughout the technical preparation of the Three Gorges Project, CAS, CASS and their affiliated research institutes, conducting their research independently, have done remarkable work in providing scientific analysis and expertise to the government. Both pro-dam and anti-dam think tank experts expressed their different opinions freely. The central government has considered both sides' attitudes seriously, supporting the extensive study on this project. Therefore, in my opinion, all through the phase of technical preparation, political factors rarely affected the investigative work of

think tanks. The central government and CCP were supportive of the scientific study on the Three Gorges Project. On the one hand, because of Deng Xiaoping's advice, in 1980s, the central government and CCP have shown enough respect to science and intellectuals. To respect the intellectuals is to acknowledge the power of knowledge. Consequently, they encouraged experts to express different opinions about the project. On the other hand, in terms of the analysis and expertise provided by these major think tanks, the central government and CCP leaders wanted to understand the advantages and disadvantages of the Three Gorges Project well, therefore helping them to make the final decision. In the CCP leaders' view of the Three Gorges Project, if the possible benefits are greater than the prospective drawbacks, they will endeavor to favor this project at all costs.

III. Final Exhaustive Feasibility Study for the Three Gorges Project (1986~1989)

Regarding the Three Gorges Project dispute, there were eight major technical issues raised. The first was flood control. The second issue was electrical power. The cost of the Three Gorges Project formed the third issue. The fourth one was the control of sedimentation. The fifth concern was relocation of the population. Navigation was the sixth issue of dispute. The seventh issue was construction. Finally, the environmental impact of the project was the last concern (Ma, 1990:86-89; Dai, 1994:213-224).

The largest and widest feasibility study of the Three Gorges Project began in 1986, focusing on the above issues. Over a period of around two years and a half, a total of 412 specialists and experts re-examined 14 special subjects including geological and seismological difficulties, the projects' main structures, hydrology, flood control, silting, navigation, power systems, machinery and electronic facilities, resettlement of the inhabitants, environmental impact, construction, an investment estimation, comprehensive planning and an overall economic appraisal (Dai, 1994). In the discussions over the project, those on both sides of the debate appealed to the authority of

science and measured the success of the decision-making process in terms of the involvement of scientific and technical experts.

Over the years, whether or not this big feasibility study group composed with 412 experts did act as a think tank, there was a controversy. Two Chinese scholars Xue Lan and Zhu Xufeng believe this experts group was not a think tank, since it was a temporary research institute and only focused on one policy (Xue and Zhu, 2006). The status of this research group was unstable. However, in my opinion, this feasibility study expert group was a think tank since it had the common features of modern think tanks and had played significant roles in providing expertise, agenda setting as well as moving toward enactment of the Three Gorges Project. As for this joint think tank (feasibility study expert group), first of all, it consists of specialists and experts in different academic fields who came from various major think tanks of China, such as CAS, CASS and their affiliated research institutes. Moreover, the task of this think tank included on-site investigation of the reservoir, laboratory experiment, raw data analysis, estimating the possible investment of the construction, and providing expertise and alternatives of the project as well as the agenda to the government. Lastly, to establish a research unit temporarily for interdisciplinary research topics accords with a feature of Chinese think tanks. For instance, CASS has the similar principle about temporary research units. Consequently, I believe this feasibility study group can be classified as a joint think tank, which did provide important analysis and expertise to the policy-makers of the Three Gorges Project.

1. Special Subjects Groups

When the feasibility study started on November 1986, initially the 14 special subjects groups examined and discussed the subjects separately and independently. Based on the basic demonstration, the leading group selected preferable designs for the water level and asked for different experts group to discuss in-depth (Dai, 1994). During the process of feasibility study, every single expert may express his/her opinion freely, write letters to the leaders of central government, accept interview of mass media as well as publish papers in different journals.

For instance, in 1986, one of the special subject groups which “was composed of 55 experts from the departments of environmental protection, geology, forestry, agriculture, soil, geophysics and medicine as well as CAS” (Yao, 1992:24) started an environment focused investigation. “In the first year, the group members made an overall evaluation of the impact of the Three Gorges Project on the local climate, water temperature and quality, terrestrial flora and fauna, aquatic life, public health, nearby rivers and sea water surface” (Yao, 1992:24). Based on their study, they concluded that the project would have a major environmental impact, both favorable and unfavorable. Professor Dai Huichao and Wang Rushu²⁷ were very concerned about the effects of this project on the regional ecology and environment, worrying about the impacts on water quality, rare species and landscape and cultural heritage. “The Three Gorges Project can play a key role in improving the ecological and atmospheric environment of the Yangtze basin. However, reservoir inundation and project construction will also bring about adverse impacts on the ecological environment” (Dai and Wang, 2006:16).

2. Comprehensive Discussion Sessions

After the 14 special subjects groups had completed their respective examinations, the leading group started the comprehensive discussion session. From June 1986 till March 1989, the leading group of feasibility study of the Three Gorges Project held ten discussion sessions. In terms of the agenda of different sessions and various topics discussed in diverse sessions, the number of experts who participated in different discussion sessions varied. *Table 3* in next page shows the brief summary of each session:

²⁷ Professor Dai Huichao and Professor Wang Rushu are senior engineers with China Yangtze Three Gorges Project Development Corporation.

Table 3: A Directory of the Sessions (Enlarged) of the Leading Group for the Feasibility Study of the Three Gorges Project

<i>Session</i>	<i>Content of Discussion</i>
The First Session (June, 1986)	Set up the leading group and the 14 experts' groups according to the Communist Party regulations and State Council Document (No. 15) "On Issues Relevant to the Assessment Report of the three Gorges Project on the Yangtze River."
The Second Session (August, 1986)	Examined guidelines for the 14 experts' groups and decided on the method for comparative study of programs proposed for the project. Attended by about 50 persons.
The Third Session (December, 1986)	Heard the 14 experts' groups report on their preliminary work. Attended by about 130 persons.
The Fourth Session (April, 1987)	Decided on the preliminary aspects of the project program. Attended by about 130 persons.
The Fifth Session (December, 1987)	Examined and approved the three subject reports relating to geology and seismology, hydrology, and electrical equipment. Attended by about 130 persons.
The Sixth Session (January, 1988)	Examined and approved the three subject reports on the dam and related structures, construction, and investment estimation. Attended by about 120 persons.
The Seventh Session (February, 1988)	Examined and approved the three subject reports relating to resettlement, ecology and environment, and sedimentation. Attended by about 140 persons.
The Eighth Session (April, 1988)	Examined and approved the three subject reports relating to flood control, electrical system, and navigation. Attended by about 140 persons.
The Ninth Session (November, 1988)	Examined and approved the two subject reports relating to the general program and water level, and comprehensive evaluation of economic results. Attended by 206 persons.
The Tenth Session (February-March, 1989)	Examined and approved the "Feasibility Report on the Three Gorges Project" compiled by the Yangtze Valley Planning Office (YVPO). Attended by 203 persons.

Note: Cited from Dai Qing (1994), **Yangtze! Yangtze! Debate over the Three Gorges Project**, Appendix B (pp.275-276)

The 14 special subjects were discussed during these ten sessions respectively. Four subjects, including Geology and Seismology, Hydrology, Navigation, and Electrical Equipment, were approved by all of the experts. As for the other ten subjects, there were 14 experts who disagreed with some certain subjects and did not sign the subject report, and another 11 experts held their dissenting opinions but finally signed. *Table 4* shows

the discussion contents and voting results in each expert's group for the assessment of the Three Gorges Project.

