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Assessing policy success and failure – Testing and adapting an environmental policy evaluation framework in rural China

A thesis
submitted in partial fulfilment
of the requirements for the Degree of
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by
Jiazhi Chen

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Abstract of a thesis submitted in partial fulfilment of the
requirements for the Degree of Doctor of Philosophy

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China does not have a systematic and holistic framework for evaluating environmental policy and programs. The absence of effective evaluations of the Comprehensive Environmental Treatment (CET) policy, which focused on comprehensively addressing rural waste management and pollution control in rural areas, is an example of the lack of a systematic and holistic policy evaluation framework in China. Such a framework is needed given the range of problems faced and initiatives undertaken, and this is the gap this study aims to address.

Based on a review of the policy evaluation framework literature, McConnell's policy evaluation framework was identified as a potential framework for application in the Chinese context. However, this framework has not been thoroughly tested. An integrated approach was taken to explore and test McConnell's framework in the Chinese context. This approach included three main and complementary methodologies: adaptive learning, case studies, and triangulation. A variety of qualitative and quantitative methods were used to examine four programs implementing the CET policy in rural China.

McConnell's framework was first evaluated from a theoretical point of view to lay the foundation for further testing and potential revision. A guideline for measuring degrees of success/failure of the criteria across three realms (process, program, and politics) was developed. McConnell's framework was then tested, and improved in light of emergent knowledge, against the CET environmental policy programs, in two phases each involving two case applications.

Findings first showed that McConnell's framework and most of its criteria are applicable in the Chinese context, subject to some relatively minor but important modifications. Second, there were various levels of policy success and failure between cases and across realms.

Third, the evaluation results were compared, showing that delegating particular areas of authority to local governments and communities, and delegating relevant decision-making power to more actors, could help to improve the effectiveness of a policy. Failures in policy shaping do not necessarily result in policy implementation failure, and policy formulation and implementation are related to the political impact of a policy. Fourth, there are multiple and complex interactions between individual behaviour, institutional design, and prevailing societal values which contributed to different degrees of policy failure.

This research indicates that the amended McConnell framework and the methods developed in this research are practical and usable for evaluating environmental policy in the Chinese political context. Especially at a higher policy level, use of the amended McConnell framework can provide a holistic view of the policy process for the identification of bigger picture, more strategic, questions. The amended framework can also provide a meaningful complement to the existing CET policy evaluation method. This research further deepens the understanding of policy success and failure, thus providing an additional reference point for future research.

Keywords: rural waste management, McConnell, policy success, policy failure, causes of policy failure, policy evaluation framework, criteria, policymaking, policy implementation, politics, China

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Acronyms

AAHB	Agriculture and Animal Husbandry Bureau
BHUD	Bureau of Housing and Urban-Rural Development
BOD	Biochemical Oxygen Demand
CCP	Communist Party of China
CET policy	Comprehensive Environmental Treatment policy
CM	Communications Model of Intergovernmental Policy Implementation
COD	Chemical Oxygen Demand
CPPCC	People's Congress or members of Chinese People's Political Consultative Conference
EIT	Environmental Inspection Team
EIA	Environment Impact Assessment
EPB	Environmental Protection Bureau
IMES	Inner Mongolian Autonomous Region Research Academy of Environmental Sciences
MEE	Ministry of Ecology and Environment
MEE [2010] 136 Framework	Policy Effect Evaluation Guideline on the CET policy
NIMBY	Not in my back yard
RTD	Rural and Township Department
STC	Sewage Treatment Container
VC	Villagers' Committee
VPBC	Village CCP branch committee
VR	Villagers' representatives

Chapter 1

Introduction

1.1 Rural pollution and rural waste management policy in China

The environment in rural areas¹ of China is generally poorer than that in urban areas in terms of public facility provision and environmental quality (The State Council, 2014a). The rural environment faces numerous kinds of pollution², including point source pollution, non-point source pollution, industrial pollution, and pollution transferring from city to rural areas (Li, 2008; Wong, 2014). In the past few years, rural waste³ disposal and its side effects have been deemed as one of the major causes of rural environment pollution. The main rural waste pollution sources include domestic waste⁴, domestic wastewater⁵, animal faeces, agricultural film⁶, agrichemical packages, and straw (Ministry of Ecology and Environment, 2014; Ministry of Housing and Urban-Rural Development, 2015).

In China, the rural population generates a huge amount of domestic waste every year, with most of it untreated (N. Wang, 2014). As of 2012, only around one-quarter of the 571 thousand villages in China had domestic waste collection facilities. Most domestic waste was

¹ There is no nationally recognized definition of a 'rural area' in China and the term is commonly misused (Liu, 2005). The National People's Congress (2014) defines rural areas as residual areas not included in the urban definition. The rural area in China accounts for a large proportion of land and contains roughly 0.6 billion people (National Bureau of Statistics, 2015c).

² Pollution refers to *"the presence of substances and heat in environmental media (air, water, land) whose nature, location, or quantity produces undesirable environmental effects"* (OECD, 2003a).

³ Waste refers to *"materials that are not prime products (that is, products produced for the market) for which the generator has no further use in terms of his/her own purposes of production, transformation or consumption, and which he/she wants to dispose of"* (OECD, 2003b).

⁴ Domestic waste in rural China refers to a complex set of solid wastes generated in the residential environment and daily life, including: kitchen garbage and other organic waste; recyclable waste such as paper, metal, glass, fabric; non-recyclable waste such as masonry, and ash; hazardous waste such as pesticide containers, small electronic products, oil paint, modulator tubes, daily chemical products, and expired drugs (Ministry of Ecology and Environment, 2012a).

⁵ Domestic wastewater in rural China refers to the sewage produced by rural residents, mainly from flushing toilets, cooking, laundry, bathing, and cleaning (Ministry of Ecology and Environment, 2012b).

⁶ Agricultural film refers to the plastic surface covering film and shed film used in agricultural production (Ministry of Agricultural and Rural Affairs, 2019). The main component of agricultural plastic film is polyethylene, which *"continue to break down over decades or even centuries. Most do not fully degrade, but split into tiny fragments"* (Royal Society Te Apa-rangi, 2019). When the film is left on farmland, it breaks up into smaller fragments which are blown around by the wind, polluting the surrounding environment.

discarded, which caused severe pollution to water, soil, air, and human settlement environment (Ministry of Ecology and Environment, 2012e).

The indiscriminate discharging of untreated sewage in rural areas causes widespread water pollution. It was estimated that in 2011 rural areas daily discharged around 23 million tons of domestic wastewater, 5.3 million tons of BOD (Biochemical Oxygen Demand), 8.6 million tons of COD (Chemical Oxygen Demand), 960 thousand tons of nitrogen, and 140 thousand tons of phosphorus (Ministry of Ecology and Environment, 2012c). Until 2011, more than 90 percent of the villages had no sewage collection and treatment systems, causing serious pollution of surface water and groundwater Ministry of Ecology and Environment (2012c).

The livestock and poultry industry generated 243 million tons of animal faeces and 163 million tons of urine in 2007, as stated in the First National Census of Pollution Sources (National Bureau of Statistics, 2010). Animal faeces caused severe water pollution and the situation was rapidly deteriorating. Around one-tenth of large-scale farms in the eastern coastal regions, with high population density and multiple river systems, were less than 50 meters from a local water source. A Ministry of Ecology and Environment (MEE) investigation in 23 provinces across China in 2012 found that 90 percent of large-scale farms did not conduct the required Environment Impact Assessment (EIA) and 60 percent lacked necessary pollution control measures (Ministry of Ecology and Environment, 2012d).

Agricultural film usage increased dramatically between 2006 and 2014 (National Bureau of Statistics, 2015b). It is estimated that in 2015, China's total use of agricultural film reached more than 2.6 million tons, but the recycling rate was less than 2/3 (Ministry of Agricultural and Rural Affairs, 2017). According to Ministry of Agricultural and Rural Affairs data from 210 national agricultural film monitoring sites, the amount of film residue in northwest China, the area with the biggest use of agricultural films, was more than 36 kg/ha, and the maximum was 138 kg/ha (Ministry of Agricultural and Rural Affairs, 2019). In order to protect and improve the agricultural ecological environment, China urgently needs to establish a sound supervision and management system for agricultural film.

There has been no detailed assessment of agrichemical packaging usage in China, but it can be estimated from agricultural pesticide usage. From 2006 to 2014, the usage of agricultural pesticides significantly increased, and thus agrichemical packaging (National Bureau of Statistics, 2015a). It was estimated that 10 billion agrichemical containers were generated each year in China, with more than 3 billion discarded - these had become one of the most

significant sources of rural water and soil pollution (Xia, 2015). In response to this problem, the government proposed the ‘Agrichemical Packages Recycling Regulation (interim)’ (Ministry of Ecology and Environment, 2015).

Straw burning is another pollution source - it generates much fine particulate matter into the air. In 2015, approximately 900 million tons of straw were produced and 80 million tons of straw residuals turned into pollutants (Shang, 2015). Because of the increasingly severe smog in most parts of China, since 2013 the MEE has started monthly and daily reporting of the straw burning situation by using satellite remote sensing in all 31 Chinese provinces (Ministry of Ecology and Environment, 2017). Based on the agricultural output statistics in the eastern and northern areas in China from 2000-2014, Jin et al. (2017) indicated that straw burning was one of the significant influential factors that contributed to the increasing levels of PM 2.5⁷ from 2000 to 2014. The MEE monitoring centre stated that straw burning contributes to around 14-55 percent of the daily concentration level of PM 2.5 (Liang, 2015).

The Chinese government recognized the environmental issues caused by these rural practices and associated wastes. A series of policies and programs were proposed and implemented to control pollution in rural areas. Table 1.1 summarises some representative policies and programs that aim to control rural waste pollution and improve the rural living environment. Besides these policies and programs, many other guidelines, standards, or notifications were introduced and published by different government departments.

Table 1.1 Example policies and programs for rural waste management in China

Ministry	Policy/Program	Year Initiated
Ministry of Agriculture	Rural Cleaning Project	2005
Ministry of Ecology and Environment	Comprehensive Environmental Treatment (CET) Policy	2008
Ministry of Housing and Urban-Rural Development	Five-year Specific Program on Rural Domestic Waste Management	2014
The State Council	Three-year Action Plan for Improving Rural Living Environment	2018

Among these policies and programs, the ‘Incentive Policy to Control Pollution and Promoting Comprehensive Environmental Treatment in Rural Areas’, otherwise known as the Comprehensive Environmental Treatment (CET) policy, is one policy that focuses exclusively on comprehensively addressing rural waste management and pollution control. This policy offers financial rewards and compensation to control rural pollution. ‘Building Ecological

⁷ Atmospheric particulate matter (PM) that has a diameter of less than 2.5 micrometres

Civilization’ is the core concept of the CET policy. There are two specific policy objectives: (1) control the most prominent environmental pollutions in rural areas; (2) educate the target groups on environmental protection and help the target groups to participate in rural environmental protection (Ministry of Ecology and Environment, 2010a). Specifically, this policy encompasses the following five types of pollution management programs: water source protection, domestic waste and domestic sewage treatment, livestock and poultry pollution control, leftover industry and mining pollution control, and comprehensive treatment of the rural environment (Ministry of Ecology and Environment, 2009). In terms of rural domestic waste treatment, this policy supports programs to sort, collect, transfer, properly dispose of the rural domestic waste, and increase the environmental awareness of villagers (Ministry of Ecology and Environment, 2012a). In terms of rural domestic wastewater, this policy supports programs to construct drainage systems, wastewater collection systems, and sewage disposal systems (Ministry of Ecology and Environment, 2012b). All CET programs must be evaluated after their implementation (The State Council, 2009). The next section introduces the CET policy evaluation process.

1.2 CET policy evaluation

Policy evaluation leads to policy-learning (Fischer & Miller, 2007). The purpose of the CET policy evaluation is to provide suggestions for improvements and use as reference for follow-up funding arrangements (Ministry of Ecology and Environment, 2010b). In 2010, the MEE sent an important notification, namely, ‘Policy Effect Evaluation Guideline on the CET policy’, to all environment protection bureaus (Ministry of Ecology and Environment, 2010b). The notification is an administrative order including guidelines and an index about evaluating the effect of the implementation of the policy (MEE [2010] 136 evaluation framework, Appendix B). MEE protocols state that this evaluation should be conducted one year after the policy program is completed. Provincial and prefectural level environmental protection bureaus organize the evaluation and recruit an evaluation panel, which involves five or more experts in the field of, e.g., rural environmental protection, natural and ecological protection, and environment monitoring. The panel checks the environmental monitoring data, which is provided by county-level environmental protection bureaus, conducts onsite assessments, scores the evaluation index, and completes a report. Provincial and prefectural level environmental protection bureaus collect the evaluation reports. All reports should be sent to the MEE before August of the year the evaluation was conducted. The MEE reviews these reports and sends summary reports to the State Council.

An internet search for CET evaluation results was performed in 2019. Currently, complete official government evaluation reports, based on the MEE [2010] 136 evaluation framework, are not available to the public. The brief reports that were available to the public were formatted in a newspaper article style, with a very brief overview summary. Thus, it is hard to compare these CET evaluation results in detail. On the other hand, evaluation results from independent scholars indicated that all the CET programs were ‘successful’ (see Gu, 2012; Lao, 2017; Wei, 2015; Zhou et al., 2019). Such uniformly positive conclusions raise doubt about the reliability of the evaluations, considering the policy and programs were implemented in rural areas with diverse social, economic, geographical, demographic, and political contexts. Furthermore, a number of limitations with the MEE [2010] 136 evaluation framework process have been identified, e.g., the MEE [2010] 136 evaluation framework cannot provide comprehensive insights and suggestions about the much broader overall policy process.

Given doubts about the evaluation results and limitations of the MEE [2010] 136 evaluation framework, a more scientific policy evaluation framework is required. Notably, this framework “*should include more specific information on why installed interventions have succeeded or failed*” (Vedung, 2017, p. 209) in order to facilitate policy-learning. However, there is a lack of a systematic and holistic public policy evaluation framework in China and such an framework is needed (Li, 2016; The Development Research Center of the State Council, 2014).

1.3 A systematic and holistic evaluation framework

Policy/program evaluation can be complicated, and the results are rarely black and white. A ‘good’ result may not equal ‘complete policy success’ and a ‘bad’ result may not equal ‘absolute policy failure’. There may be different degrees of policy success or policy failure, e.g., there is likely to be a ‘grey area’. Meanwhile, a program that is successful in one aspect may fail in another. It is common in China for local government to take risks in implementing local programs, which might greatly benefit the local economy, but also results in public opposition (Bradsher, 2013; Wang, 2012). A P-Xylene⁸ project in China was such a case. The National Development and Reform Commission did not officially approve the para-xylene project of Qingdao East Chemical Industry Group Co., Ltd. in Qingdao city until July 2010, but the project had been put into production in 2007. Public concerns about the project's

⁸ P-Xylene is an important chemical feedstock. Overexposure of P-Xylene in humans can cause a series of health issues (National Center for Biotechnology Information, 2020).

environmental and health implications had led to mass protests and the shutdown of the project after its approval 2010 (Song & Yan, 2011).

This research uses the notions of 'policy success' and 'policy failure' as a starting point. These words are often used in the literature and reports, but without clear definitions and a conceptual framework that facilitates further investigation (Marsh & McConnell, 2010; Zittoun, 2015). To fill this research gap, McConnell (2010a, 2010b) clearly defined policy success and policy failure (2010a). McConnell believed that it is rare for absolute policy success or policy failure to occur, and more often it is a matter of degree. And policy success and failure can be observed from three realms, namely: process, program and, politics. Based on these definitions, McConnell (2015, 2016) developed a systematic and holistic framework to facilitate public policy/program evaluation.

McConnell's framework is adopted as the theoretical basis for this research. But the context in which McConnell's framework was developed is different from the Chinese political context. Therefore, his framework needs to be considered and tested in China. The findings from this research may allow this framework to be adopted to better fit the Chinese context, and thus help address the gap of a systematic and holistic public policy evaluation framework in China, and also deepen the understanding on the nature of policy success and policy failure.

1.4 Research objectives and questions

How environmental policy is designed, implemented and evaluated (including in terms of relative success and relative failure) is a question often raised in the Chinese context (see Gao, 2008; Luo & Zhang, 2010; Song et al., 2003; The Development Research Center of the State Council, 2014) . Indeed, contemporary thinking (see Li, 2016; Wang et al., 2014) would suggest there is no such systematic and holistic environmental policy evaluation framework. This is significant because without such a framework, it is difficult to assess either the policy process or the outcomes achieved. More importantly without an integrated policy framework, it is very hard to capture the learning from relative successes and failures is captured and incorporated this learning into policy improvements or new policy initiatives. This thesis seeks to address this gap, first by identifying a potential framework for application in the Chinese context, and then by testing and applying it in such a way that it gives insights into specific case examples that potentially can then be applied more broadly to the entire area of environmental policy design, implementation, and evaluation in China.

To explore and assess the process of policy evaluation, this research uses the CET policy, and specifically the programs related to domestic waste and domestic wastewater that are implemented in study villages in rural China, as case studies. These case studies are used to explore the application of McConnell's framework in the Chinese context and provide insights into how the policy might be improved. The study has the following objectives:

- To explore the application of McConnell's framework in the Chinese context.
- To evaluate the relative success or failure of the CET policy.
- To explore the causes of policy failure.

The specific research questions that contribute to addressing these objectives are:

- (1) What aspects of McConnell's framework are missing/not fitting/can be revised in the Chinese context?
- (2) What are the relative degrees of policy success/failure in each case study?
- (3) What are the internal relationships between success/failure in the stages of policymaking, policy implementation, and its political impact?
- (4) What are the causes of policy failure?

1.5 Overview of the thesis structure

The thesis contains nine chapters. This chapter (Chapter 1) has presented the introduction to the problem, the research gap, the objectives, and research questions. Chapter 2 presents a literature review of policy success and policy failure. McConnell's framework is further introduced and discussed. The methodology and methods are then presented in Chapter 3. Chapter 4 briefly describes the Chinese policy process for the purpose of further testing McConnell's framework in the Chinese context. Chapters 5-7 cover the application of adaptive learning, triangulation, and case study methodology in the Chinese context. Specifically, chapter 5 evaluates McConnell's framework from a theoretical point of view in the Chinese context. It lays the theoretical foundation for further testing and potential revision of McConnell's framework. Guidelines for evaluating degrees of success/failure are developed for empirical field investigations. Chapter 6 reports on the first phase of the case study evaluation of McConnell's framework, and learnings that can then be further tested. Chapter 7 reports on the second phase of the case study evaluation of the modified

McConnell framework. The evaluation results are then compared and discussed in Chapter 8 which also examines the causes of policy success or policy failure. Finally, Chapter 9 outlines the main conclusions and identifies both limitations to the study and recommendations for further research.

Chapter 2

Literature Review and Theoretical Framework

2.1 Introduction

This chapter surveys the academic research on public policy evaluation. It summarises the current knowledge about policy evaluation in China, the Comprehensive Environmental Treatment (CET) policy evaluations, and relevant studies on policy success and policy failure. It identifies gaps in the existing research and proposes a theoretical framework to evaluate the CET policy.

This chapter begins with a literature review of environmental policy evaluation in China and the evaluation of the CET policy. International studies on policy success and policy failure are then reviewed. The variable and sometimes conflicting understandings of the concepts of policy success and policy failure and the limits of current research are discussed. To fill the research gap that is identified, a framework is introduced that is considered systematic and holistic and is then used to evaluate and analyse the CET policy, as the basis of developing an approach that could fit the context of China.

2.2 Environmental policy evaluation in China and the CET policy evaluation

In China, there is a lack of a systematic and holistic environmental policy evaluation framework in China (Li, 2016; The Development Research Center of the State Council, 2014; Wang et al., 2014). Environmental policy assessment is mainly conducted internally by government departments. It is easier for government staff to obtain information and the assessment results can easily be adopted, but it is difficult to guarantee the authenticity, reliability, and comprehensiveness of the assessment. Meanwhile, evaluations conducted by research institutions and scholars often lack sufficient information to ensure the assessment is reliable and robust (Li, 2016). Therefore, many scholars have called for the establishment of a sound environmental policy assessment system (Luo & Zhang, 2010; Song et al., 2003; Ye & Tang, 2017).

The absence of effective and independent evaluations of the CET policy can be taken as a symptom of the lack of a systematic and holistic environmental policy evaluation framework in China. The CET policy is evaluated using the MEE [2010] 136 evaluation framework (the

policy effect evaluation guideline for the CET policy from the Ministry of Ecology and Environment, Appendix B). However, the MEE [2010] 136 evaluation framework has limitations. It focuses only on policy implementation and its side effects. But contemporary policy analysis goes beyond the policy implementation process (Fischer & Miller, 2007; Howlett et al., 2015). Failure to fully examine the broader policy stages limits the ability to provide comprehensive insights and suggestions on the CET policy programs. In addition, several components necessary for policy evaluation were not included in the index, for example, the policy impact on human health and policy outcomes on target group behaviour. Also, the MEE [2010] 136 evaluation framework requires evaluations to calculate the ratio between inputs and outputs (see Appendix B, Item 3), but these cannot be calculated as they are measured in different units. The input can be the resources dedicated to the design and implementation of a measure (European Environment Agency, 2001), e.g., financial investment in building a garbage collection point. The output can be the tangible results of a measure (European Environment Agency, 2001), e.g., the number of garbage collection points. Normally, cost-effectiveness is used to describe whether the objectives have been achieved at the lowest cost, but this ratio indicator has limited value when used to evaluate a single program – it is most relevant when used to compare similar programs. Furthermore, it is hard to establish a causal relationship between a CET program and the regional water or air quality (see Appendix B, Item 18 and 19). For example, the causal relationship between a village domestic waste management program and an improvement in regional water quality, or between a township domestic wastewater management program and an improvement in the regional air quality are difficult to determine.

The CET policy evaluation process is also controversial. Key stakeholders, such as local community leaders and third-party organizations, may not be fully involved in this process. Local governments are not only the policy program designers and implementers, but also the policy evaluators, who recruit evaluation panels, provide environmental data, review the evaluations, and submit the evaluation reports. Scholars have noted that in this situation local governments could potentially bias the evaluation results, given they have a direct interest in the evaluation results, which are referenced for follow-up funding arrangements (Gao, 2014; Guo, 2007; Li, 2010; Qin, 2015; Wang, 2006; Xu et al., 2010; Yin, 2012).

To further understand the CET policy evaluation process, an internet search was used to gather information about the CET programs and the results of their evaluations. Currently, complete government evaluation reports, based on the MEE [2010] 136 evaluation

framework, are not available on the internet, although some evaluation summaries are available. For example, Zhe Jiang Province evaluated its CET programs during 2010-2012. In 2010, all counties scored very well in the evaluation: 61.5% counties were 'very good' (above 90), 38.5% were 'good' (below 90, the lowest score is 87). During 2011-2012, again all counties passed the evaluation: 90% counties were 'very good' (above 90/100), and 10% of counties were 'good' (below 90/100, the lowest score is 88.5). However, due to the lack of data from other provinces, it is hard to compare these scores. Hence, it is possible that the reason this province received such high scores was that it had a more developed economy and other factors, rather than due to the policy itself.

To date, most of those currently publicly available on internet have been formatted in a newspaper article style and contain only a very brief overview summary of the program implementation and outcomes. For example, the Ministry of Ecology and Environment (MEE) regular news conference in November 2019, stated that *"the living environment in villages has been improved, and the sense of gain, security, and happiness of rural residents has been significantly enhanced"* (Ministry of Ecology and Environment, 2019). The CET policy had also attracted the attention of scholars. However, evaluation results from independent scholars were surprisingly similar, that is, the policy and the program have been a great success (see Dong & Zhu, 2012; Gu, 2012; Lao, 2017; Wei, 2015; Zhou et al., 2019). Such conclusions raise doubt about reliability, considering the policy and programs were implemented in areas with diverse social, economic, geographical, demographic, and political backgrounds all over China.

Given the above limitations, the MEE [2010] 136 evaluation framework cannot provide a comprehensive picture of the CET policy programs - not only failing to *"describe the components of systems"*, but also *"how these connect and interact to generate change"* (Lemire et al., 2020, p. 58). Therefore, a systematic and holistic environmental policy evaluation framework that can fit the Chinese context is needed.

2.3 Assessing policy success and failure

Policy evaluation is complicated and there are multiple ways to evaluate policy. Vedung (2017) summarised several evaluation models, including: effectiveness models (e.g., goal-attainment model, side-effects model, goal-free evaluation model, comprehensive evaluation model, client-oriented model, stakeholder model), economic models (productivity model and efficiency model), and professional models. Besides, multiple

frameworks are used in different countries, in different fields, and for different goals, e.g., the DPSIR framework in the European Union for evaluating the environmental policies (European Environment Agency, 2001), the six-step CDC Framework for evaluation in public health (Milstein & Wetterhall, 1999) and the Guidelines for Preparing Economic Analyses for evaluation of environmental regulations and policies in the United States (National Center for Environmental Economics Office of Policy, 2010), and the Policy Quality Framework in New Zealand for assessing the quality of policy outputs (Department of the Prime Minister and Cabinet, 2017).

Vedung (2017, p. 3) defined evaluation as a “careful retrospective assessment of the merit, worth and value of administration, output and outcome of government interventions, which is intended to play a role in future, practical action situations”. As per Schoenefeld and Jordan (2019), in their examination of environmental policy evaluation in the EU, this definition is adopted for the purposes of this research. Vedung (2017, p. 209) also emphasised that “evaluation should include more specific information on why installed interventions have succeeded or failed” – this further requirement is important when examining all components of the policy cycle and when considering the detail of particular policies, programmes and projects. Clarity of understanding and this definition are necessary to help properly examine the claims that a policy is a ‘success’ or a ‘failure’ that are commonly made in government reports, the media, and academic journals, by politicians, journalists and scholars. Thus, the conversation should surround “what exactly constitutes policy success and failure” (Howlett, 2012, p. 542). A specific agreed-on meaning and approach that involves describing indicators and dimensions of the evaluation method is essential to set up a benchmark and avoid misusing the concept in further evaluations (Babbie, 2015).

Building on the above requirements, and in order to identify a policy evaluation framework for testing in the Chinese context, it was important to first determine what is meant by success (and failure) and what criteria can be used to determine the degree and nature of such success or failure? Such a determination requires that evaluation should “establish systematic criteria for assessing success or failure” (Marsh & McConnell, 2010, p. 565). Simply judging the success or failure of a policy from a single perspective is not sufficient; rather, a more holistic view will take into account that policy success or failure does not only happen in the policymaking process and policy implementation process, but that there may also be political repercussions that could be important in judging policy success or failure.

Therefore, the second question was: is there a systematic and holistic framework for evaluating policy success or failure, generally and more specifically, which has potential to be applied in the Chinese context? This research uses the notions of 'policy success' and 'policy failure' as a starting point, with the literature concerning key debates relating to the above two questions being reviewed next.

The literature on defining policy success is limited. Baldwin (2000, p. 167) commented "*there was not even a common understanding of what is meant by success*". Most literature refers to 'policy success' in case studies but fails to define it clearly, or fails to provide a systematic framework to evaluate policy success (Hall, 1993; Hulme & Moore, 2007; Kane, 2003; King, 1999).

Compared to policy success, policy failure attracts more public attention (Birkland, 1997; Cairney, 2011). Social media tends to report and spread the news of policy failure, but again without a clear definition of what such failure is. There is also a paucity of literature focused on the definition of policy failure and remarkably little is known about what actually constitutes policy failure. Without a clear definition, it is worth noting that policy failure is often described in emotive terms such as 'policy blunders', 'policy disasters', 'policy fiasco', and 'policy omnishambles' (see Annison, 2019; Boin et al., 2008; Bovens et al., 1996; Butler et al., 1994; Massey, 2013; Richardson & Rittberger, 2020). These words could easily confuse the process of determining the degree of failure. On the other hand, policy failure is normally described in case studies as "*if policy has failed to achieve an objective or perceived set of outcomes*" (Hall, 2011, p. 653). And the typical focus in the literature is to investigate the causes of policy failure rather than the nature of the failure, either without a systematic structured assessment or sometimes just making an occasional passing comment (see Ascher, 2000; Aspinall, 2006; Bourblanc & Anseeuw, 2019; Brody & Shapiro, 1989; Davidson, 2019; Luk, 2009; Ward, 2003). Meanwhile, scholars often consider policy failure in either the policymaking process or the policy implementation process, but lack a holistic perspective (see Howes et al., 2017; Howlett, 2012; Khalilian et al., 2010; Mitchell & Massoud, 2009; Payne, 2000). Thus, discussion of the relationship between policy failure, policy learning, and policy change may also lack a systemic examination (see Ei-Jardali et al., 2014; May, 1992; Stronks et al., 2006; Zhong et al., 2017).

The reason for the lack of proper analysis and discussion of policy success and failure may be attributed to methodological difficulties in conceptualizing policy failure, including: "*what one individual perceives as a failure may be viewed by another as 'not a failure' or even a*

‘success’; [no] universally agreed benchmark; a policy that failed to deliver benefits for one group may be successful for another; a policy that failed in the short term may yield successes in the long term” (McConnell, 2015, pp. 226-229).

Despite the difficulties, scholars have sought to illuminate the types of policy failure to facilitate policy evaluation. Howlett (2012) presented a two-dimensional typology. One dimension is ‘high’ to ‘low’ for salience, meaning the intensity and visibility of policy failure. The other dimension is ‘high’ to ‘low’ for magnitude, meaning the extent and duration of policy failure. He categorized policy failure, namely: major failure, focused failure, diffuse failure, and minor failure. In a six-country and four-sector comparative empirical investigation on public administration, Mark and Paul (2016) also developed a two-dimensional framework and presented a matrix setting out four possible combinations of ‘++’ and ‘--’ for programmatic performance assessment and political reputation assessment, namely success, tragedy, farce and fiasco.

However, each categorization mentioned above has its limitations. Firstly, policy failure was only categorized and evaluated in the stages of policy formulation and implementation in Howlett’s categorization, or in the stage of policy implementation and with respect to political reputation in Mark and Paul’s categorization, rather than taking the entire policy cycle into account. Secondly, while there may be a correlation between policy process failure, policy implementation failure, and political aspects of policy failure, the studies did not provide a tool for further research on the tension between the failures in different themes. Thirdly, words such as effectively or ineffectively, high and low, or symbols like ‘++’ and ‘--’ that were used in previous studies proved difficult to define clearly.

Therefore, a specific agreed-on meaning that involves describing indicators and dimensions is essential to set up a benchmark and avoid misusing the concept in further evaluations (Babbie, 2015). Meanwhile, simply judging the success or failure of a policy from a single perspective is not sufficient. It is critical to have an overall view and notice that policy success or failure does not only happen in the policymaking process and policy implementation process, but its political repercussion could also be an important aspect in judging the policy success or failure.

In order to fill the above research gaps, Marsh and McConnell (2010) published an article entitled ‘Towards a Framework for Establishing Policy Success’, which is based on Boyne’s (2003) research on measuring public service improvement. Marsh and McConnell argued

that policy may succeed in the 'process', 'program', and 'political' realms. These three realms are built on the distinction between policy implementation success and political success by Bovens et al. (2001), with a policymaking category added. Therefore, policy success is considered *"beyond the assumption that success equates with meeting policy objectives or producing 'better' policy"* (Marsh & McConnell, 2010, p. 565). On this basis, Marsh and McConnell constructed a framework for judging policy success and identified nine indicators from the above three dimensions. However, both Marsh and McConnell admitted that this framework *"is a heuristic, not a model, let alone a theory"* (p. 571), but it became the basis of subsequent studies by McConnell on policy success and policy failure.

McConnell (2010b) published a book titled 'Understanding Policy Success: Rethinking Public Policy'. In this book, he defined policy success from the perspective of *"both foundationalist (success as fact) and anti-foundationalist (success as interpretation) approaches"* (p. 39).

McConnell argued that policy may succeed in the realm of 'process', 'program', and 'political', and he identified eleven indicators as criteria for evaluating policy success (pp. 40-54). Moreover, he held that policy success has five degrees, namely: policy success, durable success, conflict success, precarious success, and policy failure (pp. 55-62). If a policy succeeded, certain degrees of success in each of the indicators and in three dimensions as well, can be observed.

Based on his book, McConnell (2010a) published a paper titled 'Policy Success, Policy Failure and Grey Areas In-between'. He expanded his focus from policy success to policy failure, and explains the gap between policy success and failure, known as the 'grey area'. Policy failures are seen as *"a mirror of policy success"* (p. 356). In this 2010 paper, McConnell revised the definition of policy success and defined policy failure. McConnell argued that policy may succeed or fail in the realm of 'process', 'program', and 'politics', along a spectrum of success, resilient success, conflicted success, precarious success, and failure (pp. 352-356). Fourteen indicators were identified as criteria for evaluating policy. Certain degrees of success/failure can be observed in each of these indicators and in the realm of 'process', 'program', and 'politics'. He further argued that the success or failure in one realm may relate to the success or failure in another realm (pp. 357-359).

McConnell next turned his focus to studying policy failure. In an article titled 'What Is Policy Failure? A Primer to Help Navigate the Maze', McConnell (2015, p. 228) argued that *"failure is rarely all or nothing"* and modified his previous definition on policy failure (p. 230). Thus, a policy may fail in the realm of 'process', 'program', and 'politics', along a spectrum of

(Outright) Failure = Marginal Success, Conflicted Failure = Conflicted Success, Tolerable Failure = Resilient Success (p. 237). **Thirteen** indicators were identified as criteria for evaluating policy failure (pp. 233-235). And he indicated that three patterns may emerge between realms, namely: process success vs program/political failure; program success vs political failure; political success vs program failure (p. 238).

In a later article entitled 'A Public Policy Approach to Understanding the Nature and Causes of Foreign Policy Failure', McConnell (2016) extended his study on policy failure further to the study on the causes of policy failure. Based on his previous research, he used examples of foreign policy to summarise and categorize the underlying causes of policy failure in a heuristic framework. This framework used three frames, namely: individual actor centred frame, institution/policy process centred frame, and societal centred frame (p. 678). McConnell admitted that these *"various categorizations are not mutually exclusive, but the framework at least allows us to order a range of elements to help prompt deeper and subsequent theorizing and operationalizing"* (p. 677).

McConnell's research has been applied by some scholars, but it has also been criticized. For example, based on McConnell's (2010b) research on policy success, Rutter et al. (2012) examined six cases of policy in the last 30 years in the USA and explored seven common factors behind policy success. They acknowledge that a successful policy is highly adaptable and resilient. But a policy is considered successful only when a controversial issue becomes an acceptable norm, which departs from McConnell's view of political success. Gray (2011, pp. 48-49) reviewed McConnell's book (2010b) and argued that the simplistic policy cycle approach that applied in McConnell's framework has gaps, and the rigid stylisation and matrix-based frameworks *"would [not] be sufficient to ascertain for definite whether or not 'success' had been achieved, and whether the policy initiative in question could claim responsibility"*. Despite these doubts, McConnell's research provided a tool for a detailed and in-depth evaluation of a policy. Table 2.1 summarises the key findings of McConnell's major literature on policy success and policy failure in chronological order. The next section presents McConnell's definition of policy failure, the extent of policy failure, a policy evaluation framework, and his explanation of the causes of policy failure.

Table 2.1 Summary of McConnell's major literature in chronological order

Title	Year	Research Focus	Concept Defined	Spectrum of policy success or failure
Towards a Framework for Establishing Policy Success	Marsh and McConnell (2010)	Policy success	Policy success	None
Understanding Policy Success: Rethinking Public Policy	McConnell (2010b)	Policy success	Policy success	<ul style="list-style-type: none"> • Process success • Durable success • Conflict success • Precarious Success • Process failure
Policy Success, Policy Failure and Grey Areas In-between	McConnell (2010a)	The area between policy success and failure	Policy success and Policy failure	<ul style="list-style-type: none"> • Process Success • Resilient success • Conflicted success • Precarious success • Process Failure
What Is Policy Failure? A Primer to Help Navigate the Maze	McConnell (2015)	Policy failure	Policy failure	<ul style="list-style-type: none"> • Tolerable = Resilient Success • Conflicted failure = Conflicted Success • (Outright) failure = Marginal Success
A Public Policy Approach to Understanding the Nature and Causes of Foreign Policy Failure	McConnell (2016)	Causes of policy failure		

Source: Marsh and McConnell (2010); McConnell (2010a, 2010b, 2015, 2016).

Note. The main theoretical applications are the framework of policy failure proposed by McConnell (2015) and the explanation of the causes of policy failure proposed by McConnell (2016). This is explained in section 2.5.

2.4 McConnell's framework on policy failure

This section introduces McConnell's framework on policy failure. His definition of policy failure is presented first, followed next by an introduction of how to consider the extent of policy failure. Based on the above concepts, McConnell's policy evaluation framework and his explanation of the causes of policy failure are then considered.

2.4.1 Defining policy failure

Some literature has conceived of policy failure as *"purely relativistic constructions or interpretations"* (Howlett, 2012, p. 542). For example, Bovens and Hart (2016, p. 654) stated: *"Success and failure are not inherent attributes of policy, but rather labels applied by stakeholders and observers. They are constructed, declared and argued over. Clearly, these labelling processes are not necessarily evidence-based"*. However, policy failure is also conceived as *"rendering judgments about an actually existing state of affairs"* (Howlett, 2012, p. 542). This is the contention in the policy sciences about how to interpret policy failure. In other words, what constitutes policy failure (Grant, 2009).

McConnell (2010a) acknowledged that there was no universal benchmark measure of success or failure, and that was always an issue of objective or subjective view. For example, opposition politicians almost always want to describe government policies as failures. However, his definition of policy failure was balanced between foundationalist (failure as fact) and anti-foundationalist (failure as interpretation), and based on two objective standards, namely: whether the policy has fundamentally reached the goals that proponents set out to achieve; and the existence of opposition or support. As the mirror of policy success, policy failure was defined as:

A policy fails, even if it is successful in some minimal respects, if it does not fundamentally achieve the goals that proponents set out to achieve, and opposition is great and/or support is virtually non-existent (McConnell, 2015, p. 230)

McConnell's definition of policy failure was based on two objective standards, namely: goal attainment and the existence of opposition or support. First, policy failure requires measurement of the general characteristics of a policy according to whether the goal has been achieved, rather than providing any moral judgment of the policy content. For example, when a government achieves its goal, it is considered successful, rather than evaluating whether the goal is desirable. Second, the public has different understandings of public policies. No matter what the policy effect, public recognition of the policy will turn

into support or opposition to the policy, which are based on the subjective will of the public and can be measured objectively.

2.4.2 Extent of policy failure

McConnell (2010a, 2015) believed that there was no absolute policy success and policy failure, even a 'policy fiasco' can have minimal success and 'grey areas in between'. The policy is not 'all or nothing'. Policy failure can be "*a matter of degree, as well as being interspersed with success*" (McConnell, 2015, p. 236). Therefore, he rated policy failures as existing on the following three scales: Tolerable Failure = Resilient Success; Conflicted Failure = Conflicted Success; (Outright) Failure = Marginal Success (2015).

2.4.3 McConnell's policy evaluation framework

McConnell (2015) distinguished between policy failures in different realms, namely: 'process', 'program', and 'politics'. Process refers to the policymaking process, including agenda setting, policy formulation, and policy adoption. Program refers to the policy implementation process. Politics refers to the political repercussions of a policy. Some failures are redeemable and others not, "*while failure in some realms may actually be a consequence of success in others*" (McConnell, 2015, p. 237).

In McConnell's policy evaluation framework, 13 criteria, including four criteria across 'process', five criteria across 'program', and four criteria across 'politics' (Table 2.2), are considered as observed variables. All 13 criteria are considered key indicators to judge whether a policy has reached the goals that proponents set out to achieve, and the existence of opposition or support. If a policy failed, certain degrees of failure (Tolerable Failure = Resilient Success; Conflicted Failure = Conflicted Success; (Outright) Failure = Marginal Success) in each of the criteria can be observed.

McConnell's policy evaluation framework provided the basis to delve deeper into issues that are critically important in public policies, allowing structured comparison over time and across sectors. The framework can be used to evaluate the shaping, implementation, and political impact of any policy, program, and plan within and across different levels of government. The framework also helps identify scales that delineate degrees of failure (outright, conflicted, tolerable) to explore the inextricable link between policy shaping, implementation, and political impact. Questions such as: 'did outright process failure lead to outright program failure' or 'did outright process failure lead to tolerable political failure',

can then be investigated based on the framework (McConnell, 2015). To sum up, the framework helps provide the basis for further examination of the dynamics in/between individual cases in the aspects of policy success or failure into meaningful analytical categories (the ‘process’, ‘program’, and ‘politics’ realms) as well as degrees of failure (outright, conflicted, and tolerable).