Table 4: Voting Results in Each Experts' Group for the Assessment of the Three Gorges Project

Experts' Group	Did Not Sign The Subject Report	Held the Dissenting Opinions But Sign
Geology and Seismology		
Hydrology		
Navigation		
Electrical Equipment		
Sedimentation	<i>Zhang Qishun</i> , at the ninth session, proposed that the pool level should not exceed 160 meters.	
Construction	<i>Li Heding</i> , at the 10th session, proposed that the pool level should not exceed 160 meters.	
Dam and Appurtenant Structures	<i>Chen Zongji</i> , at the seventh session of the leading group's study, out of a concern for inadequate air raid defense.	<i>Zhang Changling</i> , at the eighth and ninth sessions, proposed a two-phase development program; <i>Huang Wenzhao</i> , at the ninth session, opposed the lock design and construction process.
Flood Control	<i>Lu Qinkan</i> ; his disagreement was prepared as a paper and was attached to the report of the experts group. <i>Fang Zongdai</i> also submitted a supplementary document in disagreement with the report.	<i>Liu Shanjian</i> submitted a supplementary document in disagreement with the report.
Electrical Power Systems	<i>Qin Xiudian</i> , <i>Cheng Xuemin</i> , and <i>Wu Yingzhong</i> ; all three submitted supplementary documents in disagreement with the report.	
Resettlement	<i>Li Yuguang</i> (General Engineer of the State Bureau of Land Administration)	<i>Hu Zhiyi</i> , at the eighth session, expressed concern with regard to flood control and sedimentation in Sichuan.
Ecology and Environment	<i>Hou Xueyu</i> submitted a supplement in disagreement with the report. <i>Chen Changdu</i> (Professor at Beijing University, Department of Geography)	<i>Ma Shijun</i> , at the eighth session, argued that the project would do more harm than good to the environment; <i>Xi Chengfan</i> , at the third session, argued that the project should not be considered before there is a solution to the problem of soil erosion.

		<i>Liu Yinong</i> , at the fourth session, out of a concern with the environmental impact of resettlement.
Multipurpose Planning and Reservoir Operating Levels	<i>Qin Xiudian</i> submitted a supplement in disagreement with the report.	<i>Shi Jiayang</i> , at the eighth and ninth sessions, proposed that the pool level should not exceed 160 meters; <i>Luo Xibei</i> , at the 10th session, proposed that the pool level should not exceed 160 meters.
Comprehensive Economic Evaluation	<i>He Gegao</i> , <i>Huang Yuanzhen</i> , and <i>Guo Laixi</i> , who all submitted supplements in disagreement with the report.	<i>Zhang Wenzhu</i> , at the ninth session, was concerned that investments would be diverted for other uses; <i>Wu Boshan</i> , at the ninth session, proposed that the project was inappropriate due to the state's financial constraints.

Note: information gathered from Dai Qing (1994), **Yangtze! Yangtze! Debate over the Three Gorges Project.**

3. Controversies

Throughout the feasibility study, policy debates among the experts were very heated. For example, December 22nd to 30th, 1986, the third session (enlarged) of the leading group for the feasibility study of the Three Gorges Project was held. During this session, the leading group handed out an article titled “The Three Gorges Project: harms are greater than the benefits,”²⁸ and asked experts to pay more attention to the writers’ opinion. Article writers Lin Hua and Sun Yueqi (feasibility study group members, economists) spoke in the meeting said that “it is better to prolong the construction of the Three Gorges dam. ... We should focus on the issues of flood control, power generation and navigation first.”²⁹ In addition, Lin Hua, Sun Yueqi and other eight CPPCC members also submitted a statement, *Views and Suggestions on the Assessment Report of the Three Gorges Project*,³⁰ to the Central Committee of the CCP directly, arguing that,

²⁸ Deputies of CPPCC: Sun Yueqi, Lin Hua, Qian Jiajy, Wang Xingrang, Lie Tianjue, Xu Chi, Lu Qinkan, and Qiao Peixin published this article on October 1986. These deputies were also the members of feasibility study group. [My Translation]

²⁹ See “The Feasibility Study and Debates over the Three Gorges Project,” in **The Yearbook of China’s Three Gorges Project Construction**. [My Translation] Cited from http://www.ctgpc.com.cn/annual/view_info1.php?mNewsId=1904, downloaded on Feb. 29, 2008.

³⁰ Ten members of the Chinese People’s Political Consultative Conference: Sun Yueqi, Lin Hua, Wang Xingrang, Xu Guangyi, Qiao Peixin, Chen Mingshao, Luo Xibei, Yan Xinghua, Zhao Weigang, Lu Qinkan jointly submitted this report to the Central Committee of the Chinese Communist Party in December, 1988.

first of all, considering the national economy and the principles and present tasks of the Party, it would be inappropriate to launch the Three Gorges Project soon. Secondly, the funds required for investing in the project far exceed the capacity of the national economy. Finally, there were several intractable problems concerning the Three Gorges Project, such as sedimentation, population relocation, technical issues as well as environmental effects (Sun, 1988:53-59). Accordingly, they strongly requested to prolong this project.

In the fourth session, April 17th to 20th, 1987, Lin Hua, again insisted on suspending the Three Gorges Project. Besides, scholar Lu Kanqin (CAS member) raised different opinion about the water level design and emphasized the importance of re-examining the feasibility of this project.³¹ Experts who had dissenting opinions toward the project published several articles stating the negative impacts of the Three Gorges Project in some journals, such *Energy Policy Study* and *Qun Yan Magazine*.³² Furthermore, these experts also published analects named “Macroscopical Decision-Making of the Three Gorges Project” in November 1987. Experts with dissenting opinions claimed to discuss more alternative procedures for this project. In addition, they also expressed their concerns about the poor economic condition of current China, technical limitations as well as the international political environment. Accordingly, these experts argued that the Three Gorges Project should start several decades later.

Moreover, the anti-dam experts also complained that “the way the assessment was conducted was neither democratic nor scientific” (Qian, 1989: 137). Zhou Peiyuan, the leader in the anti-dam faction, said that “those people are dishonest and show little respect for the scientific method and for factual evidence” (Qian, 1989: 137). And Lin Hua condemned that “those who support the project have submitted some misleading information to elicit the backing of the leadership” (Qian, 1989: 138). Sun Yueqi criticized that “at an enlarged meeting of the Leading Group for the Assessment of the Three Gorges Project, I gave two long speeches on the subject along with other members of the CPPCC. However, nothing appeared in the summary of the proceedings, except

³¹ See “The Feasibility Study and Debates over the Three Gorges Project,” in *The Yearbook of China’s Three Gorges Project Construction*. [My Translation] Cited from http://www.ctgpc.com.cn/annual/view_info1.php?mNewsId=1904, downloaded on Feb. 29, 2008.

³² *Qun Yan Magazine* is the journal of Chinese Democratic League.

the names of the speakers. Some experts presented different points of view, but none were accepted and the assessment reports on various subjects were adopted by the majority. The structure of meetings only reinforced ‘the single opinion’ ” (Zhang, 1994:149). In addition, although the anti-dam proposal was handed over to the central committee, Sun Yueqi said, “nothing happened, and there was no reply at all” (Zhang, 1994:149). These opponent think tank experts believed that their opinions were treated unfairly and they did not obtain equal opportunity as the advocates possess to put influence on the policy-making process.

The phenomenon that Sun Yueqi described above is significant, since it directly relates to whether or not the decision-making process was scientific and democratic at that time. On the one hand, it reflected that the advocates prevailed in the competition among different think tank employee factions. One of the possibilities is that in order to make their own expertise visible and influential to the central government, the advocates held the opponents’ opinions back purposely. If so, it indicates that throughout the feasibility study, the procedure for providing analysis and expertise of think tanks was not scientific and institutionalized. On the other hand, another explanation is the central government intentionally supported the pro-dam side, willing to hear “the single voice.” If that was true, the fact showed that the process of decision-making of this project was not transparent and democratic. Both of the explanations of this phenomenon illuminate that the advisory system as well as the decision-making process of the Three Gorges Project was neither scientific nor transparent.

In contrast, as for the advocates of the Three Gorges Project, when they confronted with opponents’ challenge they defended for the project stoutly. The leading group for the feasibility study submitted an elaborate *Feasibility Study Report* to the central government, in which a great number of experts stated their analysis and opinions of the Three Gorges Project. Throughout this 218 pages-long report, expert gave a brief overview of the history, preparation and proposal of this project, then elaborated on the benefits and drawbacks in aspects of main structures, hydrology, flood control, silting, navigation, power systems, machinery and electronic facilities, resettlement of the inhabitants, environmental impact, construction, investment estimation, etc.

For instance, Pan Jiazheng, a senior member of CAS, argued in this report that the proposal of the Three Gorges Project had been under a serious examination. After the on-site scrutiny and carefully data analysis, a majority of the experts agreed that this project is technologically feasible and economically reasonable.³³ Furthermore, an early construction of the project was more beneficial than a late one. The vice-dean of CASS, Dr. Liu Guoguang also claimed that “We should acknowledge the achievements of this two-year feasibility study. Experts not only re-examined all of the research results for last two decades, but also conducted an exhaustive study aiming on the construction of the Three Gorges Dam. The study has covered all of the significant issues. And this report might be the chief consultations for the final decision-making of the Three Gorges Project.”³⁴ Although Dr. Liu did not clearly express his support for this project, his words indicated that the feasibility study process was scientific, and the results of this study were reliable. The central government should adopt consultations from this feasibility study leading group. Processor Ma Bin, consultant for the Development Research Center affiliated to the State Council, wrote an essay arguing that we should not leave the construction of the Three Gorges Dam to our offspring. In addition, he also suggested opening the results of the feasibility study to the public, making this project transparent to the people in order to eliminate public doubt. “The objective of this feasibility study is to figure out a method to achieve the general benefits, but not an optimization for every single subject. Through investigation, experiments, calculation, examination and estimation on each subject, we believe the Three Gorges Project is technologically feasible and economically reasonable.”³⁵ Professor Ma believed that to open the results of the feasibility study to the public was the best method to gain supports from the public. With support from the public and mass media, approval by the central government of the proposal of the Three Gorges Project might be possible.

As for the controversies of the feasibility study, the pro-dam faction predominated all along. In my opinion, it was not only because the advocates occupied majorities, but also because the advocates were skillful and overwhelming in publicizing their attitudes.

³³ See the *Preface of Report on the Feasibility Study of the Three Gorges Project* (my translation), pp.2-7, published on May 5th, 1990

³⁴ See “We Should Construct the Three Gorges Project,” pp.22-23, in *Report on the Feasibility Study of the Three Gorges Project* (my translation), published on May 5th, 1990

³⁵ See “We Should Not Leave the Construction of the Three Gorges Dam to Our Offspring,” p.18, in *Report on the Feasibility Study of the Three Gorges Project* (my translation), published on May 5th, 1990

Take the *Feasibility Study Report* as an example, although in the conclusions every single expert agreed that the proposal of the Three Gorges Project is feasible, throughout the report their writings were plain but mighty, stating both the advantages and disadvantages of this project which persuaded the readers to believe their statement was unbiased. By contrast, as for the anti-dam faction, since they could only get limited support from public and some certain media, most of the time their voices seemed weak.

Finally, the exhaustive feasibility study of the Three Gorges Project was completed in 1989. Expert group finished the report and drawn the conclusion that the Three Gorges Project was technologically feasible and economically reasonable, that it is better to build it than not to do so and that an early construction of the project was more beneficial than a later one. Of course, there were 14 experts among this general think tank did not sign the report and 11 experts did sign but held their dissenting opinions toward some certain subjects of this project.

In order to give the National People's Congress (NPC) deputies and the Chinese People's Political Consultative Conference (CPPCC) members, who were the final decision-makers for the Three Gorges Project, better knowledge about the project and boost the enactment of this project, the joint think tank (feasibility study expert group) as well as ministries of water conservancy, energy and communications jointly sponsored an exhibition of the model of the Three Gorges Project during the annual sessions of the NPC and CPPCC. In addition, they provided the on-site consultation during the session. The exhibition and on-site consultation gave the NPC deputies and CPPCC members a straightforward understanding about the proposed Three Gorges Project (Li, 1992).

Zheng Weizhi, a CPPCC National Committee member, said, "I was very concerned about the Three Gorges Project. I used to think that to build the Three Gorges Project was similar to buying a bomb which, sooner or later, was bound to explode. After reading the feasibility report, however, I changed my views" (Li, 1992:25).

CPPCC National Committee member He Shaoxun, a professor at the Zhongnan Industrial University in Hunan Province, told reporters:

“I used to be against the construction of the Three Gorges Project. I am a geologist and had participated in the geological survey of two other reservoirs. I used to have reservations on the height of the proposed Three Gorges dam and, apart from my fear that the project might become a military target in future wars, I was also worried about problems such as avalanches, slides, the triggering of earthquakes and population movements. Later, however, I joined a group on an inspection tour of the three Gorges, organized by the State Commission of Education, and read the classified feasibility study report worked out by the experts’ group involved in the project. Many of these experts who personally signed the report were former classmates of mine. They are cautious people and their conclusions convinced me to support the project. I believe the advantages of the project far outweigh the disadvantages and that some of the adverse effects can be resolved. Construction of the project should begin as early as possible” (Li, 1992:25).

Professor He’s words might represent numbers of deputies’ thoughts, since the report of the expert group and their on-site consultation were extensive and compelling, which means the analysis and expertise this joint think tank provided were influential to the decision-makers. This fact proved that compared with the anti-dam faction, the pro-dam think tank experts were more dominant in providing expertise and communicating with decision-makers. If, these pro-dam think tank experts might be guaranteed to provide scientific and unbiased expertise to the policy-makers, it would be a good sign. After all, to pursue influence on the policy-making and obtain political access are the important goals of think tanks.

Altogether, according to their performance during the exhibition of the project model and on-site consultation, it showed that this joint think tank did play a role as policy advisor and defender. They participated in the design of the project, explaining to the central government for both possible positive and negative impact, and providing alternative resolutions for any potential changes. At the same time, they made a great effort to defend for the project, publicizing its benefits to the public in order to catalyze the final decision-making of the policy. Therefore, their work as policy advisor and defender was noticeable throughout this period.

In addition, the controversy between pro-dam and anti-dam think tank experts and that the pro-dam faction finally won the support from the CCP government indicated that

on the one hand, knowledge possessed by the experts is strong enough to influence the decision-makers who possess power. On the other hand, by the same token, decision-makers can also use the power in their hands to control, even shape knowledge. The dual-identity of some of the experts may help them to do so: as the policy advisor, these think tank experts do provide analysis and alternatives for this project; at the same time, as decision-makers, they can also utilize their privilege to manage which kind of knowledge may favor the enactment of this project, and manipulate the process of policy consultant. Therefore, to this certain extent, in terms of their political demand, the power possessor may make use of their power to obtain particular knowledge as well. Knowledge and power interplay with each other. And the relationship between them is complicated.