Table 2.2 McConnell’s policy evaluation framework

Realm	No.	Criteria (13)
Process	1	Preserving goals and policy instruments
	2	Securing legitimacy
	3	Building sustainable coalition
	4	Attracting support for process
Program	5	Implementation in line with objectives
	6	Achieving desired outcomes
	7	Benefiting target group(s)
	8	Satisfying criteria highly valued in policy domain
	9	Attracting support for program
Politics	10	Enhancing electoral prospects/reputation
	11	Easing the business of governing
	12	Promotion of government’s desired trajectory
	13	Providing political benefits for government

Source: McConnell (2015, pp. 233-235)

2.4.4 Causes of policy failure

Policy failure attracts public attention and facilitates policy learning. McConnell (2016) distinguished between what could be observed if a policy failed (via the 13 criteria mentioned above) and the cause of the policy failure. The causes of policy failure from the perspectives of unsupportive (unsympathetic) and supportive (sympathetic) views were categorized in three frames, namely: individual actor centred frame, institution/policy process centred frame, and societal centred frame (Table 2.3). While this framework does not give definitive answers to causality, it may help to systematically analyse the causes of failure.

Table 2.3 Causes of policy failure

Frame	Causes	
	Unsupportive	Supportive
Individual actor-centred frame	<ul style="list-style-type: none">• Reckless self-interest• Deliberate cultivation of failure• Negligence• Incompetence	<ul style="list-style-type: none">• Appalling judgment• Lapse in otherwise good judgment• Genuine mistake• Bad luck
Institution/policy process-centred frame	<ul style="list-style-type: none">• Institutional self interest• Institutional arrogance• Major blind spots• Weak capacity for good decision making	<ul style="list-style-type: none">• Small weakness in otherwise solid institutions and process
Societal-centred frame	<ul style="list-style-type: none">• Core value/elite interests produced policy-making biases and inevitable failures	<ul style="list-style-type: none">• Good society has perhaps drifted slightly from core values and issues

Source: McConnell (2015, p. 678)

2.5 McConnell's framework as theoretical framework

This thesis is based on McConnell's study of policy failure. The main theoretical applications are the framework of policy failure proposed by McConnell (2015) and the explanation of the causes of policy failure proposed by McConnell (2016). This section explains why McConnell's framework is chosen as the theoretical framework in this research.

McConnell's framework has the potential to be applied to examine public policy in the Chinese context. First, McConnell clearly defined policy failure and produced the necessary criteria and judgments for assessing success and failure in his framework. 'Criteria' refers to *"the yardsticks to be used as the basis of comparison"*, and 'judgments' refer to *"the overall process of actually comparing the intents, observations, and criteria of merit"* (Vedung, 2017, pp. 64-65). Second, McConnell's framework is a systematic and holistic framework, which systematically describes the components that need to be evaluated (the realms of 'process', 'program', and 'politics') and facilitated in a holistic evaluation of the connection and interaction between these realms. No other framework or approach could be found that included the full policy cycle and clear criteria for defining success or failure.

2.6 Testing application of McConnell's framework in China

McConnell's framework is the theoretical basis of this research. However, this framework has not been thoroughly tested, certainly not within the political context of a country like

China. The assumptions underpinning McConnell's framework are based on a political system that has a very different background, traditions, and institutions when compared to the political system in China. For example, China's policymaking process may not involve as much stakeholder involvement as occurs in western countries, nor is the electoral process as transparent (Horsley, 2009). Given such complexity, McConnell's framework needs to be tested in the Chinese context. This research uses the CET policy, and specifically the programs related to domestic waste and domestic wastewater that are implemented in study villages in rural China, as case studies. These case studies are used to explore the application of McConnell's framework in the Chinese context and provide insights into how environmental policy might be improved.

2.7 Summary

China does not have a systematic and holistic environmental policy evaluation framework, and the various limitations of the CET policy evaluation framework can be seen as a reflection of this. The search for a framework that might potentially be applicable in the Chinese context began by reviewing how policy success and failure are defined in the literature, then looking more closely at McConnell's framework on policy failure. In McConnell's framework, the key nodes in the policy process and the important influential factors that may affect policy outcomes are used to evaluate a policy, while the context is further extended to the political response to the policy process. McConnell's framework is a relatively systematic and holistic policy evaluation framework, which has the potential to be applied to examine environmental policies in the Chinese context but needs to be tested. Therefore, suitable research approaches are needed. The next chapter introduces the methodology and methods that are used in undertaking this research.

Chapter 3

Methodology and Methods

3.1 Introduction

Chapter 2 reviewed the literature on policy success and policy failure. McConnell's framework was introduced as the theoretical basis to evaluate rural waste policy in China, and thus against which to test and to modify the framework both for theory and practice purposes. This chapter provides an overview of the methodology and methods used. The chapter begins with an introduction of the basic methodology applied in this research. Based on the methodology, detailed methods, including how the data was collected and analysed, are then presented.

3.2 Methodology

McConnell (2015) proposed a framework for the evaluation of policy failure. This framework provides the basis for the evaluation of the Comprehensive Environmental Treatment (CET) policy, but it has not been thoroughly tested internationally, or tested at all in the Chinese context. Therefore, the research itself is an exploration of the framework in the Chinese context which in turn is hoped to contribute to further development of the framework. An integrated approach is taken to explore and test McConnell's framework in the Chinese context. This approach includes three main methodologies: adaptive learning, case studies, and triangulation, with each of the methodologies complementary to the others. Within and across these methodologies, a variety of qualitative and quantitative methods are used, all designed to inform the research objectives of the thesis.

3.2.1 Adaptive learning

It is proposed to explore the framework via an adaptive learning approach, namely: preliminary understanding; trial and re-inform; re-trial and refine. Adaptive learning has been widely used to improve learning achievements in the education sector and knowledge exchange for better decision making in the public policy sector (Reed et al., 2006; Tseng et al., 2008; Tyre & Von Hippel, 1997). Implementation of these steps is intended to lead to an improved framework applicable in China. In this research, the **preliminary understanding step** of adaptive learning is to evaluate McConnell's framework from a theoretical point of view, in the Chinese context. The purpose is to lay the theoretical foundation for further

testing and potential revision of McConnell's framework to fit the Chinese context. The next steps then tested and improved the framework in the light of emergent knowledge, against CET policy programs, in two phases each involving two case applications. **Phase I** is a trial to assess the utility of a modified McConnell's framework and gain preliminary insights into the evaluation criteria applied in the Chinese context. Based on the findings from phase I, **phase II** further tests McConnell's framework and evaluates the CET policy. The aim of phase II is to gain deeper insights into McConnell's criteria. The findings from phase I and phase II should provide deep insights into McConnell's framework and allow for further development in the Chinese, and similar, contexts.

3.2.2 Case studies

McConnell's framework is a semi-finished product. He has proposed the base against which to explore, explain, and evaluate the success or failure of policy. This research aims to evaluate and develop this framework within complex Chinese contexts. Given the context, case studies are appropriate for policy evaluation research of this type (Baxter & Jack, 2008). *"Case studies are a design of inquiry found in many fields, especially evaluation, in which the researcher develops an in-depth analysis of a case, often a program, event, activity, process, or one or more individuals"* (Creswell, 2014, p. 43). Case studies applied in this research can provide in-depth insights into how the policy worked in different cases.

3.2.3 Triangulation

This research uses an untested framework to evaluate policy in the Chinese context. Therefore, the application of triangulation methodology provides an opportunity to improve the validity and mitigate the potential biases that may contribute to a poor outcome. Triangulation is used as *"a strategy for the validation of the procedures and results of empirical social research"* (Flick, 2004, p. 178). Data triangulation is applied in this research (Denzin, 2017) and data is collected *"from different sources and at different times, in different places or from different people"* (Flick, 2004, p. 178).

It should be noted that evaluation results that are based solely on McConnell's framework may not be valid. Therefore, the case study approach incorporates two complementary comparative methods: (1) the evaluation results using McConnell's framework are compared with the results obtained when the CET policy evaluation framework from the Ministry of Ecology and Environment (MEE [2010] 136 Evaluation Framework, see Chapter section 2.2) is applied by an independent third-party investigator (the author); (2) results from both of

the above are compared with the CET policy evaluations undertaken by the governmental departments. These complementary comparative methods help to inform further development of the framework.

3.2.4 Methodology summary

Achieving a triangulation based methodology requires the following related components: adaptive learning involving theoretical review for further testing and potential revision of McConnell's framework; adaptive learning involving multiple cases to test and improve the framework; and data collection from multiple sources and analysis to inform adaptive learning. Table 3.1 summarises the sequence of adaptive learning steps and the purpose of each step. These approaches are explained in the following sections. Detailed theoretical evaluation of McConnell's evaluation is presented in Chapter 5. The phase I case study is presented in Chapter 6 and phase II in Chapter 7.

Table 3.1 Sequence of research steps

Adaptive learning steps	Purpose of each step
Theoretical evaluation	Lay the theoretical foundation for further testing and potential revision of McConnell's framework to fit the Chinese context.
Phase I	A trial to assess the framework's utility and gain preliminary insights into the policy evaluation criteria; Draw conclusions about policy success or policy failure.
Phase II	Provide deeper insights into the framework; Draw conclusions about policy success or policy failure.

3.3 Focus group

"Focus groups are semi-structured discussions with groups of 4–12 people that aim to explore a specific set of issues" (Tong et al., 2007, p. 351). A focus group was used in the preliminary step of the adaptive learning approach to complement the literature review because McConnell (2010a, 2010b, 2015) did not state clearly what was included in Criterion 8 (satisfied criteria highly valued in policy domain). Therefore, before any field investigations could be conducted, it was necessary to identify what criteria were most valued in public sectors in the Chinese context. To do this, five professionals in public policy and public administration, including three scholars in public administration and two local-level government officials (county and township) were recruited for a focus group discussion. All five were recruited when they participated in a Master of Public Administration (MPA) course at Inner Mongolian Normal University. They were familiar with the policy process in

China and could provide practical insights. Information, including a range of literature discussing criteria for evaluating public policy was given to these professionals before the discussion. They were then asked: what criteria do you think are most highly valued in the policy domain in the Chinese context, and why? Each of the professionals answered the question and a preliminary list of what should be included in the criterion was developed based on their answers. Finally, an open discussion on the preliminary list was conducted, and the professionals reached a consensus on the five principles they considered most important (see section 5.2.8).

3.4 Case study

As shown in Table 3.1, case study was used in the next step of adaptive learning to test McConnell's framework and draw conclusions about policy success or policy failure. It was conducted in two phases each involving two case applications.

3.4.1 Case study setting

Validity is an issue in social science research and variances need to be taken into account to help ensure research finding validity. For example, due to the challenging information disclosure system in China, this research is best conducted in locations where data collection is most likely to be available to the researcher. In addition, the large and diverse geography across China poses a significant limitation to the study in regard to labor and financial resources required for data collection. Variances between different regions, such as socio-economic conditions and political background, may also considerably affect the policy process and evaluation results (Sabatier, 1991). And the baseline environmental and geographic variability, population differences and cultural variances between different regions may also influence the policy process and evaluation results. In order to mitigate the above limitations, this research selected two Chinese provinces, namely: Inner Mongolia Autonomous Region and Beijing⁹. They are geographically close to each other and contain similar sociocultural and political contexts, but also capture enough of the variation that this research needs to consider, e.g., the influence of different economic conditions. Such variation allows comparison between different cases.

⁹ China's administrative divisions can be simply divided from top to bottom into provinces, city, county, and township. The administrative divisions of Inner Mongolia Autonomous Region and Beijing are equivalent to province (The Central People's Government of the People's Republic of China, 2013). Village is a self-governing unit at the grassroots level (National People's Congress, 2010).

A qualitative sampling process does not need to be random, but can instead be a purposefully selected set of participants and sites (Creswell, 2014). Therefore, four case study areas were selected purposefully in the two provinces (**Case 1 and Case 2 for phase I, Case 3 and Case 4 for phase II**). In phase I, Case 1 is in the Inner Mongolian Autonomous Region, and Case 2 is in Beijing. Both cases have implemented domestic waste management programs. In phase II, Case 3 and Case 4 are both in the Inner Mongolian Autonomous Region and have implemented domestic wastewater management programs. Choosing another program type and different policymaking levels in phase two enriches the research and helps to examine the potential application of McConnell's framework to different types of programs and administrative tiers.

3.4.2 Participant Sampling

Participants were sought from two groups: (1) local officials; and (2) villagers. Local officials are the CET policy program architects who are in charge of designing and implementing the programs, e.g., deputy head of the township government and village CPP branch committee secretary. They have a comprehensive understanding of the policy process and policy results, and therefore were selected. Villagers, in this research, refers to those who reside in the village but do not hold an office in the local villagers' committee, e.g., community leaders, farmers, and others who may know about the policy. They were selected because they are the CET policy target group. Their experience, knowledge, and possible insights concerning the policy process could provide rich information for this study.

The snowball sampling strategy was used to select participants (Flick, 2009; Patton, 2014). Local officials were selected first. Information was sought about the key government departments that cooperated with them, who implemented the program, who influenced the policymaking and implementation process, and who was most affected by the program. The snowball sampling method was used to identify and sample other officials. Villagers, such as community leaders, were approached next. Information was sought about who were the key stakeholders of the programs' target group, and who influenced the program making and implementation process. The snowball sampling method was also used to identify and sample other villagers. Participants were approached via the face-to-face method. As a rule of thumb, the manageable sample size of a qualitative study is under 50 (Ritchie et al., 2013). A total of 27 participants were selected across the four cases.

3.4.3 Description of participants

“Key demographic variables are likely to have an impact on participants’ view of the topic” (Bricki & Green, 2007, p. 10). In the four case studies, participants’ demographic variables are considered, namely gender, occupation, age, and ethnic group. It should be noted that in China, women are underrepresented at local governments compared with men (Wu, 2012), and women are sometimes marginalized in a village community (Hu, 2017). Therefore, fewer women were identified as participants in this research. But women were still targeted to get a balanced view. However, most of the government officials and community leaders that are key participants, e.g., village CCP branch secretary and villagers’ representatives, are male. And few women farmers would want to talk to someone they are not familiar with.

Description of participants - Phase I (Case 1 and Case 2)

In Phase 1, eleven people were selected, five in Case 1 and six in Case 2. Table 3.2 shows the demographics of the interviewees. Of the 11 interviewees, two were older than 50, two were female, four were Mongolian and seven were Han.

Table 3.2 Demographics of participants in Cases 1 & 2

Key. Age: 1 = 20-29, 2 = 30-39, 3 = 40-49, 4 = 50-59, 5 = 60-69; Gender: M = Male, F = Female; Ethnic group: H = Han, M = Mongolian.

Case No.	Location	Occupation	N	Age	Gender	Ethnic Group	Respondent Code
1	V1 village	Village CCP branch committee secretary	1	4	M	M	1VS
		Head of villages’ committee	1	3	M	H	1VC
		Farmer	1	4	M	M	1FR
		Villagers’ Representative	2	3	M	H	1VR
2	T2 township	Deputy head of the township	1	2	M	H	2HT
	V2 village	Village CCP branch committee secretary	1	4	M	H	2VS
		Villagers’ Representative	1	4	M	H	2VR
		Local Business Representative	1	2	M	H	2BR
		Street Cleaner	2	3	F	M	2SC

Description of participants - Phase II (Case 3 and Case 4)

In Phase II, sixteen people were selected, seven in Case 3 and nine in Case 4. Table 3.3 shows the demographics of the interviewees. Of the sixteen interviewees, four were older than 50, two were female, five were Mongolian and eleven were Han.

Table 3.3 Demographics of participants in Cases 3 & 4

Key: Age: 1 = 20-29, 2 = 30-39, 3 = 40-49, 4 = 50-59, 5 = 60-69; Gender: M = Male, F = Female; Ethnic group: H = Han, M = Mongolian.

Case No.	Location	Occupation	N	Age	Gender	Ethnic Group	Respondent Code
3	DS3 district	Director of Agriculture and Animal Husbandry Bureau in DS3 district	1	3	M	H	3DA
	T3 township	Deputy head of T3 township	1	3	M	H	3HT
	V3 village	Village CCP branch committee secretary	1	2	M	M	3VS
		Farmers	2	4	F/M	M/H	3FR
		Villagers' representative	2	4/5	M/F	H	3VR
4	CT4 county	Director of Environmental Protection Bureau in CT4 county	1	4	M	H	4DE
		Deputy captain of Environmental Inspection Team of the Environmental Protection Bureau in CT4 county	1	2	M	H	4CE
		Director of the Rural and Township Department of the Bureau of Housing and Urban-Rural Development in CT4 county	1	2	M	M	4DR
	T4 township	Director of 'Armed Forces' who was in charge of township environment issues	1	2	M	H	4DA
	V4 village	Village CCP branch committee secretary	1	3	M	H	4VS
		Farmers	2	4	M	H/M	4FR
		Villagers' representative	2	4/5	M	H	4VR

3.4.4 Data collection

Given the complexity of rural waste policy, comprehensive information is required to answer the research questions, and quantitative and qualitative data are both necessary in these case studies.

Quantitative data were collected via public documents from local governments (including villagers' committees). These organisations have data about actual outputs from policy implementation, e.g., program funding and the number of garbage collection points.

Qualitative information was collected via: public documents, such as newspapers, official reports, and conference speeches; from observation as an observer using an observational protocol (i.e., field notes were made during the observation); and from qualitative audio and visual materials, such as photographs.

Empirical data was also gained from face-to-face in-depth interviews using a semi-structured questionnaire. The duration of each interview was between 40-120 minutes. Audio recording was used during the interviews. Qualitative data were collected until information saturation was reached (Charmaz, 2006). In this research, no more interviews were conducted in each case when information saturation was reached. The questionnaire and interview questions for testing and application of McConnell's framework presents in **Appendix A**.

The MEE [2010] 136 Evaluation Framework (**Appendix B**) is also applied by this author as a complementary comparative method. The MEE [2010]136 evaluation framework provided indicators and illustrated relative weighting of each indicator used for evaluating the 'objective achievement' and 'overall output', depending on the type of pollution that the program targeted. However, the MEE [2010]136 evaluation framework did not provide details on how to score each indicator. Therefore, the MEE [2010]136 evaluation framework was revised according to program type, with unreasonable items removed to ensure the validity (see section 2.2), and a set of methods and rules were developed as the basis to judge the indicators.

Appendix C presents the revised MEE [2010] 136 Evaluation Framework used in Case 1 and Case 2 (in Phase I). It includes the indicators from the MEE [2010] 136 Evaluation Framework which are relevant for assessing domestic waste management programs and the methods developed for assessing these indicators. **Appendix D** presents the revised MEE [2010] 136

Evaluation Framework used in Case 3 and Case 4 (in Phase II). It includes the indicators from the MEE [2010] 136 Evaluation Framework which are relevant for assessing domestic wastewater management programs and the methods developed for assessing these indicators. Data were collected from: public documents, observation, qualitative audio and visual materials, and in-depth interviews.

3.4.5 Data analysis

The interviews were first transcribed from audio documents to text documents in Chinese. The text documents were then translated into English and analysed in English. Thematic analysis was applied to analyse qualitative data. To test McConnell's framework, predetermined codes and emerging codes were used (consistent with Creswell 2014, p248), based on the information derived from McConnell's framework, literature review, and case studies. Themes, descriptions, and context information were interrelated, and meaning determined. Findings from the initial exploratory database were then built into quantitative measures to facilitate analysis. Finally, it should be also noted that the currency appearing in this study is New Zealand dollar 2019.

Evaluating McConnell's framework

In this research, the theory review ascertained whether the criteria in McConnell's framework can be applied in China and the criteria were grouped into three categories, namely: supportive, non-supportive, and unclear. These criteria were further tested in case studies. An 'extent-of-fit' category was developed to judge the extent to which a criterion fits the Chinese context. Table 3.4 shows this categorisation and the standard for evaluation. It is important to note that depending on the findings at each stage of the case study, and with the deeper understanding of a criterion, a criterion may move amongst categories.

Table 3.4 Extent-of-fit category for each of McConnell's criteria

Extent of fit category	Standard for evaluation
Clearly fit	Interviews and literature strongly support the application of the criterion in the Chinese context
Partially fit	Part of the criterion applies in the Chinese context or applies in some circumstances
Potentially fit	Interviews provide hints of the potential application of the criterion, and literature strongly supports its application in the Chinese context
May fit	Interviews tend not to support the criterion but based on theory, the criterion may be applicable in the Chinese context
May not fit	Interviews tend not to support the criterion and literature does not support/state clearly the application of the criterion in the Chinese context
Does not fit	Interviews and literature do not support the application of the criterion in the Chinese context

Based on the research findings, changes to the criteria are proposed. The suggested changes fall into the following categories:

- Criteria scope change
- Split criteria into separate aspects, weighted accordingly
- Add new criteria
- Criteria not retained

Analysis of policy success and failure

McConnell's framework was also used to draw conclusions about policy success or failure. However, McConnell did not articulate a method to judge the success and failure of each individual realm (process, program, and politics) and the overall policy program based on the success/failure of each criterion, nor how to weight each criterion and realm.

To fill this gap, an ordinal five-point scale has been proposed to capture the different levels of success/failure, showing how a criterion, a realm, and the overall policy program scores in the range from 'Absolute Failure' (a score of 1) to 'Absolute Success' (a score of 5), namely: Absolute Failure = 1; (Outright) Failure = Marginal Success = 2; Conflicted Failure = Conflicted Success = 3; Tolerable Failure = Resilient Success = 4; Absolute Success = 5. This method facilitates further analysis and comparison between cases. The scale is applied as follows:

- First, based on this scale, the degree of success and failure of each criterion in each case study is quantified. If a result for a particular criterion is unclear, it is not included when calculating.
- Second, the scores given to the criteria in one realm are then added up and the mean is calculated to indicate the success/failure level for that realm. All criteria, including Criteria 8A, 8B, and 8C, are each considered in their own right and are given the same weight. A mean score is used because the 'program' realm comprises more criteria than the 'process' and 'politics' realms, thus the 'program' realm would be always score higher if simple addition was used. In this research, mean scores between 2 and 4 are rounded to the nearest whole number. For example, a realm score of 2.7 will be rounded to 3. However, a realm will not be considered as 'Absolute Failure' if there are minor successes, and a realm will not be considered as 'Absolute Success' if there are minor failures. Thus, a realm with a mean score between 1 and 2 is rounded up to 2, and a realm with a mean score between 4 and 5 is rounded down to 4.
- Third, similar to how to determine realm performance, the extent of success or failure of the overall program can be determined by averaging the mean score of the three realms, of which each is given the same weight.

3.4.6 Human ethics

Complying with human ethics (HE) is a basic requirement for research involving human participants (Lofland & Lofland, 2006). The HE application submitted to the Lincoln University Human Ethics Committee included the questionnaire and interview questions which had been developed in compliance with relevant policies and procedures. The HE application was granted in November 2017 (see Appendix E).

No data which allows identification of specific individuals is or will be included in any written or oral presentation of this research, and geographic and demographic information about the specific villages has been generalised to prevent identification. Every participant and case study location were assigned a respondent code (see Table 3.2 and Table 3.3). All quotations from individual interviews are obscured with this respondent code. Interviewees were contacted in person by the researcher. The researcher first explained clearly the purpose and participants' rights. An information sheet was given to the participants. If they intended to participate, a consent form was required to be signed. The signed consent forms and data were kept in a secure place and only the researcher and supervisors accessed to

the data. Face-to-face interviews were then conducted. The audio data was recorded with the participant's permission. At the end of the interview, the participants were given a chance to ask questions.

3.5 Summary

This chapter introduced the methodology and methods used to explore a framework that is untested in the Chinese context and to evaluate it within the rural waste policy in China. The adaptive learning approach, case study, and triangulation methodologies are applied in this research. Qualitative and quantitative data were collected and analysed using a range of standard techniques.

McConnell's framework is the basis for this research. In order to test whether McConnell's framework fits the Chinese context, it is a necessity to have an overall view of the Chinese political background and policy process in advance. The next chapter introduces the Chinese political background and general policy process.

Chapter 4

The Chinese Policy Process – A Brief Introduction

4.1 Introduction

McConnell's framework is used as a basis to evaluate the Comprehensive Environmental Treatment (CET) policy and provide insights into how the policy might be improved. However, the underlying context for the development of McConnell's framework is democratic politics, which is very different from the Chinese political context. In order to test the potential application and utility of the framework in the Chinese context, it is therefore necessary first to consider how policy is developed and implemented in China. This chapter provides an overview of the Chinese policy process, focusing on policymaking and the policy implementation process.

This chapter begins with an introduction to the policymaking process in China, including agenda setting, policy formulation, and policy adoption. The policy implementation process is then introduced. Finally, the characteristics of China's policy process are discussed.

4.2 Policymaking process in China

The most significant insight of policymaking in China is that formal institutional structure shapes policy processes and outcomes even in a communist authoritarian system. The structure is bureaucratic; authority is fragmented among the various central ministries and provinces; fragmentation is overcome by bargaining; decisions are made by consensus; and the policy process is protracted and incremental (Shirk, 1990, pp. 83-84).

The policymaking process usually contains a set of sequential and distinct activities that facilitate analysis: namely, agenda-setting, proposal formulation, and policy adoption (Anderson, 2003). This section introduces the policymaking process in China, from the above perspectives.

4.2.1 Agenda-setting

Agenda-setting is about "how an issue or a demand becomes or fails to become the focus of concern and interest within a polity" (Cobb & Elder, 1971, pp. 903-904). Agenda-setting concerns who can propose an agenda item, why some social issues receive more attention,

and how a social issue becomes a public agenda issue. The above aspects are introduced in this section.

Participants, namely those *“inside of government, including the administration, civil servants, and Congress.....and outside of government, including the interest groups, academics, media, and public opinion”*, can be the source of agenda items (Kingdon & Thurber, 2011, pp. 15-21). In China, the ‘Interim Regulation on Major Administrative Decision-Making Procedures’ specified the agenda initiators, including: the leading members of a policy-making organization; subordinate department of a policy-making organization or subordinate government; deputies to the People's Congress or members of Chinese People's Political Consultative Conference (CPPCC); and citizens, legal persons, and other organizations (The State Council, 2019). In addition to the above participants, ‘opinion leaders’ from social media, such as BBS and Weibo¹⁰, can propose a topic for general discussion (Deng & Meng, 2016; Liu, 2013; Yin et al., 2012).

Not all issues proposed by participants get on the policy agenda. Some issues receive more attention and become a government agenda priority, but some do not. A triggering mechanism is essential in this process (Anderson, 2003; Gerston, 2015). There are a number of common triggering mechanisms in China. First, the more extreme, concentrated, intense, visible, and broadly scoped a problem, the more likely that it will be included on the policy agenda. For example, the frenzy of coverage from reporters and bloggers nationwide drew attention to the gravity of PM2.5 pollution, after the USA embassy first started monitoring air pollution in Beijing in 2008. Then air pollution control became a government agenda item. Prime Minister Li Keqiang pledged to the delegates and Chinese citizens in the National People's Congress in March 2014: *“We will resolutely declare war against pollution as we declared war against poverty”* (The State Council, 2014b). Second, an issue which is similar to an existing one has more chances of being included on the policy agenda item. The government tries to maintain the policy continuity and inheritance between new and old policy, especially for long-term policy (Lu, 2015). Third, a program with positive values or one which has the potential to eliminate the adverse effects of existing policies might be more likely to be placed on the agenda. Positive symbolism is critically important for program establishment in China. For example, the creation of the label ‘environment protection’ may help a program move onto the government agenda (Li & Wu, 2017). Fourth, governments may actively put forward a solution for market failure. For example, few

¹⁰ BBS: Bulletin Board System or online forum; Weibo: A social media platform similar to Twitter.

companies and farmers have the economic incentive to recycle agriculture film that severely pollutes farmland. The public called for the government to intervene (Zhu & Liu, 2015). In 2017, the Ministry of Agriculture and Rural Affairs responded to market failure and announced the ‘Agri-film Recycling Action Plan’. This plan encouraged local government to reduce taxes and provide subsidies to agriculture film recycling companies (Ministry of Agricultural and Rural Affairs, 2017). In contrast, a problem without an obvious technical solution and beyond the capacity of the government would not be placed on the agenda (Anderson, 2003). For example, the use of kitchen waste shredders in cities. There are concerns that kitchen waste shredders would increase urban water pollution, energy consumption, and the cost of sewage treatment, especially in cities where sewage treatment facilities are aging. But there were no technical solutions dealing with the problems caused by kitchen waste shredders (Home.163.com, 2018). Therefore, the use of kitchen waste shredders was not on the national policy agenda, e.g., ‘Implementation Plan of Household Garbage Classification’, issued by the National Development and Reform Commission and Ministry of Housing and Urban-Rural Development in 2017 (General Office of the State Council, 2017). It was also not on the agenda of the provincial plans for domestic waste management, e.g., ‘Sichuan Province Municipal Solid Waste Classification System Implementation Plan’ (General Office of Sichuan Provincial People's Government, 2018).

“Problems do not move themselves on and off agendas” (B.G. Peters, 2015, p. 75). A rich literature has categorized the process of agenda-setting in China from diverse perspectives. S. Wang (2008) focused on the policy initiator and public participation. He proposed six agenda-setting patterns (Table 4.1). Liu (2011) emphasized institutional backgrounds and proposed four models: Inside Initiative Model, Mobilization Model, Outside Initiative Model, and Integrated Model. Zhao and Xue (2017) focused on the effect of the social focal event and identified the Response-oriented Agenda-setting Process Model: a government may act as a firefighter and put social focal events onto the agenda under the influence of public pressure.

Table 4.1 Six types of agenda-setting patterns in China

		Policy Initiator		
		Policymaker	Think Tank	Public
Level of Public Participation	Low	I Closed-door Model	III Internal Documents Model	V Statement Submitting Model
	High	II Mobilization Model	IV Leveraging Model	VI External Pressure Model

Source: S. Wang (2008, p. 44)

In the early stage of 'Reform and Opening-up' in China since 1978, agenda-setting relied more on the judgment of policymakers in terms of policy issues. With the deepening of the 'Reform and Opening-up', policy agenda-setting was open to more participants, and the process became more scientific and democratic when experts, media, and the public began to influence this process (Qi et al., 2015). However, agenda-setting in China remains goal-oriented and based on top-down planning, e.g., top-level design (Naughton, 2012). National trajectory and prioritized issues proposed by the National Congress, National People's Congress, central government, and ministries, such as the 'Five-year Plan for National Economic and Social Development' and 'Made in China 2025', are considered cornerstone and fundamental guidance of social and economic development. Following the national trajectory, local governments are expected to compile their own long-term plan. The chief executive of each level of government sets up the policy agenda in the 'Government Work Report' at the beginning of each year to respond to the national objectives.

4.2.2 Policy formulation

When the agenda is being set, the government would formulate practical and applicable policy terms. *"Policy formulation involves developing pertinent and acceptable proposed courses of action (often called alternatives, proposals, or options) for dealing with public problems"* (Anderson, 2003, p. 101). However, policy formulation takes place in a government office and few participants are expected to get involved (Sidney, 2006).

Law, regulation, administrative rules, notifications, standards, projects, programs, plans, strategies, and even the call from a political leader are all considered public policy in China (Wang, 2004). Sometimes, for a simple public decision, an administrative order or 'words' from political leaders would replace policy drafting. But usually, there would be a complex and scientific process (Hu, 1998). Considering the drafting of '13th Five-year Plan for National Economic and Social Development (2016-2020)' as an example. The formulation of this plan took three years (from 2013 to 2016), divided into four stages and ten steps. Multiple stakeholders got involved in this process, including the department chief executives from the National People's Congress, CPPCC, and State Council, as well as local government chief executives and scholars (Wang & Yan, 2015).

"China's macro-level five-year planning moved from the early reform era mode of centralized, closed, intra-state bargaining, and coordination to controlled multiple advocacies that is based on carefully orchestrated consultations of state, non-state, and even foreign inputs and on much more regularized administrative

procedures that are intended to support 'scientific' policymaking"
(Heilmann & Muse, 2018, pp. 179-180).

4.2.3 Policy adoption

Policy adoption refers to the *"action by some official person or body to adopt, modify, or reject a preferred policy alternative"* (Anderson, 2003, p. 119). This section introduces the policy adoption process and policy legitimization in China, both of which are relevant aspects of policy adoption.

Policy adoption process

"Although private individuals and organizations also participate in making policy decisions, the formal authority to decide rests with public officials" (Anderson, 2003, p. 119). In China, the actual policymakers are the political elites of the CCP leadership (Hu, 1998; Shih, 2005). The CCP committees existing in government and its subordinated departments act as the actual policymaker (Dai, 2014). This is especially the case for four key issues, referred to as 'Three Important and One Large': important decision making, appointment and removal of important officials, the arrangement of important projects, and the use of large amounts of funds (The Central Committee of the Communist Party of China, 2005).

The policy adoption process follows certain principles, namely: the principle of collective leadership, democratic centralism, individual consultations, and decision by meetings (Lin, 2013). The CCP Constitution states:

"Party committees at all levels function on the principle of combining collective leadership with individual responsibility based on the division of work. All key issues shall be decided upon by the party committees after discussion in accordance with the principle of collective leadership, democratic centralism, individual consultations, and decision by meetings. The members of the party committees should earnestly exercise their functions and powers in accordance with the collective decisions taken and division of work"
(The 19th National Congress of the Communist Party of China, 2017a).

The CCP Constitution regulates the decision-making rules:

"When discussing and making decisions on any matter, party organizations must keep to the principle of subordination of the minority to the majority. A vote must be taken when key issues are decided on. Serious consideration should be given to the differing views of a minority. In case of controversy over key issues in which supporters of the two opposing views are nearly equal in number,

except in emergencies where action must be taken in accordance with the majority view, the decision should be put off allowing for further investigation, study and exchange of opinions followed by another vote. Under special circumstances, the controversy may be reported to the next higher Party organization for a ruling” (The 19th National Congress of the Communist Party of China, 2017a).

‘Regulations on local committees of the Communist Party of China’ sets out the decision-making procedure of the party Standing Committee:

“Meetings of the Standing Committee are usually held twice a month and may be convened at any time in case of important circumstances. The Standing Committee meeting shall be convened and presided over by the secretary of the party committee. The topics of the meeting shall be proposed by the secretary or can be proposed by other members of the Standing Committee after comprehensive consideration by the secretary. Voting can be conducted by means of raising hands, secret voting, or open voting according to the differences in the matters discussed and decided. The affirmative vote shall be passed by more than half of the committee members. Opinions from party committee members that are not present at the meeting shall not be counted in the votes. The alternate member has no right to vote. The meetings of the Standing Committee shall be faithfully recorded by specialized personnel, and the minutes of the meetings shall be prepared and issued for decisions. Documents submitted or issued in the name of the party committee after discussion at the meeting of the Standing Committee shall be issued by the secretary” (The Central Committee of the Communist Party of China, 2016).

However, the party Standing Committee institution has challenges. The party secretary is the core leader (Chen, 2004). He/she may become too powerful and act arbitrarily (Jing, 2011). The centralisation of power also makes it difficult to supervise the power of the Standing Committee (Dai & Ye, 2010).

In general, the more important the decision, the more likely it is to follow a complete decision-making process. For minor decisions or day-to-day decisions, it is not possible to use a full set of decision-making procedures. More decision-making functions adopt flexible or even non-procedural means. Therefore, Hu (1998) summarised the Chinese policy adoption process as a combination of order and disorder of elite decision-making.

Policy legitimization

Policy legitimization is an important stage of policymaking process (Chen, 2004; Zhang, 1992). There are several ways to legitimate a policy in China. First, an order from a political

leader can be legitimate, due to the personification of power¹¹ (Pei, 2009). Second, the People's Congress is the authoritative institution that could legitimate a policy/law (The National People's Congress of PRC, 2013). However, in practice according to an informal rule that exists widely in the legislative work, the CCP leads the legislative process in the People's Congress (Han, 2001). Third, **more commonly**, policy and top-down programs are managed through the government system, not through the enactment of laws (Johnson, 2017). According to 'Regulation on major administrative decision-making procedures', the policy legitimization process can occur in government agencies (The State Council, 2019). This means the policy legitimization process does not necessarily occur in the legislature as in a parliamentary system (Chen, 2004), where the "*policy decisions made by the legislature are usually accepted as legitimate*" (Anderson, 2003, p. 119). Chief executives in the government system have the power to approve and promulgate policy, if it is not necessary to report to the upper-level government for approval. Prior to the approval and promulgation by chief executives, the government Legislative Affairs Office may review the policy options, but for reference only (Chen, 2004). In particular, major issues¹² must be reviewed by the Legislative Affairs Office and discussed and decided in the government Standing Committee meeting or plenary meeting (The State Council, 2019). The above practice is considered the policy legitimization process in the government system (Chen, 2004). However, the public pays little attention to the legitimization process in China. Hu (1998, p. 251) concluded that:

"In China, compared with policy agenda-setting and policy formulation, the importance of policy legitimacy ranks secondly. It is not that policy legitimacy itself is not important, but a legislating process is just a form. Society and the public do not place much value in this form. Agenda-setting and policy formulation process are much more substantial. As long as these two processes are completed, policy legitimacy is a matter of course."

4.3 Policy implementation

Once a policy proposal is adopted and legitimized, it needs to be implemented. Three generations of international implementation research have used different theoretical

¹¹ Pei (2009) described it as a unique political power structure that is closely connected with the interpersonal relationship between political roles in the process of government decision-making.

¹² Major issues refer to (1) Important plans for economic and social development; (2) Major public policies and measures concerning public services, market supervision, social management, and environmental protection; (3) Major public policies and measures for the development, utilization and protection of important natural resources; (4) Major public construction projects to be implemented in the administrative region; (5) Major matters that have a major impact on economic and social development and involve major public interests or the vital interests of the public" (The State Council, 2019).

approaches to study policy implementation, namely: top-down theories, bottom-up theories, and hybrid theories (Agyei, 2017). Top-down theories place the emphasis on policymakers, bottom-up theories focus on local bureaucrats, and hybrid theories incorporate the elements of top-down and bottom-up theories (Pülzl & Treib, 2007). This section uses the hybrid theory, namely, the Communications Model of Intergovernmental Policy Implementation (CM Model), to briefly introduce China's policy implementation. In the CM Model, the state would put an already-decided federal policy into effect, and this could be affected by three factors (Goggin, 1990).

The first factor in the CM Model refers to federal-level (central government who makes policy) inducements and constraints, such as *“policy type, financial arrangements, clarity of the provisions of the decision, the consistency of the decision with other policy objectives, flexibility of goals and procedures, legitimacy and credibility of officials and agencies, and the existence of a provision for citizen participation”* (Goggin, 1990, p. 35). In terms of policy type, Wei (2012) used a multiple-case comparison to analyse Chinese policy implementation, based on Lowi's (1972) policy typology, namely: distributive policy, constituent policy, regulative policy, and redistributive policy. He indicated that the implementation deviation of a distributive policy was usually caused by the policy content. The implementation of a constituent policy relied on communication and cooperation among different levels of government and government departments. The implementation of the regulative policy was affected by the target groups and was constrained by a potential conspiracy between regulators and target groups. The implementation of the redistributive policy was influenced by local stakeholders who got involved in a competition for benefits. Zhu (2013) investigated the 'housing monetization policy' in Gui Zhou Province. This research indicated that the financial arrangements from central government became the biggest obstacle in the implementation of this policy. On the other hand, a provincial government would not question the legitimacy of this policy, which was made by the State Council. The central government only proposed a number of principles for the policy without substantive content. Detailed implementation plans were formulated by local governments. This meant the policy had great flexibility to fit local conditions and facilitate the implementation of local plans.

The second factor in the CM Model refers to state and local-level (province, city, county government) inducements and constraints: interest groups, state and local officials, and their associated political institutions, as well as state implementing institutions who

represent their own interest and preference. They are independent, but also communicate and cooperate with each other (Goggin, 1990). Xie and Jiang (2007) studied China's policy implementation and described it as an 'interest game' between higher and lower-level governments leading to the exchange of financial rights and political interests, and an interest game between governments at the same level to attract resources needed for economic growth. Guo and Yang (2019) studied China's cross-domain governance of environmental policy. Four kinds of conflicts of interest (personal, institutional, jurisdictional, and regional), and lack of effective communication and cooperation between cross-domain governments resulted in the ineffective implementation of environmental policy.

The third factor in the CM Model refers to: how state (provincial) decision-makers interpret the information they receive; the organizational capability to take actions; and ecological capacity concerning socioeconomic and political conditions (Goggin, 1990). In China, there was little literature on provincial-level decision-makers and the capacity of a provincial government. Most research has focused on the lower level. O'Brien and Li (1999) analysed Chinese street-level bureaucrats¹³ and found many policies from central government were misunderstood or partially implemented. The decision outcomes of local bureaucrats could turn a well-liked central policy into a disliked local policy. Lin and Jin (2012) surveyed 40 villages about compensation for land acquisition in Jiang Su Province. They indicated that the socio-economic and political conditions, such as the characteristics of the families, the level of economic development, and the characteristics of the acquisition land, affected farmers' degree of satisfaction.