4. Conclusion

After this joint think tank's thirty month long investigation, around 400 outstanding Chinese experts gave an affirmative answer about the feasibility of the Three Gorges Project. Based on the scrutiny of government archives, think tanks' reports as well as publications of both pro-dam and anti-dam think tank experts, I believe, first of all, we should acknowledge the painstaking work of these experts. Especially in the technical preparation period, the think tank's achievement was appreciated by the central government. The CCP leaders did show respect to those experts and encouraged different opinions from both pro- and anti-dam. That is one of the reasons why the central government permitted a thirty month long feasibility study once again after years of preparation for this project. Admittedly, during this period, the atmosphere for think tanks' study was not strained and experts did express their different opinions freely.

Nevertheless, when it came to the phase of feasibility study, there were more tensions between various factions. With the support from some certain mass media, the anti-dam faction articulated their counterviews publicly, condemning the pro-dam think tank experts for providing misleading information to the central government. Moreover, they criticized that it was because the CCP leaders crave for greatness and success, they bolster the Three Gorges Project unreasoningly. As far as I am concerned, it was unfair

that the leading group of feasibility study intentionally hid the opinions of anti-dam think tank experts, since all of the experts who participated in this advisory system should be on the same page, in order to make the process of consultation and decision-making scientific and democratic. It is not beneficial for the development and institutionalization of Chinese think tanks. Besides, whether it was the CCP leaders who inspired the leading group to do so, or the leading group did it themselves in order to win the competition, such behavior undoubtedly harmed the reputation and credibility of think tanks. On the other hand, as for the critique of the CCP leaders, I believe the statement of “craving for greatness and success” was not very fair. In my view, the sticking point of the Three Gorges issue was the unscientific and undemocratic institution of the advisory system as well as the nontransparent process of decision-making. Based on their own wishful thinking that the benefits will be greater than the drawbacks, the CCP leaders favored the Three Gorges Project. To this extent, both the CCP leaders and the pro-dam think tank experts should take part of the responsibility of providing biased expertise to the decision-makers.

In addition, there was another factor that resulted in making consultations to the central government so complicated — the dual-identity for some of these think tank employees. These experts were the members of this joint think tank (expert group), which means they worked as advisors for this project. At the same time, these experts were the deputies of the CPPCC as well, which means during the annual sessions they also act as decision-makers. In my opinion, such an equivocal institution led to the complicated advisory system and decision-making process. The double-duty of experts will definitely result in biased and unscientific decision-making. Consequently, an independent and institutionalized advisory system is a very urgent requirement for current China. The advisory system should be separated from the decision-making system in order to guarantee a scientific and democratic decision-making process.

In sum, the whole procedure of the Three Gorges Project, from the time this project was proposed, the technical preparation, the repeatedly feasibility studies, the debates among different think tanks, the discussions in NPC and CPPCC, to the final decision-making, there were too many factors intertwined with each other – think tanks experts,

CCP/State leaders, various ministries and departments – which resulted in the progress of this decision-making so difficult and intractable. My *Time-Lines* in the following pages illustrate the complicated think tank process of the Three Gorges Project, and the interaction between the CCP/State and experts. Moreover, my *Time-Lines* display the struggle between pro-dam and anti-dam experts as well as different factions among the CCP.

Time-Lines of the Three Gorges Project (TGP)

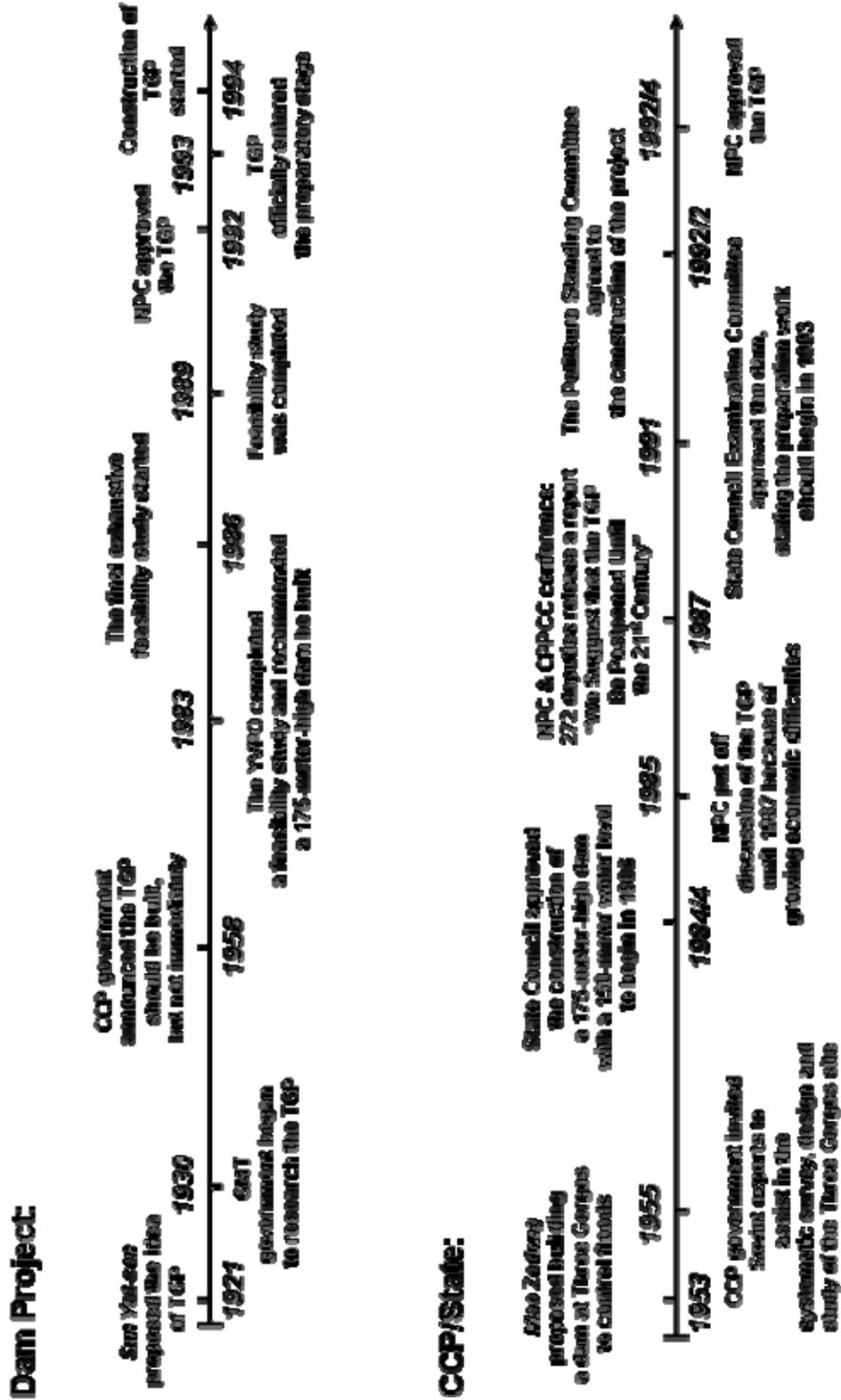
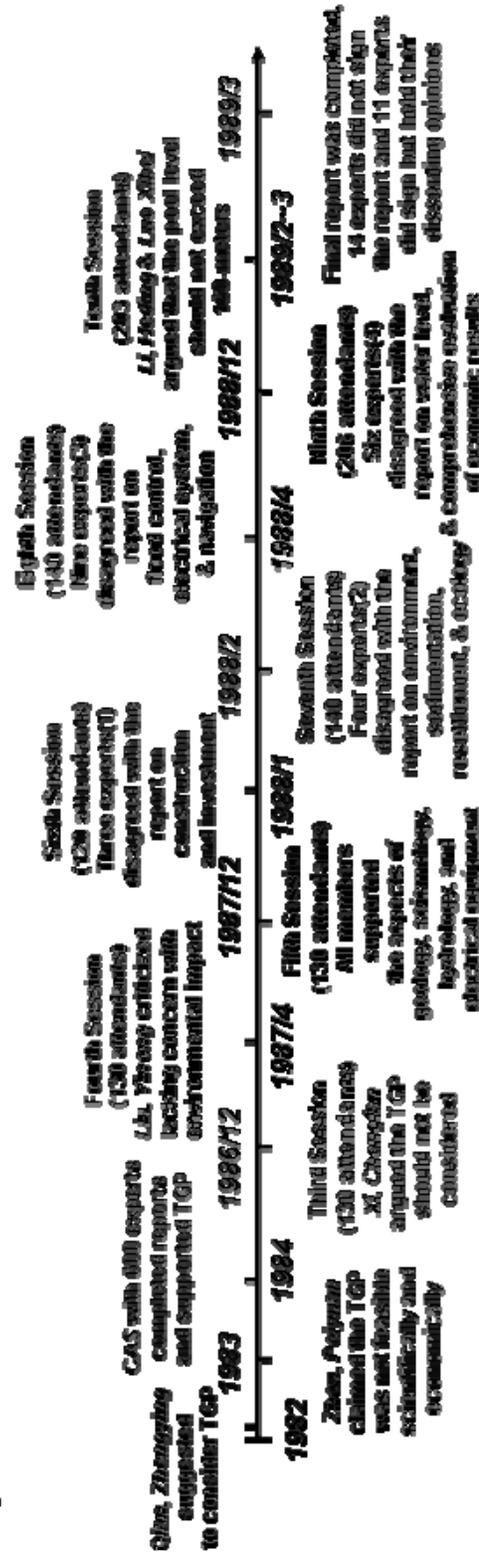