4.4 Characteristics of China's policy process

Heilmann (2017) discussed the crucial elements of China's political system. One successful element ascribed was: a flexible bureaucratic system that was willing to experiment. *"Almost any major Chinese policy had to go through a trial phase"* (Zhou, 2012, p. 45). A policy might follow the 'test and promotion' pattern, which means policymakers took the experience gained in one area and popularized it in the whole area (Han & Wang, 2012). For example, the 'Agriculture Film Recycling Action Plan' set up 100 demonstration counties in Gan Su province, Xin Jiang Province, and Inner Mongolia Autonomous Region (Ministry of

¹³ Street-level bureaucrats refers to *"public service workers who interact directly with citizens in the course of their jobs, and who have substantial discretion in the execution of their work"* (Lipsky, 2010, p. 3).

Agricultural and Rural Affairs, 2017). Another example is the regulation of government information disclosure. In 2001, Guang Zhou City was the first city that legislated the 'Government Information Disclosure Regulation'. This was followed by the 'Regulation of the People's Republic of China on the Disclosure of Government Information', issued by the State Council in 2007 (Liu, 2015).

Wang and Lai (2013) summarised such policy experiments as four policy diffusion models: Top-down Hierarchical Diffusion Model, Bottom-up Policy Adoption and Promotion Model, Regional and Sectoral Diffusion Model, and Leader-laggard Model. First, the 'Top-Down Hierarchical Diffusion Model' was commonly seen in China. Policies formulated by governments and relevant departments at higher levels were directly adopted by governments from lower levels. Second, the 'Bottom-up Policy Adoption and Promotion model' means 'local policy innovation – higher-level government adoption – push policy innovation widely'. This was an 'absorption – radiation' type of public policy diffusion (Zhou, 2012). Third, a policy could diffuse among regions and sectors horizontally, indicated by the 'Regional and Sectoral Diffusion Model'. A government might facilitate easy access to information about policy innovations in adjacent areas. Due to the competitive relationship between adjacent governments, governments tended to actively track such policy innovation, either to learn or imitate, thus promoting the spread of the policy. Fourth, the 'Leader-laggard Model'. Since the 'Reform and Opening-up' in 1992, China's economic development has adopted an unbalanced development strategy, allowing some regions and people to get rich first. The eastern areas were in the leading position and became the template for economic development and public policy for the central and western regions.

4.5 Summary

This chapter briefly introduced China's policy process and its key characteristics. This introduction is far from sufficient to illuminate China's complex policy processes. However, it provides a sufficient overview of China's policy process to help further understand how McConnell's framework could be considered in the Chinese context. Based on China's policy process, the next chapter evaluates McConnell's framework from a theoretical point of view in the Chinese context.

Chapter 5

Does McConnell's Framework Fit the Chinese Context?

– A Theoretical Evaluation

5.1 Introduction

This research uses McConnell's (2015) framework to assess one environmental policy and its implementation in China, and then to interpret and understand the ensuing data. However, there are questions about whether McConnell's framework fits the Chinese context. Therefore, it needs to be tested, through theoretical consideration and then applied and empirical field testing in China.

Chapter 4 provided an overview of China's policy process to provide the basis for this chapter which analyses, interprets, and critically evaluates McConnell's framework from a theoretical point of view, in the Chinese context. The purpose is to lay the theoretical foundation for further testing and potential revision of the framework to fit this context. The chapter concentrates on responding to this question: what does the literature tell us about the potential application of McConnell's criteria in the Chinese context? It is thus the preliminary step of adaptive learning and is part of the triangulation methodology applied in this research.

The chapter begins with a literature review of the 13 evaluation criteria used in McConnell's framework. Based on the theoretical evidence, improvements to the framework that would potentially aid in its application to China are discussed. Guidelines for evaluating degrees of success/failure using the criteria across the 'process', 'program', and 'politics' realms in China are then developed. Finally, the causes of policy failure in the Chinese context are briefly reviewed.

5.2 Evaluation of McConnell's Framework

In this section, the 13 criteria used in McConnell's (2015) framework are reviewed. The review is based on the Chinese political background and policy process. A standard template is used to present each of the review results, e.g., (1) McConnell's criterion; (2) Literature review findings and implications.

5.2.1 Preserving goals and policy instruments (Criterion 1)

McConnell's criterion

McConnell (2015, p. 233) proposed the criterion 'preserving goals and policy instruments' to judge the success or failure of a policy/program. *"From a policymaker's perspective, a legislative process during which a bill is scrutinized, but the outcome is the preservation of the broad values and detailed policy instruments, is likely to be considered a success"* (McConnell, 2010b, p. 41). This criterion targets the policy adoption process and uses the extent of changes between a policy proposal and its final blueprint as a benchmark.

Literature review findings and implications

A policy proposal can be rejected, revised, and/or adopted (Anderson, 2003). Policy adoption procedures may follow a democratic process in congress, legislature, city council, or other government structure. Participants, such as government officials, interest groups, political parties, and experts, may influence the adoption of a policy proposal (Anderson, 2003). The public may have access to the information process, from which they could learn how and why a provision of the policy was rejected, accepted, or modified.

As stated in 4.2.3, in China 'a legislative process during which a bill is scrutinized' more commonly occurs in government agencies as part of the policy adoption process, through defined deliberation procedures in government meetings. The decision is made by political elites through collective discussion in these meetings. Such processes may lack transparency and there is little (or no) need for the public to have input (Hu, 1998). The public may not know whether there have been any changes between a draft policy proposal and an approved policy, and if there have been, what they are (Chen et al., 2010). Therefore, Criterion 1 may not apply to the Chinese political system. It is not supported by the literature.

5.2.2 Securing legitimacy (Criterion 2)

McConnell's criterion

McConnell (2015, p. 233) proposed the criterion 'securing legitimacy' to judge the success or failure of a policy/program. *"The policymaking process failure can comprise of...being considered illegitimate in terms of the **processes** used"* (McConnell, 2015, p. 236).

Literature review findings and implications

As stated in section 4.2.3, in China the policy legitimization process more commonly occurs inside government agencies. Thus, there is a lack of public participation in the policy legitimization process (Huang & Wang, 2007). The public may not know whether the policy legitimization process is appropriate because of the non-transparent policy adoption process (Liu, 2004). However, when a political system loses public acceptability due to failures of equal distribution of benefits, inefficient administration, or severe conflicts of interest, it would trigger the so-called 'legitimacy crisis' (Huang, 2012). For example, proposals to construct facilities that are likely to have negative effects on their neighbours have often generated a NIMBY response and attracted public attention. There have been several cases of protests in China, such as a refuse incineration power plant program in Ji County of Tian Jin City. People were concerned about the missing or irregular process of Environmental Impact Assessment (EIA) in these circumstances (L. He, 2016). In other words, 'securing legitimacy' is a critical question, especially when a political system loses public acceptability. Criterion 2 may apply in the Chinese context and it is supported in the literature. However, Anderson (2003, pp. 119-120) notes that *"legitimacy is affected both by how something is done (i.e., whether proper procedures are used) and by what is being done"*. Thus 'securing legitimacy' does not only refer to whether the policymaking process conforming to laws or rules, but also refers to the policy content or the actions of government. This broader interpretation may be most applicable in China.

5.2.3 Building sustainable coalition (Criterion 3)

McConnell's criterion

McConnell (2015, p. 233) proposed the criterion 'building sustainable coalition' to judge the success or failure of a policy/program. *"A successful process from the perspective of policy-makers and policy-supporters can be the building of sustainable alliances. Obtaining formal approval is a key goal. A strong alliance that supports a particular policy initiative can be portrayed as the basis of successful policy"* (McConnell, 2010b, p. 44). McConnell believes that building a coalition between policy stakeholders helps to obtain policy approval, and this is considered a success.

Literature review findings and implications

"Coalitions are temporary, means-oriented, alliances among individuals or groups which differ in goals" (Gamson, 1961, p. 374). Scholars have proposed theories to explain coalition formation and their influence on policy change, such as the minimum winning coalition,

coalition formation theory, and the advocacy coalition framework (Riker, 1962; Sabatier & Jenkins-Smith, 1993). Coalitions seek to translate their beliefs or interests into policy by using strategies to influence government decision-makers and obtain preferred policy outcomes (Aksoy, 2010; Nelson & Yackee, 2012).

However, *“what constitutes a sustainable coalition is far from an exact science”* (McConnell, 2010b, p. 44). We do know that the ability to create coalitions is constrained by institutional arrangements (Schermann & Ennser-Jedenastik, 2014). Institutional arrangements, especially participation rules, shape stakeholders’ influence on the policymaking process (Bryson et al., 2013; Fung, 2015; Nabatchi, 2012). Therefore, it is possible to judge from participation rules whether there are conditions conducive to the formation of coalitions, and to infer the influence of coalitions on decision-making based on the role of stakeholders in the policymaking process.

Participation rules are defined as *“shared understandings by participants about enforced prescriptions concerning what actions (or outcomes) are required, prohibited, or permitted”* (Ostrom, 2005, p. 18). Among participation rules, boundary rules, choice rules, aggregation rules, and information rules are particularly relevant to participants’ interaction in administrative policy (Baldwin, 2019; Fung, 2006). Boundary rules shape the eligibility of stakeholders to enter or exit a position (Ostrom, 2005). Who participates in and how to select participants are the *“primary features of any public decision-making device”* (Fung, 2006, p. 67). Choice rules shape *“what a participant occupying a position must, must not, or may do”* (Ostrom, 2005, p. 200). Aggregation rules specify how the interaction of participants shape the decision Ostrom (2005). For example, the public may not have the ability to influence the decision-making process or have the authority to shape the decision (Nabatchi, 2012). Information rules shape the way information flows and affect information availability for participants (Ostrom, 2005).

Research into coalition formation in the field of public administration has not been a major focus of Chinese scholars. Some researchers have used the Advocacy Coalition Framework to explain the success of coalitions in obtaining preferred policy outcomes in the field of poverty alleviation policy, sport policy, and environmental policy (Hong, 2014; Jia, 2018; D. Li et al., 2019; Li & Wang, 2018; Wang & Li, 2016). Most of the literature has generally described national policy changes, but no meaningful empirical studies that clearly illustrate how a coalition is formed, and how institutions shape the influence of a coalition in terms of policymaking were found. Therefore, the question of whether criterion 3 applies in the

Chinese context needs further research. It is not clearly discussed in the literature and lacks empirical study.

5.2.4 Attracting support for process (Criterion 4)

McConnell's criterion

McConnell (2015, p. 233) proposed the criterion 'attracting support for process' to judge the success or failure of a policy/program. 'Process' in this context refers to the policymaking process, including agenda setting, policy formulation, and policy adoption. McConnell indicated that attracting support for the policymaking process from stakeholders is essential for policymakers. A policy is considered a success if opposition to the policymaking process is outweighed by support.

Literature review findings and implications

The government may face an unsupportive public and this can result in the failure to develop a policy. However, attracting widespread support for the policymaking process (agenda setting, policy formulation, and policy adoption) may not be essential in the Chinese political system. First, the government agenda can be set without public support. For example, in a closed-door model of agenda-setting (see Table 4.1), there is no place for stakeholder engagement in the policymaking process and their participation was not or is little needed (S. Wang, 2008), while elite politics is a typical characteristic of a closed-door agenda-setting process (Hu, 2013). Secondly, Hu (1998) found the public were rarely consulted and their influence on policy formulation was low. It was difficult to find a way to become involved in shaping policy, and local officials prefer to exclude stakeholders to make this process easier and quicker (Peters & Zhao, 2017). Thirdly, *"the decision-makers of contemporary China are the power elites of the communist leadership"* (Hu, 1998, p. 254), and the public have limited capacity to impact decision (Brombal et al., 2017). However, for key issues that strongly relate to the public interest, or that have a strong negative impact, key stakeholders may be invited and be consulted. But, there was concern that the public could not have a consistent influence on the policy process because the interaction among actors failed to be translated into policy decisions (Baldwin, 2019).

China has been undergoing a transition from managerialism public administration to participatory public administration since the 16th National Congress of the Communist Party of China in 2002. Citizens have increasingly acted in ways that range from passive protest to active participation in policymaking (Wang & Zhang, 2010). The enactment of 'Interim

regulations on major administrative decision-making procedures' in 2019 secured this legitimacy and provided an opportunity for public participation in key administrative decisions (The State Council, 2019). Therefore, it is possible that attracting support for the policymaking process from stakeholders has become more important for policymakers nowadays in China. Therefore, criterion 4 may be suitable to judge the policymaking process in the Chinese context. It is supported in the literature.

5.2.5 Implementation in line with objectives (Criterion 5)

McConnell's criterion

McConnell (2015, p. 233) proposed the criterion 'implementation in line with objectives' to judge the success or failure of a policy/program. *"This is a classic 'we did what we set out to do' measure of success"* (McConnell, 2010b, p. 46). A policy/program that is implemented consistent with its objectives is considered a success.

Literature review findings and implications

In China, local governments carry out policies initiated by a higher authority (Chen, 2011; J. Wang, 2014). But they design and implement local policies/programs that meet local conditions (Chen, 1994), and *"local governments have primary control over behaviour, policy and economic outcomes with each autonomous in its own sphere of authority"* (Saich, 2004, p. 170). Therefore, it is possible that local programs may not meet or be implemented in line with policy objectives initiated by a higher authority, which is considered policy/program failure. First, fragmented bureaucracy may create a permissive environment that causes conflicts. Not only at the national level, but also at the local level - none of the fragmented bureaus in China, from which policies are initiated, can dominate the trans-department policymaking and policy implementation, e.g., more than ten departments were at loggerheads over China's health care reform plan, which was discussed national wide between 2005 and 2009 (Chen et al., 2010; Lieberthal & Lampton, 2018). Fragmented bureaucracy exacerbates institutional misalignments that *"drive a wedge between policy directives and implementation"* (Cai & Aoyama, 2018, p. 75). Second, the interest orientation of the local office may influence the implementation of a policy. The central government empowers local governments with defined degrees of flexibility in the light of local realities to avoid the 'One Size Fits All' metaphysical mistakes (Chen, 1994; Ding, 2003; Zhu & Pu, 2001). But empirical studies show that local offices prioritize their own economic and political interests that stray from policy objectives (Fang, 2009; J. Zhao et al., 2013). For example, in order to protect local polluting enterprises, local governments may reduce the

pollution fee, thus weakening the anti-pollution policy (Bao, 2015). Third, local governments may lack experience, professional staff, and the necessary resources to implement a policy program (Zhu & Pu, 2001). An empirical study of 334 division directors in Tian Jin City indicated that knowledge, professionalism, and experience of local decision-makers severely affected their judgment in terms of implementing local programs (Zhu & Tian, 2008). Therefore, a policy/program can be implemented inconsistently with its objectives, and criterion 5 could be used to judge policy/program implementation in the Chinese context. It is supported in the literature.

5.2.6 Achieving desired outcomes (Criterion 6)

McConnell's criterion

McConnell (2015, p. 233) proposed the criterion 'achieving desired outcomes' to judge the success or failure of a policy/program.

"The nature of programmatic success can also encapsulate the subsequent impact on society; that is, outcomes...beyond specific targets or the bureaucracy of implementation, the broader impact or outcome that policy actually has can be used as an identifier of policy success" (McConnell, 2010b, p. 47).

McConnell identified the need to think beyond the outputs or objectives of a policy/program, and include also the impacts on the economic, social and environmental aspects, such as ecological improvement (OECD Development Assistance Committee, 1991) and human behaviour changes (Dunn, 2003).

Literature review findings and implications

Outcome indicators are commonly considered in policy evaluations, in fields such as education, public health, and environmental protection. For example, changes in human behaviour and the ecological system can be used as indicators to judge the success or failure of a policy/program (Hargreaves, 2011; Soderholm, 2013; Whitmarsh et al., 2012; Wilson & Buller, 2001; Young et al., 2015).

In China, most policy evaluations focused on describing policy/program outputs and whether these outputs had met policy objectives (T. Li, Y. Shen, et al., 2019; T. Li, Z. Yang, et al., 2019). Much literature explains the influential factors in meeting policy objectives and causal relationships between policy objectives and policy approaches (Bao, 2015; Chen et al., 2011; Harris, 2006; Heberer & Senz, 2011; Simões, 2016; F. Wang, 2008; Wang & Yin, 2010; Wang & Zhang, 2004; Zhao & Wu, 2019). However, outcome indicators, such as social and environmental impacts of policy intervention, were rarely used to evaluate a

policy/program, due to the lack of a standard evaluation system, necessary information, and a complete theoretical framework (Li et al., 2018; Yan et al., 2012). Nevertheless, it is possible to use outcome indicators to judge the success or failure of a policy/program in the Chinese context. It is supported in the literature.

5.2.7 Benefiting target group(s) (Criterion 7)

McConnell's criterion

McConnell (2015, p. 234) proposed the criterion 'benefiting target group(s)' to judge the success or failure of a policy/program. *"Program success is the benefit it brings to a particular target group, interest or actor, based on issues such as class, territory, gender, religion and race"* (McConnell, 2010b, p. 48). Benefit is defined as *"any gain in human wellbeing"* (Pearce, 1998, p. 86). It could come from the output, outcome, or impact of a policy/program. The success of a policy encapsulates the benefit it brings to target groups.

Literature review findings and implications

Public policy implementation may exert a positive or negative impact on the target group (Xie & Zhang, 2015). Providing benefit to the target group could be the objective of government, but also be a trade-off with the target group to facilitate the implementation of a policy/program (Gao, 2007; Zhang & Tan, 2014). Empirical studies in China further indicated that the conflicts between policy objectives and the interests of target groups impeded the implementation of public policies/programs (Bai, 2012; X. Ye, 2014). Therefore, criterion 7 could be a critical identifier of policy/program implementation success or failure in the Chinese context. It is supported in the literature.

5.2.8 Satisfying criteria highly valued in policy domain (Criterion 8)

McConnell (2015, p. 234) proposed the criterion 'satisfying criteria highly valued in policy domain' to judge the success or failure of a policy/program. *"Policy sectors have values that are widely held by its community of actors"* (McConnell, 2010b, p. 48). However, McConnell (2010a, 2010b, 2015) did not state clearly which criteria might be highly valued in particular policy sectors, giving only the example of efficiency which he considered particularly important. Besides, it is likely that the criteria that are valued will vary in different contexts. To apply the framework in a particular policy context, it is therefore important to identify what criteria are highly valued in that context.

There is much literature discussing the criteria for evaluating public policy in public policy sectors. Poister (1978) proposed seven criteria for policy assessment: effectiveness, efficiency, adequacy, appropriateness, equity, responsiveness, and executive capability. Nagel (2002) arranged a list of criteria in order of importance, namely from highest to lowest: effectiveness, efficiency, equity, public participation, predictable rules and procedural due process, and political feasibility. Dunn (2003) divided policy evaluation criteria into six aspects: effectiveness, efficiency, adequacy, equity, responsiveness, and appropriateness. Patton et al. (2015) believed that the major criteria fall into four categories: technical feasibility, economic and financial possibility, political viability, and administrative operability. Scholars in China have also put forward their own standards for policy evaluation. The standards proposed by Zhang (1992) include effectiveness, efficiency, fairness, and feasibility (political acceptability, economic affordability, social acceptability, and management feasibility). Chen (2004) proposed five standards: productivity, efficiency, efficiency, equity, and responsiveness. Ning (2011) proposed seven standards: efficiency, effectiveness, policy influence, responsiveness, development of social productivity, social justice, and sustainable development of society. Xie and Zhang (2015) suggested six standards: effectiveness, responsiveness, efficiency, adequacy, equity, and appropriateness.

To apply McConnell's framework in China, it was necessary to identify which criteria are highly and generally valued in public policy sectors. As discussed in section 3.3, a focus group discussion was conducted with five policy professionals in public policy and public administration. Drawing on the diverse literature identified above, a variety of criteria were identified, and of these, five were recognised as important in the Chinese context, namely: effectiveness, responsiveness, efficiency, equity, and appropriateness. In line with these five principles:

- Effectiveness evaluates whether *“the valued outcome has been achieved”* (Dunn, 2003, p. 358). This determination is consistent with criterion 6 and thus is considered under that criterion.
- Responsiveness evaluates *“do policy outcomes satisfy the needs, preferences or values of particular group”* (Dunn, 2003, p. 358). This determination is consistent with criterion 7 and thus is considered under that criterion.
- The remaining three principle-based criteria, namely: efficiency, equity, and appropriateness were therefore selected as the criteria for evaluating ‘satisfying criteria

highly valued in policy domain' in the Chinese context. It is proposed to use Criterion 8A (efficiency), Criterion 8B (equity), and Criterion 8C (appropriateness) in place of McConnell's original Criterion 8 (satisfying criteria highly valued in policy domain). However, giving them separate numbers (e.g., 8, 9, 10) would make it much harder to make comparison with McConnell's criteria as originally numerated, so they are here referred to as 8A, 8B, and 8C. These three criteria are each considered in their own right and equally weighted with other McConnell's criteria.

a. Efficiency (Criterion 8A)

Efficiency describes the amount of effort invested in a program to achieve the desired objectives (Dunn, 2003). Such effort includes (1) activities performed by program personnel and equipment used in the service of objectives, and (2) resources that support the performance of activities (Deniston et al., 1968). Therefore, efficiency incorporates two kinds of ratios: objectives attained to resource expended, and activities performed to resource expended (Deniston et al., 1968, p. 605). Program implementation is supposed to result in the attainment of policy objectives in an efficient way, which is considered a success.

Efficiency is a critical indicator of policy/program evaluation. Access efficiency measured through a cost-benefit ratio, net benefit, unit cost, and cost-effectiveness analysis are the prevailing methods used in OECD countries, but also in China (Chen, 2004; European Environment Agency, 2001; National Center for Environmental Economics Office of Policy, 2010; OECD, 2008; Pearce, 1998; Song, 2008). Empirical studies found inefficient public spending for environmental programs in China (Chen & Pei, 2013; Jin & Zhang, 2012; Pan, 2013). Low efficiency resulted in government failure and potential policy failure (Chen, 2006; Qi, 2000), which indicated *"government interventions lead to waste or redistribute income in an undesirable fashion"* (Samuelson & Nordhaus, 2009, p. 309). Therefore, criterion 8A could be one means of evaluating policy/program implementation in the Chinese context. It is supported in the literature.

b. Equity (Criterion 8B)

Equity concerns the question, *"are the costs and benefits distributed equitably among different groups"* (Dunn, 2003, p. 358). Equity includes distributive justice and procedural justice. Distributive justice concerns fair allocation, and procedural justice concerns fair procedures (Cook & Hegtvædt, 1983). Successful policy implementation ensures distributive justice and procedural justice.

The literature reviewed indicated that a lack of equality in public policy is one of the main reasons for public disputes and policy failure in China (D. Chen, 2014; Ren, 2008; Sun & Ma, 2013). Public participation can help to improve social equity (Clark, 2018; Fung, 2015). It is necessary to not only ensure distributive equity, but also because the public require procedural justice (Li, 2009; Y. Yu, 2007). Therefore, criterion 8B could be a useful criterion for helping to evaluate policy/program implementation in the Chinese context. It is supported in the literature.

c. Appropriateness (Criterion 8C)

Appropriateness evaluates the tenability of assumptions underlying a policy's objectives. Wedell-Wedellsborg (2017) indicated that an organisation needs to understand the basic needs of the target group, consider approaches that have been tried and the alternatives, as well as to find a solution that fits within internal and external constraints. More importantly, appropriateness refers to *"whether desired outcomes (objectives) are actually worthy or valuable"* (Dunn, 2003, p. 358). Therefore, a successful policy is able to meet policy intervention needs and propose sufficient and feasible solutions. More importantly, according to Dunn's interpretation, appropriateness could imply a moral judgment on 'goodness', such as consideration of sustainable development and human rights protection.

Evaluating appropriateness is applied in multiple public sectors in China, such as government performance evaluation, city planning evaluation and land requisition compensation evaluation (see Mao & Liu, 2008; Wu et al., 2013; Xu et al., 2013). Most of the literature reviewed focused on program adaptation to the local environment and seeking potential alternative measures (see Cheng & Wang, 2002; Hao, 2011; Wang et al., 2010; Yu et al., 2011). Chinese scholars considered appropriateness as a necessary evaluation criterion (Xie & Zhang, 2015). Therefore, criterion 8C could be a useful criterion for helping to evaluate policy/program implementation in the Chinese context. It is supported in the literature.

5.2.9 Attracting support for program (Criterion 9)

McConnell's criterion

McConnell (2015, p. 234) proposed the criterion 'attracting support for program' to judge the success or failure of a policy/program. 'Program' in this context refers to the policy implementation process. A policy is considered a success if opposition to the policy implementation process is outweighed by support.

Literature review findings and implications

Public policies are mainly implemented by administrative organizations which use a range of control techniques on the target groups in order for them to comply or act in a desired way, so as to garner their support for program *“aims, values, and means of achieving them”* (McConnell, 2014, p. 19). Anderson (2003) produced a list of control techniques for the effective implementation of a policy, including: non-coercive forms of action, inspection, licensing, loans, subsidies, and benefits, contracts, general expenditures, market and proprietary operations, taxation, directive power, services, informal procedures, and sanctions. Public support may occur from implementing one or more of these techniques (Peng & Zhang, 2015; Sabatier & Mazmanian, 1980).

These control techniques are widely applied during policy implementation in China and are introduced to attract public support and facilitate policy implementation. Much literature has discussed the effectiveness of these techniques. In terms of environmental policy, empirical studies indicated that economic measures and services, e.g., subsidies and information disclosure, were more effective than command and regulatory measures, e.g., directive power and sanctions (X. He, 2016; Wang & Wang, 2016; Yang, 2009; C. Yu, 2014). Empirical studies also indicated that failure to attract public support might reduce the quality and increase the difficulty of policy implementation (Cao et al., 2004; Jiang & Liu, 2010; Wang & Chen, 2006; Wen, 2006; H. Zhao et al., 2013). Therefore, criterion 9 could be used to evaluate policy/program implementation in the Chinese context. It is supported in the literature.

5.2.10 Enhancing electoral prospects/reputation (Criterion 10)

McConnell's criterion

McConnell (2015, p. 234) proposed the criterion ‘enhancing electoral prospects/reputation’ to judge the success or failure of a policy/program. *“Parties holding political office want to stay elected. Governments want to continue to govern. A policy that helps sustain, or even boost their prospects at the ballot box can be considered successful”* (McConnell, 2010b, p. 50). A policy is considered a success if it enhances the electoral prospects of a party or government. The support/opposition to policy implementation could be reflected through the ballot box.

Literature review findings and implications

The political party system China has adopted is multi-party cooperation and political consultation under the leadership of the

Communist Party of China, which is different from both the two-party or multi-party competition systems of western countries...The CCP holds the leading and ruling position (National People's Congress, 2018).

In the Western world, the electorate can express their view about the performance of a party and government officials via their ballot choices (Boyne et al., 2008). However, China's political system is different from that of western countries, so electoral prospects of the party and government is not a relevant criterion for this study. In order to comply with McConnell's interpretation of this criterion, the discussion is therefore focused on the promotion of officials, because the promotion incentive is the key factor in explaining China's socio-economic reform and development over the past few decades (Zhou et al., 2005). In this section, the logic of how government officials get promoted in China is discussed first. Whether this logic applies in terms of environmental performance is then discussed. Finally, reputation is considered.

The logic of getting promotion in China

In China, bureaucrats play a decisive role. The power of appointment, removal, or promotion of personnel is actually in the hands of CCP organizations. Government officials perform to influence higher officials (rather than voters) in order to achieve promotion (Chow, 1988). The literature indicates five factors that significantly influence whether government officials get promoted. These factors include: (1) the economic performance of the area they are responsible for; (2) their personal relationships in the political system; (3) their education level; (4) their working experience; and (5) their personal characteristics (X. Yu, 2014).

First, economic performance is a key factor. Zhou et al. (2005) examined the turnover of provincial governors between 1979 and 2002. A positive correlation was found between economic performance and promotion. Zhou (2007) then summarised economic performance and promotion correlation as being a 'Promotion Tournament Mechanism', which indicated the potential link between economic growth and a competitive institution set by the upper-level government to stimulate local governments. Other studies supported the 'Promotion Tournament Mechanism'. An empirical study of 31 provinces between 1978 and 2008 argues that economic performance has a strong impact on the likelihood of promotion of deputy provincial governors (Feng & Wu, 2013). However, there were challenges to this perception. Bo (2002) examined the provincial leadership of 30 provinces since 1949. He found that central government focused more on the amount of tax collected from each province, not just on GDP growth. Landry (2005) analysed 104 mayors at the

prefectural level between 1990 and 2000 and found economic performance had little impact on their promotion.

Second, 'personal relationships matter' is an unspoken rule in the Chinese political system. The study of the secretaries of provincial governors showed that personal relationships and political networks established were the key determinants that influenced their promotion. Secretaries with good relationships and networks could be assigned to a region where they might achieve better economic performance more easily (Oppen & Brehm, 2007; Tao et al., 2010).

Third, educational credentials also lead to prestigious administrative posts or professional posts in China. 'Regulations on the selection and appointment of leading party and government cadres' requested local government officials should have a bachelor's degree (The Central Committee of the Communist Party of China, 2002). The higher the education level, the easier it is to be promoted. This is the reason why government officials were passionate about pursuing a higher degree (Sun & Hu, 2012). Walder (1995) proposed a dual-path model to illuminate how the political reward mechanisms operated in China. He indicated the bureaucracy emphasized the importance of knowledge and education, which was the basis for expert statecraft (Wang & Liu, 1990).

Fourth, the promotion of Chinese government officials is greatly influenced by their previous working experience (Teiwes, 1967). Panel data of provincial and municipal governments from 1978 to 2010 indicated that working experience in a party committee or government would significantly increase the chances for promotion (Qiao, 2013). For example, working experience in the Chinese Communist Youth League Committee (Yang & Zheng, 2014) and working experience in economically well-developed areas or in important central level bureaus significantly affected the positive chances of promotion, especially at the provincial level (Huang, 2002).

Fifth, personal characteristics, such as age, ethnic group, and gender, influence promotion. The '2009-2013 Party and Government Leading Group Plan' clearly regulated the age limit and the constitution of the age group in the government and party systems (Naughton, 2012). Qiao (2013) proved that with increased age, the odds of promotion decrease. The younger government officials are, then the easier they get promoted (Shen, 2013). Ethnic group membership was another factor. *"In Xinjiang and Ningxia Province [in northwest China], mayors (who usually belong to ethnic minorities) never become party secretary"*

(Landry, 2005, p. 43). Gender was another key factor. 'Opinions on further training and selecting female cadres and developing female party members' issued by the Organization Department of the Central Committee of the CCP requested at least 10%, 15%, and 20% of leaders be female in provincial, prefectural, and county-level CCP organizations and governments (Organization Department of the Communist Party of China, 2001).

Environmental performance and getting promotion

There is limited evidence on whether and how environmental performance influences the promotion of officials in China. An empirical study of 86 major Chinese cities between 2004-2009 showed that environmental assessment had a positive effect on the probability of local officials' promotion. But this result may only fit in major cities (Sun et al., 2014). However, the literature indicated that most environmental policies are often at odds with the preferences of politicians seeking re-election, and it is natural for utility maximisers to reduce subsidies or limit environmental projects (Schneider & Volkert, 1999). Zhang and Lu (2016) found similar results in their empirical study by interviewing 109 city mayors and CCP secretaries: spending on pollution control reduced the likelihood of officials being promoted. Empirical research also found that some officials took action which led to environmental pollution in order to get promoted, as stated by Jia (2017, p. 28): *"politicians motivated by strong promotion incentives would like to promote growth, regardless of its social costs such as pollution"*. More recent research further confirmed that the pressure on officials' performance to get promoted aggravated environmental pollution (Chu & Wang, 2019) and government officials' turnover significantly aggravated PM2.5 pollution in prefecture-level cities (Zhang & Tang, 2019). Therefore, it is questionable whether a successful environmental policy/program can contribute to the promotion of officials. Especially in rural areas, environmental policy/program covers a wide range of areas, but the cycle is long, and the effect is slow. At present, it is difficult to conduct rural environmental performance audits to assess officials' performance (Ge & Li, 2020).

Reputation and getting promotion

Jøsang et al. (2007, p. 5) defined reputation as *"what is generally said or believed about a person's or thing's character or standing"*. There is no denying that reputation is a factor influencing the behaviour of officials (Xu & Chen, 2018). For example, at the village level, the pursuit of a good reputation may contribute to successful program implementation. The

tighter the village cultural network, the more the villagers' committee¹⁴ or village CCP branch committee members are willing to carefully consider and ensure the long-term benefit of the village. Although there is very limited room for village officials to get promoted (Hou, 2013), the purpose of doing so was to pursue prestige and 'face' (He & A'gu, 2006).

However, "*political success can stem from programme implementation*" (McConnell, 2010b, p. 51). This is what McConnell emphasized in Criterion 10, i.e., gaining reputation through policy/program implementation may help government officials to be promoted. But this may not be the case in China. As stated above, reputation is not one of the five factors that significantly influence government officials to be promoted, and in particular, reputation gained from environmental policy/program implementation may not contribute to the promotion of officials in China, especially in rural areas. On the contrary, spending on pollution control (which enhanced reputation with the public) reduced the likelihood of officials being promoted (Zhang & Lu, 2016).

To sum up, the logic of getting promotion for Chinese and western officials is quite different (Wu & Ma, 2009). There was no evidence to show that environmental performance and reputation is an important factor in deciding the promotion of officials in China, especially in rural areas. Therefore, criterion 10 may not be suitable to judge environmental policy success or failure, in terms of government officials staying elected or getting promoted in the Chinese context. It is not supported by the literature.

5.2.11 Easing the business of governing (Criterion 11)

McConnell's criterion

McConnell (2015, p. 234) proposed the criterion 'easing the business of governing' to judge the success or failure of a policy/program. "*An aspect of the business of government involves producing programs that might arguably leave much to be desired in terms of dealing with policy problems but help sustain its capacity to govern and pursue its other high-priority items*" (McConnell, 2010b, p. 51). Governments seek to ease the business of governing by a range of means, such as controlling the policy agenda, narrowing the scope of a problem, or

¹⁴ A villagers' committee is a mass organization of self-government at the grassroots level, in which villagers administer their own affairs, educate themselves and serve their own needs and in which election is conducted, decision adopted, administration maintained and supervision exercised by democratic means (National People's Congress, 2010).

implementing a placebo program. Successfully keeping an issue off the government agenda through the policy program can be considered a political success for the government.

Literature review findings and implications

In China, local governments tend to ease the business of governing through multiple measures. First, local governments prioritize issues that central government believes important because policymakers are obligated to follow the orders from the upper-level government to set the policy agenda (Heilmann, 2017). On the other hand, social issues can be excluded from the government agenda by being manipulated (Yang, 2013). Second, local governments prioritize issues that are easy to act on. For problems off the 'safe range', namely issues that are difficult to solve, involving multiple stakeholders, and concerning the redistribution of interests, local governments might ignore or not respond to public appeals (Yang, 2016). Such activities might cause social conflicts and negative political impact (Gan, 2018). Third, local governments ease the business of governing through implementing programs that could achieve short-term effects. For example, in order to fulfil the objectives of the air pollution control policy, Zheng Zhou City, the capital city of He Nan Province, had identified 539 polluting companies in March 2017. But this number increased to more than 10,000 four months later, due to pressure from the inspection and executive accountability (Zhou et al., 2017). *"The haste to fulfil pollution-control targets may also reveal a greater interest in satisfying the demands of short-term campaigns than in undertaking long-term structural changes."* (Huang, 2018). Therefore, criterion 11 could help to explain a government's activity in the Chinese context. It is supported in the literature.

5.2.12 Promotion of government's desired trajectory (Criterion 12)

McConnell's criterion

McConnell (2015, p. 235) proposed the criterion 'promotion of government's desired trajectory' to judge the success or failure of a policy/program. *"Policies can be politically successful if they promote the values desired by government and help maintain the broad trajectory of government and its programs"* (McConnell, 2010b, p. 52).

Literature review findings and implications

In China, the government's desired trajectories guide the objectives and direction of the country. They help a party to form common values, reach consensus, constrain party members' actions, and act uniformly. They also help to defend the legitimacy of an action

and its existence, make long-term planning pervasive, and keep society stable (Cai & Dong, 2012; X. Chen, 2014; H. Li, 2011; K. Yu, 2007).

In China, economic growth has been the fundamental government trajectory since the advent of the 'Economic Reform and Open Up' initiative in 1978. In 2012, environmental protection became another key trajectory, when the concept of 'Ecological Civilization' was first proposed at the 18th National Congress of the Communist Party of China (The 18th National Congress of the Communist Party of China, 2012). In 2015, it became one of the government trajectories and was written into the 'Outline of the 13th Five-Year Plan for the National Economic and Social Development of the People's Republic of China (2015-2018)' (National People's Congress, 2015). In 2018, 'Building Ecological Civilization' was further considered as a national goal for sustainable development in China (The 19th National Congress of the Communist Party of China, 2018). Besides economic growth and environmental protection, since 2017, poverty alleviation and government debt reduction have become the focus of the central government (The 19th National Congress of the Communist Party of China, 2017b).

To follow or promote national trajectories are matters of political correctness for local governments. However, local governments are inevitably caught in the 'dilemma' between these trajectories (Zhang & Li, 2014). For example, since 2016, the so-called 'Environmental Storm Act' that aims to manage heavy polluting enterprises has shut down thousands of enterprises nationwide. This is the 'One Size Fits All' approach that caused widespread controversy, which is essentially a battle between economic development and environmental protection (Huang, 2018; Zhou et al., 2017). Therefore, criterion 12 is a meaningful policy measure in the Chinese context. It is supported in the literature.

5.2.13 Providing political benefits for government (Criterion 13)

McConnell's criterion

McConnell (2015, p. 235) proposed the criterion 'providing political benefits for government' to judge the success or failure of a policy/program. *"There can be failure for government in the sense that any political benefits it may have accrued are outweighed by substantial opposition which is critical of government and accuses it of not acting in the public interest"* (McConnell, 2016, p. 674). A policy is considered successful if political opposition is outweighed by political support for the government.

Literature review findings and implications

The intention of many political actions is to gain political benefits. Li and Deng (1989, pp. 15-16) define political benefit as *“a kind of political need that has been satisfied during a people’s political life. It manifests itself in the acquisition or partial acquisition of political rights, political status, political honours, political preferences and political claims. Subjects have the practical feeling in terms of the extent that need is fulfilled”*. Cao and Rong (2009, p. 104) defined political benefits as *“earning the right to participate in political life”*.

In China, government, party, government officials, and citizens can all get political benefits through public policy (Hong et al., 2006). At the government level, a government rationally allocates public resources and fulfils the public interest, in order to establish, maintain, and consolidate the economic, political and cultural order that is needed for society. This is considered a political success if a government successfully doing so (Huang, 2012; Yuan, 2011; Yuan, 2014; Zhao, 2004). At the party level, in a democratic political system, a party is looking to benefit from vote-maximization (Downs, 2005). In China, the ruling party is looking for possible support for its government and considers such support as a political success (Cao & Rong, 2009). In terms of government officials and politicians, they will pursue power, political position, political influence, and reputation which are considered indicators of political successes (Cao & Rong, 2009). In terms of citizens, *“the political interest of the citizen refers to their status in social and political life and the various social democratic rights they have gained”* (Hong et al., 2006, p. 483), so that the successful acquisition of democratic rights is considered a political success.

It should be noted that providing political benefit for government may not be the only indicator for evaluating support/opposition to policy. Failure to provide political benefits for the above groups can cause controversy or even opposition to a policy. When support is outweighed by the opposition, a policy/program may fail in terms of political impact. Therefore, criterion 13 can be used to evaluate the political impact of a policy/program in the Chinese context. It is supported in the literature.

5.3 Overall evaluation of the criteria based on literature

The literature provides insights into the 13 criteria originally used in McConnell’s framework. Criteria 8A, 8B, and 8C are proposed to replace McConnell’s original Criterion 8 with these three criteria considered equal with other criteria, giving a total of 15 criteria. The literature

insights suggest the evaluation criteria can be grouped into three categories in terms of their relevance to the Chinese political environment.