Figure 1(a): Time-lines of the Three Gorges Project (TGP)

Time-Lines of the Three Gorges Project (TGP) (cont'd)

Experts:



Notes:

- (1) He, Gequn; Huang, Yuanzhen; and Guo, Laih
- (2) Li, Yitong; Heu, Xuyun; Chen, Changda; Chen, Zongli
- (3) Lu, Qitao; Fang, Zongdi; Liu, Shanjie; Qiu, Xindao; Cheng, Xuesic; Wu, Yingzhong; Shi, Jiayang; Ma, Shijun; Zhang, Changling
- (4) Zhang, Weizhe; Wu, Boshan; Huang, Weirhai; Zhang, Qishan; Shi, Jiayang; Zhang, Changling

Figure 1(b): Time-lines of the Three Gorges Project (TGP) (cont'd)

IV. Expertise Provided during the Course of the Three Gorges Construction

On April 3rd, 1992, *The Resolution to Construction of Three Gorges Project* was approved at the fifth meeting of the Seventh People's Congress, which indicated that the project entered into the executive process from legislative process. On July 29th, 1993, the State Council Three Gorges Project Construction Committee approved *The Report of Preliminary Design of the Three Gorges Project* forwarded by Yangtze Water Resource Commission in the second committee meeting, indicating the overall preparation for construction started. December 14th, 1994, construction of the Three Gorges Project set off. To date, with the Three Gorges Project approved, those pro-dam think tank experts won this fight, indicating the controversies and competition between pro-dam and anti-dam think tank experts ended.

Since the *Report of Preliminary Design of the Three Gorges Project* was approved, which meant the decision-making had been made; people may think that think tanks have completed their overall missions. Nevertheless, there are a great number of think tanks still working on this project. Along with the construction of Three Gorges Dam, Chinese think tanks keep providing analysis and expertise to the State Council Three Gorges Project Construction Committee as well as the China Three Gorges Project Corporation for consulting. Actually, between the feasibility study report finished in 1989 and the construction start off, think tanks never paused in their studies for this project. For instance, based on two years' investigation, in March 1991, the environmental evaluation department of CAS and the Scientific Research Institute of the Protection of the Yangtze River Water Resources published the "Report on the Environmental Impact of the Three Gorges Water Control Project," a report approved by the State Environmental Protection Bureau. They reached a conclusion similar to the one the special subject group made during the feasibility study in 1987. Between 1991 and 1995, CAS carried on an ecological study around the Three Gorges area, raised several alternative measures about population resettlement and the protection of natural scenery. Moreover, from the

beginning of the construction of Three Gorges dam, CAS has been taking over the inspection work on diversification of aquatic and environment in the Three Gorges drainage area (Liu, 2002). After the 1990s, CAS has paid more attention to publicizing their achievements on the research about the Three Gorges Project. In terms of my own statistics, from August 2001 till March 2008, CAS members have published 210 reports and articles related to the studies of the Three Gorges Project on their official website. Through different channels, experts in CAS keep interplaying with central and local government, other research institutes in China as well as overseas think tanks, providing expertise for the construction on the one side, and revealing problems on the other side. In addition, CAS also summarizes their advisory work for the Project regularly and records their contributions in the annual report of CAS.

The Chinese Academy of Social Science, acting as social and economic development consultant for the Three Gorges Project endeavored to work on the analysis of economic development in the Three Gorges area, conducting many different surveys in order to understand the Three Gorges immigrants' living condition in the new location. CASS keeps exchanging information with several university-based think tanks around Yangtze River, for example the Three Gorges Research Center at Wuhan University. Besides, CASS also set up a special column on its official website, reporting instant news from the construction site of the Three Gorges Dam and offering analysis for issues related to the project. Experts and scholars of CASS like to accept interviews from mass media as well, answering questions raised by ordinary people and helping the public to know the Three Gorges Project better.³⁶

In order to understand the roles Chinese think tanks now play and have played, during the construction of the Three Gorges Project, we also need to pay attention to the activities of the Chinese Academy of Engineering. In terms of the brief introduction of CAE in the previous chapter, CAE was established to fulfill the demand of professional engineering and technological science think tanks. Moreover, as a new rising official think tank, CAE has a more clear orientation for itself which is providing timely and appropriate analysis and consultations to the nation's key issue. Undoubtedly, based on

³⁶ See detailed missions of CAE on the Three Gorges Project from its official website www.cae.cn

its nearly 14 years' performance, CAE members have made a great effort to improve the Academy's professionalism. It truly has implemented its mission as a think tank.

Let us use the Three Gorges Project as an example. This project was the first significant task for CAE after it was established. Moreover, I think the establishment of CAE was to assist the Three Gorges Project Construction Committee working on the construction of this project. In terms of the official records of CAE, research on the Three Gorges Project is one of the Academy's major tasks. For instance, between 1995 and 1996, CAE's research group focused its attention on the study of sustainable development of China's hydro power equipment, and the power generation equipment for Three Gorges Project.³⁷ In the second construction phase (1998 – 2003), CAE's major concerns include the water level and navigation channel in the near-dam reach, earthquakes and landslides monitoring in the east segment of Three Gorges, and so on. For the third phase of construction (after 2003), preventing contamination of the Three Gorges Reservoir area and its upstream waters became CAE's target. CAE set up eight research groups to work on the investigation of the total volume of pollutants emitted in the Three Gorges Reservoir area and its upstream regions, the trend of water quality changes, measures for controlling non-point source contamination, water pollution prevention technologies and policies, comprehensive treatment in tributary river valleys, research on the feasibility of fast economic growth combined with zero growth of pollutant emissions, measures for preventing flowing sources of pollution, management systems for water quality protection, and harmonious development of the river valley.³⁸ According to CAE's annual report, the Academy's consultation about pollution control has been adopted by the Three Gorges Project Construction Committee.