- Supportive: **Twelve** criteria were supported in the literature, namely: securing legitimacy (Criterion 2), attracting support for process (Criterion 4), implementation in line with objectives (Criterion 5), achieving desired outcomes (Criterion 6), benefiting target group(s) (Criterion 7), efficiency (Criterion 8A), equity (Criterion 8B), and appropriateness (Criterion 8C), attracting support for program (Criterion 9), easing the business of governing (Criterion 11), promotion of government's desired trajectory (Criterion 12), providing political benefits for government (Criterion 13).
- Unclear: **One** criterion was not clearly discussed in the literature and lacked empirical study, namely: building sustainable coalition (Criterion 3). The application of this criterion in the Chinese context needs further research.
- Non-supportive: **Two** criteria were not supported by the literature, namely: preserving goals and policy instruments (Criterion 1) and enhancing electoral prospect/reputation (Criterion 10). It may not be practical to investigate criterion 1 in the Chinese context as the process of setting policy is not open to the public. Criterion 10 reflects an opposing logic to the prevailing Chinese political environment.

Preliminary insights into McConnell's framework from other scholars are not adequate for a complete evaluation, especially regarding their potential utility in the context of China. Some criteria need further evidence to validate the findings. Evidence from a field investigation could provide deeper insights and may yield different results. The next section discusses potential improvements and adjustments to McConnell's framework, for the purpose of utilizing it in the Chinese context.

5.4 Potential improvements to McConnell's framework

First, as discussed in 5.2.8, in terms of efficiency, McConnell did not state clearly what is included in Criterion 8 (satisfying criteria highly valued in policy domain). Therefore, efficiency, equity, and appropriateness were identified as criterion 8A, 8B, and 8C to elaborate Criterion 8 in the Chinese context. Therefore, the creation of 8A, 8B, and 8C is an improvement of McConnell's framework.

Second, McConnell (2015) used a set of qualitative considerations to judge overall policy success/failure and success/failure with respect to individual criteria. If a policy failed, certain degrees of failure (Tolerable Failure = Resilient Success; Conflicted Failure = Conflicted Success; (Outright) Failure = Marginal Success) in each criterion could be observed. McConnell claimed that policy failure is not *“all or nothing”*, and *“the three categories with ‘failure’ terminology helps to grasp the real politick of failure”* (pp. 236-237). While it might be appropriate to evaluate overall policy success/failure via these three categories, this approach appears to be limited. Insights from the literature indicated there will be situations of absolute failure and absolute success for individual criterion. For example, in an authoritarian political system, there might be situations that no coalition among stakeholders was formed during the policymaking process, which indicated that Criterion 3 is an absolute failure. Therefore, it is proposed that Absolute Success and Absolute Failure be added to build on McConnell’s framework, but only with respect to individual criteria, not the overall policy.

This research will use qualitative guidelines as per McConnell (2015, pp. 233-235) modified based on literature findings and as described above. The language of some items has been tweaked to make them easier to understand. Table 5.1 shows these modified guidelines for criteria evaluation as a basis to measure the degree of success/failure for each criterion across the ‘process’, ‘program’, and ‘politics’ realms, for the purpose of utilization in the field investigation.

Table 5.1 Guidelines for measuring degrees of success/failure for each of McConnell's modified framework criteria across realms of 'process', 'program', and 'politics' (modified based on McConnell (2015, pp. 233-235)

Key: AF = Absolute Failure; OF/MS: (Outright) Failure = Marginal Success; CF/CS: Conflicted Failure = Conflicted Success; TF/RS: Tolerable Failure = Resilient Success; AS = Absolute Success.

Realm	No.	Criteria (13)	AF	OF/MS	CF/CS	TF/RS	AS
Process	1	Preserving goals and policy instruments	No policy goals and instruments preserved	Government unable to produce its desired policy goals and instruments	Preferred goals and instruments proving controversial and difficult to preserve. Some revisions needed.	Policy goals and instruments preserved, despite minor failure to achieve goals	All policy goals and instruments preserved
	2	Securing legitimacy	Policy illegitimate	Great challenges to legitimacy and of lasting significance	Difficult and contested issues surrounding policy legitimacy, with some potential to taint the policy in the long-term	Some challenges to legitimacy but of little or no lasting significance	No challenges to policy legitimacy
	3	Building sustainable coalition	No coalition formed	No building of a sustainable coalition	Coalition intact, although strong signs of disagreement and some potential for fragmentation	Coalition intact, despite some signs of disagreement	Intact coalition without disagreement
	4	Attracting support for process	Widespread criticism to process or not to seek for support	Criticism to process is virtually universal and/or support is virtually non-existent	Criticism to process and support are equally balanced	Criticism to process is low level and outweighed by support	Widespread support to process

Program	5	Implementation in line with objectives	No objectives achieved	Despite minor progress towards implementation as intended, program is beset by chronic failures, proving highly controversial and very difficult to defend	Mixed results, with some successes, but accompanied by unexpected and controversial failings	Implementation objectives broadly achieved, despite minor failures and deviations	All objectives achieved
	6	Achieving desired outcomes	No desired outcomes achieved	Some small outcomes achieved as intended but overwhelmed by controversial and high-profile failure to produce results	Some successes, but the partial achievement of intended outcomes is counterbalanced by unwanted results, generating substantial controversy	Outcomes broadly achieved, despite minor shortfalls	All desired outcomes achieved
	7	Benefiting target group(s)	Target group damaged without any benefit	Small benefits are accompanied and overshadowed by damage to the very group that was meant to benefit. Also, likely to generate high profile stories of unfairness and suffering	Partial benefits realised, but not as widespread or deep as intended because of substantial failings	A few shortfalls and possibly some anomalous cases but target group broadly benefits	Target group benefits without damage
	8A	Efficiency	None of the criteria fulfilled with desired outcome	A few minor successes but plagued by failures	Partial achievement of goals, but accompanied by failures to achieve, with possibility of high-profile examples	Not quite the outcome desired, but despite flaws, close enough to lay strong claim to fulfil the criteria	Criteria fulfilled with desired outcome
	8B	Equity					
	8C	Appropriateness					

	9	Attracting support for program	Widespread criticism to program or not to seek for support	Criticism to program aims, values and means of achieving them outweighs small levels of support	Criticism to program aims, values and means of achieving them is equally balanced with support for same	Criticism to program aims, values and means of achieving them is stronger than anticipated, but easily outweighed by support	Widespread support to program
Politics	10	Enhancing electoral prospect/reputation	Reputation ruined and failed electoral prospects	Despite small signs of benefit, policy proves an overall electoral and reputational liability	Policy obtains strong support and opposition, working both for against electoral prospects and reputation in fairly equal measure	Favourable to electoral prospects and reputation enhancement, despite minor setbacks	Reputation enhanced and resulted in staying elected or promotion
	11	Easing the business of governing	Lost control on policy agenda, and government faces overwhelming issues.	Clear signs that the agenda and business of government struggles to suppress a politically difficult issue	Policy proving controversial and taking up more political time and resources in its defence than was expected	Despite some problems in agenda management, capacity to govern is unperturbed	Successfully control on policy agenda to ease the business of governing
	12	Promotion of government's desired trajectory	Entire trajectory of government is damaged	Entire trajectory of government in danger of being compromised	Direction of government very broadly in line with goals, but clear signs that the policy has promoted some rethinking, especially behind the scenes	Some refinements needed but broad trajectory unimpeded	Government's trajectory is fully met

	13	Providing political benefits for government	There is no agreement that there are political benefits for government	Political disbenefits for government outweigh the political benefits	Political benefits for government are balanced with political disbenefits	Political benefits for government outweigh the political disbenefits	There is no disagreement that there are political benefits for government
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Note. In the phase II study, Criterion 2 was defined more broadly to include the legitimacy of policy content or actions taken by the government. The scope of Criterion 13 is expanded from 'providing political benefits for government' to 'providing political benefits'. The word 'government' is changed to 'stakeholders'.

5.5 Causes of policy failure

McConnell (2016) distinguished between what could be observed if a policy failed and the cause of the policy failure. The causes of policy failure were categorized into three frames, namely: individual actor centred frame, institution/policy process centred frame, and societal centred frame (Table 2.3). McConnell extracted key points of the causes of policy failure from various theories and literature, and these key points provide an opportunity for further study. However, they may not be sufficient to unveil a Chinese policy story. Therefore, there is still a need to merge other scholars' ideas regarding the cause of policy failure into McConnell's explanation and to find empirical evidence to better understand the causes of policy failure.

Policy failure may be caused by complex interactions of individual behaviours, institutional deficiency, and prevailing values of the society. Several theories shed light on such complex interactions, such as path dependency (Pierson, 2000), punctuated equilibrium theory (Baumgartner & Jones, 2010; Jones & Baumgartner, 2005), complexity theory (Paul, 2012), self-organizing networks (Rhodes, 1996, 1997), and street-level bureaucracy (Lipsky, 2010; Moore, 1987, 1990). For example, Scott (1997, pp. 35-36) indicated three factors, namely: *'characteristics of the client, organizational characteristics, and attributes of the service provider, are the determinants of bureaucratic discretion in street-level bureaucracies'*.

In China, the main focus of the formal institutional policy process is political stability (Chen, 2016; Lawrence & Martin, 2012, p. 2). This ideology will drive an individual actor's behaviour towards 'blame avoidance', which may lead to 'deliberate cultivation of failure' (Hood, 2002, 2007, 2010; Shi, 2014; Weaver, 1986). This kind of failure may be the outcome of a complex policy process that is characterized by the interaction among actors as a 'game or arena' and a 'trade-off' (Zheng et al., 2010). And the ideology may be coloured by so-called 'Local Crony Capitalism', which indicates that local governments will benefit from using their political and economic power to support businesses linked to political leaders (Bai et al., 2014).

The situation may be more complex in rural China (Ku, 2003). 'Guanxi (personal relationship)¹⁵', 'renqing (favour)¹⁶', 'bao (reciprocity)¹⁷', and 'guanliao zuofeng

¹⁵ "guanxi" refers to "interpersonal relationships or connections in almost every realm of life in the Chinese culture, from kinship to friendship and from politics to business" (Chan, 2006).

¹⁶ "renqing", partly refers to "the social norms by which one has to abide in order to get along well with other people in Chinese society" (Gabrenya Jr & Hwang, 1996, p. 314).

¹⁷ "bao" refers to "reciprocity or retribution/reward of good or evil" (Bond, 2010, p. 248).

(bureaucratic)¹⁸ may also be the key reasons for policy success or failure, especially in policymaking and implementation processes (Chan, 2006; Ho, 1976; Hu, 1944; Hwang, 1987; Jacobs, 1979; King, 1980; King & Myers, 1977; Liu, 1982).

5.6 Summary

This chapter evaluated McConnell's (2015) framework from a theoretical point of view in the Chinese context. Using insights from the literature and a focus group, Criteria 8A, 8B, and 8C are proposed to replace McConnell's original Criterion 8, and all criteria were grouped into three categories, namely: supportive, unclear, and non-supportive for potential applicability in the Chinese context. However, further investigation is needed to provide complementary evidence to support McConnell's framework application. Consequently, absolute success and absolute failure have been added to complement tolerable failure, conflicted failure, and (outright) failure, to fully evaluate the criteria. Guidelines for measuring degrees of success/failure against each criteria across the realms of 'process', 'program', and 'politics' were developed, based on McConnell and modified, for the purpose of testing McConnell's framework through field investigation in China. Finally, the causes of policy failure in the Chinese context are briefly reviewed to complement McConnell's (2016) explanations on policy failure. The next chapter reports on the first phase of the field investigation of McConnell's framework in China. It involves a trial to assess the framework's utility and gain preliminary insights into the criteria applied in the Chinese context.

¹⁸ "Guanliao zuofeng" refers to bureaucratic workstyle (Ku, 2003, p. 248).

Chapter 6

Evaluation of McConnell's Framework - Phase I Case Study

6.1 Introduction

Chapter 5 reported the theoretical findings underpinning potential application of McConnell's (2015) policy evaluation criteria in the Chinese context and McConnell's (2016) explanations on policy failure are briefly reviewed. Criteria 8A, 8B, and 8C were used to replace McConnell's original Criterion 8. Insights from literature grouped the evaluation criteria into three categories, namely: supportive, unclear, and non-supportive. Guidelines for evaluating degrees of success/failure of these criteria across the 'process', 'program', and 'politics' realms were also developed.

As the next step of the adaptive learning and triangulation approach, this chapter reports on the first phase of the case studies evaluation of the modified set of McConnell's policy evaluation criteria. The first phase case application was a trial to assess the criteria's utility and gain preliminary insights into the policy evaluation criteria applied in the Chinese context, as well as draw conclusions about policy success or policy failure. Two cases studies were conducted in rural China with different socio-political and geographical contexts. One type of the Comprehensive Environmental Treatment (CET) policy program that deals with rural domestic waste was selected. The policymaking process of the two case studies occurred at the township level.

The chapter begins with a description of the case studies. The application of each criterion to these case studies is considered individually within the context of a standard reporting template and an overall evaluation of the criteria is then presented. Finally, the findings from the revised MEE [2010] 136 evaluation framework (the policy effect evaluation guideline for the CET policy from the Ministry of Ecology and Environment, Appendix C) evaluation undertaken as a third-party investigator of these cases is then presented.

6.2 Case studies

- Case 1:

V1 village (at T1 township in CT1 county of CY1 city in Inner Mongolia Autonomous Region) was selected as Case 1. V1 village covers an area between 30-40 km², contains 500-1000

permanent households, and 1,000-2,000 residents. The village was an important potato planting and processing base. Domestic waste, domestic wastewater, fertilizer pollution, animal excreta, and especially plastic film used for potato planting were the key environmental problems.

A CET policy program (**P1 program**) targeting rural domestic waste management was initiated and implemented for this village. This program aimed to construct public waste collection points and manage street cleaners to clean and collect garbage.

The P1 program was proposed, designed, and approved by the T1 township government. The villagers' committee (VC) was then informed about the decision and requested to provide suggestions to the T1 township government. A village meeting was held with the VC or village CCP branch committee (VPBC) members, and villagers' representatives (VR) to discuss the site choice of the waste collection points. The T1 township government then constructed garbage collection points (see Plate 6-1), and the Environmental Sanitation Department of T1 township government operated the program.



Plate 6-1 One garbage collection point in V1 village

- Case 2:

V2 village (at T2 township in DS2 district of Beijing City) was selected as Case 2. V2 village covers an area between 5-10 km², contains 50-100 permanent households with 100-500 residents. Tourism is the supporting economy with peach production being the traditional business of the village. Domestic waste (including garbage produced by tourists), groundwater pollution, and river pollution are the key environmental problems. In V2 village, a CET policy program (**P2 program**) targeting rural domestic waste management was

initiated and implemented. This program aimed to construct a public waste collection point and manage street cleaners to clean and collect garbage.

The P2 program was proposed, designed, and approved by the T2 township government. The VC was then informed about the decision and required to provide suggestions for the location of the waste collection point. The T2 township government then constructed garbage collection points (see Plate 6-2). A sanitation company contracted by T2 township operated the program with the collaboration of V2 villages' committee.



Plate 6-2 Garbage collection point in V1 village

6.3 Criteria evaluation

The results of the case studies are presented in the following format for each criteria: (1) Results from Case 1 and Case 2; (2) Overall findings and implications. The respondent codes used in reporting the results are in Table 3.2 and Table 3.3. A set of standard phrases at the end of each section is used to judge how much extent a criterion fit the Chinese context (see Table 3.4).

6.3.1 Preserving goals and policy instruments (Criterion 1)

Results from Case 1 and Case 2

An internet search was used to in an attempt gather general information such as summaries of township CCP Standing Committee meetings, township government executive meetings, and township government plenary meetings about the policy adoption process of both P1 and P2 programs. These meeting summaries may contain discussions, decisions made, and dissenting opinions. However, the meeting summaries could not be located. Interviewees also indicated that they knew little of the policy adoption process, including the content of the draft proposal, what had changed, and why it had changed. Interviewee 2VS complained

about the lack of participation of the local office in this process: *“Township government just told us to build one [waste collection point]. We were not sure who would build it and how it would be built.”*

Overall findings and implications

Without access to the information needed to assess Criterion 1 (see Table 5.1), Criterion 1 could not be measured in either case. Criterion 1 ‘may not fit’ the Chinese context, due to lack of information and non-transparent policy adoption process at the township level.

Whether this criterion fits the Chinese context needs further research.

6.3.2 Securing legitimacy (Criterion 2)

Results from Case 1 and Case 2

In both cases, it was unclear whether the process legitimacy of both programs was secured. Most interviewees focused on the very existence of the program or the fact that the programs had been approved, as interviewee 1VR noted: *“If the program was illegitimate, it would not be approved.”* However, this is a false argument because interviewees did not know whether the policy legitimization process is proper. The interviewees rarely consider/lack interest in whether these programs conforming to laws or rules because their interests were not violated. ‘Conflict’, ‘benefit’, and ‘interest’ are the keywords used in the interviews, which indicated that the public may neglect process legitimacy as long as the programs *‘benefit them’*, *‘don’t cost me a penny’*, or *‘there is no interest violation’*, e.g., *“we do trust the government as long as it is a good program that benefits and serves the public without charging us any money. If the program violated our interests, it would influence the public trust of the government (interviewee 2BR).”*

Overall findings and implications

“Legitimacy is affected both by how something is done (i.e., whether proper procedures are used) and by what is being done” (Anderson, 2003, pp. 119-120). ‘Whether proper procedures are used’ refers to whether the policymaking process conforming to laws or rules. ‘What is being done’ refers to policy content or actions of the government. When legitimacy is considered in this first sense of ‘whether proper procedures are used’ (McConnell focuses on this aspect, see section 5.2.2), it was unclear whether the process legitimacy of either program was secured. Without access to the information needed to assess process legitimacy (see Table 5.1), Criterion 2, if assessed solely in terms of process legitimacy, could not be measured in either case. However, if Criterion 2 is defined more

broadly to include legitimacy of actions taken, it 'potentially fits' the Chinese context. As found in case studies, the idea of 'focusing on content, less on procedure' always exists in the public mind in China (Guo & Peng, 2014). *"No matter what the procedure was, as long as the public accepted and endorsed the content, it would be considered legitimate"* (Chen, 2004, p. 227; Zhang, 1992, pp. 23,172). Though not obviously observed in both cases, legitimacy may be challenged by the stakeholders in other programs when stakeholders challenge the policy content or actions of the government.

6.3.3 Building sustainable coalition (Criterion 3)

Results from Case 1 and Case 2

In both cases, the policymaking process took place at the township government level. Table 6.1 shows the participation rules. Policymaking at this level was more exclusive. Most of the public, including the villagers, VR, and village CCP members could not participate in such a process. The public had little expectation of influencing a public action and as noted by interviewee 1FR: *"Villagers did not know this [the policymaking process]"*. The VC or VPBC members could propose suggestions and influence the decision-making of the township governments, but they cannot vote. The township governments preserved their authority and power to accept, revise, or deny suggestions. In this centralized authority, decision-making was concentrated in the hands of township government officials. The VR, village CCP members, VPBC members, and VC members mainly acted as information intermediaries between villagers and the township government. In both cases, a coalition among stakeholders was not formed. Boundary rules restrict most of the public from entering the policymaking process, choice rules defined their possible actions, and aggregation rules limited the influence of those who could participate.

Table 6.1 Participation rules recorded in the policymaking process at the township level in Cases 1 and 2

Participants	Boundary Rules	Choice Rules	Aggregation Rules	Information Rules
Villager	No Entry	None	None	Provide information through VR and village CCP members
VR	No Entry	None	None	Intermediary
Village CCP member	No Entry	None	None	Intermediary
VPBC and VC member	May Enter	Propose suggestions	Influence	Intermediary
Township government	Enter	Listen to suggestions; Provide feedback; Make decisions	Democratic centralism ¹⁹	Receive information from the above sources and send feedback to the members of the VPBC and the VC

Overall findings and implications

In terms of the evaluation items in Table 5.1, coalitions were not formed. Criterion 3 was deemed Absolute Failure in both cases. Criterion 3 ‘may not fit’ the Chinese context when the policymaking process occurs at the township level. However, there is the possibility that a coalition could be formed at the village level to facilitate the approval or denial of a program. Most of the public, namely villagers, may enter the policymaking process, especially for major issues that broadly affect them. Interviewee 2HT used the example of a controversial sewage treatment program that was not allowed to continue in this village to make the point:

For major issues, the VR, VC members, or the villagers may propose their demand and provide suggestions. They will conduct a democratic appraisal in the VR meeting or village CCP meeting to decide. If villagers think the program is needed, they will endorse with their signature to confirm, and then report to the township government...I think they [township government] should coordinate with the VC first about how to build, whom to build and how it [the sewage treatment facility] looks like. The construction team just came and dug [pipelines]. I said I can't let you work here, because I have to be responsible for our villagers.

¹⁹ “Democratic centralism emphasizes the dialectical unity between democracy and centralism, which is reflected in practice as the decision-making mechanism of the leaders that fully respects the collective discussion” (Chen et al., 2010, p. 61). The principle of ‘democratic centralism’ is written in Article 3 of the Constitution of the People’s Republic of China (National People’s Congress, 2018).

Therefore, further investigation is needed to examine coalition formation at the village level, and even at the county level as a complement to the first phase study.

6.3.4 Attracting support for process (Criterion 4)

Results from Case 1 and Case 2

In both cases, attracting public support during the policymaking process was not essential. Both township governments had not sought support by seeking advice from the public during agenda setting, policy formulation, and policy adoption processes. Most of the public could not participate in such processes. Although both villages were requested to provide site choice suggestions for the waste collection point, they were not informed about the decision until program implementation.

Overall findings and implications

In terms of the evaluation items in Table 5.1, the township governments had not sought public support during the policymaking process. Criterion 4 was deemed 'Absolute Failure' in both cases. Reflecting on public policy process is the value of public policy evaluation (Van der Knaap, 1995). Ignoring consultation feedback from the public or local officials may lead to potential implementation problems or result in political backlash (McConnell, 2015). So, not seeking support for the policymaking process is considered a failure. If public policymaking in China does not require public support, then this criterion does not apply in China. However, as stated in 5.2.4, China has been undergoing a transition from managerialism public administration to participatory public administration 2002. There is the possibility that for other programs, attracting widespread public support is essential. Therefore, Criterion 4 'may fit' the Chinese context. Besides policymaking at the township level, further investigation at the village and county levels is needed to supplement the first phase study.

6.3.5 Implementation in line with objectives (Criterion 5)

'Building Ecological Civilization'²⁰ is the core concept of the CET policy. There are two specific policy objectives: (1) control the most prominent environmental pollutions in rural areas; (2) educate the target groups on environmental protection and help the target groups to participate in rural environmental protection (Ministry of Ecology and Environment, 2010a).

²⁰ Resource conservation and circular development are two important concepts of Ecological Civilization (The State Council, 2015).

Results from Case 1 and Case 2

- Case 1:

The P1 program partially met the first objective. In V1 village, domestic waste, domestic wastewater, fertilizer pollution, animal excreta, and especially plastic film used for potato planting were considered the key environmental problems by interviewees (see Plate 6-3). The P1 program targeted one of the problems (domestic waste), but four other long-term and tricky problems remained unsolved.



Plate 6-3: Plastic film left on the farmland (left) and a self-use sewage well without leakage protection (right)

The P1 program did not meet with the second objective. There was no evidence that the program educated the villagers on environmental protection to establish the concept of ecological civilization and helped villagers to participate in rural environmental protection. The program did not educate the public to sort waste and facilitate such behaviour. There were also no incentives to encourage household waste recycling to control the rural domestic waste generated. This is a chronic failure. After all, measures that help changes in thoughts and behaviours are prerequisites for sustainable development (Dobson, 2007; Hofman-Bergholm, 2018).

- Case 2:

The P2 program partially met the first objective. In V2 village, domestic waste (including garbage produced by tourists) was considered one of the major environmental problems by the interviewees. But the long-term and tricky problems in this village, such as groundwater pollution and river pollution, were unsolved (see Plate 6-4 left).

The P2 program met the second objective. The program educated the villagers on environmental protection. The street cleaner would always remind the villagers to use the garbage can provided to them. Interviewee 2SC noted: *“When we collect garbage, we told them [villagers] don’t dump garbage conveniently as you have a garbage can. And we will collect them.”* In addition, an award called ‘Civilized Household’ was offered NZ\$60 to a well-performed family to educate the public and guide their behaviours. The program also helped the villagers to participate in rural environmental protection, through providing free services, such as free garbage cans to each household for collecting and roughly sorting waste (see Plate 6-4 right), and collecting large appliances and furniture for free.



Plate 6-4 A broken sewage treatment facility (left) and garbage collected from households are roughly sorted (right).

Overall findings and implications

In Case 1, the P1 program partially met the first objective, but not the second objective. In terms of the evaluation items in Table 5.1, despite progress towards implementation as intended, the program was beset by chronic failures, proving highly controversial and very difficult to defend. Criterion 5 was deemed (Outright) Failure = Marginal Success in Case 1. In Case 2, the P2 program partially met the first objective and met the second objective. In terms of the evaluation items in Table 5.1, the implementation objectives of the program were broadly achieved, despite minor failures and deviations. Criterion 5 was deemed Tolerable Failure = Resilient Success in Case 2. It is necessary to evaluate the whether a policy/program is implemented consistent with its objectives to fully judge its success or failure. Criterion 5 ‘clearly fits’ the Chinese context.

6.3.6 Achieving desired outcomes (Criterion 6)

The objectives indicated in section 6.3.5 are intended to achieve the following outcomes: (1) improve the rural environment and sanitation; (2) increase environmental awareness and pro-environmental behaviours of the target groups (The State Council, 2009).

Results from Case 1 and Case 2

- Case 1:

The P1 program achieved the first desired outcome to a limited extent. Interviewee 1VR stated: *“No one cleans the garbage before, and now the street cleaners clean the garbage. The environment [sanitation] has improved (see Plate 6-5 left).”* However, the potential outcome was weakened by poor program management. Waste collected from V1 village was not transferred to the waste disposal facility but dumped into the pits near the village (see Plate 6-5 right). Interviewees indicated that the garbage truck driver probably embezzled the fund that was supposed to pay for the landfill. But the VC and VPBC did not participate in the implementation of the P1 program, thus they had no authority to manage this matter.



Plate 6-5 The rural environment has improved (left) and one of the illegal dumping site (right)

The P1 program failed to achieve the second desired outcome. The potential outcome was damaged by design flaws at garbage collection points. Some garbage collection points were not close to villagers' homes and the entrances to the garbage collection points were too small to use a wheelbarrow to dump waste. As interviewee 1VS stated: *“The entry of garbage collection points is too small, and garbage can't be collected by the rubbish collector. It was a design problem (see Plate 6-6 top left).”* Thus, some villagers did not use the garbage collection points but still dumped waste into pits they had dug (see Plate 6-6

top right). The potential outcome was also damaged by the implementation pathway, such as poor management of street cleaners. Interviewee 1FR stated: *“The street cleaners did not collect the garbage routinely but wait till the garbage collection points were full. Only before the inspection from the upper-level government, the street cleaners would then actively transfer the garbage from the collection points.”* The street cleaners, who were hired by the Environmental Sanitation Department of the T1 township government, were not local residents. They travelled from T1 township to V1 village to do the service. This was one reason why the street cleaners did not actively collect waste on time. Some interviewees indicated that on several occasions the garbage collection points were full, but no street cleaners came to do the job, thus further reducing their willingness to use the facilities (see Plate 6-6 bottom). The potential outcome was further damaged by the missing of education on sorting waste, necessary equipment and incentives to recycle waste. Domestic waste in V1 village remained unsorted and mixed (see Plate 6-6 bottom).



Top: The newly built garbage collection point (left) and the pit dug by villagers to dump waste (right). Bottom: Waste left in the garbage collection point (left) and uncollected waste in the village (right).

Plate 6-6 Rural waste management in V1 village

- Case 2:

Most interviewees thought the P2 program had achieved a very high level of success in terms of the first desired outcome, e.g., the rural environment had been greatly improved (see Plate 6-7 top). Interviewee 2BR stated: *“We can’t see dirt and chaos anymore. The*

environment is much better. This is the truth.” The reason why the program achieved a very high level of success was because the VC and VPBC of V2 village got involved in the program implementation. Although a sanitation company contracted with T2 township operated the P2 program, the VC and VPBC of V2 village had negotiated with the T2 township government and insisted on hiring local residents as street cleaners under their supervision. The VC strictly then monitored the job of street cleaners. The street cleaners were requested to collect the garbage from each household every day (see Plate 6-7 bottom).



Top: Rural environment has improved.

Bottom: Street cleaners collect waste from every household (left), and waste collected from every household were transferred (right).

Plate 6-7 Rural waste management and outcome in V2 village

The P2 program successfully achieved the second desired outcome. Villagers roughly sorted the garbage. In addition, they did not throw trash around but actively cooperated with the job of street cleaners. Interviewees indicated that villagers felt it was more of a disgrace to litter when the street cleaners, who would have to pick up the litter, were locals.

Overall findings and implications

In Case 1, the P1 program achieved the first desired outcome to a limited extent, and it failed to achieve the second desired outcome. In terms of the evaluation items in Table 5.1, the program achieved some outcomes as intended, but was overwhelmed by controversial and high-profile failure to produce results. Criterion 6 was deemed (Outright) Failure =

Marginal Success in Case 1. In Case 2, the P2 program significantly achieved the first desired outcome, and it successfully achieved the second desired outcome. In terms of the evaluation items in Table 5.1, the program successfully achieved all desired outcomes. Criterion 6 was deemed Absolute Success in Case 2. It is necessary to evaluate the achieved outcomes of a program to fully judge its success or failure. Criterion 6 'clearly fits' the Chinese context. It was further noted that an adequate solution for rural domestic waste management needed multiple and complementary measures to facilitate and encourage pro-environmental behaviours. The participation of local residents and appropriate delegation of authority to the local office during the implementation produced better outcomes.

6.3.7 Benefiting target group(s) (Criterion 7)

Results from Case 1 and Case 2

'Benefit' is a key word mentioned several times by interviewees. It is considered the core basis to judge program success or failure.

- Case 1:

The P1 program benefited the target group, but the benefit was reduced by poor program management. Interviewee 1VR stated: *"Now garbage is collected. And the garbage collection points are not too close to any household, so they don't smell."* However, interviewees indicated that there were several times when the garbage collection point was full, and the street cleaners did not transfer the garbage on time. Villagers would have to dump the garbage somewhere else. Interviewee 1FR stated: *"They [the garbage collection points] benefited us a little because of this [the above reasons]."*

- Case 2:

The P2 program benefited the target group to a very high extent. In V2 village, the street cleaners collected garbage from each household and transferred it to the garbage collection point daily and on time. Some program measures, such as providing a free garbage can to each household and collecting large appliances free of charge, also benefited villagers. Meanwhile, all street cleaners hired by the P2 program were local residents. The P2 program promotes local employment and brought income to unemployed villagers.

Overall findings and implications

The P1 program benefited the target group, but the benefit was reduced by poor program management. In terms of the evaluation items in Table 5.1, partial benefits were realised, but not as widespread or as deep as intended because of substantial failings. Criterion 7 was deemed Conflicted Failure = Conflicted Success in Case 1. The P2 program benefited the target group to a very high extent. In terms of the evaluation items in Table 5.1, the intended target group benefited without damage. Criterion 7 was deemed Absolute Success in Case 2. Benefit is central for the target group to judge the success and failure of a program. Criterion 7 'clearly fits' the Chinese context.

6.3.8 Criteria 8A, 8B, and 8C

Criterion 8A (efficiency), Criterion 8B (equity), and Criterion 8C (appropriateness) are proposed to replace McConnell's original Criterion 8 (satisfying criteria highly valued in policy domain). These three criteria are each considered in their own right and equally weighted with McConnell other twelve criteria.

Efficiency (Criterion 8A)

Results from Case 1 and Case 2

Both programs were designed and implemented by the township government, and they were provided free to the public. However, it was unclear whether efficiency was achieved. The interviewees did not know or did not care about the cost of the programs. Interviewee 2VR stated: *"It [the program] did not charge us and affect us. It gave us all the good things. So, we don't care about these things [efficiency]."* Meanwhile, program cost data of both programs could not be located and retrieved. Therefore, it is not possible to calculate the ratio between objectives attained and resource expended, or the ratio between activities performed to resource expended in either case.

Overall findings and implications

Without access to the information needed to assess Criterion 8A (see Table 5.1), Criterion 8A could not be measured in either case. However, although the public lack the necessary information to judge efficiency or may not care about this criterion, it is possible this criterion matters to the public, especially in programs that are more transparent and having active public participation in the policy process, or in programs that charge the target group. Criterion 8A 'potentially fits' the Chinese context.

Equity (Criterion 8B)

Results from Case 1 and Case 2

- Case 1:

Most interviewees considered the P1 program distributed benefits equally because most villagers benefited from the programs. However, interviewees also indicated that it was hard to reach absolute equity, thus distributive equity might not be their priority concern.

Interviewee 1VC stated: *“There is no absolute equity in rural areas. Some households are far away from the garbage collection points, and some are closer.”* On the other hand, interviewees indicated that local residents were excluded from program operation. This might be considered a procedure inequity.

- Case 2:

Most interviewees considered the P2 program distributed benefits equally because most villagers benefited from the programs. However, distributive equity might not be their top concern. Interviewee 2HT stated:

*As far as I know, we haven’t reached this step [considering equity].
The environmental program can fulfil the basic needs of the public.
But the villages are different. Some are richer, some are located in
the mountain areas, and some are large. For example, in T2
township, two villages account for 80% population of the township.
It is hard to achieve absolute fairness, but only relative fairness.*

Conversely, interviewees complained that V2 village should be paid to build the garbage collection point, rather than the construction team contracted by the T2 township government. Interviewee 2VS stated: *“I just think it was a waste to find a company to do the business [build the garbage collection points]. In the end, the VC actually did the management job.”* This might be considered by interviewees as a procedure inequity.

Overall findings and implications

In terms of the evaluation items in Table 5.1, both the P1 and P2 program secured distributive equity but was accompanied by failures in achieving procedural equity. Criterion 8B was deemed Conflicted Failure = Conflicted Success in both cases. Distributive equity might not be a prioritized concern for villagers and local authorities, but they might pay some attention to procedural equity. However, evidence was insufficient to ascertain whether this criterion fits the Chinese context. Criterion 8B ‘may fit’ the Chinese context.

Further research is needed to investigate other types of programs, especially when inequity caused conflicts.

Appropriateness (Criterion 8C)

As discussed in section 5.2.8, in terms of appropriateness, a successful policy should: (1) meet the policy intervention needs; (2) propose sufficient and feasible solutions; (3) and more importantly, imply a moral judgment on 'goodness', such as consideration of sustainable development.

Results from Case 1 and Case 2

In China, 'household sort, village collect, township transfer, and county disposal' is the basic mechanism of rural domestic waste disposal (Ministry of Ecology and Environment, 2016). At each village, domestic waste should be sorted and then collected.

- Case 1:

The P1 program met policy intervention needs and provided basic infrastructure and services for rural waste collection. However, the program was not implemented in a sustainable way. The program did not educate the public to sort waste and facilitate such behaviour. Domestic waste in V1 village was unsorted and mixed. There were also no incentives to encourage household waste recycling to control the rural domestic waste generated.

- Case 2:

The P2 program met policy intervention needs and provided sufficient infrastructure and comprehensive services for rural waste management. The program was also implemented in a sustainable way. Garbage cans were given to each household to facilitate waste collection and allow the villagers to roughly sort the waste. Sorting was done by householders in a sustainable way. They separated organic kitchen waste to use as fertilizer or feed animals.

Overall findings and implications

In terms of the evaluation items in Table 5.1, the P1 program was considered partially appropriate but accompanied by failures to implement it in a sustainable way. Criterion 8C was deemed Conflicted Failure = Conflicted Success in Case 1. In terms of the evaluation items in Table 5.1, the P2 program was considered appropriate and implemented in a sustainable way. Criterion 8C was deemed Absolute Success in Case 2. A successful policy

can meet policy intervention needs, propose the adequate/right solutions, and more importantly, imply a moral judgment on 'goodness'. Criterion 8C 'clearly fits' the Chinese context.

6.3.9 Attracting support for program (Criterion 9)

Results from Case 1 and Case 2

In both cases, similar 'control techniques' (see section 5.2.9) were applied to attract support from the public and government officials. First, as discussed in Criterion 7, both programs provided benefits to the target groups to attract their support. Second, direct power was used to bind private parties and lower-level government officials to achieve compliance. In both cases, the VS, VC, township government officials, and some villagers were CCP members. They would inevitably support orders from higher party organization levels to secure program implementation. Third, the performance of the VPBC and VC would be assessed by the township government, and environmental condition is one key performance indicator. The VPBC could be rewarded by the successful implementation of a program, such as the title of 'Five Good CCP Branch'²¹.

- Case 1:

Few control techniques were used in the P1 program other than those stated above. The village officials stated that most villagers supported program implementation, e.g., *"Most villagers supported the program because there was no conflict (interviewee 1VS); If villagers did not support, the program could not be done (interviewee 1VR)."* However, criticism to how the program was implemented might be equally balanced with support for the same. There were many complaints by villagers about design flaws at garbage collection points and the poor management of street cleaners that caused the failure to achieve desired outcomes.

- Case 2:

More control techniques were applied in the P2 program than the P1 program, and the interviewees strongly supported implementation of the P2 program. Local households that performed well during program implementation would be honoured with the title 'Environment Five Good Household' by the village committee. As stated in 6.3.5, there was a

²¹ 'Five Good CCP Branch' refers to a special honour awarded to the local CCP branch committee by the upper-level CCP committee.

similar award called 'Civilized Household'. These awards were program measures to encourage pro-environmental behaviours. The P2 program also provided free services to attract public support, such as providing garbage cans and collecting large appliances for free. The above actions of the village committee resulted in a high level of public support for program implementation.

Overall findings and implications

Fewer control techniques were applied in the P1 program. In terms of the evaluation items in Table 5.1, criticism to how the program was implemented might be equally balanced with support for it. Criterion 9 was deemed Conflicted Failure = Conflicted Success in Case 1. More control techniques were applied in the P2 program. In terms of the evaluation items in Table 5.1, the program resulted in a high level of public support for its implementation. Criterion 9 was deemed Absolute Success in Case 2. Control techniques were necessary to attract public and government officials' support. Criterion 9 'clearly fits' the Chinese context.

6.3.10 Enhancing electoral prospects/reputation (Criterion 10)

Results from Case 1 and Case 2

In both cases, participants believed that local officials gained honour and recognition from program implementation. The pursuit of a good reputation may in turn contribute to successful program implementation. However, there was no evidence to indicate any local officials got promoted as a result of program implementation or as a result of the reputation gained from program implementation.

Overall findings

Without access to the information needed to assess Criterion 10 (see Table 5.1), no evidence to support Criterion 10 was available in either case. Criterion 10 'may not fit' the Chinese context. Further research is needed to establish whether this criterion fits the Chinese context.

6.3.11 Easing the business of governing (Criterion 11)

Results from Case 1 and Case 2

In both cases, township governments prioritized their agenda on domestic waste. All interviewees stated that domestic waste was a major and visible environmental problem in rural areas, and compared with other environmental problems, it was easier to respond to. Programs dealing with domestic waste might achieve obvious effects in the short-term and

require only small investments. Therefore, domestic waste became the priority of both the T1 and T2 township government agendas. But the remaining environmental problems in both case study areas, such as domestic sewage, plastic film, and river pollution were left unsolved. These environmental problems are severe, long-term, and tricky problems for local governments, but might lack suitable solutions, such as how to deal with a large amount of plastic film left in farmland after harvest. Such problems might be beyond the capacity of a township government and thus failed to be listed on the government agendas in both places.

Overall findings and implications

In terms of the evaluation items in Table 5.1, local governments successfully controlled the policy agenda to ease the business of governing. Criterion 11 was deemed Absolute Success in both cases. Local governments can prioritize the government agenda on an environmental problem that is easy to act on, may achieve obvious effects in the short-term, and require only a small amount of investment. Criterion 11 'clearly fits' the Chinese context.

6.3.12 Promotion of government's desired trajectory (Criterion 12)

Results from Case 1 and Case 2

All interviewees believed both programs had sustained the broad value and direction of central government to build the 'Ecological Civilization'. There was also no evidence to show that both programs conflicted with other national trajectories. On the contrary, a better rural environment could contribute to marketing V1 village as a potato trading centre, and to the development of tourism in V2 village.

Overall findings

In terms of the evaluation items in Table 5.1, the government's trajectory was fully met. Criterion 12 was deemed Absolute Success in both cases. Local programs can help to maintain the central government's 'vision and promise'. Criterion 12 'clearly fits' the Chinese context.

6.3.13 Providing political benefits for government (Criterion 13)

Results from Case 1 and Case 2

In both cases, local governments gained much political benefit. All interviewees indicated their support for township governments was 'considerably more' or 'much more' as a result of the programs. The township governments distributed benefits and welfare to villagers.

They also maintained political order by controlling the agenda and implementing programs to meet the national trajectory.

Overall findings and implications

In both cases, local governments gained many political benefits. In terms of the evaluation items in Table 5.1, there was no disagreement that there were political benefits for the government. Criterion 13 was deemed Absolute Success in both cases. Criterion 13 'clearly fits' the Chinese context. However, politics is contested and there is always a concern of 'success for whom' (Marsh & McConnell, 2010). As stated in 5.2.13, failure to provide political benefits for policy stakeholders could cause controversy, or even opposition to a policy. The stakeholders do not only refer to the government. A party, government officials, and citizens, may also gain political benefits and thus influence their level of support for the policy. Therefore, it is proposed that in the phase II study, the scope of Criterion 13 is expanded from 'providing political benefits for government' to 'providing political benefits' to evaluation political benefits.

6.4 Evaluation of the modified set of criteria applied to Cases 1 & 2

Phase I of the study empirically tested and evaluated criteria of revised McConnell's framework in two Chinese case studies. Criteria 8A, 8B, and 8C were used to replace McConnell's original Criterion 8. All three criteria have their own distinguishing characteristics and are considered equal with other criteria. A summary of the evaluation findings based on analysis of the data collected during phase I is shown in Table 6.2. All criteria can be grouped into four 'extent-of-fit' categories (see section 3.4.5), related to the context of the Chinese policy environment:

- **Clearly Fit: eight criteria** were fully supported by evidence and clearly fit the Chinese context, namely: implementation in line with objectives (Criterion 5), achieving desired outcomes (Criterion 6), benefiting target group(s) (Criterion 7), appropriateness (Criterion 8C), attracting support for program (Criterion 9), easing the business of governing (Criterion 11), promotion of government's desired trajectory (Criterion 12), and providing political benefits for government (Criterion 13).
- **Potentially Fit: two criteria** were not clearly observed to confirm they applied, namely: securing legitimacy (Criterion 2) and efficiency (Criterion 8A). However, based on the theory and 'hints' from the interviews, they are still considered of potential importance

and likely do fit the Chinese context. Further investigation is needed and may provide evidence to support these suggestions.

- May Fit: evidence in support of **two criteria** was not adequate, namely: attracting support for process (Criterion 4), and equity (Criterion 8B). But based on the theory, they may still be important and may fit the Chinese context. It is considered that evidence may be found in other programs to support these two criteria which may demonstrate they fit the Chinese context. Further investigation is needed.
- May Not Fit: no evidence was found to support the following **three criteria** and they may not fit the Chinese context, namely: preserving goals and policy instruments (Criterion 1), building sustainable coalition (Criterion 3), and enhancing electoral prospect/reputation (Criterion 10). These criteria were not supported by the literature. It is highly possible that further investigation in other programs will reach the same conclusion. But, to be sure, testing should continue to validate this interim finding.

Table 6.2 Summary evaluation of the modified set of policy evaluation criteria applied to Cases 1 & 2

No.	Criterion	Conclusion	Summary evaluation of criteria and needs for further Investigation
1	Preserving goals and policy instruments	May not fit	It may not be practical to investigate this criterion in China due to a lack of information and non-transparent policy adoption process. Further research is needed to establish whether this criterion fits the Chinese context.
2	Securing legitimacy	Potentially fits	When legitimacy is considered in McConnell's sense of 'whether proper procedures are used', it was unclear whether the process legitimacy of both programs was secured. However, although concerns about legitimacy were not observed in either case, discussion about the legitimacy of a program cannot be neglected. Legitimacy may be challenged by the stakeholders in other programs when the policy content or the actions of government violates their interests or causes disputes.
3	Building sustainable coalition	May not fit	In both cases a coalition was not formed. However, there is a possibility that a coalition can be formed at the village level or county level to facilitate the approval and denial of a program. Therefore, further investigation is needed.
4	Attracting support for process	May fit	In both cases, attracting widespread public support may not be essential for agenda setting, policy formulation, and policy adoption at the township level. However, there is the possibility that in other programs, attracting widespread public support is essential. A further investigation at the village and county level is needed as supplements to the phase I study.
5	Implementation in line with objectives	Clearly fits	The P1 program partially met the first objective, but not the second objective. The P2 program partially met the first objective and met the second objective. It is necessary to evaluate the whether a policy/program is implemented consistent with its objectives to fully judge its success or failure.
6	Achieving desired outcomes	Clearly fits	The P1 program achieved the first desired outcome to a limited extent, and it failed to achieve the second desired outcome. The P2 program successfully achieved all desired outcomes. It is necessary to evaluate the achieved outcomes of a program to fully judge its success or failure.
7	Benefiting target group(s)	Clearly fits	The P1 program benefited the target group, but such effect was reduced by poor program management. The P2 program benefited the target group to a very high extent. Benefit is central to judging a program.
8A	Efficiency	Potentially fits	Although the public lack necessary information to judge the efficiency or they may not care about this criterion, it is possible this criterion matters to the public. Further research is needed to investigate more transparent programs or programs that charge the target group.

8B	Equity	May fit	In both cases, distributive equity was not a prioritized concern for villagers and local authorities, but they might pay some attention to procedural equity. Further research is needed, especially when inequity caused conflicts of interest.
8C	Appropriateness	Clearly fits	The P1 program met the needs of the target group, but the program failed to be implemented in a sustainable way. The P2 program met the needs of the target group, and it was a more appropriate solution. An adequate solution needs multiple and complementary measures to meet local conditions and in a sustainable way.
9	Attracting support for program	Clearly fits	Control techniques were applied to attract support from the public and government officials. Fewer control techniques were applied in the P1 program. and the opposition to how the program was implemented might be equally balanced with support for it. More control techniques were applied in P2 program and resulted in higher support.
10	Enhancing electoral prospect/reputation	May not fit	The implementation of both programs enhanced the reputation of government officials. But there was no evidence to indicate any government officials got promoted as a result of this program implementation or as a result of the reputation gained from program implementation. Further research is needed to establish whether this criterion fits the Chinese context.
11	Easing the business of governing	Clearly fits	Local governments that prioritized the government agenda on an environmental problem that was easier to act on, might achieve obvious effects in the short-term, and require a small amount of investment.
12	Promotion of government's desired trajectory	Clearly fits	Both programs helped to maintain the 'vision and promise' of the central government and they did not conflict with other national trajectories. Local programs can help to maintain the central government's 'vision and promise'.
13	Providing political benefits for government	Clearly fits	In both cases, local governments gained many political benefits.

6.5 Analysis of policy success or failure

The modified McConnell's framework was applied in case studies to draw conclusions about policy success or policy failure. McConnell used (Outright) Failure = Marginal Success, Conflicted Failure = Conflicted Success, Tolerable Failure = Resilient Success as reference points to judge the success/failure of each of the 13 criteria. However, there is the possibility that some criteria can be scored as Absolute Failure and Absolute Success. Therefore, two additional reference points, namely Absolute Failure and Absolute Success, were added to complement McConnell's framework for evaluating degrees of success/failure of the 13 criteria across the 'process', 'program', and 'politics' realm (see section 5.4). Guidelines were presented in Table 5.1 as the basis for measure relative success and failure. Table 6.3 summarises the success/failure in Case 1 and 2 for each of the 13 criteria.

Table 6.3 Summary of success/failure for each of the modified set of McConnell's criteria when applied to Cases 1 & 2

Key. AF = Absolute Failure; OF/MS: (Outright) Failure = Marginal Success; CF/CS: Conflicted Failure = Conflicted Success; TF/RS: Tolerable Failure = Resilient Success; AS = Absolute Success. Y = Yes

Success/Failure			Unclear		AF		OF/MS		CF/CS		TF/RS		AS	
Case														
Criteria			1	2	1	2	1	2	1	2	1	2	1	2
1	Process	Preserving goals and policy instruments	Y	Y										
2		Securing legitimacy	Y	Y										
3		Building sustainable coalition			Y	Y								
4		Attracting support for process			Y	Y								
5	Program	Implementation in line with objectives					Y				Y			
6		Achieving desired outcomes					Y						Y	
7		Benefiting target group(s)						Y					Y	
8A		Efficiency	Y	Y										
8B		Equity						Y	Y					
8C		Appropriateness						Y					Y	
9		Attracting support for program						Y					Y	
10	Politics	Enhancing electoral prospect/reputation	Y	Y										
11		Easing the business of governing											Y	Y
12		Promotion of government's desired trajectory											Y	Y
13		Providing political benefits for government											Y	Y

Table 6.3 shows that in Case 1 and 2, there were varying degrees of success and failure for each of the 13 criteria. A method was developed (see section 3.4.5) to analyse the success and failure of each individual realm (process, program, and politics) and the overall policy program based on the success/failure of each criterion. Table 6.4 shows the score for each criterion, each realm, and the overall scores of Case 1 and Case 2.

Table 6.4 Summary scores for each criterion, realm, and the policy program to Cases 1 & 2

Key. An ordinal five-point scale is used to capture the different levels of success/failure, showing the success/failure of a criterion, a realm, and the overall policy program, namely: Absolute Failure = 1; (Outright) Failure = Marginal Success = 2; Conflicted Failure = Conflicted Success = 3; Tolerable Failure = Resilient Success = 4; Absolute Success = 5. The extent of success or failure of each realm and the overall program are determined by the mean score.

No.	Realm	Criterion	Case 1	Mean Realm Score	Case 2	Mean Realm Score
1	Process	Preserving goals and policy instruments	Unclear	2/2=1	Unclear	2/2=1
2		Securing legitimacy	Unclear		Unclear	
3		Building sustainable coalition	1		1	
4		Attracting support for process	1		1	
5	Program	Implementation in line with objectives	2	16/6=2.7≈3	4	27/6=4.5≈4
6		Achieving desired outcomes	2		5	
7		Benefiting target group(s)	3		5	
8A		Efficiency	Unclear		Unclear	
8B		Equity	3		3	
8C		Appropriateness	3		5	
9		Attracting support for program	3		5	
10	Politics	Enhancing electoral prospect/reputation	Unclear	15/3=5	Unclear	15/3=5
11		Easing the business of governing	5		5	
12		Promotion of government’s desired trajectory	5		5	
13		Providing political benefits for government	5		5	
Mean overall program score				(1+2.7+5)/3=2.9≈3		(1+4.5+5)/3=3.5≈4

Based on Table 6.4, it can be concluded that:

- In Case 1, the 'process' realm was deemed Absolute Failure, the 'program' realm was deemed Conflicted Failure = Conflicted Success, and the 'politics' realm was deemed Absolute Success. In total, Case 1 was deemed Conflicted Failure = Conflicted Success.
- In Case 2, the 'process' realm was deemed Absolute Failure, the 'program' realm was deemed Tolerable Failure = Resilient Success, and the 'politics' realm was deemed Absolute Success. In total, Case 2 was deemed Tolerable Failure = Resilient Success.

6.6 Evaluation using MEE [2010] 136 evaluation framework

As stated in 3.2.3, evaluation results that are based solely on McConnell's framework may not be valid. This research applies triangulation methodology to help ensure analytical validity. The researcher used the MEE [2010] 136 evaluation framework as a third-party investigator to independently evaluate both case studies. The original intention was to compare the results of three different evaluation methods: the results presented above using McConnell's framework, this researcher's evaluation using the MEE [2010] 136 evaluation framework as a third-party investigator, and government department evaluations that employ the MEE [2010] 136 evaluation framework. However, the researcher was not able to access the evaluation reports for either Case 1 or Case 2 undertaken by government departments.

The MEE [2010] 136 evaluation framework (Appendix B) provided indicators and illustrated relative weighting of each indicator used for evaluating 'objective achievement' and 'overall output', depending on the type of pollution that the program targeted. A revised MEE [2010] 136 evaluation framework (Appendix C) was developed for **domestic waste programs**, and a set of methods and rules were created as the basis to judge these indicators. Findings from applying the revised MEE [2010] 136 evaluation framework (Appendix C) as a third-party investigator in Case 1 and Case 2 are presented in Table 6.5. The findings were based on public documents, on-site observation, and qualitative visual assessments, and in-depth interviews. The MEE [2010] 136 evaluation framework regulates that the assessment results are divided into four grades: excellent, good, fair and poor. The corresponding assessment scores are: ≥ 90 = Excellent, $\geq 70 - < 90$ = Good, $\geq 60 - < 70$ = Fair, and < 60 = Poor. Therefore, based on the application of the MEE [2010] 136 evaluation framework:

- Case 1 scored **38.8** and was deemed 'Poor'
- Case 2 scored **94** and was deemed 'Excellent'

It should be noted that the MEE [2010] 136 evaluation framework addresses only the matters covered by Criteria 5 (Implementation in line with objectives) and Criterion 6 (Achieving desired outcomes) in McConnell's framework. The average score using McConnell's Criteria 5 and 6 from each of the two cases is: Case 1 = $(2+2)/2 = 2$, Case 2 = $(4+5)/2 = 4.5$. The evaluation results using McConnell's Criteria 5 and 6 are consistent with the evaluation results using the MEE [2010] 136 evaluation framework in Case 1 and Case 2. This further confirms the validity of the research findings.

6.7 Summary

Phase I of the empirical study was conducted to test the modified set of McConnell's policy evaluation criteria in two selected areas in rural China. The findings grouped the evaluation criteria into four 'extent-of-fit' categories in relation to the Chinese context, namely: 'clearly fit', 'potentially fit', 'may fit', and 'may not fit'. Eight criteria 'clearly fit', two criteria 'potentially fit', two criteria 'may fit', and three criteria 'may not fit' the Chinese context. The modified set of McConnell's policy evaluation criteria were also applied in case studies to draw conclusions about policy success or policy failure. Case 1 was deemed Conflicted failure = Conflicted Success and Case 2 was deemed Tolerable failure = Resilient Success. Based on the researcher's own application of the revised MEE [2010] 136 evaluation framework (Appendix C), Case 1 was deemed 'Poor' and Case 2 was deemed 'Excellent'. The evaluation results using Criteria 5 and 6 in McConnell's framework are consistent with the evaluation results using the revised MEE [2010] 136 evaluation framework in Case 1 and Case 2.

Further investigation is needed to provide complementary evidence for application of the modified set of McConnell's policy evaluation criteria in the Chinese context. Informed by the findings of phase I, some of the criteria were considered essential to evaluate policy/program success or failure in the Chinese context, regardless of the program type and the context, for example producing desired outcomes (Criterion 6) and creating benefit for target group (Criterion 7). But the context and the type of programs may greatly impact some evaluation criteria, especially those grouped as 'potentially fit', 'may fit', and 'may not fit'. The phase I study did not provide sufficient evidence to reach a conclusion. In the phase II study, different types of programs other than domestic waste management programs are

considered. And the study focuses on the policymaking process that occurred at the village and county level to complement the findings from the phase I study, where policymaking occurred at the township level. The next chapter reports the second phase application and evaluation of McConnell's framework.

Table 6.5 Researcher application of the MEE [2010] 136 evaluation framework as a third-party investigator to Cases 1 & 2

	No.	Indicators	Relative Weighting (out of 100)	Requirements	Case 1	Evaluation Scores (Assessed against weighting)	Case 2	Evaluation Scores (Assessed against weighting)
Objective Achievement	1	Desired objectives achieved, and desired outcome produced	8	Achieve desired objectives and produce desired outcome.	Partially met the objectives; No significant outcomes produced.	2	Partially met the objectives; Significant outcomes produced.	6
	2	Satisfaction rate of rural population with rural environment	8	≥95%	87.5%	4	90%	4
	3	Establishment of rural environmental protection team	8	Full-time staff in charge of program implementation and management hired in township.	Part-time staff in charge of program implementation and management were hired.	4	Full-time staff in charge of program implementation and management hired.	8
Overall Output	4	Domestic waste transfer rate	23	=100%	60%	13.8	100%	23
	5	Hazard-free treatment rate of domestic waste	23	≥70%	Garbage transferred was not disposed in official landfill but dumped, e.g., 0%.	0	100%	23

	6	Domestic waste facility operation and management	30	Stable operation; Follow-up management, and operating expense guaranteed.	Facility operation not stable. Follow-up managing and operating expense was guaranteed	15	Facility operation stable. Follow-up management and operating expense were guaranteed.	30
			100			38.8/100 = Poor		94/100 = Excellent

Note. For indicators **1, 3, and 6**, partially meeting one of the requirements gets a 50% score; for indicator **2**, less than 50% satisfaction rate gets a 0 score, 50%-94.9% would be considered partial success and get 4 points, above 95% would get 8 points; for indicators **4 and 5**, the calculation was based on the actual waste transfer rate, e.g., $23 \times 60\% = 13.8$. Findings were derived from interviews, on-site observation, and qualitative visual assessments. The MEE [2010]136 evaluation framework regulates that the assessment results are divided into four grades: excellent, good, fair and poor. The **overall** corresponding assessment scores are: ≥ 90 = excellent, $\geq 70 - <90$ = good, $\geq 60 - <70$ = Fair, and < 60 = poor (Ministry of Ecology and Environment, 2010b).

Chapter 7

Evaluation of McConnell's Framework - Phase II Case Study

7.1 Introduction

Chapter 6 reported on the initial evaluation of the modified set of McConnell's (2015) policy evaluation criteria in the Chinese context. The findings from the phase I evaluation grouped the evaluation criteria into four 'extent-of-fit' categories, namely: 'clearly fit', 'potentially fit', 'may fit', and 'may not fit'. The Chinese context lessons from that evaluation then informed a revision of the criteria. This revision is the subject of a further empirical application and evaluation as reported in this chapter.

As the next step of the adaptive learning and triangulation approach, this chapter reports on the second phase of the case study evaluation of the modified set of McConnell's policy evaluation criteria. The aim of the phase II case application was to gain deeper insights into the policy evaluation criteria and draw conclusions about policy success or policy failure. The evaluation considered whether the criteria could be considered as 'partially fit', 'potentially fit', 'may fit', 'may not fit', and 'does not fit' in the phase II case study. It aimed also to establish whether the criteria that were assessed as 'clearly fit' in the phase I case study would show the same results. Two cases studies were conducted in rural China with different socio-political and geographical contexts. One type of the Comprehensive Environmental Treatment (CET) policy program that mainly dealt with rural domestic wastewater was selected in the phase II study. The policymaking process in the two case studies occurred at the village level in Case 3 and county level in Case 4, in contrast to Case 1 and Case 2 where policymaking occurred at the township level.

The chapter begins with a description of the case studies. The application of each criterion to these case studies is considered individually within the context of a standard reporting template and an overall evaluation of the criteria is then presented. Finally, the findings from the revised MEE [2010] 136 evaluation framework (the policy effect evaluation guideline for the CET policy from the Ministry of Ecology and Environment, Appendix D) evaluation undertaken as a third-party investigator of these cases is then presented.

7.2 Case Studies

- Case 3:

V3 village (at T3 township in DS3 district of CY3 city in Inner Mongolia Autonomous Region) was selected as Case 3. It covers an area between 5-10 km² with 200-500 permanent households and 1,000-2,000 residents. Agriculture, especially garlic, was the main economic produce of this village. Agricultural residues, especially straw, was the key environmental problem.

In V3 village, a CET program called Rebuild Toilets Inside Villagers' Houses (**P3 program**) was implemented. This program aimed to install a flush toilet (plus a handwashing sink and a showering system if possible) inside villagers' houses (see Plate 7-1), along with the pipe connecting to an underground storage pit in the front yard. Around one-third of the village households had participated in the program.

The policymaking process of this program occurred at the village level, which was initiated by V3 village and first implemented as a trial program. The program was discussed and approved at the villagers' committee (VC) meeting, the village CCP branch committee (VPBC) meeting, and the villagers' representatives (VR) meeting. The T3 township government and the Agriculture and Animal Husbandry Bureau (AAHB) in DS3 district supervised the implementation of the P3 program.



Plate 7-1 Flush toilet, handwashing sink, showering system inside villagers' houses

- Case 4:

In CT4 county, rural domestic sewage was one of the major pollution sources of underground water and XX Lake. XX Lake is a nature reserve, but the lake has been shrinking rapidly and become heavily polluted. Therefore, a CET program called 'Program on

comprehensive improvement of rural living environment in CT4 County (**P4 program**)’ was implemented. One major aim of the P4 program was to control the indiscriminate discharge and disposal of domestic sewage to prevent pollution of XX Lake. To do so, the program intended to extend the urban sewerage network to surrounding villages. Besides, three kinds of domestic sewage treatment facilities were used for villages that are far away from urban sewerage network, namely: sewage treatment plant, integrated sewage treatment equipment (see Plate 7-2 left), and medium-scale Johkasou (see Plate 7-2 right)²². Domestic sewage treatment facilities needed to be connected to rural housing, and relevant facilities such as flush toilets, washbasins, and bathrooms should be installed. Villagers were encouraged to use recycled water²³ from these facilities to irrigate their farmland.

The policymaking process of the P4 program occurred at the county level. It was proposed by CT4 county government. The Bureau of Housing and Urban-Rural Development (BHUD) of CT4 county was assigned to draft the proposal and implement the program. The director of the Rural and Township Department (RTD) in BHUD managed the job. The Environmental Protection Bureau (EPB) of CT4 county and the Environmental Inspection Team (EIT) in EPB cooperated with the BHUD to implement the P4 program.

V4 village (at T4 township in CT4 county of CY4 city in Inner Mongolia Autonomous Region) was one of the targeted villages of the P4 program because it is very close to XX lake. Therefore, V4 village was selected as Case 4. It covers an area between 5-10 km². There were 200-500 permanent households and 1,000-2,000 residents. Selling vegetables grown in solar greenhouses was the main economy of the village. The annual vegetable trade was between 15,000-30,000 tons with NZ\$2-4 million income, which was the reason why it was a wealthy village compared to other villages in T4 township.

A Sewage Treatment Container (STC) container (see Plate 7-2 left) that had a total capacity of 50 tons per day was installed in V4 village. Sewage pipes were connected from a

²²Sewage treatment plant is used in villages with sewage above 50 tons per day. Integrated sewage treatment equipment refers to Sewage Treatment Container, with the daily treatment capacity ranging from 10 to 50 tons. It is used in villages with sewage less than 50 tons per day. Johkasou is a kind of septic tank. Every Medium-scale Johkasou serves 15 households, around 60 people. The treatment capacity is about 5 tons per day (People's Government of CT4 County, 2018).

²³ Recycled water is “for non-potable uses, such as open space irrigation and industrial use, or for augmentation of drinking water supplies through aquifer and reservoir recharge. Recycled water is also being used to enhance the environment with schemes such as reduction of salt water intrusion and boosting river flows” (Water New Zealand, 2010).

sightseeing park and a restaurant. However, domestic sewage from village households and public toilet was not piped to the STC.



Plate 7-2 Sewage Treatment Container in V4 village (left) and Johkasou (right)

7.3 Criteria evaluation

The results of the case studies are presented in the following format for each criteria: (1) findings from the phase I study; (2) Results from Case 3 and Case 4; (3) Overall findings and implications. The respondent codes used in reporting the results are in Table 3.2 and Table 3.3. A set of standard phrases at the end of each section is used to judge how much extent a criterion fit the Chinese context (see Table 3.4).

7.3.1 Preserving goals and policy instruments (Criterion 1)

Findings from the phase I study

The phase I study indicated that Criterion 1 ‘may not fit’ the Chinese context due to a lack of information and non-transparent policy adoption process at the township level. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

- Case 3:

The P3 program was adopted at V3 village. Proposal revision happened through making phone calls or meeting with T2 township and DS3 district government officials, chatting with colleagues, and visiting villagers. These kinds of informal communication replaced the formal proposal formation process. But they were not recorded and there was no formal draft proposal. The public could not know what exactly had changed between the draft proposal and the proposal adopted.

- Case 4:

The P4 program was discussed several times and adopted in the CT4 county government executive meeting, but the meeting summaries could not be retrieved. Interviewees from the government indicated that there were no major changes between the program proposal and its final blueprint on goals and instruments, except changes on the amounts of program investment and selected priority villages. However, the public had little information about these changes, including what had changed and how the proposal was adopted.

Overall findings and implications

In both cases, the public had little information about which part of the proposal had been changed and why such changes happened. Without access to the information needed to assess Criterion 1 (see Table 5.1), Criterion 1 could not be measured in either case. Phase II study built on the findings from phase I and confirms finally that Criterion 1 ‘does not fit’ the Chinese context.

7.3.2 Securing legitimacy (Criterion 2)

Findings from the phase I study

The phase I study indicated that Criterion 2 ‘potentially fits’ the Chinese context. Though legitimacy concerns were not obvious in either Case 1 or Case 2, discussion about the legitimacy of a program cannot be neglected. Legitimacy may be challenged by the stakeholders in other programs when the public challenge the policy content or the actions of government. Criterion 2 was retained for the phase II study, but Criterion 2 was defined more broadly to include the legitimacy of policy content or actions taken by the government.

Results from Case 3 and Case 4

- Case 3:

A 532 Working Methods²⁴ was applied in Case 3. Interviewee 3VS stated:

²⁴ ‘532 Work Methods’ refers to the decision-making, including the management, organization, and implementation of major issues at the village level, which must strictly implement the ‘Five Procedures’, successively pass the ‘Three Audits’, and implement ‘Two Disclosures’. The ‘Five Procedures’ are: (1) the VPBC proposes the proposal; (2) The VC and the VPBC discuss; (3) the CCP member congress deliberation; (4) make a decision on the VR meeting or the villagers’ meetings; (5) and the VC and the VPBC jointly organize and implement. The ‘Three Audits’ means that township government should establish a ‘village affairs coordination steering group’ that the township CCP and government leaders serve as group leaders, CCP committee members, the principles in agriculture

After we proposed the P3 program, we held the VC meeting, VPBC meeting, and the VR meeting. The proposal was approved at these meetings. According to the 532 Working Methods, if any issue is vetoed at any of these meetings, we cannot do it. Therefore, the program was legitimate.

The village official thought the policymaking process was legitimate because the right policymaking procedure was used. Nevertheless, villagers were not concerned about the formal policymaking process. They emphasised that the program did not violate their interests and cause any conflict, which were considered the key reasons that they did not question the policy legitimacy. In other words, villagers accepted and endorsed the program content or actions of the government.

- Case 4:

Interviewees believed that it was not so relevant whether the policymaking process is conforming to the law or rules. Interviewee 4FR stated: *"There is no violation of the law considering it is an order from the upper-level government."* However, villagers severely questioned the policy content and actions of the government. One example was that villagers felt angry because there were no compensation clauses in the P4 program. Villagers sought redress from the government for setting up electric poles on their farmland for the STC, but their requests were not satisfied. Instead, such conflicts and disputes were solved through an authoritative approach. Villagers complained that the VPBC secretary, township, and even county government officials tried to persuade them to reach a consensus on compensation, through multiple visiting, which was considered as 'soft violence'. Another example was that the VC spent three days negotiating with villagers over the location of a sewage treatment facility to be installed. Initially, it was placed on public land, but close to a family cemetery. A few days later, this family appealed to the county government for help and filed a complaint. They believed that the sewage treatment facility would ruin their fortune or 'feng shui'. The facility was forced to move to another location while thousands of dollars have been spent on levelling the ground. Interviewee 4VR sighed and said: *"Trust is built up over small issues [disputes]."* As a result, the government's follow-up actions may also be questioned by villagers. For example, CT4 county government tried to lay sewage

and economy bureau, land bureau, justice bureau, police bureau, and other related units serve as members. The 'village affairs coordination steering group' shall audit (1) the proposal proposed by the VC and VPBC; (2) audit the decision-making procedure on the CCP members meeting, the VR meeting, and the villages' meetings; (3) audit the financial account after the program is implemented. The 'Two Disclosures' are: (1) the implementation plan shall be open to the public before implementation; (2) and the implementation process and results shall open to the public after the implementation.

pipes under the farmland of some villagers. However, villagers did not allow the government to do so. *"We promised the villagers to restore the farmland, but they did not allow [trust] us to lay the pipeline,"* interviewee 4DR said, *"They accuse us of setting up such facilities beside their farmland."*

Overall findings and implications

The above research findings show that 'securing legitimacy' depended more on the policy content or actions of the government, but less not on whether the policymaking process conforming to laws or rules. As long as the public accepted and endorsed the policy content or actions of the government, the policy legitimacy was secured. When legitimacy was considered in the sense of 'what is being done', in terms of the evaluation items in Table 5.1, there were no challenges to the legitimacy of the P3 program. Criterion 2 was deemed Absolute Success in Case 3. However, in Case 4, again considering legitimacy in the sense of 'what is being done', in terms of the evaluation items in Table 5.1, there were great challenges to legitimacy, and this had lasting significance. Criterion 2 was deemed (Outright) Failure = Marginal Success in Case 4. The phase II study further indicated that, **in most cases**, Criterion 2 'partially fits' the Chinese context in terms of the policy content or actions of the government.

7.3.3 Building sustainable coalition (Criterion 3)

Findings from the phase I study

The phase I study indicated that Criterion 3 'may not fit' the Chinese context. A coalition among the stakeholders that was supposed to facilitate the approval of a policy/program was not formed. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

- Case 3:

In V3 village, the P3 program was discussed and approved at the VC, VPBC, and VR meetings. In this process, the VPBC and VC *"preserved their authority and power, but committed themselves to receiving input"* (Fung, 2006, p. 69). The VR and village CCP members could enter the decision-making process and become key intermediaries, which indicated a more inclusive boundary rule that involved more benefitted groups. They would listen to the suggestions from stakeholders and deliver feedback to the VPBC and VC, thus exerting much influence on the decisions made by the VPBC and the VC through communication, advice, and consultation. The level of public participation was close to co-governance. In terms of

the P3 program, there was an intact coalition formed without disagreement. According to Table 5.1, Criterion 3 was deemed Absolute Success in Case 3.

Table 7.1 summarises the participation rules of the policymaking process at the village level. At this level, a coalition among stakeholders could be formed through broad public participation, which might be a necessity for the approval or veto of a proposal initiated at the village level. For example, a land transfer proposal initiated by the VC of V3 village was rejected because of widespread opposition from stakeholders. Interviewee 3VS stated: *“If there is an issue that the VPBC had already discussed and proposed, but the others [villagers] disagree to, what shall we do? The minority is subordinate to the majority.”*

Table 7.1 Participation rules recorded in the policymaking process at the village level in Case 3

Participants	Boundary Rules	Choice Rules	Aggregation Rules	Information Rules
Villager	May Enter	Listen to suggestion; Provide feedback	None	Provide information through VR and village CCP member
VR	May Enter	Listen to suggestion; Provide feedback; Participate in the decision-making process	Influence collective decision making	Intermediary
Village CCP Member	May Enter	Listen to suggestion; Provide feedback; Participate in the decisions-making process	Influence collective decision making	Intermediary
VPBC and VC Member	Enter	Listen to suggestion; Provide feedback; Make decisions	Democratic centralism	Receive information from and send feedback to village CCP member and VR

- Case 4:

The P4 program was drafted by the BHUD of CT4 county with the assistance of the Inner Mongolian Autonomous Region Research Academy of Environmental Sciences (IMES). The program was then discussed and approved by CT4 county government. Decision-making at the county level is more exclusive than at the village level. Most of the public were excluded from this process. They had little expectation of influencing policy or action. Township

government officials had participated in the policy formulation process through providing basic information on the local environmental conditions and environmental protection facilities. They may influence the decisions made by county governments by making suggestions, but they could not vote. The third-party institution was invited by the county government to provide professional suggestions and inform decisions. They act as expert administrators, but cannot “*exercise direct authority over public decisions or resources*” (Fung, 2006, p. 69). In terms of the P4 program, there was no coalition formed among the stakeholders. According to Table 5.1, Criterion 3 was deemed Absolute Failure in Case 4.

Table 7.2 summarises the participation rules of the policymaking process at the county level. At this level, a coalition might **not** be formed because boundary rules restricted most of the public from entering the policymaking process, choice rules defined their possible actions, and aggregation rules limited the influence of those who had participated. The county government preserves its authority and power to accept, revise, or deny suggestions. Decision-making is concentrated in the hands of county government officials and its sub-departments officials.

Table 7.2 Participation rules recorded in the policymaking process at the county level in Case 4

Participants	Boundary Rules	Choice Rules	Aggregation Rules	Information Rules
Villager	No Entry	None	None	Provide information through VR, VPBC and VC members
VR	No Entry	None	None	Intermediary
Village CCP member	No Entry	None	None	Intermediary
VPBC and VC member	No Entry	None	None	Intermediary
Township government	May Enter	Make suggestions	Influence	Intermediary
Third-party institution	May Enter	Provide professional knowledge	Influence	Receive information from and send feedback to county government
County government and sub-departments	Enter	Listen to suggestions; Provide feedback; Make decisions	Democratic centralism	Receive information from the above sources and send feedback to township government officials

Overall findings and implications

In terms of the evaluation items in Table 5.1, there was an intact coalition formed without disagreement in Case 3. Criterion 3 was deemed Absolute Success. In terms of the evaluation items in Table 5.1, there was no coalition formed in Case 4. Criterion 3 was deemed Absolute Failure. In both cases, the institutional design outlined stakeholder involvement through participation rules. At the village level, a coalition could be formed to facilitate approval or denial of a proposal that is proposed by village officials. But because most of the public are restricted from entering the policymaking process at county level, coalitions among stakeholders are not possible in county level policymaking. The phase II study indicated that Criterion 3 ‘partially fits’ the Chinese context when policy is made at the village level, but not when policymaking is at the county level.

7.3.4 Attracting support for process (Criterion 4)

Findings from the phase I study

The phase I study indicated that Criterion 4 ‘may fit’ the Chinese context. Attracting public support may not be essential for the policymaking process at the township level. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

The following sections discuss Criterion 4 from different stages of the policymaking process, namely: agenda setting, policy formation, and adoption.

a. Agenda setting

In China's ‘top-level design and local implementation’ political system, local governments follow the agenda put forward by the superior government as a political task. Therefore, village and county level agenda-setting may not require broad public support. First, villagers rarely bring up agenda items. Agenda items are usually proposed by the VPBC or VC following the agenda set by the superior or central government. The P3 program, for example, is a response to the 2015 ‘Toilet Revolution Champion’. Second, most items on the county-level environmental policy agenda are pre-determined by the central government. County governments follow these agendas and come up with their solutions, e.g., the P4 program.

b. Policy formulation

- Case 3:

Local officials learned from stakeholders about how to better shape policy. Interviewee 3VS said he often chatted with villagers to get their opinions on the P3 program. VR and CCP party members also communicated with villagers to learn their needs, concerns, grievances, and possible problems, all of which had been carefully considered. Corresponding solutions were then introduced during the policy formulation process by soliciting public opinions. The actions of government attracted broad public support.

- Case 4:

At the county level, public opinion was not sought in the policy formulation process. The P4 program was drafted by the BHUD of CT4 county with the mandate of the government of CT4 county. However, interviewee 4DR said: *"no one in the department [BHUD] has expertise in this area."* IMES was thus hired as a third-party organization. A meeting of all township officials responsible for environmental issues was then held in BHUD. They were asked to provide basic information on environmental conditions and facilities. The information had been provided to the IMES as the basis for drafting the program. In this process, the public was not invited to provide suggestions and comments. The lack of public participation had created serious problems in implementation of the program.

c. Policy/program adoption

- Case 3:

At the village level, policy adoption attracted widespread public support. The 532 Working Methods regulation stipulates that on major issues, it is necessary to attract support from the villagers to adopt a program proposal. Interviewee 3VS stated: *"the workflow [532 Working Methods] stipulates that decisions made by the VPBC must be approved by the village party congress and VR congress before further implementation."*

- Case 4:

At the county level, as shown in Table 7.2, the decision-making process at the county level is more exclusive than that at the township level. Most stakeholders were excluded. Township governments can participate in the process, but aggregation rules limit their influence. Decision-making is concentrated in the hands of county officials, not the public, township

governments, or technical experts. The county government did not seek support from the public or other stakeholders to make decisions.

Overall findings and implications

In terms of the evaluation items in Table 5.1, there was widespread support to the policymaking process, in terms of the P3 program. Criterion 4 was deemed Absolute Success in Case 3. In terms of the evaluation items in Table 5.1, the county government had not sought public support during the policymaking process. Criterion 4 was deemed Absolute Failure in Case 4. The phase II study indicated that Criterion 4 ‘partially fits’ the Chinese context. Agenda-setting may not need widespread public support at both the village and county levels. But the policy formulation and adoption processes had tried to seek public advice and attract public support at the village level, but not at the county level.

7.3.5 Implementation in line with objectives (Criterion 5)

Findings from the phase I study

The phase I study indicated that Criterion 5 ‘clearly fits’ the Chinese context. The CET programs in phase I had partially met the policy objectives. This criterion was not changed for phase II study.

Results from Case 3 and Case 4

‘Building Ecological Civilization’ is the core concept of the CET policy. There are two specific policy objectives: (1) control the most prominent environmental pollutions in rural areas; (2) educate the target groups on environmental protection and help the target groups to participate in rural environmental protection (Ministry of Ecology and Environment, 2010a).

- Case 3:

The P3 program might not have met the first objective – interviewees argued that rural sewage was not the most prominent pollution in V3 village. Interviewee 3FR describes rural sewage this way: “[Sewage in] rural toilets are unsanitary, but do not seriously pollute the environment in our village.” Drinking water in V3 village comes from wells 170 metres deep, far from the village, and is stored in reservoirs. Villagers can get water directly from their home pipes, with no risk of contamination. Instead, interviewees identified straw as a key environmental issue, but issue was not addressed (see Plate 7-3). Interviewee 3HT stated: “Burning straw was a problem, especially in agricultural regions. After harvest in autumn,

how to dispose straws was tricky. Although forbidden, some villagers still burn straw in autumn.”



Plate 7-3 Straw left in the farmland

The P3 program did not meet the second objective. There was no evidence that the program educated the villagers about resource conservation and circular development. As stated in 7.3.3, the design of this program is based on co-governance and collective decision-making. If villagers had been educated about resource conservation and circular development, then the program design could have paid more attention to this aspect. However, the program did not consider sustainable resource utilization in the program design. For example, nutrient recycling was not considered in this program. A 3.5-meter-deep, impermeable domestic sewage collection facility was built underground in the villagers' front yard to store manure (see Plate 7-4). Collection facilities are sealed, and a manure suction truck would be used every 1-2 years to suck out the manure and take it away. This manure was considered a valuable fertilizer in the past 4,000 years of traditional Chinese agriculture (King, 2004).



Plate 7-4 Under the green manhole cover is the domestic sewage collection facility (left), the white tube is used for exhaust from the domestic sewage collection facility (right)

- Case 4:

The P4 program met the first objective. The haphazard discharge of domestic sewage in rural areas has caused a large area of water pollution, making water pollution a more and more serious problem (Ministry of Ecology and Environment, 2012c). Both Interviewee 4CE (deputy captain of Environmental Inspection Team) and interviewee 4DR (director of the Rural and Township Department) indicated: *“What should be done most and the most difficult to implement is the disposal of sewage.”* (see Plate 7-5)



Plate 7-5 XX Lake has been shrinking rapidly and almost turned into a salt flat (left) and a sewage channel connected to the XX Lake (right)

The P4 program did not meet the second objective. Using underground water to irrigate could exacerbate local water shortages and local officials were aware of this issues (see Plate 7-6). Therefore, villagers were encouraged to use recycled water from the STC to irrigate their farmland. However, there was no evidence that the program educated the villagers. Villagers lacked knowledge about the STC and the P4 program. Without educating them about its content, benefits, and risks in the community, villagers might fail to reach a consensus with the county officials on the use of recycled water.



Plate 7-6 Dry farmland in V4 village

Overall findings and implications

The P3 program did not meet both policy objectives. In terms of the evaluation items in Table 5.1, there were no objectives achieved. Criterion 5 was deemed Absolute Failure in Case 3. The P4 program met the first objective, but not the second objective. In terms of the evaluation items in Table 5.1, the success of was accompanied by controversial failings of reaching policy objectives. Criterion 5 was deemed Conflicted Failure = Conflicted Success in Case 4. The phase II study indicated that Criterion 5 'clearly fits' the Chinese context.

7.3.6 Achieving desired outcomes (Criterion 6)

The objectives indicated in section 7.3.5 are intended to achieve the following outcomes: (1) improve the rural environment and sanitation. (2) increase environmental awareness and pro-environmental behaviours of the target groups (The State Council, 2009).

Findings from the phase I study

The phase I study indicated that Criterion 6 'clearly fits' the Chinese context. The CET program in Case 1 had partially achieved the desired outcomes, and Case 2 fully achieved the desired outcomes. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

- Case 3:

The P3 program achieved the first desired outcome to a limited extent. *"Pit-latrines are not environmentally friendly [clean], "* said interviewee 3FR, *"Maggots are everywhere in summer. Now the pollution [insanitation] has been well controlled."* But the program effect may not be significant as pit toilets had been replaced by several public toilets. Interviewee 3VS stated: *"Several public toilets were built in 2016. Public toilets in rural areas are no longer dirty."* On the other hand, only around one-third of rural families had participated in the program, which was clearly not enough to make an impact on the entire village.