In addition, CAE members also published a great number of papers discussing technical issues of the Three Gorges Project's construction on *China Engineering Science*,³⁹ *CAE Annual Report* and *CAE Newsletters*. [See details from Appendix A] After its establishment, the Chinese Academy of Engineering not only played a role of

³⁷ See Chinese Academy of Engineering's "Main Study Report from 1995 to 1996":

<http://www.cae.cn/english/studyandadvisory/content.jsp?id=83>, downloaded on Feb. 23, 2008.

³⁸ See "A project symposium for strategic consultation on preventing contamination of the Three Gorges Reservoir area and its upstream waters is held in Chongqing": <http://www.cae.cn/english/publications/content.jsp?id=993>, downloaded on Feb. 23, 2008

³⁹ *China Engineering Science* is a comprehensive and high-level academic monthly magazine of the engineering science and technology circles of China published by the China Engineering Science Journal.

policy advisor and defender, but also a role of policy broadcaster. The Academy endeavored to let more and more people know better about the project its members are working on.

Conclusion

Throughout the construction of the Three Gorges Project, many different think tanks cooperated with each other, and at the same time, competed with each other, trying to offer satisfactory expertise and advice to the government. Other than the roles think tanks played during the technical preparation and feasibility study phases, during the phase of construction, Chinese think tanks have shown more functions such as monitoring and evaluating. The Three Gorges Project witnessed the transformation and development of Chinese think tanks. Moreover, with the development of think tanks, the Chinese government will rely on the advice offered by these groups much more than before. Activities of CAE and CAS relating to the construction of the Three Gorges Project show that Chinese think tanks have been more active and creative.

Chapter Four: Conclusion

Based on my scrutiny of Chinese think tanks, and the exploration of the roles and influences of the Chinese Academy of Social Science (CASS), the Chinese Academy of Sciences (CAS), and the Chinese Academy of Engineering (CAE) through the case study of the Three Gorges Project, I believe professionalism and institutionalization are very urgent requirements for today's Chinese think tanks. Although the experience of almost thirty years' development now shows that Chinese think tanks have been more professional and creative, the Three Gorges case being one indicator of the progress that some Chinese think tanks have made during this period, the evidence in this thesis shows that currently in China, the political roles of these think tanks are still confined to a narrow scale, and their influences on the policy-making process are limited.

Admittedly, compared with Mao era's "slapping the head" policy-making style, the decision-making of China's central government regency has been more professional and institutional. Nevertheless, are these decision-making procedures really scientific and democratic? Is this process transparent? In terms of the evidence I collected and presented in this thesis, the answer is negative. Frankly, such a finding is not what I expected to discover, since my original intention in doing this study was to find evidence proving Chinese think tanks have authentic and significant political influence on government policy-making. Before I conducted this study, I always believed that Chinese think tanks do have their advantages. For instance, the central government may utilize its privilege to convene the best experts and specialists of China to work in the government advisory system, accordingly to realize an efficient, scientific and democratic decision-making process; the existence of an abundance of official think tanks may indicate the superiority of China's "collective democracy." As far as I was concerned, by investigating the roles that science and technology think tanks are playing in a nonpolitical area, I should have some findings indicating the performance of these kinds of think tanks should present the scientific and democratic spirit during the process of

policy-making. I believed that “science promises neutrality in decision-making.” However, I overlooked the great influence of political concerns. The central government’s final decision has had less to do with science than it has had with political position and power. Sometimes scientific evidence and scientific experts seem to be weak when they are confronted with strong political preference. In other words, to some certain extent, power also can shape knowledge. And its influence is mighty. The fact leads me to question the productive role of scientific evidence and expertise in policy-making. I have begun to doubt if the idea of scientific and democratic decision-making will survive under the political environment of today’s China.

In terms of the evidence presented in my study, I raised serious doubts: What are Chinese think tanks? Why are they so different from think tanks in the United States? What are Chinese think tanks’ characteristics and responsibilities? What kinds of roles have they authentically played during the process of policy-making? Are they really influential on China’s policy-making, or is their so called influence just an illusion? Can they bridge the space between power and knowledge? Are there any private think tanks exist in China? I am trying to answer these uncertainties as follows:

I. Characteristics of Chinese Think Tanks

Because of their development history and classification in China, Chinese think tanks have displayed their distinctions. *First of all*, various political ideologies of different generation of the CCP leaders determined their distinct demands from think tanks. The development status of Chinese think tanks was influenced by those top leaders’ attitudes toward the scientific expertise and analysis provided by think tanks. In Mao’s era, China’s “first generation” think tanks were modeled on Soviet-style research institutes, whose research interests fastened on the national defense, military development as well as international relations. The status quo in China during 1950s and 1960s resulted in the existence of think tanks that were “an ideological stopgap measure” (Boland, 1998) for coping with temporary international tension. The institution of think tanks at that time was very unprofessional and ambiguous. On the one hand, Soviet

Union and China was in the same communist community, younger brother stimulating older brother's model seemed reasonable for the CCP. On the other hand, in Mao's era, the CCP top leaders were not aware they need scientific analysis and expertise from any experts. In fact, what they needed from those think tanks they built up was merely some filtering/processed information. To a certain extent, in these CCP leaders' view, the functions of think tanks were simply as information filters and data analyzers. Under such a highly personalized policy-making circumstance, the existence of think tanks was just a "hollow shell."

In succession, with the increasingly demand of science and technology, in the post-Mao era, "it represented an important shift away from a random and seemingly whimsical approach that dominated policy formulation during the chaotic years of the Cultural Revolution" (Boland, 1998:35). The post-Mao leaders, particularly Deng Xiaoping and his supporters, believed that one of the CCP's major goals was to modernize China's science and technology, since they regarded the development of science and technology as the most straightforward and effective method to achieve wealth, power, and status in the international community. Deng Xiaoping's point was that through scientific policy-making to realize "collective democracy," thereby enhancing China's national power. He emphasized better using the expertise of think tanks to promote scientific decision-making in policy matters. Therefore, to this extent, science and technology's role in the decision-making process reveals that the politics was also influenced by attitudes towards knowledge/science. The emergence of some important science and technology think tanks after 1980s accorded with the requirement of scientific decision-making.

In my opinion, the change of think tanks' organization along with the variation of the CCP leaders' political ideologies are not beneficial for the development of Chinese think tanks. This will result in many uncertainties and the deinstitutionalization of Chinese think tanks. It will not help China to achieve the goal of a scientific, democratic and transparent decision-making process. The single-party lead institutions of China make the desire for democratic and transparent policy-making illusive.

Secondly, since the intellectuals have a particular social and historical status in China, and at the same time, they are the primary components of experts among think

tanks, the increasing of the importance of intellectuals directly affects the development of think tanks. “Traditionally, intellectuals in China have been seen as official scholars who are members of the government bureaucracy” (Shai and Stone, 2004:145). What’s more, after the establishment of People’s Republic of China, intellectuals still maintain their special position and reputation in Chinese government as well as Chinese society. It is a tradition that intellectuals play an active role in the process of policy-making. In particular, the influence of *establishment intellectuals* is considerable. According to Bonnic and Chevrier, establishment intellectuals are those scholars singled out by political leaders in order to shape the legitimacy of political authority (Bonnic and Chevrier, 1991:569-593). In addition, Diane Stone and Ming-Chen Shai defined Chinese establishment intellectuals as:

The Chinese establishment intellectuals are intellectuals serving and operating within governing institutions such as official and semi-official think tanks or universities. They are experts, generally well educated, specializing in political and economic issues serving the ruling party’s interests. They play a crucial role in policy-making by providing leaders with policy suggestions through informal channels. And they seek to join official associations or to be recruited into the bureaucracy, which leads them to play an ambivalent role as both servants of the regime and critics of society (Shai & Stone 2004: 145).