The P3 program achieved the second desired outcome to a limited extent. Although the P3 program was not designed for sustainable use of resources, it helped to regulate the behaviour of discharging rural domestic sewage. In rural China, the discharge of rural domestic sewage is haphazard. Rural houses are basically self-built and scattered in villages with no planning. There are various ways for residents to discharge domestic sewage. Some sewage is discharged into open ditches or culverts, and some into nearby streams, rivers, and lakes. Some farmers collect manure for fertilizer or use sewage to irrigate their fields.

Some of the sewage was spilled on the ground to evaporate or seep into the soil. The P3 program had upgraded pit-latrines to flush toilets (some households had installed washbasins and shower systems), and thus changed the program participants' wastewater treatment habits. Wastewater from showers, cooking and hand washing was not dumped conveniently anymore. But it is noted that around two-third of rural families did not participate in the program, so for them the program impact was unclear.

- Case 4:

The P4 program achieved the first desired outcome to a limited extent. The STC treated 50% of the sewage in this village. However, the treated sewage came mainly from a 'XXX sightseeing and demonstration park' and a large restaurant. Domestic sewage from village households was untreated. They still used their private pit toilets in front of their household or public toilets, neither of which was piped to the STC. The domestic sewage from rural households and public toilets in V4 village was still unsolved (see Plate 7-7). And some sewage was still being discharged into open ditches, culverts, and nearby streams, thus polluting XX Lake.



Plate 7-7 Rural pit toilets in front of household (left) and rural public toilet (right)

The P4 program did not achieved the second desired outcome. Villagers refused to use recycled water. Interviewee 4DR stated:

The sewage has been treated to meet the national standard. Recycled water does not contaminate groundwater and ecosystems. It can be used to irrigate farmland [or greenhouses]. However, villagers do not use it. They said it was dirty water. We had such a problem last year, and the people really blamed us (see Plate 7-8).



Plate 7-8 Greenhouses (left) and farmland do not use recycled water (right)

Overall findings and implications

The P3 program achieved the both desired outcomes to a limited extent. In terms of the evaluation items in Table 5.1, the partial achievement of intended outcomes is counterbalanced by unwanted results, Criterion 6 was deemed Conflicted Failure = Conflicted Success in Case 3. The P4 program achieved the first desired outcome to a limited extent, but it did not achieve the second desired outcome. In terms of the evaluation items in Table 5.1, the P4 program achieved some outcomes as intended, but was overwhelmed by controversial and high-profile failure to produce results. Criterion 6 was deemed (Outright) Failure = Marginal Success in Case 4. The phase II study indicated that Criterion 6 ‘clearly fits’ the Chinese context.

7.3.7 Benefiting target group(s) (Criterion 7)

Findings from the phase I study

The phase I study indicated that Criterion 7 ‘clearly fits’ the Chinese context. Benefit was considered by the interviewees as the core and basis to judge the success or failure of the phase I study programs. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

- Case 3:

The P3 program would increase spending among the target groups, though not in the short term. For example, pumping from the sump cost NZ\$44 per household every two years, but such cost was not included in the CET scheme. Repairing pipes that burst during freezing winters would be another extra cost. In addition, villagers would need to buy more fertiliser, which used to be made from manure. Despite these shortfalls, villagers who had

participated in the program benefited broadly from the P3 program. They were happy to use their new toilet because it was much more convenient, especially for older villagers, and cleaner than a pit toilet.

- Case 4:

Most interviewees doubt the benefits they got and replied: “*I don't know.*” First, implementation of the program conflicted with the interests of the target groups, as stated in section 7.3.2. Second, sewage from V4 village households was untreated, and the villagers refused to use recycled water to irrigate their farmland as stated in section 7.3.6.

(3) Overall findings and implications

Villagers who had participated in the P3 program were happy to use their new toilet, although program would increase their spending. In terms of the evaluation items in Table 5.1, the target group broadly benefited, despite a few shortfalls. Criterion 7 was deemed Tolerable Failure = Resilient Success in Case 3. The villagers in V4 village did not perceive clear benefits, and the implementation of the P4 program violated the interests of some villagers. In terms of the evaluation items in Table 5.1, the target groups were damaged without any benefit. Criterion 7 was deemed Absolute Failure in Case 4. The phase II study indicated that Criterion 7 ‘clearly fits’ the Chinese context.

7.3.8 Criteria 8A, 8B, and 8C

Criterion 8A (efficiency), Criterion 8B (equity), and Criterion 8C (appropriateness) are proposed to replace McConnell’s original Criterion 8 (satisfying criteria highly valued in policy domain). These three criteria are each considered in their own right and equally weighted with McConnell’s other twelve criteria.

Efficiency (Criterion 8A)

Findings from the phase I study

The phase I study indicated that Criterion 8A (efficiency) ‘potentially fits’ the Chinese context, but the interviewees were not able to clearly judge the efficiency of the programs due to lack of data. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

- Case 3:

The P3 program cost NZ\$116,000 for water-based toilets, sewers, and a sump for 108 households. The average cost per household was NZ\$1,074. Villagers paid close attention to the cost because they had to pay half of the bill. All interviewees agreed that the fund was being used effectively. Interviewee 3VS stated: *"It is highly unlikely to waste money because of a highly transparent process that under public scrutiny. Everything done was posted on the bulletin board."* At the same time, expenditure is monitored by the Audit Bureau of T3 township conducted and a third-party audit firm was hired to do the work.

- Case 4:

According to the 'Program on comprehensive improvement of rural living environment in CT4 County' (People's Government of CT4 County, 2018), the P4 program intended to spend NZ\$51.37 million on sewage treatment facilities, sewers, and subsidies to install flush toilets for 10,000-20,000 homes in 90-110 villages. The average cost per family was NZ\$4,308. However, the target groups did not know how the fund was being used. Even government officials at CT4 county do not know exactly how the fund was used. Interviewee 4DE stated that: *"The use of money is chaotic. The city or provincial government may not know what it is being used for."*

Overall findings and implications

It was hard to calculate the average cost of a rural sewage system in China and to compare it with the P3 program and the P4 program. However, it was noted that the P3 program was more efficient than the P4 program, because of transparent program expenditure and a more inclusive public participation during the policymaking process. Interviewees paid close attention to the efficiency of the P3 program, while the public might lack the necessary information to judge the P4 program. In this sense, the P3 program can lay a strong claim to meet the requirement of efficiency, and Criterion 8A was deemed Absolute Success in Case 3. While the P4 program was far less efficient and accompanied by failures, Criterion 8A was deemed (Outright) Failure = Marginal Success in Case 4. The phase II study indicated that Criterion 8A 'clearly fits' the Chinese context.

Equity (Criterion 8B)

Findings from the phase I study

The phase I study indicated that Criterion 8B (equity) 'may fit' the Chinese context. It was concluded that equity might not be a prioritized concern for stakeholders. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

In rural China, there are social problems such as aging populations and poverty. How to provide public services fairly in the complex Chinese rural context is a difficult task for local governments. Some villages are close to the urban areas, some have larger populations, and some have adequate water supplies, while others do not.

- Case 3:

The P3 program ensured distributive equity. In V3 village, the VC raised money for elderly villagers who cannot afford to participate. And villagers who worked outside the village all year round could not participate in the program and receive a CET subsidy. The program also ensured procedural equity. Villagers have the opportunity to participate in the decision-making process and express their concerns and needs. *"Addressing equity is the biggest challenge."* said interviewee 3HT, *"The P3 program is fair because it is voluntary. Whether or not the villagers participate in the program depends entirely on their willingness and their housing conditions."*

- Case 4:

The P4 program did not guarantee the distributive equity. Although the STC container was installed and sewage pipes were built in V4 village, the villagers did not have access to the sewage systems and the sewage from their homes was untreated. From a countywide perspective, the program was first implemented in 90-110 villages in 'four priority areas'²⁵, but many other villages in CT4 county were excluded. Interviewee 4DR points out why some

²⁵ The P4 program targeted 90-110 villages and was to be implemented step by step in 'four key areas': (1) expand the urban sewage network to surrounding villages that are close to the T4 township, in which the county government is located; (2) construct sewage treatment facilities and supporting pipeline in populous villages around XX Lake; (3) construct sewage treatment facilities and the supporting pipeline in towns where township governments are located and their surrounding villages; (4) construct sewage treatment facilities and supporting pipeline in populous villages (People's Government of CT4 County, 2018).

villages were not included in the program: *“If there are only 30 households in a village...In a few years, older villagers may leave the village because of poor conditions. It [building a sewage treatment system] is a waste”*. Meanwhile, the program did not guarantee procedural equity. The policymaking process for this program was more exclusive. Target groups could not participate in the process. Consequently, their preferences and needs might be ignored.

Overall findings and implications

The P3 program guaranteed distributive equity and procedural equity, but the P4 program did not. In terms of the evaluation items in Table 5.1, the P3 program fulfilled the criterion of equity. Criterion 8B was deemed Absolute Success in Case 3. In terms of the evaluation items in Table 5.1, the P4 program failed to fulfil the criterion of equity. Criterion 8B was deemed Absolute Failure in Case 4. The phase II study indicated that Criterion 8B ‘clearly fits’ the Chinese context.

Appropriateness (Criterion 8C)

Findings from the phase I study

The phase I study indicated that Criterion 8C (appropriateness) ‘clearly fits’ the Chinese context. An adequate solution needs multiple and complementary measures to meet local conditions and be undertaken in a sustainable way. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

As discussed in section 5.2.8, in terms of appropriateness, a successful policy should: (1) meet the policy intervention needs; (2) propose sufficient and feasible solutions; (3) and more importantly, imply a moral judgment on ‘goodness’, such as consideration of sustainable development.

- Case 3:

First, the P3 program met policy intervention needs, especially for children and elderly villagers. Interviewee 3VS stated: *“The problem was the grandson and granddaughter of villagers would not want to visit and stay in their grandpa’s house for just one night because they did not want to use the old-style toilet at the courtyard.”* Interviewee 3FR said: *“Some children are afraid to go to the toilet because the pit is too big.”* Interviewee 3VR said:

It was very hard for me to squat down and stand up every time I went to the toilet [pit-latrine], sometimes I might need someone to assist me. Now we have installed the new toilet, it is more convenient than in the past.

Second, the P3 program considered the problems that might arise from program implementation and proposed sufficient and feasible solutions. For example, for a house that did not have the condition to build a bathroom, such as an old-fashioned house built of adobe, residents could choose to attend the program voluntarily. For those who were short of money, they could get paid for their labour from this program. Besides, the VC had purchased a pipe jacking machine to avoid damaging to the courtyard floor.

Third, the P3 program was not designed and implemented in a sustainable way. The Inner Mongolia Autonomous Region lacks adequate water resources, with only 68 percent of villages having running water (Ministry of Housing and Urban-Rural Development, 2017). The use of flushing toilets could exacerbate local water shortages and it is a waste that excreta were not treated locally and reused. In fact, there are better options in terms of sustainable development. Public dry toilets, such as composting toilets and urine-diverting dry toilets, can be used as alternatives, depending on local contexts, to meet the goal of sustainable use of resources. Dry toilets use facilities such as waterless urinals and use less or no water. They do not mix excrement with water and do not contaminate groundwater, so they do not contribute to eutrophication of surface water. After further treatment, such as drying or composting, the manure can be safely used as fertilizer. They can also provide more construction flexibility than flush toilets (Platzer et al., 2008). Unlike flush toilets, there is no need to connect to a septic tank or sewer system (Tilley, 2014), especially for the arid region.

- Case 4:

First, the P4 program met policy intervention needs, despite villagers had different opinions on rural sewage. Interviewee 4FR said:

Wastewater in the countryside is different from that in cities and it is not that complicated. Villagers do not use much cooking oil or cook much meat. So, they don't use a lot of cleanser essence. Villagers use little soap to wash hands. In arid areas, they don't even wash their hands with soap. Wastewater can water sheep or cattle. It can also be used to water vegetables in the yard.

Despite these opinions, domestic sewage was considered one of the causes of the severe pollution of XX Lake (Guo et al., 2007; People's Government of CT4 County, 2018). As the statement by interviewee 4CE and 4DR shown in 7.3.5, the indiscriminate discharge and disposal of domestic sewage in CT4 county should be under control.

Second, the P4 program failed to propose sufficient and feasible solutions. The P4 program intended to build sewage treatment facilities, lay pipe networks on a large scale, and install relevant facilities such as flush toilets, washbasins, and bathrooms in villagers' homes. However, this might not work in the countryside. The construction of sewage treatment facilities and large-scale pipe networks in rural areas required villagers to rebuild drainage facilities in their houses, but not all houses were fit to do so. Moreover, for villages that did not have running water, it was difficult to use flush toilets. Low temperatures could also cause pipes to freeze and break during the cold winter months, if the pipes are not buried deep enough (Fan Chuan Xiao Yi Ge, 2019). However, the P4 program did not specify how to solve the above problems. Interviewee 4FR stated:

It is very inconvenient and impractical to build sewage treatment systems in rural areas because the cost is too high. The VC and villagers have no money. This is not an easy program, because the sewage system needs pipes under the yard, just like water pipes.

Third, it was questionable whether the P4 program was designed and implemented sustainably. The P4 program intended to encourage the villagers to use recycled water from sewage treatment facilities to irrigate their farmland. Although the program did not achieve the desired outcome, the program was considered sustainable in this sense. However, facilities, such as flush toilets, washbasins, and bathrooms, could exacerbate local water shortages because they used tap water from underground aquifers. But water recycling was not considered in the P4 program. Recycled water was only used for irrigation but not for augmentation of drinking water supplies through aquifer recharge. This might further decline the water table, which had dropped from 40-50 meters to below 100 meters in the northern foot of Yinshan mountain (where V4 villager located) in the past few years (Xu & Li, 2020). Moreover, the P4 program did not specify how to treat the sludge from sewage treatment facilities and whether the sludge would be reused.

Overall findings and implications

The P3 program met the policy intervention needs, propose sufficient and feasible solutions, but it was not designed and implemented in a sustainable way. In terms of the evaluation

items in Table 5.1, the P3 program was considered appropriate but was accompanied by failures. Criterion 8C was deemed Conflicted Failure = Conflicted Success in Case 3. The P4 program met the policy intervention needs. But it failed to propose sufficient and feasible solutions. More importantly, it was questionable whether the P4 program was designed and implemented in a sustainable way. In terms of the evaluation items in Table 5.1, there were a few minor successes but plagued by failures. Criterion 8C was deemed (Outright) Failure = Marginal Success in Case 4. The phase II study indicated that Criterion 8C 'clearly fits' the Chinese context.

7.3.9 Attracting support for program (Criterion 9)

Findings from the phase I study

The phase I study indicated that Criterion 9 'clearly fits' the Chinese context. Control techniques were applied to attract support and achieve compliance to ensure program success in phase I cases. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

In both cases, direct power constrains CCP members and lower-level government officials. The VPBC secretary, township and county government officials, and some villagers were CCP members that were bound to support orders from higher party organizations to ensure the project went ahead. In addition, a series of control techniques were used in each case to attract public support.

- Case 3:

The first method used to attract support for the program was to provide subsidies to the target groups to encourage their participation. Participants in the P3 program could receive a NZ\$538 subsidy to install flush toilets and plumbing. The second was publicity. VR and village CCP members acted as intermediaries between the VC and villagers. They spread the concept of the program and persuaded the villagers to take part. Meanwhile, banners were hung on street walls to publicize the program. Third, a small trial was conducted to show the results to other villagers. Interviewee 3VS stated: *"The VC and CCP members are more politically aware than villagers. So, they run a pilot. Then they encouraged others to participate."* Fourth, participants in the program signed a voluntary agreement with the VC to avoid disputes and ensure their participation. The above actions of the village committee resulted in a high level of public support for program implementation

- Case 4:

The implementation of the P4 program used less control technology than the P3 program. The P4 program provided a similar amount of subsidy as in Case 3 for villagers to install flush toilets and plumbing, but no village household was piped to the STC in Case 4, so that there was no subsidy given to villagers. The P4 program implementation relied mainly on executive orders and subsidies to attract stakeholders' support. The technique of exhortation was also used. Land disputes are resolved through informal procedures. Government officials would visit and persuade villagers to reach a consensus. There was widespread criticism to the program implementation.

Overall findings and implications

In terms of the evaluation items in Table 5.1, the control techniques used in the P3 program resulted in a high level of public support for its implementation. Criterion 9 was deemed Absolute Success in Case 3. In terms of the evaluation items in Table 5.1, the P4 program was highly controversial and there was widespread criticism from the public. Criterion 9 was deemed Absolute Failure in Case 4. The phase II study indicated that Criterion 9 'clearly fits' the Chinese context.

7.3.10 Enhancing electoral prospects/reputation (Criterion 10)

Findings from the phase I study

The phase I study indicated that Criterion 10 'may not fit' the Chinese context. It is hard to find evidence that any government officials got promoted as a result of the CET program implementation or as a result of the reputation gained from program implementation. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

- Case 3:

The implementation of the program had enhanced the reputation of local officials. But much depends on whether the target group benefits from the project. However, program implementation and a good reputation gained from the program had no impact on the VC members' promotion. The Organic Law of the Villagers' Committees regulated: "*A villagers' committee is a mass organization of self-government at the grassroots level*" (National People's Congress, 2010). This means the villagers' committee is a self-managing organization, not a government agency. The members of this committee cannot be

promoted to higher levels of government. Interviewee 3VS stated: *"It's impossible for villagers' committee members [to get promoted]. They are not government officials."*

- Case 4:

The P4 program did not enhance the reputation of county government officials.

Interviewees hold negative attitudes towards the government officials who carried out the program. Villagers believed that implementing an environmental program is what the government should do. On the other hand, program implementation had no impact on the government officials' promotion. Interviewee 4DR said: *"The institution limits my room to get promoted. I work overtime every day. No matter what my performance is, I can't get the promotion, since I am a staff of government-affiliated institutions. The county government made this rule."*

Overall findings and implications

An environmental program may increase or decrease the reputation of local government officials. However, there was no evidence to indicate any government official got promoted as a result of program implementation or reputation gained from program implementation. Without access to the information needed to assess Criterion 10 (see Table 5.1), no evidence to support Criterion 10 was available in either case. The Phase II study, building on the findings from phase I, confirms finally that Criterion 10 'does not fit' the Chinese context.

7.3.11 Easing the business of governing (Criterion 11)

Findings from the phase I study

The phase I study indicated that Criterion 11 'clearly fits' the Chinese context. A local government may prioritize an issue that is easier to act on. This criterion was not changed for the phase II study.

Results from Case 3 and Case 4

- Case 3:

Local governments did not prioritize the policy agenda for issues if they lacked suitable solutions for these issues. The P3 program aimed to solve rural sewage pollution. However, another serious environmental problem, namely straw disposal, was not on the government's agenda, because local governments and villagers could not find a way to properly dispose of straw left on the farmland after harvesting (see Plate 7.3). Straw removal

by burning was used to improve seedbed preparation and seedling establishment, but this practice is now strictly prohibited. Straw was also used to feed livestock, but now the villagers have almost no livestock. Straw gathered and stored in a straw bale could be a valuable addition to the compost pile, but this practice had failed because seedlings would not grow in compost made from straw in V3 village. Interviewee 3HT stated: *“This is a headache from above [central government] to below [local governments] because there is no good way to recycle it. At present, no method is acceptable to the public.”*

- Case 4:

Local governments prioritized the policy agenda items that the political leadership considers important to ease the business of governing. Mr. Xi Jinping, the General Secretary of the CCP and the president of the People’s Republic of China, announced the ‘Toilet Revolution Campaign’ in 2015. More than 68,000 public toilets were built in China from 2015 to 2017, and 64,000 more will be built from 2018 to 2020 (Cheang, 2017). CT4 county government ‘jumped on the bandwagon’ as it was a good opportunity to advance the program on preventing XX Lake pollution. Therefore, CT4 county put rural toilet construction and rural sewage treatment on the county government's agenda to get more state subsidy.

Overall findings and implications

A tricky issue or an issue without a technical solution would not be on the agenda. Local governments prioritize the policy agenda items that the political leadership considers important. In terms of the evaluation items in Table 5.1, both programs successfully controlled the policy agenda to ease the business of governing. Criterion 11 was deemed Absolute Success in both cases. The phase II study indicated that Criterion 11 ‘clearly fits’ the Chinese context.

7.3.12 Promotion of government’s desired trajectory (Criterion 12)

Findings from the phase I study

The phase I study indicated that Criterion 12 ‘clearly fits’ the Chinese context. Both programs maintained the ‘vision and promise’ of the central government and they did not conflict with other national trajectories, so that they are politically successful. However, public policy requires making decisions among conflicting goals. This criterion was not changed for the phase II study, but the phase II study focused on potential conflicts between national trajectories.

Results from Case 3 and Case 4

All respondents agreed that both programs had sustained the broad value and direction to build an 'Ecological Civilization', which is also the core concept of the CET policy. Interviewee 3VS stated: *"In the past, we focused on helping farmers increase their incomes and alleviate poverty. At present, we are committed to improving the rural living environment and farmers' happiness index."* However, environmental protection may conflict with other national trajectories, such as economic development and government debt reduction.

- Case 3:

The contradiction between economic development and environmental protection was the dilemma faced by local government. Interviewee 3VS stated:

Environmental protection cannot be achieved overnight. It must be sustained. In the long run, the countryside must first find a way to develop its economy. We cannot improve the effectiveness of environmental projects if we insist on environmental protection without restructuring the economy. We should address the root causes, not the symptoms.

The above statement implied that development and sustainability should go hand-in-hand, and the haste to fulfil pollution-control targets should not be at the expense of economic development. For example, T3 township government provided the villagers with a free environment-friendly coal stove to replace their old stoves. But the villagers may not be able to afford hard coal or anthracite, which was much more expensive than black coal.

Interviewee 3VS said:

Now we comply with the national call for environmental protection. Did they [upper-level governments] consider the affordability of the villagers? We joke about this: villagers used to be in poverty because of illness. But now villagers return to poverty because of heating [environmental protection].

- Case 4:

Environmental protection may conflict with the national trajectory for debt reduction. In China, local governments rely heavily on debt to protect the environment (Bradsher, 2017; Q. Ye, 2014). Interviewee 4DE stated:

There is no government leader who does not want development [Local economy and environmental protection]. But local governments have been reluctant to apply for any projects or

accept funding. Why is that? Because we [local governments] must provide matching funds. Where can we get the money? It's a big conflict.

The P4 program exacerbated the debt crisis in CT4 county, as the CET policy provided only part of the funding, while the rest had to be raised by the CT4 county government.

Therefore, the P4 program indicated that the entire trajectory of the government was in danger of being compromised. According to Table 5.1, Criterion 12 was deemed (Outright) Failure = Marginal Success in Case 4.

Overall findings and implications

In terms of the evaluation items in Table 5.1, the P3 program sustained the broad value and direction of the government, but it promoted some rethinking. Criterion 12 was deemed Conflicted Failure = Conflicted Success in Case 3. In terms of the evaluation items in Table 5.1, the P4 program conflicted with other national trajectories, e.g. debt reduction. Criterion 12 was deemed (Outright) Failure = Marginal Success in Case 4. The phase II study indicated that Criterion 12 'clearly fits' the Chinese context.

7.3.13 Providing political benefits (Criterion 13)

Findings from the phase I study

The phase I study indicated that Criterion 13 'clearly fits' the Chinese context. Local governments could gain more political benefits as a result of the CET programs. The phase II study expands the scope of Criterion 13 from 'providing political benefits for government' to 'providing political benefits'. More stakeholders were taken into account.

Results from Case 3 and Case 4

In both cases, the **village committee and county government** gained political benefits by distributing benefits to community members. All interviewees indicated that their support to the governments or village committee was 'considerably more' or 'much more' as a result of the programs. The **CCP** had also benefited politically. All interviewees indicated that their support for the CCP had increased or increased significantly as a result of both programs.

- Case 3:

As a result of program implementation, village **officials** gained political benefits and their reputations grew. **Citizens** also benefit politically by pursuing democratic rights, as the P3

program ensured public participation in the policy process and that the public could express their needs.

- Case 4:

County government **officials** gained bad reputation in implementing the P4 program. This may be because the villagers dissatisfactions were associated with local government officials, whom they believed were the cause of the problems, but not to the government, which had good intentions. Interviewee 4DR said sarcastically: *“The Chinese believe that the higher level of the government, the better the officials. They believe President Xi Jinping is good and CCP is good. In lower-level government, no officials are good.”* Meanwhile, **citizens** had not benefited politically from the pursuit of democratic rights, because the P4 program had failed to engage the public in the policy process and to express their needs.

Overall findings and implications

All stakeholders from the P3 program gained political benefits. In terms of the evaluation items in Table 5.1, there was no disagreement that there were political benefits for stakeholders. Criterion 13 was deemed Absolute Success in Case 3. In the P4 program, the county government and the CCP gained political benefits, but not county government officials and citizens. In terms of the evaluation items in Table 5.1, political benefits gained by county government and the CCP are balanced with political disbenefits gained/experienced by county government officials and citizens. Criterion 13 was deemed Conflicted Failure = Conflicted Success in Case 4. The phase II study indicated that Criterion 13 ‘clearly fits’ the Chinese context.

7.4 Evaluation of the modified set of criteria applied to Cases 3 & 4

The phase II study evaluated the modified set of criteria in two Chinese case studies. A summary of the evaluation findings, based on the evidence collected and the underpinning theory, is shown in Table 7.3. All these criteria can be grouped into three ‘extent-of-fit’ categories (see section 3.4.5), related to the context of the Chinese policy environment:

- Clearly Fit: **ten** criteria were fully supported by evidence and clearly fit the Chinese context, namely: implementation in line with objectives (Criterion 5), achieving desired outcomes (Criterion 6), benefiting target group(s) (Criterion 7), efficiency (Criterion 8A), equity (Criterion 8B), and appropriateness (Criterion 8C), attracting support for program

(Criterion 9), easing the business of governing (Criterion 11), promotion of government's desired trajectory (Criterion 12), and providing political benefits (Criterion 13).

- Partially Fit: evidence was found to partially support the following **three** criteria: securing legitimacy (Criterion 2), building sustainable coalition (Criterion 3), and attracting support for process (Criterion 4). In most cases, Criterion 2 fits the Chinese context in terms of the policy content or actions of the government. Criterion 3 and Criterion 4 are applicable to the village level, but not the county level.
- Does not fit: no evidence was found to support the following **two** criteria and they do not fit the Chinese context: preserving goals and policy instruments (Criterion 1) and enhancing electoral prospect/reputation (Criterion 10).

Table 7.3 Summary evaluation of the modified set of the policy evaluation criteria applied to Cases 3 & 4

No.	Criterion	Conclusion of the phase I study	Conclusion of phase II study	Summary evaluation of criteria
1	Preserving goals and policy instruments	May not fit	Does not fit	In both cases, the public had little information about which part of the proposal had been changed and why such changes happened.
2	Securing legitimacy	Potentially fits	Partially fits	When legitimacy is considered in the sense of ‘what is being done’, there were no challenges to the legitimacy of the P3 program and the P4 program was considered illegitimate. In most cases, Criterion 2 fits the Chinese context in terms of the policy content or actions of the government.
3	Building sustainable coalition	May not fit	Partially fits	At the village level, a coalition could be formed to facilitate approval or denial of a proposal. Coalitions among stakeholders are not possible in county level policymaking.
4	Attracting support for process	May fit	Partially fits	Agenda setting may not need widespread public support at both village and county levels. But the policy formulation and adoption process had tried to seek public advice and attract public support at the village level, but not at the county level.
5	Implementation in line with objectives	Clearly fits	Clearly fits	The P3 program did not meet both policy objectives. The P4 program met the first objective, but not the second objective. It is necessary to evaluate the whether a policy/program is implemented consistent with its objectives to fully judge its success or failure.
6	Achieving desired outcomes	Clearly fits	Clearly fits	The P3 program achieved both desired outcomes to a limited extent. The P4 program achieved the first desired outcome to a limited extent, but it did not achieve the second desired outcome.
7	Benefiting target group(s)	Clearly fits	Clearly fits	The target group of the P3 program broadly benefited, despite a few shortfalls. The target groups of the P4 program were damaged without any benefit.
8A	Efficiency	Potentially fits	Clearly fits	The P3 program was more efficient than the P4 program, because of transparent program expenditure and more inclusive public participation during the policymaking process.
8B	Equity	May fit	Clearly fits	The P3 program guaranteed distributive equity and procedural equity, but not the P4 program.

8C	Appropriateness	Clearly fits	Clearly fits	The P3 program partially achieved its goals but accompanied by failures. The P4 program was not considered appropriate in terms of meeting local conditions.
9	Attracting support for program	Clearly fits	Clearly fits	Control techniques were applied in both cases, which resulted in a high level of public support for the P3 program, but there was widespread criticism for the P4 program from the public.
10	Enhancing electoral prospect/reputation	May not fit	Does not fit	An environmental program may increase or decrease the reputation of local government officials. However, there was no evidence to indicate any government officials got promoted as a result of this program implementation or as a result of the reputation gained from program implementation.
11	Easing the business of governing	Clearly fits	Clearly fits	A tricky issue or an issue without a technical solution would not be on the agenda. Local governments prioritize the policy agenda items that the political leadership considers important. Both programs fully controlled the policy agenda to ease the business of governing.
12	Promotion of government's desired trajectory	Clearly fits	Clearly fits	The P3 program sustained the broad values and direction of the government, but it promoted some rethinking of the policy. The P4 program conflicted with other national trajectories, e.g. debt reduction.
13	Providing political benefits	Clearly fits	Clearly fits	In Case 3, CCP, local government, government officials, and citizens gained political benefits. In Case 4, CCP and local government gained political benefits, but not government officials and citizens.

7.5 Analysis of policy success or failure

The same approach that was used to analyse policy success or failure in the phase I case study (see Tables 6.3 and 6.4) was applied in the phase II case study. Table 7.4 summarises the success/failure in Cases 3 and 4 for each of the 13 criteria. Table 7.5 shows the score of each criterion, the mean scores of each realm and overall score of Case 3 and 4.

Table 7.4 Summary of success/failure for each of the modified set of McConnell's criteria when applied to Cases 3 & 4

Key. AF = Absolute Failure; OF/MS: (Outright) Failure = Marginal Success; CF/CS: Conflicted Failure = Conflicted Success; TF/RS: Tolerable Failure = Resilient Success; AS = Absolute Success. Y = Yes

Success/Failure			Unclear		AF		OF/MS		CF/CS		TF/RS		AS	
Case														
Criteria			3	4	3	4	3	4	3	4	3	4	3	4
1	Process	Preserving goals and policy instruments	Y	Y										
2		Securing legitimacy					Y						Y	
3		Building sustainable coalition				Y							Y	
4		Attracting support for process				Y							Y	
5	Program	Implementation in line with objectives			Y				Y					
6		Achieving desired outcomes					Y	Y						
7		Benefiting target group(s)				Y				Y				
8A		Efficiency					Y						Y	
8B		Equity				Y							Y	
8C		Appropriateness					Y	Y						
9	Politics	Attracting support for program				Y							Y	
10		Enhancing electoral prospect/reputation	Y	Y										
11		Easing the business of governing											Y	Y
12		Promotion of government's desired trajectory						Y	Y					
13		Providing political benefits							Y				Y	

Table 7.5 Summary scores for each criterion, realm, and the policy program to Cases 3 & 4

Key. An ordinal five-point scale is used to capture the different levels of success/failure, showing the success/failure of a criterion, a realm, and the overall policy program, namely: Absolute Failure = 1; (Outright) Failure = Marginal Success = 2; Conflicted Failure = Conflicted Success = 3; Tolerable Failure = Resilient Success = 4; Absolute Success = 5. The extent of success or failure of each realm and the overall program are determined by the mean score.

N o	Realm	Criterion	Case 3	Mean Realm Score	Case 4	Mean Realm Score
1	Process	Preserving goals and policy instruments	Unclear	15/3=5	Unclear	4/3=1.3≈2
2		Securing legitimacy	5		2	
3		Building sustainable coalition	5		1	
4		Attracting support for process	5		1	
5	Program	Implementation in line with objectives	1	26/7=3.7≈4	3	12/7=1.7≈2
6		Achieving desired outcomes	3		2	
7		Benefiting target group(s)	4		1	
8 A		Efficiency	5		2	
8 B		Equity	5		1	
8 C		Appropriateness	3		2	
9		Attracting support for program	5		1	
1 0	Politics	Enhancing electoral prospect/reputatio n	Unclear	13/3=4.3≈4	Unclear	10/3=3.3≈3
1 1		Easing the business of governing	5		5	
1 2		Promotion of government’s desired trajectory	3		2	
1 3		Providing political benefits	5		3	
Mean overall program score				(5+3.6+4.3)/3=4.3≈4		(1.3+1.9+3.3)/3=2.2≈2

Based on Table 7.5, it can be concluded that:

- In Case 3, the 'process' realm was deemed Absolute Success, the 'program' realm was deemed Tolerable Failure = Resilient Success, and the 'politics' realm was deemed Tolerable Failure = Resilient Success. In total, Case 3 was deemed Tolerable Failure = Resilient Success.
- In Case 4, the 'process' realm was deemed (Outright) Failure = Marginal Success, the 'program' realm was deemed (Outright) Failure = Marginal Success, and the 'politics' realm was deemed Conflicted failure = Conflicted Success. Case 4 was deemed (Outright) Failure = Marginal Success.

7.6 Evaluation using the MEE [2010] 136 evaluation framework

As with Case 1 and 2, the MEE [2010] 136 evaluation framework was applied to Cases 3 and 4 as a third-party investigator and the findings compared with those from applying McConnell's framework. The original intention was to compare the results of three different evaluation methods: the results presented above using McConnell's framework, this researcher's evaluation using the MEE [2010] 136 evaluation framework as a third-party investigator, and government department evaluations that employ the MEE [2010] 136 evaluation framework. However, the researcher was not able to access the evaluation reports for either Case 3 or Case 4 undertaken by government departments.

The MEE [2010] 136 evaluation framework (Appendix B) provided indicators and illustrated relative weighting of each indicator used for evaluating the 'objective achievement' and 'overall output', depending on the type of pollution that the program targeted. A revised MEE [2010] 136 evaluation framework (Appendix D) was developed for **domestic wastewater programs**, and a set of methods and rules was created as the basis to judge these indicators. Findings from applying the revised MEE [2010] 136 evaluation framework (Appendix D) as a third-party investigator in Case 3 and Case 4 are presented in Table 7.6. The MEE [2010] 136 evaluation framework regulates that the assessment results are divided into four grades: excellent, good, fair and poor. The corresponding assessment scores are: ≥ 90 = Excellent, $\geq 70 - <90$ = Good, $\geq 60 - <70$ = Fair, and < 60 = Poor. Based on the researcher's own application of the MEE [2010] 136 evaluation framework:

- Case 3 scored **41.96** and was deemed 'Poor'
- Case 4 scored **69** and was deemed 'Fair'

It should be noted that the MEE [2010] 136 evaluation framework addresses only the matters covered by Criteria 5 (Implementation in line with objectives) and Criterion 6 (Achieving desired outcomes) in McConnell's framework. The average score using McConnell's Criteria 5 and 6 from each of the two cases is: Case 3 = $(1+3)/2 = 2$, Case 4 = $(3+2)/2 = 2.5$. The evaluation results using McConnell's Criteria 5 and 6 are consistent with the evaluation results using the MEE [2010] 136 evaluation framework in Case 3 and Case 4. This further confirms the validity of the research findings.

7.7 Summary

The phase II study was conducted to gain deeper insights into modified set of McConnell's policy evaluation criteria in two selected areas in rural China. The findings grouped the evaluation criteria into three 'extent-of-fit' categories, namely: 'clearly fit', 'partially fit', and 'does not fit'. Ten criteria 'clearly fit', three criteria 'partially fit', and two criteria 'do not fit' the Chinese context. The modified set of McConnell's policy evaluation criteria were also applied in case studies to draw conclusions about policy success or policy failure. Case 3 was deemed Tolerable Failure = Resilient Success, and Case 4 was deemed (Outright) Failure = Marginal Success. Based on the researcher's own application of the revised MEE [2010] 136 evaluation framework (Appendix D), Case 3 was deemed 'Poor' and Case 4 was deemed 'Fair'. The evaluation results using Criteria 5 and 6 in McConnell's framework are consistent with the evaluation results using the revised MEE [2010] 136 evaluation framework in Case 3 and Case 4. Based on the findings from phase I and phase II case study, the next chapter discusses the meaning, importance and relevance of these results. Recommendations are then given to improve the policy evaluation framework and the CET policy.

Table 7.6 Researcher application of the MEE [2010] 136 evaluation framework as a third-party investigator to Cases 3 & 4

	No.	Indicators	Relative Weighting (out of 100)	Requirements	Case 3	Evaluation Scores (Assessed against weighting)	Case 4	Evaluation Scores (Assessed against weighting)
Objective Achievement	1	Desired objectives achieved, and desired outcome produced	8	Achieve desired objectives and produce desired outcome.	No objectives met; No significant outcomes produced.	2	Partially met objectives; No significant outcomes produced.	4
	2	Satisfaction rate of rural population with rural environment	8	≥95%	100%	8	80%	4
	3	Establishment of rural environmental protection team	8	Full-time staff in charge of program implementation and management hired in township.	No full-time staff in charge of program implementation and management hired in T3 township.	0	Part-time staff in charge of program implementation and management were hired in T4 township.	4
Overall Output	4	Domestic wastewater treatment rate	38	≥60%	36%	12.96	50%	19
	5	Domestic wastewater treatment facility operation and management	38	Stable operation; Follow-up management, and operating expense guaranteed.	Facility operation stable. The follow-up managing and operating expense was not guaranteed.	19	Facility operation stable. The follow-up managing and operating expense was guaranteed.	38
Total			100			41.96/100 = Poor		69/100 = Fair

Note. For indicators **1, 3, and 5**, partially meeting one of the requirements gets a 50% score; for indicator **2**, less than 50% satisfaction rate gets a 0 score, 50%-94.9% would be considered partial success and get 4 points, above 95% would get 8 points; for indicators **4**, the calculation was based on the actual rate, e.g., $23 \times 60\% = 13.8$. Findings were derived from interviews, on-site observation, and qualitative visual assessments. The MEE [2010]136 evaluation framework regulates that the assessment results are divided into four grades: excellent, good, fair and poor. The **overall** corresponding assessment scores are: ≥ 90 = excellent, $\geq 70 - < 90$ = good, $\geq 60 - < 70$ = Fair, and < 60 = poor (Ministry of Ecology and Environment, 2010).

Chapter 8

Discussion

8.1 Introduction

An environmental policy initiative in China was explored using McConnell's policy evaluation framework (2015), and undertaken with an integrated approach involving triangulation and adaptive learning in multiple case study applications. Chapter 5 reported the theoretical findings underpinning potential application of McConnell's policy evaluation criteria in the Chinese context. Chapters 6 and 7 presented the results from empirical enquiry covering two phases of case studies. This chapter will interpret and evaluate these results, showing their relationship to the literature and the research questions, and exploring their significance, importance, and relevance within the Chinese and global contexts.

This chapter responds to the research questions raised in this study. Section 8.2 addresses the first research question: what aspects of McConnell's framework are missing/not fitting/can be revised in the Chinese context? Section 8.3 then examines two research questions: what are the relative degrees of policy success/failure in each case study; and, what are the internal relationships between success/failure in the 'process', 'program' and 'politics' realms. Section 8.4 responds to the final research question: what are the causes of policy failure? Finally, section 8.5 discusses overall the research implications of this research.

8.2 Revisiting McConnell's framework

Based on a review of the literature of the Chinese policy process, it is argued that the underlying context in which McConnell's framework was developed is very different from the Chinese political context, and that this may influence the potential application of the framework in China. Despite the differences in context, the framework was considered the most relevant and integrated of those available, and thus one of the aims of this research was to test its applicability in China. The framework was first evaluated from a theoretical point of view and then tested, and improved in the light of emergent knowledge, against Comprehensive Environmental Treatment (CET) environmental policy programs, in two phases each involving two case applications. The first phase was a trial to assess the framework's utility and to gain preliminary insights for subsequent framework improvement and further testing. In this phase, rural domestic waste programs were studied in two

selected cases. The second phase application incorporated the improvements identified in the first phase and was conducted to gain deeper insights into the overall applicability of the modified framework in the Chinese context. Rural domestic wastewater programs were studied in the further two selected cases in this second phase.

This section reviews each of the 13 criteria in McConnell's framework, based on the findings and results from the theoretical evaluation and the two phases of case applications. The purpose of this section is to respond to the research question: What aspects of McConnell's framework are missing/not fitting/can be revised in the Chinese context? The above research findings lead to several suggested improvements to McConnell's framework, with a final amended framework proposed that appears to fit the Chinese context. Additional, complementary evaluation results using the MEE [2010] 136 evaluation framework (the policy effect evaluation guideline for the CET policy from the Ministry of Ecology and Environment) are then discussed and compared with the evaluation results using McConnell's framework.