Under Mao Zedong’s regime, “the impact of intellectuals on either domestic or foreign policy was very limited. It was only since the late 1970s that intellectuals and policy research institutes have developed as institutional entities within the bureaucracy” (Shai and Stone, 2004:146). From the beginning of the 1980s, establishment intellectuals have increasingly come to play a major role in providing political leaders with expertise and policy advice in a range of reform areas. In other words, Chinese establishment intellectuals have been given a more open intellectual environment than at any time since 1949. The debate over the Three Gorges Project is the good example to examine the activity of Chinese establishment intellectuals. All of the think tank employees and experts who participated in the technical preparation and feasibility study of the Three Gorges Project were establishment intellectuals, because under China’s political environment only establishment intellectuals may take part in the central government’s

policy-making process. Accordingly, in the Three Gorges case, if we plan to explore the role of think tanks, we must count the influence of establishment intellectuals in, since establishment intellectuals are the major components for these think tanks and have coherent connections with government policy-makers as well. For the controversy of the Three Gorges Project, in my view, it was the fight of some think tank employees/establishment intellectuals pursuing their political access and political influence on scientific and democratic policy-making. Throughout this hot controversy, some intellectuals insisted the truth, strongly opposed this project because of its terrible environmental impacts on Yangtze River and its drainage area; some think tank experts just carefully watched and kept silent in order to make themselves safe during the dispute. Of course, there were a great number of experts who supported the project as well. Among this group of people, perhaps some of them truly believe the Three Gorges Project was technologically feasible and economically reasonable based on their professional knowledge and analysis. By contrast, some people bolstered the project with their particular motive —— catering to the CCP leaders' preference. Different factions in think tanks contended with each other. And finally the winner was the group which grasped the CCP leaders' fondness precisely.

In sum, the situation of intellectuals directly relates to the status of think tanks, which is one of the notable features of Chinese nonpolitical think tanks. The embarrassing condition of Chinese think tanks means they have no alternative when faced by the central government's demand. Intellectuals were in an intricate network, interweaving government, party, think tanks and the Chinese People's Political Consultative Conference (CPPCC) together. Such an intertwined connection makes a democratic and transparent policy-making procedure infeasible. For those highly motivated Chinese intellectuals, relapsing into this dilemma is a disappointment.

Third, according to the classification of Chinese think tanks as well as the reality in the Three Gorges case, it indicates that in China there is no influential independent think tank. Since most of the university-based research institutes' funding was offered by the Chinese government, and all of their activities are under the surveillance of government, to this extent, there is no clear distinction between official and semi-official think tanks in

China. They are all controlled by the central government. Moreover, with regard to the privately owned think tanks, most of the influential ones are actually sponsored or supervised by the government *sub rosa*. For instance, China Development Institute (CDI), the most famous private think tank in China, was established in February 1989. In both Chinese and Western academia, there are many scholars who classify CDI as a private think tank (Shai and Stone, 2004; Luo, 1991). Nevertheless, it has very close relations with government, because its establishment “was approved by State Council and the major goal of this institute is to engage in economic policy studies and provides economy-related consulting services to government at all levels, to businesses and to other public organizations.”⁴⁰ The Unirule Institute of Economics, another famous private non-profit research institute founded in Beijing, although the institution claims that it has never “obtained financial assistance from any government. The revenue of the institute mainly comes from social donations and provisional grants on a project basis from institutions at home and abroad.”⁴¹ In fact, all the major five economists who co-founded this institute have governmental background. Mao Yushi is a retired economist and think tank employee of the CASS; Zhang Shuguang is the present dean of the Graduate School of the CASS; Sheng Hong, the professor of the Economics Research Center of Shandong University, who was a member of the CASS from 1986 to 1992; Fan Gang, who is the professor of the Graduate School of the CASS; and Tang Shouning, who is the researcher in Economics Institute affiliated to the CASS.⁴² In reality, the governmental background of these economists helps them to make their think tank influential. Accordingly, this private think tank is not independent of the government, either. On the other hand, with regard to those real privately owned think tanks sponsored by individuals or private companies, it is impossible for them to have actual access to the government policy-making process. They have been excluded outside the government advisory system.

Therefore, because the government dominance think tanks always prevail in the policy-making, it is rare to see competition between Chinese think tanks. Seeking

⁴⁰ Cited from China Development Institute official website: <http://www.cdi.com.cn/en/aboutus/>, downloaded on April 3, 2008.

⁴¹ Cited from Unirule Institute of Economics official website: <http://www.unirule.org.cn/English/AboutUnirule/About%20Unirule.asp>, downloaded on April 3, 2008.

⁴² My translation from the Unirule Institute of Economics official website – “Brief Introduction” (Chinese version) <http://www.unirule.org.cn/SecondWeb/TianZeJianJie.asp>, downloaded on Feb. 26, 2008.

visibility in order to increase the influence on policy-making is not one of Chinese think tanks concerns. It may explain why the CASS and CAS never emphasize to the public and advertise that they are official think tanks, but they can always participate in the process of important policy-making in China. In the feasibility study of the Three Gorges Project, for instance, analysis and expertise provided by CASS and CAS were absolutely more prominent than any other think tanks. All in all, the single-party lead institution of China results in the unilateral development of Chinese think tanks. Such a defect determines the limited capability of think tanks and undoubtedly weakens the influence of Chinese think tanks.

Fourth, according to the particular demand, occasionally central government will convene numbers of experts and specialists from different think tanks to conduct short-term investigations (Zuo, 2004). Sometimes the research of these temporary think tanks is secret, only inter-party experts participating. Other times, the investigation of think tanks is open, it welcomes experts and specialists to express their opinions and offer various expertise and analysis. However, such temporary think tanks “without a permanent base in the government structure rarely have a sustained impact on decision-making” (Halpern, 1989:161). One reason is that these think tanks provide little help in “reconciling the conflicting advice generated by various bureaucratic units” (Halpern, 1989:161). On the other hand, the groups often “focus on very general issues related to reform, but they do not provide a mechanism for the leadership to obtain an interdisciplinary perspective on concrete projects” (Halpern, 1989:161). For example, the proposal to build the Three Gorges dam on Yangtze River had been debated for decades, with various research institutes providing sharply differing advice. In deciding whether and how to move ahead with this project, the leadership organized a temporary feasibility study group which was composed of 412 experts from different think tanks to provide them scientific analysis and expertise to reconcile these conflicting views. The feasibility study was exhaustive and those think tank employees were outstanding, nevertheless, the work of this group gained less acknowledgement but more critiques. The feature of short-term made this temporary think tank looks like a stopgap and excuse, incurring attacks from both domestic and international societies. The existence of

temporary think tanks results in the institution of think tanks in China being more unprofessional and unstable.

Fifth, years of study on the Three Gorges Project, in some scholars' view, indicates the inefficiency of Chinese think tanks. "The project has become a classical example of the 'bureaucracy approach' because of the 'protracted,' 'disjointed,' and 'incremental' nature of the decision making process," Ma Shu Yun argued in her article *The Politics of the Three Gorges Project* (Ma, 1990:93). According to my understanding of the Three Gorges Project, I disagree with Ma's viewpoint. As far as I am concerned, an extensive technical preparation and exhaustive feasibility study of the project just show the policy-makers' serious attitude toward policy-making and think tanks' conscientious manner for their consulting services. This extensive study gave the think tanks opportunity to improve themselves in many different aspects, and offered a good start for the scientific and democratic decision-making process. Chinese think tanks needed to make a great effort in order to improve their incomplete institutionalization. As far as I am concerned, the 'protracted,' 'disjointed,' and 'incremental' nature of the decision-making process was not the problem of these think tanks, but because of the dissidence among the CCP leadership. The communist leaders had different opinions toward this project: Li Peng, pre-premier of China, and his followers advocated this project. On the contrary, the pre-vice-premier Yao Yilin and his supporters opposed this proposal. Consequently, the debate over the Three Gorges Project among experts of think tanks was a conflict between different factions inner the CCP as well. The simple controversy over academic issues is easy to resolve, whereas, the political intentions that affect the scientific analysis and expertise makes the issue more complicated and sensitive. When scientists' role in policy-making becomes less like "experts" and more like "advocates," their earlier basis of legitimacy will become suspect. The Three Gorges case reveals that different social and political factors influence scientific studies as well as "advocacy" science.