8.2.1 Preserving goals and policy instruments (Criterion 1)

A policy proposal can be adopted following a defined deliberation procedure in government structures, where the stakeholders may exert influence. The literature review suggested that, in China, such processes may lack transparency and the government sees little or no need for public participation (Hu, 1998). The phase I study found that Criterion 1 'may not fit' the Chinese context in the sense that it cannot be used in policy evaluation due to lack of information and non-transparent policy adoption processes at the township level. The phase II study further indicated that the public had little information about which part of the program proposal may have been changed and why such changes happened. It can be concluded that Criterion 1 'does not fit' the Chinese context.

The Chinese policy process involves 'crossing the river by feeling the stones' (Fan, 2014; Sheng, 1998; Zhang, 2014). Policy is therefore often trialled via small-scale policy experiments that replace the policy formulation process and help to make better decisions through adaptive learning. Given that local governments may lack experience and professionalism around environmental programs, repeatedly revising policies by 'trial and error' is an effective way to find the best and most feasible solutions (Zhang, 2016; Zhang & Song, 2018). In Case 3 (phase II), the P3 program (Rebuild Toilets Inside Villagers' Houses) was trialled first in V3 village and then applied in T3 township. Potential problems were not

detected and resolved in advance of the first trial but were after the trial implementation. Therefore, I propose a revised criterion, based on McConnell's thinking and study findings, designed to fit the Chinese context. This suggested criterion is '**Policy Trial**', and asks the question: has the policy been trialled and improvements informed by stakeholders?

8.2.2 Securing legitimacy (Criterion 2)

"Legitimacy is affected both by how something is done (i.e., whether proper procedures are used) and by what is being done" (Anderson, 2003, pp. 119-120). 'Whether proper procedures are used' refers to whether the policymaking process conforms to laws or rules. 'What is being done' refers to the policy content or actions of the government.

Administrative decision-making needs to go through a normative process in order to achieve public recognition and acceptance (X. Wang, 2008). On the other hand, legitimacy in public policy can be *"the product of satisfying felt needs and solving perceived problems"* (Anders, 2003, p. 257). The phase I study indicated that, if policy legitimacy was assessed solely in terms of process legitimacy, it could not be measured in either Case 1 or Case 2. The stakeholders rarely considered/lacked interest in whether these programs conformed to laws or rules because their interests were not violated. However, legitimacy may be challenged by the stakeholders in other programs when the policy content or actions of the government violates their interests or causes disputes. If Criterion 2 is defined more broadly to include legitimacy of policy content or actions taken by the government, it 'potentially fits' the Chinese context. Therefore, the phase II study expanded the scope of legitimacy to include the policy content or actions taken by the government. Findings from Case 3 and Case 4 indicated that, as long as the public accepted and endorsed the policy content or actions of the government, the policy legitimacy was secured. It is then concluded that, in most cases, Criterion 2 'partially fits' the Chinese context, in terms of the policy content or actions of the government.

"Legitimacy is an important factor in developing public support and acceptance for both government and the policies that it adopts" (Anderson, 2003, p. 120). In China, it is not so relevant whether the policymaking process is conforming to the law or rules, but if the policy content or actions of the government are not considered legitimate, it is more likely there will be disputes. Therefore, administrative procedure should effectively coordinate social conflicts and maintain social stability and balance (Zhai, 2017). In this sense, Criterion 2 could be amended. A revised criterion has been designed that could fit the Chinese context

better, namely: **Disputes Settlement**. It asks the question: does the government have fair and reasonable measures to settle disputes?

8.2.3 Building a sustainable coalition (Criterion 3)

The ability to create coalitions is constrained by institutional arrangements that outline the participation rules involved in the policymaking process (Bryson et al., 2013; Fung, 2015; Nabatchi, 2012; Schermann & Ennser-Jedenastik, 2014). However, there is little literature on how a coalition is formed, and how institutions constrain the influence of a coalition in terms of policymaking in the Chinese context. Thus, the question about whether building a coalition between policy stakeholders helps to obtain policy approval was discussed further in the case studies. The phase I study indicated that Criterion 3 'may fit' the Chinese context because a coalition was not formed when the policymaking process occurred at the township level. Therefore, further investigation was conducted at the village and county level in phase II. This study indicated that Criterion 3 'partially fits' the Chinese context when the policymaking process occurred at the village level, but not at the county level.

The research results showed that there was no coalition formed at the township and county level, because most stakeholders in the cases studies were not included in the policymaking process. Meanwhile, the Deputy Head of T3 township stated: *"Without the support and collaboration of other departments and upper-level government, we cannot do a program. If we do not communicate well in advance and gain their support and recognition, you cannot get the program approval"*. The literature review further suggested that effective coordination at horizontal and vertical levels of government (departments) are considered important to achieve program approval in the Chinese context (Wang, 2019). Therefore, an additional sub-criterion is proposed to more fully capture the requirements for policy success in China, namely: **Coordinated Government**, which refers to the coordination within the government system (B Guy Peters, 2015) that exists above the village level. It is different from 'coalition', which refers to 'temporary alliances' (Gamson, 1961) among stakeholders that may happen at the village level in China. Therefore, it is proposed Criterion 3 comprises of two sub-criteria: building a sustainable coalition (Criterion 3A) and coordinated government (Criterion 3B). These two sub-criteria are two aspects of Criterion 3 and each weighted half of other criteria.

8.2.4 Attracting support for process (Criterion 4)

The literature review suggested that attracting widespread support for the policymaking process (agenda setting, policy formulation, and policy adoption) may not be essential in the Chinese political system (Hu, 2013; Hu, 1998). However, since 2002 China has been undergoing a transition from managerialism public administration to participatory public administration (Wang & Zhang, 2010). Thus, it is possible that policymakers in China today would seek support from the public. The phase I study indicated that Criterion 4 'may fit' the Chinese context. Although the township governments had not sought public support during the policymaking process, there is the possibility that attracting public support is essential at the village and county levels. Therefore, further investigation was conducted at the village and county level in phase II. This further research indicated that Criterion 4 'partially fits' at the village level, but not at the county level. 'Partially fits' means this criterion may not be necessary for China. However, as China develops, there is increasing emphasis on public participation, thus this criterion appears appropriate. Therefore, it is recommended that this criterion be retained when evaluating Chinese public policy.

8.2.5 Implementation in line with objectives (Criterion 5)

The review of the literature suggested that Criterion 5 could be used to judge policy/program implementation in the Chinese context. Results from the two phases of the case studies supported the argument from the literature. It can be concluded that Criterion 5 'clearly fits' the Chinese context.

8.2.6 Achieving desired outcomes (Criterion 6)

The literature review suggested that it is possible to use outcome/impact indicators, such as economic, social, and environmental impact, to judge the success or failure of a policy/program in the Chinese context. The two phases of case studies supported the argument from the literature. It can be concluded that Criterion 6 'clearly fits' the Chinese context.

8.2.7 Benefiting target group(s) (Criterion 7)

The review of the literature suggested that criterion 7 could be a critical identifier of policy/program implementation success or failure in the Chinese context. Results from the two phases of case studies again supported the argument from the literature. It can be concluded that Criterion 7 'clearly fits' the Chinese context.

8.2.8 Satisfying criteria highly valued in policy domain (Criterion 8)

McConnell (2010a, 2010b, 2015) did not state clearly what attributes were included in Criterion 8 (satisfying criteria highly valued in policy domain), except that he considered efficiency particularly important. Besides, it is likely that the criteria that are valued will vary with different national context. Therefore, identification of valued criteria that might fit for the Chinese context was conducted through a focus group prior to phase I (described in full in Chapter 3). Efficiency, equity, and appropriateness were judged as the most suitable criteria for evaluating 'satisfying criteria highly valued in policy domain' in the Chinese context. They are considered criteria in their own right and are equally weighted with other criteria.

Efficiency (Criterion 8A)

The review of the literature suggested that 'efficiency' could be one means of evaluating policy/program implementation in the Chinese context. However, does efficiency matter to a policy's target group? Phase I indicated that Criterion 8A 'potentially fits' the Chinese context. Where the policymaking process took place at the township level and most stakeholders were excluded from this process, they lacked the necessary information to judge policy efficiency. Additionally, since waste disposal services were provided for free, interviewees were not interested in program efficiency. Therefore, phase II targeted village and county level policymaking, and a different type of waste program. The phase II study found that the interviewees in Case 3 paid close attention to efficiency of the P3 program because most stakeholders had participated in decision-making and they shared in the costs of implementation of the program. However, while stakeholders in Case 4 lacked the necessary information to judge the efficiency of the P4 program (Program on comprehensive improvement of rural living environment in CT4 County), it is argued that the lack of necessary information in the policy process does not mean that policy efficiency is not important to the policy target group. This is because Case 3 demonstrates that in a transparent policy process, or if the policy requires funding from the target group, efficiency remains an important indicator for the target group to judge the success or failure of the policy. It is thus concluded that Criterion 8A 'clearly fits' the Chinese context.

Equity (Criterion 8B)

The review of the literature suggested that 'equity' was a useful criterion for helping to evaluate policy/program implementation in the Chinese context. The phase I study concluded that Criterion 8B 'may fit' the Chinese context. Distributive equity had been

ensured in both domestic waste programs, but it was not a prioritised concern for stakeholders. However, it was not clear whether or not equity was a prioritised concern for village and county level stakeholders, especially in situations where inequity could cause conflicts. Therefore, the phase II study targeted village and county level policymaking and focused on the potential impact of inequity to stakeholders. The phase II study found that, especially at the village level, the necessity to attract public support for policy formulation and the adoption of a policy impelled the local authority to attach significant importance to equity. It was concluded that Criterion 8B 'clearly fits' the Chinese context.

Appropriateness (Criterion 8C)

The reviewed literature suggested that 'appropriateness' could help evaluate policy/program implementation in the Chinese context. The two phases of case studies supported that proposition and thus it can be concluded that Criterion 8C 'clearly fits' the Chinese context.

8.2.9 Attracting support for program (Criterion 9)

Administrative organizations gain support from the target group by using a range of 'control techniques' (see Chapter 5) during policy implementation. The literature review suggested that Criterion 9 could be used to evaluate policy/program implementation in the Chinese context. Similar control techniques were applied in the two phases of case studies, such as directive power that bond private parties and lower level government officials to achieve compliance. Research findings indicated that the more control techniques applied, the higher the level of public support gained for program implementation. Criterion 9 therefore 'clearly fits' the Chinese context.

8.2.10 Enhancing electoral prospects/reputation (Criterion 10)

China's political system is different from that of western countries, so the electoral prospects of party and government are not a relevant criteria for this study. In order to comply with McConnell's interpretation of this criterion, the discussion of is correspondingly on the promotion of officials, because promotion incentive is key factor to explain China's socio-economic reform and development in the past few decades (Zhou et al., 2005). The literature review suggested that Criterion 10 may not be suitable to judge policy success or failure in the Chinese context because the factors involved in getting a promotion are quite different for Chinese and Western officials (Wu & Ma, 2009). The phase I study found that Criterion 10 'may not fit' the Chinese context. There was a lack of evidence to illustrate that

any government official got promoted as a result of program implementation or reputation gained from program implementation. The phase II study built on these findings and confirmed that Criterion 10 'does not fit' the Chinese context, at least in terms of environmental policy. Therefore, it is recommended that this criterion not be retained in the framework when it is used for evaluating Chinese environmental policy, but its retention be considered if the framework is used to evaluate other types of policy, such as economic policy.

8.2.11 Easing the business of governing (Criterion 11)

In China, local governments use multiple measures to ease the business of governing. The literature reviewed suggested that Criterion 11 could help to explain government activity in the Chinese context. In both phases of the case studies, local governments were found to prioritize their government agendas to ease the business of governing. It is therefore concluded that Criterion 11 'clearly fits' the Chinese context.

8.2.12 Promotion of government's desired trajectory (Criterion 12)

To follow or promote national trajectories are matters of political correctness for local governments, but they may be caught in a 'dilemma' between these trajectories (Zhang & Li, 2014). Thus, the literature review suggested that Criterion 12 is a meaningful policy measure in the Chinese context. The phase I study found that Criterion 12 'clearly fits' the Chinese context. Both programs in phase I helped to maintain the central government's 'vision and promise' and they did not conflict with other national trajectories. However, public policy requires making decisions among conflicting goals. Therefore, the phase II study focused on potential conflicts between national trajectories. The research findings indicated that environmental protection had conflicted with other national trajectories. It is therefore concluded that Criterion 12 is a meaningful policy measure and 'clearly fits' the Chinese context.

8.2.13 Providing political benefits for government (Criterion 13)

McConnell (2015, p. 235) proposed the criterion 'providing political benefits for government' to judge the success or failure of a policy/program. The review of the literature suggested that Criterion 13 can be used to evaluate the political impact of a policy/program in the Chinese context. The phase I study found the Criterion 'clearly fits' the Chinese context. In both cases, local governments gained much political benefit. However, the phase I study indicated that political activities may have varying degrees of influence on those affected by

the policy, but also those not affected. Not only the government, but also a party, politicians, government officials, and citizens can gain political benefits through public policy (Hong et al., 2006). The phase II study found that in Case 3 all interviewees gained political benefits. But in Case 4 the county government that led the policy formulation and implementation, and the public that did not participate in the policy process, did not gain political benefits. It is therefore concluded that Criterion 13 is a meaningful policy measure and 'clearly fits' the Chinese context. It is also suggested that the scope of Criterion 13 be widened from 'providing political benefits for government' to 'providing political benefits'.

8.2.14 Overall evaluation of McConnell's framework

The application of McConnell's framework was evaluated by three steps: literature review and the empirical phases I and II. These evaluations are summarised below.

First, Criteria 8A, 8B, and 8C are proposed to replace McConnell's original Criterion 8. They are considered criteria in their own right and are equally weighted with other criteria. The literature review identified that nine of McConnell's original criteria and Criteria 8A, 8B, and 8C could be appropriate for policy evaluation in China. Criteria 1 and 10 were not supported by the literature. Criterion 3 was not clearly discussed in the literature and lacked empirical analysis.

Second, phase I of the empirical enquiry then found seven of McConnell's original criteria, and Criterion 8C, were fully supported by evidence and 'clearly fit' the Chinese context. Criterion 2 and Criterion 8A were not clearly observed, and not enough evidence was found to confirm they applied so they were considered to 'potentially fit' the Chinese context. Evidence in support of Criterion 4 and Criterion 8B was not found, but it was considered that evidence may occur in other programs and they 'may fit' the Chinese context. No evidence was found to support Criteria 1, 3, and 10 and they 'may not fit' the Chinese context.

Third, in phase II, a revised set of criteria, based on learnings from the above, was tested empirically again. The scope of Criterion 2 and Criterion 13 were broadened from that tested in phase I. The other criteria tested in phase I were unchanged. The empirical enquiry then identified that six of McConnell's original criteria, plus Criteria 8A, 8B, 8C, and Criterion 13 were fully supported by evidence and 'clearly fit' the Chinese context. Evidence was found to partially support Criteria 2, 3, and 4 and they 'partially fit' the Chinese context. No evidence was found to support Criteria 1 and 10 and they 'do not fit' the Chinese context. The evaluation results of each step are summarised in Table 8.1.

Table 8.1 Evaluation summary from iteratively applying the modified set of McConnell's policy evaluation criteria in the Chinese context

	McConnell's original Criterion	Evaluation from literature based theoretical view		Criteria used in Phase I case studies	Evaluation from phase I case studies	Criteria used in Phase II case studies	Evaluation from phase II case studies
1	Preserving goals and policy instruments	Non-supportive		Preserving goals and policy instruments	May not fit	Preserving goals and policy instruments	Does not fits
2	Securing legitimacy (process)	Supportive		Securing legitimacy (process)	Potentially fit	Securing legitimacy (process; content and actions)	Partially fits
3	Building sustainable coalition	Unclear		Building sustainable coalition	May not fit	Building sustainable coalition	Partially fits
4	Attracting support for process	Supportive		Attracting support for process	May fit	Attracting support for process	Partially fits
5	Implementation in line with objectives	Supportive		Implementation in line with objectives	Clearly fits	Implementation in line with objectives	Clearly fits
6	Achieving desired outcomes	Supportive		Achieving desired outcomes	Clearly fits	Achieving desired outcomes	Clearly fits
7	Benefiting target group(s)	Supportive		Benefiting target group(s)	Clearly fits	Benefiting target group(s)	Clearly fits
8	Satisfying criteria highly valued in policy domain	8A: Efficiency	Supportive	8A: Efficiency	Potentially fits	8A: Efficiency	Clearly Fits
		8B: Equity	Supportive	8B: Equity	May fit	8B: Equity	Clearly Fits
		8C: Appropriateness	Supportive	8C: Appropriateness	Clearly fits	8C: Appropriateness	Clearly fits
9	Attracting support for program	Supportive		Attracting support for program	Clearly fits	Attracting support for program	Clearly fits
10	Enhancing electoral prospects/reputation	Non-supportive		Enhancing electoral prospect/reputation	May not fit	Enhancing electoral prospect/reputation	Does not fits
11	Easing the business of governing	Supportive		Easing the business of governing	Clearly fits	Easing the business of governing	Clearly fits

12	Promotion of government's desired trajectory	Supportive	Promotion of government's desired trajectory	Clearly fits	Promotion of government's desired trajectory	Clearly fits
13	Providing political benefits for government	Supportive	Providing political benefits for government	Clearly fits	Providing political benefits	Clearly fits

8.2.15 Adapting McConnell's framework for the Chinese context

The above research findings answered the question: is McConnell's framework applicable in the Chinese context? The evaluation of results from McConnell's framework application in the two phases of case studies is basically consistent with the conclusions of the literature evaluation. It can be confirmed that McConnell's framework can be used in China, with the following suggested revisions, amendments, and improvements.

- Criterion 1, namely: preserving policy goals and policy instruments, 'does not fit' the Chinese context. An alternative revised Criterion 1 has been designed, namely: Policy Trial. It asks the question: has the policy been trialled and improvements informed by stakeholders?
- Criterion 2, namely: securing legitimacy, 'partially fits' the Chinese context. The scope was defined more broadly to include the legitimacy of policy content or actions taken by the government. It has been amended to better fit the Chinese context, namely: Disputes Settlement. It asks the question: does the government have fair and reasonable measures to settle disputes?
- Criterion 3, namely: building sustainable coalition, 'partially fits' the Chinese context. An additional sub-criterion is added to more fully capture the requirements for policy success in China, namely: Coordinated Government. It asks the question: is there effective coordination within and between layers of government to facilitate the approval of a program?
- Criterion 4, namely: attracting support for process, 'partially fits' the Chinese context. This criterion should be retained to evaluate Chinese public policy.
- Criteria 8, namely: satisfying criteria highly valued in policy domain, is more clearly articulated to focus on efficiency, equity and appropriateness via three separate criteria.
- Criterion 10, namely: enhancing electoral prospects/reputation, 'does not fit' the Chinese context. It is recommended that this criterion not be retained in the framework when it is used for evaluating Chinese environmental policy, but its retention be considered if the framework is used to evaluate other types of policy, such as economic policy.

- Criterion 13, namely: providing political benefits for government, ‘clearly fits’ the Chinese context. However, it is suggested that the scope be widened from ‘providing political benefits for government’ to ‘providing political benefits’.

A modified McConnell’s framework is presented in Table 8.2. The modified framework is based on the research findings and is considered to now be applicable in the Chinese context. Overall there are 15 criteria (with sub-criteria 3A and 3B, and proposed criteria 8A, 8B, and 8C). All are considered as observed variables for evaluating a policy or a program in the Chinese context. More importantly, McConnell’s framework, as modified by the results and implications of this research, potentially fills a gap in the Chinese policy environment, namely addressing the lack of a systematic and holistic public policy evaluation framework.

Table 8.2 Amendment of McConnell's framework to fit the Chinese context

Original McConnell's criteria			Amendment to the original criteria		Modified McConnell's criteria	
Process	1	Preserving goals and policy instruments	Not be retained; Revised to focus on policy trial		1	Policy trial
	2	Securing legitimacy	Defined more broadly; Amended to focus on dispute settlement		2	Disputes settlement
	3	Building sustainable coalition	Split and an additional sub-criterion 3B added to more fully capture the requirements for policy success in China		3A	Building sustainable coalition
					3B	Coordinated Government
Program	4	Attracting support for process	No change		4	Attracting support for process
	5	Implementation in line with objectives	No change		5	Implementation in line with objectives
	6	Achieving desired outcomes	No change		6	Achieving desired outcomes
	7	Benefiting target group(s)	No change		7	Benefiting target group(s)
	8	Satisfying criteria highly valued in policy domain	Criterion 8A was proposed and retained		8A	Efficiency
			Criterion 8B was proposed and retained		8B	Equity
			Criterion 8C was proposed and retained		8C	Appropriateness
	9	Attracting support for program	No change		9	Attracting support for program
Politics	10	Enhancing electoral prospects/reputation	Not be retained for evaluating environmental policy, but its retention be considered for other types of policy			
	11	Easing the business of governing	No change		11	Easing the business of governing
	12	Promotion of government's desired trajectory	No change		12	Promotion of government's desired trajectory
	13	Providing political benefits for government	Scope widened to include political benefits to any/all stakeholders		13	Providing political benefits

Note. The numbering of McConnell's original criteria is retained to allow easier comparison with the original criteria.

8.3 Evaluating the relative success or failure of the CET policy

McConnell's framework (2015) was applied and tested empirically in two phases with four specific case examples. Aside from testing and potentially improving the design and utility of the framework, another aim of this study involved evaluating relative success or failure of the CET policy and providing insights into how the policy might be improved. This section responds to two research questions: (1) what are the relative degrees of policy success/failure in each case study? (2) what are the internal relationships between success/failure in the 'process', 'program' and 'politics' realm²⁶?

This section first compares and interprets the evaluation results from using an adapted McConnell's framework in phase I, between Case 1 and Case 2, and then in phase II, between Case 3 and Case 4. Following phase I, a slightly revised set of criteria was used in phase II (the scope of Criterion 13 was widened). Despite this (minor) change, it was still considered appropriate to combine and compare the four case studies for an overall indicative evaluation. The comparison is conducted in a paired way and across the criteria realms. This approach is justified because the changes and improvements suggested are consistent with the overall intent of the framework and together, while significant, are relatively minor in terms of overall implications for the sort of evaluation reported here.

The evaluation results using McConnell's framework across the realms of 'process', 'program', and 'politics' for each case are summarised in Table 8.3. As noted in 3.4.5 all three realms are given equal weighting in the analysis. For consistency, when comparing cases between phases I and II, Criterion 13 is used with the narrower framing of 'providing political benefit for government'. It should be noted that Criterion 2 did not have a score in either case in phases I, so that the comparison related to this criterion is conducted between Case 3 and Case 4, when this criterion was defined more broadly.

The MEE [2010] 136 evaluation framework was also applied to the four case studies. Findings from this evaluation are, where appropriate, considered alongside the relevant findings from applying McConnell's framework to provide a more integrated view of environmental policy success and failure in China. The evaluation results of the MEE [2010] 136 evaluation framework are discussed at the end of this section.

²⁶ Process refers to the policymaking process, including agenda setting, policy formulation, and policy adoption. Program refers to the policy implementation process. Politics refers to the political repercussions of a policy.

Table 8.3 Summary of evaluation results for all four case examples (based on the evaluation results from Table 6.4 and Table 7.5)

Realm	Phase I		Phase II	
	Case 1	Case 2	Case 3	Case 4
Process	Absolute Failure	Absolute Failure	Absolute Success	(Outright) Failure = Marginal Success
Program	Conflicted Failure = Conflicted Success	Tolerable Failure = Resilient Success	Tolerable Failure = Resilient Success	(Outright) Failure = Marginal Success
Politics	Absolute Success	Absolute Success	Tolerable Failure = Resilient Success	Conflicted Failure = Conflicted Success
Overall	Conflicted Failure = Conflicted Success	Tolerable Failure = Resilient Success	Tolerable Failure = Resilient Success	(Outright) Failure = Marginal Success

8.3.1 Comparison between Case 1 and Case 2 studies (Phase I)

Based on McConnell's framework, in phase I, Case 1 was deemed 'Conflicted failure = Conflicted Success', and Case 2 was deemed 'Tolerable failure = Resilient Success'. Case 2 thus scored higher than Case 1. A more detailed analysis of the evaluation criteria indicates that both cases were deemed 'Absolute Failure' in the 'process' realm, and both cases were deemed 'Absolute Success' in the 'politics' realm. The reason why Case 2 performed better than Case 1 lies in the 'program' realm, whereby Case 1 was deemed 'Conflicted failure = Conflicted Success', and Case 2 was deemed 'Tolerable failure = Resilient Success'. So, what caused this difference in the 'program' realm?

In Case 1, the Environmental Sanitation Department of T1 township government was responsible for garbage collection and transfer. The village office and village stakeholders were excluded from this process and passively accepted the implementation of the P1 program (the CET policy program in V1 village). For example, because the local government did not have the right to manage the street cleaners, the local residents often complained about the street cleaners not cleaning up the garbage on time. It was also noticed that the local villagers' committee (VC) kept quiet about the fact that the waste collected from V1 village was not transferred to the waste treatment facility but was instead dumped into a pit near the village.

In Case 2, a sanitation company contracted by T2 township operated the P2 program (the CET policy program in V2 village). However, the V2 village office had negotiated with the T2 township government, and the village office insisted on hiring villagers as street cleaners and put them under its supervision. Therefore, the local office had participated in program implementation and obtained the appropriate delegation of authority. For the above

reasons, program implementation was more detailed and comprehensive, and easy to monitor. For example, the VC knew the villagers' needs and provided free garbage cans to each household and collected large appliances free of charge. Moreover, hiring low-paid local villagers not only brought income, but the public considered littering a disgrace when street cleaners themselves have a local connection.

Case 2 performed better than Case 1 in the 'program' realm, and thus in terms of overall program performance. It is noted that the delegation of authority to the local office for policy implementation can make policy implementation more flexible, enable it to better meet local needs, and help facilitate local governments to supervise, thereby producing better performance in terms of policy implementation. This is the key lesson from the evaluation results, which supports the classical claims of Wildavsky and Majone (1979) that the discretion of the executor was essential due to uncertainty in the execution process. Likewise, March (1988) pointed out that the policy implementation process is a continuation of the decision-making process, and a decision that does not consider the implementation process is an incomplete decision. Therefore, the result of a policy implementation depends to a large extent on the organic combination of policy design and policy implementation. In China's hierarchical government system, the expansion of government and extension of the hierarchy will inevitably generate a large number of uncertainties between policy design and implementation, resulting in structural separation and loose connection, and finally, the decision intention is likely to be distorted and misinterpreted, and the result will often deviate from the original intention (Zhong, 2018). Generally, one of the direct consequences of policymaking in China is the 'uniformity' and 'One-Size-Fits-All' nature of decisions (An & Xu, 2011). However, the target of the CET policy is the rural areas with diverse conditions and differentiated individual villages. The hardware and software conditions in rural areas vary widely from place to place. Differences and imbalances mean that policy implementation must be tailored to local conditions. It can be seen that 'flexibility' is an indispensable operating mechanism in the process of policy implementation (Zhou, 2009). The policy endows the local office with a certain 'power of action' to implement the policy, which provides the necessary space to execute expediently. Pierre and Peters (2000) divided the reconfiguration of power into three forms: moving-up, moving-down, and moving-out. Therefore, it can be concluded that '**moving-down**' (delegation of) certain authority to local governments and communities can improve the effectiveness of policy implementation.

8.3.2 Comparison between Case 3 and Case 4 studies (Phase II)

Based on McConnell's framework, in phase II, overall Case 3 was deemed 'Tolerable Failure = Resilient Success', and Case 4 was deemed '(Outright) Failure = Marginal Success' (Table 8.3). Case 3 overall scored more highly than Case 4, performing better across 'process', 'program', and 'politics' realms. However, the question is 'why'?

First, what are the major differences between the cases in the 'process' realm? In Case 3, most stakeholders were included in the policymaking process, through a variety of informal communications and formal village meetings that gave the villagers an opportunity to listen to suggestions, communicate with each other, provide feedback, and more importantly to influence decision-making. In contrast, in Case 4 most stakeholders were excluded from the policymaking process. It is argued that a participatory design, that is *"inclusive and representative on the participant dimension... [can] address problems of misunderstanding and misperceptions"*, would give the public good reasons to support or obey a policy initiative, or in other words, enabling policy legitimacy (Fung, 2006, p. 70). For this reason, there were no challenges to the legitimacy of the P3 program and Case 3 had a higher score for Criterion 2 (Securing legitimacy). Furthermore, the research findings indicated that this inclusive decision-making process, which encouraged deliberation and negotiation, made it easier for villagers to reach consensus and accept the programs proposed by the VC. This consensus is the basis for most of the public to support the program, and it is also a necessary condition for the program to obtain formal approval. Furthermore, this is why Case 3 had a higher score than for Case 4 for Criterion 3 (Building Sustainable Coalition) and Criterion 4 (Attracting support for process). Therefore, it can be concluded that Case 3's higher score in the 'process' realm can be attributed to having a more appropriate set of institutional arrangements, or in other words, better participation rules.

Second, what are the major differences between the two cases in the 'program' realm? In Case 3, the P3 program was implemented locally by the VC. Extensive participation of stakeholders in the decision-making process enabled decision-makers to actively listen to opinions and adopt reasonable suggestions, thus avoiding many problems that may occur during program implementation. Conversely, in Case 4 the P4 program was implemented top-down by the county government. There was no broad stakeholder involvement in the decision-making process, and the policymakers did not actively listen to the views of target groups or adopt feedback. Thus, the P4 program was somewhat divorced from the realities of the countryside, and the implementation of the program encountered many difficulties.

These difficulties were not identified by policymakers in advance, who also failed to identify a viable solution. It is argued that *“when some groups cannot influence the political agenda, affect decision making, or gain information relevant to assessing how well policy alternatives serve their interests because they are excluded, unorganized, or too weak, they are likely to be ill served by laws and policies”* (Fung, 2006, p. 70). In Case 4, the lack of public participation in the policymaking process caused failures in policy implementation. Case 4 therefore scored lower for Criterion 7 (Benefiting target group), Criterion 8B (Equity), Criterion 8C (Appropriateness) and for Criterion 9 (Attracting support for program). Additionally, the higher score of Case 3 in the ‘program’ realm can also be attributed to the more appropriate institutional arrangements, in other words, encouraging participation rules.

Third, the difference in the scores for the ‘politics’ realm between the two cases can be attributed to Criterion 13 (Providing political benefits), where the scores are very different. In Case 3, stakeholders, including the CCP, local governments, and government officials, have benefited politically from relatively successful policy implementation, while citizens had also pursued their democratic rights by participating in the decision-making process. In Case 4 the interviewees supported the CCP and the local government more because they thought the rural sewage treatment program was a form of social welfare that came from the CCP and local government. However, due to the villagers not being involved in the policy process, they had not benefited politically. At the same time, as a result of a series of disputes over implementation of the program, the interviewees vented their anger toward government officials, who were blamed for the disputes. Therefore, it can be concluded that the failure of Case 4 in the ‘politics’ realm can be attributed to the failure of the public to participate in the policymaking process and the failure of government officials to properly resolve disputes during policy implementation. Furthermore, these disputes were essentially caused by inappropriate institutional arrangements, or in other words by a lack of encouraging participation rules.

To sum up, the research findings indicated that the broader the level of stakeholder participation during the policymaking process, the better the policy program performs. This is another key lesson from the evaluation results. In fact, the ‘New Public Management Movement’ encouraged third party organizations to participate in public affairs and to improve government efficiency and effectiveness (Huang, 2005). It challenged the traditional bureaucratic paradigm, which was considered the only and best way to govern and conduct

public policy. The concept of market mechanism and market method is widely applied to the provision of public goods. The third sector theory holds that the government mechanism, which serves as a provider of public goods, has inherent limitations (Pestoff et al., 2013). When the government fails to allocate social resources effectively and enterprises are unwilling to provide public goods due to the profit motive, the third sector, as a new resource, can effectively make up for the deficiencies of the two major ways of resource allocation, namely the government and enterprises (Yu & Li, 1998). Public participation in specific issues greatly accelerates the promotion of public policy and has a positive impact on the final policy effectiveness (Box, 1997). Therefore, according to Pierre and Peters (2000), it can be concluded that ‘**moving-out**’ relevant decision-making power to more actors, e.g., the public, can improve the effectiveness of a public policy - in this case, the CET policy.

8.3.3 Comparison across all four cases examples

McConnell’s framework helps identify scales that delineate degrees of failure (outright, conflicted, tolerable) to explore the inextricable link across the ‘process’, ‘program’, and ‘politics’ realms. Although the phase II case studies used a revised set of criteria compared to phase I case studies, it is still insightful to combine the four case studies to identify common patterns. This section discusses these relationships based on insights from the four case studies.

Process vs Program

As shown in Table 8.3, Cases 1, 2, and 4 all largely failed in the ‘process’ realm (Case 3 is deemed ‘Absolute Success’ in the ‘process’ realm and thus is not compared in this section). And in Cases 1 and 4, failures outweighed successes in the ‘program’ realm, while failures in Case 2 were largely considered a success, as the failure “*does not fundamentally impede the attainment of goals that proponents set out to achieve, and opposition is small and/or criticism is virtually non-existent*” (McConnell, 2015, p. 237). The question to be asked therefore is: Why did not the failures in the ‘process’ realm result in ‘program’ realm failure in Case 2, whereas they did in Cases 1 and 4?

Comparing Cases 1 and 2, as discussed in the previous section, it is argued that the delegation of specific authority(s) to the local office, as happened in Case 2, can help to produce better performance in policy implementation. Therefore, although both cases failed

in terms of policy shaping, Case 2 performed better in policy implementation because the VC was empowered to undertake policy implementation.

Comparing Cases 2 and 4, it can be seen that major stakeholders, e.g., the VC and villagers, did not participate in policymaking. In Case 2, major stakeholders were also not involved in policymaking. However, the absence of major stakeholder involvement did not result in serious flaws in policy design, nor did it cause serious controversy in its implementation. At the same time, the active participation of the VC in the policy implementation process also eliminates potential disputes. For example, due to the VC monitoring, the problem of cleaners not cleaning up garbage in time did not arise. In Case 4, the absence of major stakeholder involvement led to defects in policy design, which were also considered the root cause of various disputes in policy implementation. Although the VC played the role of 'firefighter' in the process of policy implementation, the VC was not empowered, but passively cooperated with the county government to solve disputes. Thus, the main difference between these two cases in the policy implementation phase was that in Case 2 the VC was authorised to participate actively, while in Case 4 it was ordered to participate passively.

This reasoning could explain why the failures in the 'process' realm did not result in 'program' realm failures in Case 2. Therefore, this comparison further emphasizes the importance of proper authorization of local government in policy implementation to improve policy effectiveness. Finally, it can be concluded that the failures in the 'process' realm **do not necessarily** result in 'program' realm failures.

Process and Program vs Politics

In all four cases, there were successes and failures in the 'process' and 'program' realms, but all contained at least some elements of success in the 'politics' realm. This finding raises a significant policy question: does this mean that no matter what the level of success or failure in the 'process' and 'program' realm, a public policy can still achieve success in the 'politics' realm in the Chinese context? To address this question the following paragraphs further consider McConnell's criteria concerning political impact (Criteria 11, 12, and 13).

In terms of Criterion 11 (Easing the business of governing), all four cases were considered Absolute Success (see Tables 6.4 and 7.5), which means the local governments successfully eased their business of governing. In China, administrative elites and social elites are at the core of the public policymaking system. They monopolise the right of public decision-making

and have become used to making decisions with limited citizen participation (Zhu, 2008). Especially in rural areas, villagers are rarely involved in politics (Zhong, 2018), and they are generally not sensitive to environmental protection (Du et al., 2016; X. Li, 2011), so it is easier in these contexts for the government to control their agendas. For these reasons, all four cases were deemed Absolute Success in terms of Criterion 11. However, the rise of the New Civic Engagement Movement in China has increased the demand for the public to participate in the management of public affairs. The role of citizens in public organizations and the management of public affairs has been strengthened, and the participation of citizens in the formulation and implementation of public policies in many important fields has been increasingly legalised (Liu & Yao, 2014). Local governments, especially in the context of focus events or NIMBY cases that can cause negative political impact, increasingly understand public pressure. Such pressure spreads through the internet, but sometimes local governments cannot take timely measures to adjust, in terms of coping strategy and policy actions. Therefore, policymaking and implementation failures can result in the government failing to ease the business of governing in China (Wang & Wu, 2019; Yao & Liu, 2014; Zeng & Zhu, 2016). In other words, the failure in the realm of 'process' or 'program' can result in failure in the 'politics' realm.

In terms of Criterion 12 (Promotion of government's desired trajectory), Cases 3 and 4 had lower scores than Cases 1 and 2 (see Tables 6.4 and 7.5). In fact, environmental protection may conflict with other desired government trajectories, e.g., economic development. Such kinds of conflict can be relatively intense in the short term, not only in China but also in the practice of environmental governance in the western world. However, conflicts triggered by questionable policy actions should be avoided as far as possible by government management, e.g., providing a matching fund to the P4 program exacerbated the debt crisis of CT4 county, which is considered a failure in the 'politics' realm in Case 4. Requiring local governments to provide a matching fund to the CET programs is the policy provision, therefore, such a failure in the 'politics' realm came from the 'process' realm and was hard to avoid. In this sense, the 'politics' realm can be related to the 'process' or even 'program' realm.

Criterion 13 (Providing political benefits for government) was considered successful in all four cases (see Tables 6.4 and 7.5). In today's society, a government represents the interests of the public, and is obliged to carry out efficient, fair and reasonable allocation of public resources (Rothstein, 2011), in order to establish, maintain, and consolidate the economic,

political and cultural order that is needed for a society (Huang, 2012; Yuan, 2011; Yuan, 2014; Zhao, 2004). At the same time, the public evaluates the quality of the government, that is, *“the extent to which the government benefits the people they serve, and whether the government makes and implements decisions in a legal and socially acceptable manner”* (Fan et al., 2011, pp. 208-209). Criteria such as efficiency, equity, and benefit to the target groups are thus considered indicators of the quality of the government (Dahlberg et al., 2020; Svallfors, 2013; Teorell, 2009). These indicators reflect the process of making and implementing government policies, as the basis for the public to support or oppose government actions (Miao, 2014). Therefore, it can be inferred that the formulation and implementation of policies are related to the political interests of the government. Based on the above discussion and the evaluation results from Table 6.4 and Table 7.5, the average score for Criterion 7 (Benefiting target group(s)) and Criterion 8B (Equity)²⁷ from each of the four cases is: Case 1 = $(3+3)/2 = 3$, Case 2 = $(5+3)/2 = 4$, Case 3 = $(4+5)/2 = 4.5$, and Case 4 = $(1+1)/2 = 1$. It can be seen that Cases 1, 2, and 3 had a relatively high score for these two criteria, which resulted in their support for the governments being ‘considerably more’ or ‘much more’ as a result of the CET policy programs. Such results support the statement that the formulation and implementation of policies are related to the political interests of the government. One exception is Case 4, which should be a failure in terms of providing political benefits for the government. However, the interviewees in Case 4 consider their level of support for the governments to be ‘considerably more’ or ‘much more’ as a result of the CET policy program. This may be because their dissatisfactions were associated with local government officials, whom they believed were the cause of the problems, but not to the government, which had good intentions. As participant 4DR said: *“In lower-level government, no officials are good.”* In this sense, the ‘politics’ realm can be related to the ‘process’ or ‘program’ realm.

To sum up, it can be concluded that ‘process’ and ‘program’ realms **are related to** the ‘political’ realm. Thus, Criteria 11, 12, and 13 can help to evaluate the political impact of a policy in the Chinese context.

²⁷ In phase I, Criterion 8A was deemed ‘unclear’, so that this criterion is not included in the discussion. The score of Criterion 7 and 8B are derived from Table 6.4 and Table 7.5. And this study assumes that Criterion 8B is equally weighted with other criteria.

8.3.4 Evaluation using the MEE [2010] 136 evaluation framework

This research applies triangulation methodology, comparing the findings from applying McConnell's framework with the findings from applying the MEE [2010] 136 evaluation, to help ensure analytical validity. However, the MEE [2010] 136 evaluation framework only assesses the aspects covered by Criteria 5 and Criterion 6 in McConnell's framework. The evaluation results using McConnell's Criteria 5 and 6 are consistent with the evaluation results using the MEE [2010] 136 evaluation framework in both phase of case studies (see section 6.6 and 7.6). This further confirm the validity of the research findings.

On the other hand, the evaluation results using the MEE [2010] 136 evaluation framework in the four cases can be sorted from highest to lowest levels of performance, that is, Case 2 > Case 4 > Case 3 > Case 1 (based on Table 6.5 and 7.6). However, a different result was obtained using McConnell's framework, that is, Case 3 > Case 2 > Case 1 > Case 4 (based on Tables 6.4 and 7.5). What do such different results indicate?