Last, with regard to the Three Gorges Project, there was an interesting phenomenon that makes Chinese think tanks distinct. On the one hand, think tanks such as CASS, CAS and CAE are official policy research institutes in China. On the other hand, their tasks are not finished after the enactment of this policy. They still need to monitor and evaluate the progress of this project, continue providing expertise in case any problem

arises during the construction, just acting as the firemen. Therefore, to this extent, these think tanks are the government's science and technology bureau as well. This dual-identity determines the analysis and expertise provided by this kind of think tanks are restricted and perhaps at times biased. Moreover, not only Chinese think tanks have the dual-identity, but also some of the think tank employees have such a dual-identity. Just as what I discussed in chapter three, on the one hand, these experts work as policy analyzers and advisors, and at the same time, they behave as decision-makers as well. This equivocal institution led to the complicated advisory system and decision-making process in China, blurring the line between policy advisors and decision-makers. The double-duty of experts will definitely result in biased and unscientific consultations and decision-making.

This dual-identity of Chinese think tanks and experts reveals the intertwined relationship between knowledge and power. Sometimes, knowledge may influence how people utilize power. Simultaneously, power can also shape knowledge. The Three Gorges Project decision-making shows that by using the dual-identity of Chinese think tanks and think tank experts, the CCP leaders have successfully shaped the knowledge they desired to favor the project, therefore hastening the final decision-making. The roles that the CCP played in this case are that of accommodator and gainer: on the one hand, it seemingly did balance the competition between pro-dam and anti-dam experts; on the other hand, it has gained a satisfactory result in approving the Three Gorges Project. Undoubtedly, the "dual-identity" of think tanks and experts resulted in the ill-considered implementation of the Three Gorges Project. However, the role that the CCP played in the process of expertise providing was not encouraged, since it caused the deinstitutionalization in the advisory system as well as policy-making process, which is not beneficial for the development of Chinese think tanks and the government's scientific and democratic decision-making.

II. Political Roles of Think Tanks in China

With regard to the political roles nonpolitical think tanks played during the Three Gorges Project policy-making, I want to argue that there are three specific roles: *Information filters*, *Policy defenders*⁴³, and *Policy broadcasters*.

(1) *Information Filters*

“Think tanks are information filters in the sense that their members provide leaders with analysis based on the filtering of abundant raw data from either the news organizations or world-wide intelligence systems. In so doing, they provide political leaders with abundant valuable processed information” (Shai and Stone, 2004: 149). Take the Three Gorges Project as an example: to a large extent, the CCP leaders are unable to gain access to comprehensive information from various fields at large, such as hydrology, flood control, silting, navigation, power systems, machinery and electronic facilities, and construction. Moreover, they are “unable to grapple with comprehensive planning and economic problems without the advice, recommendations and expertise of experts and specialists” (Shai and Stone, 2004: 149). Accordingly, the function of think tanks as information filters is to “conduct the preliminary task of removing repetitive or substandard information in order to shortlist essential reference materials on any aspects for political leaders” (Shai and Stone, 2004: 149). Acting as information filters, these academic think tanks help the CCP leaders to clarify the various complex problems involved in the Three Gorges Project.

(2) *Policy Defenders*

“In China, think tank analysis serves to justify the policies of political leaders and legitimate their official positions” (Shai and Stone, 2004: 149). Therefore, think tanks tend to become policy defenders for the CCP leaders. Moreover, “being policy defenders also means that think tank experts are regarded as the instrument of their political patrons,

⁴³ I borrowed these two terms from Professor Ming-Chen Shai, who used these terms in his paper “The Chinese Tradition of Policy Research Institute,” 2004

acting to legitimate their political behaviors and opposite their political rivals” (Shai and Stone, 2004: 150). For instance, throughout the controversy of the Three Gorges Project, most of the Chinese think tank experts who participated in the technical preparation and feasibility study of this project defended this proposal fully, arguing with those in oppositions during the discussion sessions of the feasibility study period, and publishing articles in some of the important paper media in order to strike back at the anti-dam scholars. In addition, “acting as a policy defender is a politically expedient strategy for some think tank experts to preserve their own social interests and political privileges” (Shai and Stone, 2004: 150). Qian Zhengying, as I mentioned in chapter three, who was the major leaders in the feasibility study group of Three Gorges Project, was criticized by a lot of think tank experts in CAS for catering to the CCP leaders’ desire and giving up her principle of providing scientific and unbiased expertise to the central government. The opponents of this project believed that Qian Zhengying bolstered the proposal because she wanted to maintain her so called “reputation” in the central government, realizing her political access toward a higher-level and stable position in the CPPCC. Acting as policy defenders is beneficial. “The relations between leaders and think tanks are based on a kind of instrumental orientation in which both leaders and intellectuals acknowledge the reciprocal benefits between them” (Shai and Stone, 2004:150).

(3) Policy Broadcasters

In fact, the role of policy broadcasters and policy defenders can be classified into one broad category, since these two roles supplement each other. Not only during the period of feasibility study of the Three Gorges Project, but also in the construction process of this project, CASS, CAS and CAE always act as broadcasters for this project. Through publications, TV or radio interviews and lectures, members of these think tanks made a great effort on advertising this project. By the same token, it helped think tanks to advertise themselves as well. Through mass media, both the scholars and the public will know these research institutes better than before. After all, to make their consultations credible and noticeable to both policy-makers and the public is one of the chief objectives for modern think tanks. Chinese think tanks understand it now.

Moreover, acting as policy broadcasters, think tanks may not only bridge the gap between policy-makers and mass media, but also draw the mass media's support in order to increase their influence on the policy-makers and implement their consultations.

III. Epilogue

This thesis has sought to explore the characteristics, influence and political roles of Chinese nonpolitical think tanks. Throughout my study, I focused on nonpolitical think tanks, since I believe these organizations allow us to investigate the features and roles of Chinese think tanks. The original goal for establishing think tanks by the Chinese central government was to enhance the national power through economic, science and technological development. With the development of Chinese think tanks, their expert staffs' achievements are notable. However, although the expertise provided by major Chinese think tanks has accelerated the development of China's comprehensive capability, in terms of my study in this thesis, the influence of Chinese think tanks on the policy-making process remains limited. Most of the time, Chinese think tanks are acting as the full-time policy defenders, sometimes, the part-time policy advisors. Moreover, over the years, Chinese think tanks acted as the silent policy advisors. Today in China, therefore, a scientific, democratic and transparent policy-making procedure is still a political ideal.

My original intention of utilizing the Three Gorges Project as a case study is because I assumed I might draw a more positive conclusion, proving that scientific policy-making in China is more rigorous. Nevertheless, the evidence shows that there is still a long way to go for China. Under the current political climate, scientific policy-making in China is still in the early stage, which means that the democratic and transparent decision-making is merely the hollow shell. I do not know in what direction the scientific decision-making in China lies. The severe environmental impact of the Three Gorges Project has warned the CCP leaders that showing respect to scientific expertise is extremely significant. The environmental costs for such an economic take-off are not a worthwhile trade-off. I hope one day, the authentic scientific and democratic decision-making can be realized in China.

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