McConnell's framework and the MEE [2010] 136 evaluation framework are different tools for different purposes, within different contexts. McConnell's framework is designed to give a holistic view of the policy process and achieved policy outcomes, whereas the MEE [2010] 136 evaluation framework is designed to be applied at the project or program level, which is narrower and more specific. However, the different evaluation results from using these two frameworks indicates there is a degree of complementarity between McConnell's framework and the MEE [2010] 136 framework.

A policymaker can take the systematic and holistic view provided by an overall policy evaluation framework, or just focus on the specific program level. Policy makers and analysts should use both general and targeted approaches – not only evaluating a part of the policy process but considering it as a whole, because evaluating only one part of the policy process may lose the systems view provided by of overall policy evaluation, in particular the connectivity between the different realms. Especially at a higher policy level, use of the amended McConnell's framework is recommended because it provides for the identification of bigger picture questions.

8.4 Causes of policy failure

This section considers the causes of policy failure, again based on the case studies. It responds to the research question: what are the causes of policy failure? Arguments based on McConnell's (2016) explanation of policy failure are discussed first, complemented then by the propositions of other researchers.

8.4.1 An examination of policy failure causes based on application of McConnell's framework

McConnell (2016) argued that the cause of policy failure exists in a tripartite frame, namely: the individual actor centred frame, institution/policy process centred frame, and societal centred frame. Findings from the four case studies can be situated to contextualize the causes of policy failure based on McConnell's proposed explanations (see Table 8.4).

Table 8.4 Common causes of policy failure identified by McConnell and observed in the four Chinese case studies

McConnell's proposed causes of policy failure	Causes of policy failure from case studies	Observed examples
Individual actor-centred frame		
Incompetence	Lack of professionalism	Case 3: program designers had no expertise in environmental issues
Institution/policy process-centred frame		
Institutional self interest	Institutional design	Cases 1, 2, and 4: limited the entry of most stakeholders
	Bureaucratism and shifting responsibility	Case 4: county government shifted responsibility to lower level governments
Weak capacity for good decision making	Lack of normalized and standardized policymaking process	Case 1: failed to systematically evaluate unexpected outcomes Case 2: failed to assess the priority environmental problems Case 4: failed to examine the possible policy options and evaluate the unexpected outcomes
Societal-centred frame		
Core value/elite interests produced policymaking biases and inevitable failures	Elite politics of agenda-setting	Cases 1 and 2: elite interests produced policymaking biases, and thus led to failure in the 'process' realm

Individual actor-centred frame

Local governments lacked professionals and staff with experience in environmental management, which limited their competence to deal with complex environmental issues

and to develop and implement environmental projects. For example, in Case 3, the P3 program was designed by the VC, with advice from other stakeholders, e.g., villagers. However, none of the program designers had the expertise to develop an environmental project or had access to third-party organizations who had the relevant expertise. As a result, recycling manure and using it sustainably were not taken into account by the program designers.

Institution/policy process-centred frame

First, the government institutional designs limited the participation of most stakeholders in the policymaking process, thus consigning the project to almost certain failure in the 'process' realm, e.g., Case 1 (Absolute Failure), Case 2 (Absolute Failure), and Case 4 ((Outright) Failure = Marginal Success).

Meanwhile, in China's hierarchical political system, local officials shift responsibility to avoid being blamed for not resolving tricky issues. The best example is Case 4, in which the county government shifted responsibility for settling disputes over compensation for land expropriation to the township and village offices, which resulted in the obstruction of program implementation.

Second, local governments were less able to make science-based decisions. In all four cases, local governments lacked normalised and standardised policymaking processes, namely: there were no clear guidelines on how to identify problems before a policy is made; how to measure the size and severity of a problem; how to examine the possible policy options; how to systematically evaluate the likely outcome of the various policy alternatives, including the expected and unexpected outcomes; and how to evaluate actual policy outcomes. Indeed, local governments might conduct one or two of these actions, but not from systematic and/or scientific perspectives.

For example, in Case 1, the township government designed the program without stakeholder participation, leading to the failure to systematically evaluate unexpected outcomes, e.g., some villagers still use pits dug by themselves to dump their waste. In Case 2, the township government assessed environmental problems without any transparent prioritisation process when they applied for CET policy funding. And in Case 4, the county government simply measured the size and severity of the problem in each village, based on the data submitted by the township government. However, the county government failed to examine the possible policy options to determine whether the P4 program is appropriate to

be conducted at the village level. Finally, the county government also failed to evaluate the unexpected outcomes and to put forward countermeasures, e.g., to deal with emergent disputes over land compensation.

In the absence of a science-based decision-making process, the quality of decision-making is easily affected by the leaders' personal biases. As in street-level bureaucracies (public service workers), the attributes of the service provider is one of the determinants of bureaucratic discretion (Scott, 1997). In China, what items should be put on the policy agenda, what measures should be adopted, and even the judgment on the effectiveness of a policy depends on the views of political leaders. Personal factors, such as cognition, judgment ability, background, and experience all significantly influence the policy process and policy outcome (Qu & Jiang, 2015). For example, in Case 1, the village secretary is a typical local farmer who earns his living by farming. The interviewees described him as rigid and conformist. In Case 2, the village secretary is a rich businessman. The interviewees used words such as strong, forceful, and ambitious to describe him. In Case 3, the village secretary is an official sent by the municipal government to work at the local level. The interviewees said he had great political ambitions and wanted to perform well to get recognition from higher officials. In Case 4, the village secretary has been working in the local area for many years. The interviewees described him as a typical government official, who is slick and worldly-wise. Among them, the political leaders in Case 2 and Case 3 were considered more enterprising and ambitious, so that they were more active in improving the local environment. In Case 2, the VC actively participated in program implementation. In Case 3, the village secretary actively visited the villagers and asked for their advice, for the purpose of better program outcomes. As a result, Case 2 and Case 3 were all deemed Tolerable Failure = Resilient Success, which means both cases were more successful than Case 1 (Conflicted Failure = Conflicted Success) and Case 4 ((Outright) Failure = Marginal Success).

Societal-centred frame

Elite interests produced policymaking biases and thus led to failure in the 'process' realm and success in terms of Criterion 11 (Easing the business of governing). In Case 1 and Case 2, the agenda was set with little public involvement, following instructions or calls from higher authorities. As a result, the government has been very successful in easing the business of governing by controlling the agenda, but has neglected long-term and tricky problems, such as groundwater pollution, soil pollution, and plastic film left on farmland.

8.4.2 Alternative explanation for the causes of policy failure

McConnell's framework provides an opportunity to explore the causes of policy failure. However, it may not be sufficient to unveil a Chinese policy story. Therefore, there is still a need to find empirical evidence to better understand the topic. Based on the case studies, local economic conditions may provide an alternative explanation for policy failure in the Chinese context.

The research findings suggest that the more developed the local economy, the better the policy performance when evaluated using the MEE [2010] 136 evaluation framework. Of the four cases, Case 2 was characterized by having the strongest economic conditions. V2 village has sufficient tourism resources and tourists to bring income to the local economy, so that the VC had the economic basis to provide convenient public services, such as free garbage cans and recycling of large appliances. The local office was more willing to deal with the rural waste problem because a better environment might bring more tourists, a view shared by all interviewees. This is one explanation why Case 2 recorded the highest MEE (2010) 136 score and recorded better performance than Case 1.

In Case 4, V4 village also had a strong economic foundation. Greenhouse-based agriculture is the main source of income for the local economy. In order to develop the economy, V4 village built a large exhibition centre and ecological agriculture restaurant near the highway entrance to the village, both of which were used for business negotiations and government officials' visits. Therefore, in CT4 county, V4 village was among the first villages to have a sewage treatment facility which could help the village maintain a good environmental image. This is one reason why Case 4 got the second-highest MEE (2010) 136 score and performed better than Case 3.

In fact, both Case 2 and Case 4 had much higher scores than Case 1 and Case 3 on 'establishment of rural environmental protection team' and 'facility operation and management' in the MEE [2010] 136 evaluation framework (See Tables 6.5 and 7.6). Hiring staff and maintaining environmental protection equipment required a lot of money so that local financial status was a key factor for the success of environmental protection programs. Certainly, the success of environmental program is closely related to the reasons mentioned in the previous section, so this does not mean poor areas are necessarily unsuccessful. But it can be deduced that economic conditions are an important factor for the successful implementation of an environmental program.

8.5 Research contributions

This section discusses the contributions of this research, in terms of how the research findings into the design and application of McConnell's framework and the causes of policy failure fit with existing knowledge and the Chinese context.

8.5.1 McConnell's framework

The value of McConnell's framework lies in its ability to examine the structural reasons for policy success and failure. As noted in the literature review, most of the current literature uses only the idea of policy failure but fails to provide a systematic and holistic framework for overall policy evaluation. McConnell's framework, however, does seek to provide this oversight. Nevertheless, while it still focuses on policy failure, by identifying 13 criteria across 'process', 'program', and 'politics' realms, it provides a framework that can also be used to explore elements of comparative success. This approach makes it easier to frame comparative studies in different cultural and political contexts. In this regard, the empirical research undertaken here suggests the framework, and its proposed modifications, is a useful tool for the integrated evaluation of policy. This study makes four key contributions to McConnell's framework.

First, it addresses a gap left in McConnell's framework around the ability to evaluate the 'value' dimension in environmental policy. *"The same actor can entertain very different ways to understand problems, and can juggle many criteria to decide that a policy outcome was a success and a failure"* (Cairney, 2020, p. 72; Stone, 2012). On the other hand, the government may naturally think the policy it implemented is a success, while the other stakeholders may view it as a failure. Given such conflict, McConnell considers success and failure are *"both fact and interpretation, and a policy can be successful in some senses (e.g., meeting objectives), but not everyone will perceive it as a success or failure"* (McConnell, 2010b, p. 31). Accordingly, McConnell's definitions of policy success and failure are based on two objective standards, namely: goal attainment and the existence of opposition or support. But such a definition and the framework developed for this definition did not contribute to any moral judgment of the policy content. To be specific, among the 13 criteria originally proposed by McConnell (2015) (Table 2.2), Criteria 1-3 judge the key policy steps during the policymaking process and Criterion 4 considers the level of public support or opposition in this process. Criteria 5-6 judge the policy objectives and outcomes. Criterion 7 considers whether the public believes that they have benefited from the policy. Criterion 9

considers the level of public support or opposition during policy implementation. Criteria 10-13 judge the political impact of the policy. These criteria do not contain any value judgment component and particular values could have been specified in Criterion 8, but McConnell did not clarify what the nature of these values are, other than *“policy sectors have values that are widely held by its community of actors...these values enshrined in industry standards or benchmarks”*, except *“efficient use of resources has become common currency for programme success”* (McConnell, 2010b, pp. 48-49; 2015, 2016). Furthermore, while the original McConnell’s framework can measure the key indicators of the policy process, it does not provide for any moral judgment of the policy content. Take the example of an extreme value-laden case, namely Nazi Germany’s holocaust policy which was clearly evil and led to the murder of millions of European Jews - this policy could be evaluated as a successful policy in terms of policymaking and implementation by using McConnell’s original criteria. Although there was resistance to this policy, *“the remaining opposition was never able to dent the general passivity and even popular support for Nazi policies within the Reich”* (Pines, 1994). This case illustrates the importance of including a moral judgment component, which *“refers to any injunction that implies an obligation to carry out an act, implicitly involving the terms ‘ought’ or ‘should’”* (Cohen & Wartofsky, 1963, p. 219).

Based on the above line of reasoning one of the major contributions from this study is to specify what should be included in Criterion 8, namely: Criteria 8A (Efficiency), 8B (Equity), and 8C (Appropriateness). These **proposed criteria** fill a gap left by McConnell and are considered key additions to McConnell’s framework around the lack of ability to evaluate the ‘value’ dimension in the environmental policy sector. However, ‘efficiency’ is less able to provide a moral judgment of a policy, because one could argue that the Nazi’s holocaust policy was efficient ways to kill people. And indeed, striving for equity is important, but absolute equity is unattainable in public policy practice because *“the rule itself rests upon no absolute equity”* (Shaw et al., 1848). On the contrary, ‘appropriateness’, such as sustainable development and human rights protection, implies a moral judgment on ‘goodness’ and further becomes a **paramount** test. These ‘moral judgements’ may differ in country and culture, and even differ in the way people interpret. But it is beyond the scope of this study to discuss what ‘moral judgments’ are included in ‘appropriateness’.

Second, a number of adjustments to the criteria are proposed to make the framework more useful and relevant in the Chinese context. While Criteria 8A, 8B, and 8C complement McConnell’s framework, these do not fully address the question as to whether the criteria in

the framework are sufficient to ascertain policy failure in the Chinese context. This study indicated that some criteria are judged to be applicable, partially applicable, and not applicable. Therefore, another important contribution from this research is the proposed adjustments of McConnell's criteria to the Chinese context, that is: Criterion 1 (Persevering goals and policy instruments) is redesigned as 'Policy Trial'; Criterion 2 (Securing legitimacy) is defined more broadly and revised as 'Disputes Settlement; an addition criterion, namely: Coordinated Government, is added to Criterion 3 (Building sustainable coalition) to more fully capture the requirements for policy success in China; Criterion 4 (Attracting support for process) partially fits the Chinese context but is retained; Criterion 10 (Enhancing electoral prospect/reputation) is recommended not be retained when it is used for evaluating Chinese environmental policy, but its retention be considered if the framework is used to evaluate other types of policy, such as economic policy; and the scope of Criterion 13 (Providing political benefits for government) is widened to all stakeholders as 'providing political benefits'. These adjustments make McConnell's framework, at least in the cases investigated in this research, useful to assess policy failure in China.

Third, this research developed a methodology for testing and adapting an evaluation framework which could be used in future by other scholars when assessing and adapting this or other frameworks in new contexts. In this research, McConnell's framework was first assessed and developed theoretically, and then tested and adapted using empirical enquiries. Several methods, tools, and different approaches were identified to help test this framework and evaluate it within the context of a rural environmental policy in a holistic way. The adaptive learning approach, case study, and triangulation methodology were employed, along with qualitative and quantitative methods that obtained data from interviews, public documents, on-site observation, and qualitative visual material. The results of these methods validate the need for a comprehensive study of the sort undertaken here. Moreover, this study explored how to judge the success and failure of each individual policy evaluation criteria realm (process, program, and politics) and the overall policy program, based on the relative success and failure of each individual criterion - McConnell did not articulate this possibility in his study. In this research, it is proposed that McConnell's framework, that evaluates policy failure via three categories, namely: Tolerable Failure = Resilient Success; Conflicted Failure = Conflicted Success; (Outright) Failure = Marginal Success, be expanded by adding 'Absolute Success' and 'Absolute Failure' to allow for evaluation of the full range of possible outcomes (see Chapter 5). This study also developed a scoring system to capture the different levels of success or failure on each

realm and overall policy program, based on the degree of success or failure of each criterion and a basic assumption that the criteria are weighted equally (see Chapter 6). This scoring system also fills a gap left by McConnell. To sum up, the application and the development of the multiple approaches above are important contributions of this research, which can be used as a reference for further study.

Fourth, the amended McConnell's framework has strong practical application potential in the Chinese context. It can be considered complementary to current policy evaluation tools that are designed to be applied at the program level, e.g., the MEE [2010] 136 evaluation framework. McConnell's framework provides a more holistic view, considering the whole policy process and the necessity to identify impacts beyond policy effectiveness. For policymakers, use of McConnell's framework can ensure the integrity of policy assessment as far as possible, because it takes into account the relevance of the range of policy realms (process, program, and politics). If only one realm is evaluated, important policy information will be ignored and important opportunities for policy learning will be lost. The need to evaluate all policy realms is especially relevant in China because the policy process is characterized by 'top-level design and local execution' (Naughton, 2012). As such, policy design may not meet the local conditions in which policy is implemented and thus exacerbate the misalignment between policymaking and implementation. Therefore, the amended McConnell's framework can be used directly by policymakers in China.

8.5.2 Causes of policy failure

To date, much of the relevant literature confuses the appearance and causes of policy success and failure, which is fundamental because the definition of policy failure is not clear. One of McConnell's contributions is to distinguish between the 'what can be observed if a policy fails' and 'what reasons cause such failure'. However, there has been little empirical study of McConnell's explanations (2016) of policy failure. Therefore, this study also sought to identify and understand the causes of policy failure by using case studies in the Chinese context.

The research findings about the causes of policy failure fit with McConnell's explanations, that is, policy failures could be and were categorized into three frames, namely: individual actor centred frame, institution/policy process centred frame, and societal centred frame (Table 2.3). As discussed in section 8.4, it then further contributed to an understanding of the causes of policy failure in rural China. The research findings indicated that policy failures

are caused by complex interactions between individual behaviours, institutional design, and prevailing societal values. Institutional factors in particular, which limited stakeholder participation and the delegation of authority to local offices, had caused failures in policy shaping and implementation, as identified in the case studies.

However, some factors discussed in Chapter 5, which may influence the policy process in rural China, e.g., 'guanxi (personal relationship)', 'renqing (favour)', 'bao (reciprocity)', were not detected in the case studies. Meanwhile, there are factors lying outside McConnell's three frames that could explain policy failure. Factors observed in the case studies included social and economic conditions, which were considered an alternative cause of policy failure in the case studies. Some factors were not observed in case studies but are critical for China's policy process and may influence the policy effect. For example, the flexibility of the bureaucratic system is identified as the crucial element in China's political system (Heilmann, 2017). Therefore, it is suggested that the three frames would have to look at these peculiarly Chinese features.

8.5.3 Future research challenges

Challenges for future research in two main areas have been identified. First, McConnell (2015) used the stages (heuristic) model (Kulaç & Özgür, 2017; Sabatier, 2007) as the basis of his policy evaluation framework, which is also the basis of this study. According to the conceptual framework proposed by Anderson (2003), this study divides the basic policy process into two stages: policymaking and policy implementation. Among them, the policymaking process is divided into agenda setting, policy formulation, and policy adoption. However, the policy process is complex, and there is much debate about using the stage heuristic to describe the policy process. As stated by Sabatier (2007):

The assumption that there is a single policy cycle focused on a major piece of legislation oversimplifies the usual process of multiple, interacting cycles involving numerous policy proposals and statutes at multiple levels of government (p. 7).

The policy process in China may be even more complex, because the government usually conducts policy experiments at the local level. The basic process of policy experiments can be described as: policy formulation at the national level - local pilot project formulation - pilot project implementation - implementation effect feedback - policy reformulation - large-scale policy implementation. This process is usually mixed with policy learning and policy imitation over the various level of local governments (Liu, 2014). Therefore, policy processes

may overlap, e.g., the implementation of pilot projects may be a step toward policy formulation on a larger scale. However, McConnell's analytical framework is based on a linear policy process, and so ignores the 'multiple, interacting cycles' (Sabatier, 2007). Therefore, the use of this framework to evaluate a multi-tiered policy process must be approached with caution, because it is difficult to identify which step is the policy formulation process and which is the policy implementation process, which may lead to the misuse of the evaluation criteria in McConnell's framework. Future research should be aware of this limitation.

Second, in McConnell's framework, whether all 13 criteria and each realm (process, program, and politics) have the same weight also needs further discussion. McConnell (2015, p. 237) did not state clearly how to weigh the 13 criteria and each realm, but he argued that: *"what factors are/are not important, is part of the 'art and craft' of analysis"*. Logically, the assessment can apply a higher level of criteria (meta-criteria) to analyse the relationships between rational forms. Criteria 8A (Efficiency), 8B (Equity), and Criterion 8C (Appropriateness) may take precedence over other evaluation criteria, showing the characteristics of meta-criteria (Xie & Zhang, 2015). But this study did not assess the respective weights of the 13 criteria in McConnell's original framework and instead accorded them all equal weight. Therefore, future studies need to take these considerations into account when evaluating using McConnell's framework.

8.6 Summary

This chapter examined the research findings of the four case studies within the context of testing and adapting McConnell's policy evaluation framework within the Chinese context. An amended framework has been developed, based on the research findings. The evaluation results from using McConnell's framework in the four case examples were compared and interpreted, leading to the conclusion that delegating particular areas of authority to local governments and communities, and delegating relevant decision-making power to other actors, can help to improve the effectiveness of a policy. It is also concluded that the failures in the 'process' realm do not necessarily result in failures in the 'program' realm. Both 'process' and 'program' realms are related to the 'politics' realm. In the end, the research findings indicated that policy failures are caused by complex interactions between individual behaviours, institutional design, and prevailing values of the society, but the causes of policy failure should be studied beyond McConnell's explanation of policy failures.

Finally, the contributions of this research in relation to existing knowledge were discussed. First, Criteria 8A (Efficiency), 8B (Equity) and 8C (Appropriateness) are proposed to fill the gap left by McConnell around the lack of ability to evaluate the 'value' dimension of policy – in this regard it is proposed that Criterion 8C potentially holds a pivotal position in the policy evaluation process. Second, McConnell's Criteria are amended to fit the Chinese context, including Criteria 1, 2, 3, 13 modified, Criterion 4, 5, 6, 7, 9, 11, 12 retained, and Criterion 10 deleted. Third, the methods applied and developed in this research can be used as reference for further study. Fourth, McConnell's framework provides a more holistic view and can be considered to be complementary to current policy evaluation tools in China. Fifth, McConnell's explanations on the causes of policy failure could fit the Chinese context but should be studied further. Finally, challenges for future research in two main areas have been identified.

The next and final chapter concludes the research and presents a summary of the most important insights of this research.

Chapter 9

Conclusion

How environmental policy is shaped, implemented, and evaluated (including relative success and relative failure) is a question frequently raised in the Chinese context, and is a question with both national and global implications. However, there is currently no such systematic and holistic evaluation framework for environmental policy in China. Therefore, this thesis seeks to fill the gap. McConnell's policy evaluation framework (2015) is identified as a potential framework for application in the Chinese context and potentially can be applied more broadly.

This concluding chapter of the thesis begins with a review of the four main research questions. It first addressed the following research question: (1) what aspects of McConnell's framework are missing/not fitting/can be revised in the Chinese context? A focused theory level review of relevant Chinese and related literature led to potential improvements of McConnell's framework and the development of methods to measure policy failure. With these improvements and developments incorporated, a slightly modified framework was then tested in two empirical case study phases. This testing found that the framework and most of the 13 criteria are applicable in the Chinese context, subject to some relatively minor but important modifications. The amended framework is considered to be a useful policy evaluation framework that provides a holistic view for policymakers.

McConnell's framework provided the basis to evaluate the shaping, implementation, and political impact of a policy, and it allows for structured comparison across sectors. In this research, two research questions dealt with how to measure and understand policy success or failure in the Chinese environmental policy context. Specifically, the research addressed: (2) what are the relative degrees of policy success/failure in each case study? (3) what are the internal relationships between success/failure in the 'process', 'program', and 'politics' realms? In relation to the first of these questions, the research findings indicated there were various levels of policy successes and failures between cases and across the realms. In answer to the second question, the evaluation results from using a slightly modified McConnell's framework in case examples were compared and interpreted, thus drawing the conclusion that delegating particular areas of authority to local governments and communities, and delegating relevant decision-making power to more actors, can help to

improve the effectiveness of a policy. It is also concluded that the failures in policy shaping do not necessarily result in policy implementation failure, and policy formulation and implementation are related to the political impact of a policy. The evaluation results using McConnell's framework and the MEE [2010] 136 evaluation framework (the policy effect evaluation guideline for the CET policy from the Ministry of Ecology and Environment) were also compared. It is thus further concluded that the amended McConnell's framework can provide a meaningful complement to the existing CET policy evaluation method.

Finally, this research responds to the research question: (4) what are the causes of policy failure? Emergent reasoning is based on McConnell's (2016) explanation of policy failure. Findings indicate there are multiple and complex interactions between individual behaviour, institutional design, and prevailing societal values which contributed to different degrees of policy failures. However, I argue that the exploration of the causes of policy failure should extend beyond the three frames of McConnell's explanations into areas such as social and economic conditions which were considered as potentially contributing to policy failure in the case studies.

Given there is a lack of an systematic and holistic environmental policy evaluation framework and the three realms (process, program, and politics) identified by McConnell are all relevant but seldom addressed in China, this research demonstrates, both in theory and in practice, that use of the amended framework can deliver practical insights into China's environmental management and potentially improve policy effectiveness. The research findings indicated that policymakers should consider involving key stakeholders in the formulation of policies and ensure the suggestions put forward by these stakeholders are properly adopted. Involving stakeholders in this way can enhance public support for policy programs and effectively reduce the possibility of conflicts in the implementation of programs. The research also indicated the need to devolve appropriate authority to local governments to improve the effectiveness of policy implementation. More professional third-party agencies are encouraged to participate in the design and evaluation of the policy initiatives. A science-based policymaking procedure needs to be developed and introduced, not only to help promote the rationality of policies but also to educate the public before policies are designed and implemented.

Despite the apparent success of the research, there are several limitations to the overall research design. First, the generalisability of the results is limited by the selection of case study areas. Future studies could expand the scope of the evaluation and select cases from

more areas for comparison. Second, the reliability of data can be impacted by selected program types – two types in this research. More types of programs are suggested to be selected in future studies. Third, the scope of this study is to examine an environmental policy. Further study may select other types of public policies. Fourth, this research proposed a scoring system and assigned values to each of the evaluation criteria. More research is required to improve this scoring system.

Despite these limitations, this study fills the gap caused by the lack of a systematic and holistic environmental policy evaluation framework in China. The amended McConnell's framework and the methods developed in this research are very practical and usable for evaluating an environmental policy in the Chinese context. Especially at a higher policy level, use of the amended McConnell's framework can provide a holistic view of the policy process for the identification of bigger picture questions, and further deepens the understanding of policy success and failure in China.

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Appendix A

Questionnaire and Interview Questions for McConnell's framework

Site:

ID		Gender	
Age		Ethnic group	
Occupation		Position	

What are you in charge of?

What do you think are the main environmental problems in the village?

What has been done to solve the problems?

Items	Interview questions
<p>Preserving goals and policy instruments (Criterion 1)</p> <p>Building sustainable coalition (Criterion 3)</p> <p>Attracting support for process (Criterion 4)</p> <p>Easing the business of governing (Criterion 11)</p>	<ul style="list-style-type: none"> • Who initiated the application of this CET program? Why? • Why was this environmental problem addressed from amongst the range of problems? • Who/which department drafted the proposal of this program? • Who was consulted when drafting the proposal? How? • Was there any revision of the draft proposal? • Why was it revised and what has changed? • Was the draft proposal discussed in any form of meeting or seminar? <ul style="list-style-type: none"> ➤ What was this meeting or seminar? ➤ Which government departments were involved? ➤ Was there any stakeholder involvement in the discussion? ➤ Was any important group missing and if so, why? ➤ Did the participants work well together? (1. Very poorly 2. Poorly 3. Fairly well 4. Well 5. Very well; 'Don't know') ➤ Did the participants form a coalition? Why? ➤ What were the obstacles to working together? ➤ How were these obstacles addressed in this process? ➤ Do you think the stakeholder participation had influenced the decision making? Why? ➤ How was final decision made? ➤ Do you think any coalition helped obtain approval of this program? • What happened then to the program proposal? • Do you support the policymaking process? (1. Very low 2. Low 3. Average 4. High 5. Very High; 'Don't know'). Why?
Securing legitimacy (Criterion 2)	Do you think the process for introducing the programme was legitimate/fair/ok? Why?
Policy as process	How successful was the policymaking process? 1. Absolute failure 2. Failure > success 3. Success = failure 4. Success > failure 5. Absolute success; 'Don't know'. Why?
Implementation in line with objectives (Criterion 5)	<p>What are the CET program objectives from your point of view?</p> <p>To what extent was the program implementation in consistent with these objectives? 1. A very little 2. A little 3. Somewhat 4. A great extent 5. A very great extent; 'Don't know'. Why?</p>

Achieving desired outcomes (Criterion 6)	<p>To what extent did the program result in better management of/or in reduced levels of rural pollution? 1.A very little 2. A little 3. Somewhat 4. A great extent 5. A very great extent; 'Don't know'. Why?</p> <p>To what extent did the program solve the most prominent rural environmental problems? 1.A very little 2. A little 3. Somewhat 4. A great extent 5. A very great extent; 'Don't know'. Why?</p> <p>To what extent did the program increase villagers' environmental awareness? 1.A very little 2. A little 3. Somewhat 4. A great extent 5. A very great extent; 'Don't know'. Why?</p> <p>To what extent did the program change the behaviour of villagers? 1. A very little 2. A little 3. Somewhat 4. A great extent 5. A very great extent; 'Don't know'. Why?</p>
Benefiting target group(s) (Criterion 7)	To what extent did the program benefit villagers? 1. A very little 2. A little 3. Somewhat 4. A great extent 5. A very great extent; 'Don't know'. Why?
Efficiency (Criterion 8A)	Do you think the government spent the money in the right way in terms of this program? Why?
Equity (Criterion 8B)	Do you think the program was implemented in a way that benefitted everyone equally? 1. A very little 2. A little 3. Somewhat 4. A great extent 5. A very great extent; 'Don't know'. Why?
Appropriateness (Criterion 8C)	<p>Do you think the program had identified the most important problem? Yes/No. Why?</p> <p>Do you think the program is the appropriateness solution to this problem? Yes/No. Why?</p>
Attracting support for program implementation (Criterion 9)	<p>What actions did the government take to help this CET program?</p> <p>What was your level of support for what government did? 1. Very low 2. Low 3. Average 4. High 5. Very High; 'Don't know'. Why?</p>
Policy as program	How successful has this program been in terms of what the government did for this CET program? 1. Absolute failure 2. Failure > success 3. Success = failure 4. Success > failure 5. Absolute success; 'Don't know'. Why?
Enhancing electoral prospects/reputation (Criterion 10)	<p>Do you think the program enhanced the government officials' reputation? Why?</p> <p>Do you think any government officials get promoted as a result of this program? Why? Could you give an example?</p>
Promotion of government's desired trajectory (Criterion 12)	<p>Do you think the program was designed with wholehearted commitment to fulfil the obligations to build ecological civilization? 1. Strongly Disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly Agree; 'Don't know'. Why?</p> <p>Do you think the program conflicts with other national trajectories? Why?</p>
Providing political benefits for government (Criterion 13)	Do you support the government more as a result of this program? 1. Much less 2. Somewhat less 3. Unchanged 4. Considerably more 5. Much more; 'Don't know'. Why?
Overall program evaluation	Overall, how successful was this program? 1. Absolute failure 2. Failure > success 3. Success = failure 4. Success > failure 5. Absolute success; 'Don't know'. Why?
Cause of policy success/failure	What are the causes of the CET program success/failure? Why?

Appendix B

MEE [2010] 136 Evaluation Framework

	Item	Relative Weighting	Indicators	Relative Weighting	Performance requirement
Performance (20)		20	1. Desired objectives achieved, and desired outcome produced	5	Achieve desired objectives and produce desired outcome.
			2. Satisfaction rate of rural population with rural environment	5	≥95%
			3. Input and output ratio	5	East region (3:1); Middle region (1:1); West region (0.5:1).
			4. Establishment of rural environmental protection team	5	Full-time staff in charge of program implementation and management hired in township.
Overall effect (60)	Water source protection	20	5. Sanitation rate of drinking water	5	=100%
			6. Water source water quality	5	Fulfil quality requirements of water source.
			7. Water source water quality guarantee	5	Water source was effectively protected.
			8. Water source pollution control	5	Pollution sources in drinking water protection areas were treated.
	Domestic waste	10	9. Domestic wastewater disposal rate	3	=100%
			10. Hazard-free treatment rate of domestic waste	3	≥70%
			11. Domestic waste facility operation and management	4	Stable operation; Follow-up management, and operating expense guaranteed.
	Domestic wastewater	10	12. Domestic wastewater disposal rate	5	≥60%
			13. Domestic wastewater disposal facility operation and management	5	Stable operation; Follow-up management, and operating expense guaranteed.

	Item	Relative Weighting	Indicators	Relative Weighting	Performance requirement
	Livestock and poultry pollution	10	14.Livestock and poultry waste comprehensive utilization rate (%)	5	≥70%
			15. Livestock and poultry disposal facility operation and management	5	Well operated and operating expense guaranteed.
	Left over industry and mining pollution	10	16.Pollution source management	5	Soil and water pollution were effectively controlled or treated.
			17. Pollution control facility operation and management	5	Well operated and operating expense guaranteed.
Environmental Quality (20)		20	18.Water quality	15	Meet the requirements of environmental function areas or environmental planning; Regional water environment improved; Solve problems of rivers and ditch ponds, such as black, smelly, clogging.
			19. Air quality	5	Meet the requirements of environmental function areas or environmental planning; Regional air environmental quality effectively improved.
Total		100		100	

Note. National Bureau of Statistics divides 31 provinces in China (including autonomous regions and municipalities) into eastern regions, western regions, and middle regions according to economic regions. Beijing belongs to eastern regions, and Inner Mongolia Autonomous Region belongs to western regions. In general, western regions were less developed than eastern regions; Hazard-free treatment of domestic waste refers to sanitary landfill, thermophilic composting, and incineration in China (Ministry of Ecology and Environment, 2012e).

Appendix C

Guidelines of the Revised MEE [2010] 136 Evaluation Framework for Domestic Waste Programs

Key. For indicators **1, 3, and 6**, partially meeting one of the requirements gets a 50% score; for indicator **2**, less than 50% satisfaction rate gets a 0 score, 50%-94.9% would be considered partial success and get 4 points, above 95% would get 8 points; for indicators **4 and 5**, the calculation was based on the actual waste transfer rate, e.g., $23 \times 60\% = 13.8$. Findings were derived from interviews, on-site observation, and qualitative visual assessments. The MEE [2010]136 evaluation framework regulates that the assessment results are divided into four grades: excellent, good, fair and poor. The **overall** corresponding assessment scores are: ≥ 90 = excellent, $\geq 70 - <90$ = good, $\geq 60 - <70$ = Fair, and < 60 = poor (Ministry of Ecology and Environment, 2010b).

	N	Indicators	Relative Weighting (out of 100)	Requirements	Data collection	Proposed method
Objective Achievement	1	Desired objectives achieved, and desired outcome produced	8	Achieve desired objectives and produce desired outcome.	Public documents; Observation; Qualitative audio and visual materials; In-depth interviews	Public documents were collected from websites and local government offices to provide detailed data; Observation and photos were taken to indicate if some of the objectives have been met; Interviews were conducted and the questions overlap with questions asked in Criterion 5 and 6 in Appendix A.
	2	Satisfaction rate of rural population with rural environment	8	$\geq 95\%$	In-depth interviews	How satisfied are you with the condition of the rural environment around where you live? (1. Very dissatisfied 2. Dissatisfied 3. Neither 4. Satisfied 5. Very satisfied; 'Don't know') Please explain your answer?
	3	Establishment of rural environmental protection team	8	Full-time staff in charge of program implementation and	Public documents; In-depth interviews	Public documents were collected from websites and local government offices to provide detailed data; Interview question: Were full-time staff in

				management hired in township.		charge of program implementation and management hired in township? (1. Yes; 2. No; 3 Don't know). If 'no', why not?
Overall Output	4	Domestic waste transfer rate	23	=100%	Observation; Qualitative audio and visual materials	Observe household waste deposit transportation in the morning and evening for two consecutive days, each observation took 15 minutes; Observe leftover of household waste in the village for two consecutive days, each observation depended on the size of the village; Observation notes and photos were taken.
	5	Hazard-free treatment rate of domestic waste	23	≥70%	Qualitative audio and visual materials; In-depth interviews	Photos were taken; Interview question: How much of the village's household waste was transported and treated in a hazard-free facility? (1. Very little 2. A little 3. A moderate amount 4. Most of it 5. All of it; 'Don't know') Please explain your answer?
	6	Domestic waste facility operation and management	30	Stable operation; Follow-up management, and operating expense guaranteed.	Qualitative audio and visual materials; In-depth interviews	Photos were taken; Interview question: How well do you think the household waste disposal facility is operated? (1. Very poorly 2. Poorly 3. Acceptable 4. Good 5. Very good; 'Don't know') Please explain your answer? Was there an approved operating budget? (1. Yes; 2. No; 3 Unsure) If 'no', why not?
Total			100			

Note. The revision index is based on original MEE [2010] 136 Index (Appendix B), of which item 3, 18, and 19 are excluded due to reliability concerns, and item 5-8, 12-17 are not included when programs targets exclusively on domestic waste. Relative weightings of the remaining items are changed accordingly.

Appendix D

Guidelines of the Revised MEE [2010] 136 Evaluation Framework for Domestic Wastewater Programs

Key. For indicators **1, 3, and 5**, partially meeting one of the requirements gets a 50% score; for indicator **2**, less than 50% satisfaction rate gets a 0 score, 50%-94.9% would be considered partial success and get 4 points, above 95% would get 8 points; for indicators **4**, the calculation was based on the actual rate, e.g., $23 \times 60\% = 13.8$. Findings were derived from interviews, on-site observation, and qualitative visual assessments. The MEE [2010]136 evaluation framework regulates that the assessment results are divided into four grades: excellent, good, fair and poor. The **overall** corresponding assessment scores are: ≥ 90 = excellent, $\geq 70 - <90$ = good, $\geq 60 - <70$ = Fair, and < 60 = poor (Ministry of Ecology and Environment, 2010).

	N	Indicators	Relative Weighting (out of 100)	Requirements	Data collection	Proposed method
Objective Achievement	1	Desired objectives achieved, and desired outcome produced	8	Achieve desired objectives and produce desired outcome.	Public documents; Observation; Qualitative audio and visual materials; In-depth interviews	Public documents were collected from websites and local government offices to provide detailed data; Observation and photos were taken to indicate if some of the objectives have been met; Interview questions overlap with questions asked in Criterion 5 and 6 in Appendix A, methods to get data are same.
	2	Satisfaction rate of rural population with rural environment	8	$\geq 95\%$	In-depth interviews	How satisfied are you with the condition of the rural environment around where you live? (1. Very dissatisfied 2. Dissatisfied 3. Neither 4. Satisfied 5. Very satisfied; 'Don't know') Please explain your answer?

	3	Establishment of rural environmental protection team	8	Full-time staff in charge of program implementation and management hired in township.	Public documents; In-depth interviews	Public documents were collected from websites and local government offices to provide detailed data; Interview: Were full-time staff in charge of program implementation and management hired in township? (1. Yes; 2. No; 3 Don't know). If 'no', why not?
Overall Output	4	Domestic wastewater treatment rate	38	≥60%	Public documents; In-depth interviews	Public documents were collected from websites and local government offices to provide detailed data; Interview: How much of your village's domestic wastewater has been diverted to a treatment facility? (1. Very little 2. A little 3. A moderate amount 4. Most of it 5. All of it; 'Don't know'). Do you know how the remaining wastewater was treated? Please explain.
	5	Domestic wastewater treatment facility operation and management	38	Stable operation; Follow-up management, and operating expense guaranteed.	Public documents; In-depth interviews	Public documents were collected from websites and local government offices to provide detailed data; Interview: How well do you think the domestic wastewater disposal facility operated? (1. Very poorly 2. Poorly 3. Acceptable 4. Good 5. Very good; 'Don't know') Please explain your answer? Was there an approved operating budget? (1. Yes; 2. No; 3 Unsure) If 'no', why not?
Total			100			

Note. The revision index is based on original MEE [2010] 136 Index (Appendix B), of which item 3, 18, and 19 are excluded due to reliability concerns, and item 5-8, 12-17 are not included when programs targets exclusively on domestic wastewater. Relative weightings of the remaining items are changed accordingly.

Appendix E

Human Ethics Approval Letter

Research Management Office

T 64 3 423 0817
PO Box 85084, Lincoln University
Lincoln 7647, Christchurch
New Zealand
www.lincoln.ac.nz

15 November 2017

Application No: 2017- 47

Title: Rural waste management in China - a comparative policy evaluation

Applicant: J Chen

The Lincoln University Human Ethics Committee has reviewed the above noted application.
Thank you for your response to the questions which were forwarded to you on the Committee's behalf.

I am satisfied on the Committee's behalf that the issues of concern have been satisfactorily addressed. I am pleased to give final approval to your project.

Please note that this approval is valid for three years from today's date at which time you will need to reapply for renewal.

Once your field work has finished can you please advise the Human Ethics Secretary, Alison Hind, and confirm that you have complied with the terms of the ethical approval.

May I, on behalf of the Committee, wish you success in your research.

Yours sincerely



Caitriona Cameron
Acting Chair, Human Ethics Committee

PLEASE NOTE: The Human Ethics Committee has an audit process in place for applications. Please see 7.3 of the Human Ethics Committee Operating Procedures (ACHE) in the Lincoln University Policies and Procedures Manual for more information.