



## The credibility and bargaining during the process of policy implementation—a case study of China's prohibition of open burning of crop straw policy

Shengyue Fan, Tianyu Zhang & Mengyao Li

To cite this article: Shengyue Fan, Tianyu Zhang & Mengyao Li (2020): The credibility and bargaining during the process of policy implementation—a case study of China's prohibition of open burning of crop straw policy, Journal of Chinese Governance, DOI: [10.1080/23812346.2020.1765453](https://doi.org/10.1080/23812346.2020.1765453)

To link to this article: <https://doi.org/10.1080/23812346.2020.1765453>



Published online: 25 Jun 2020.



Submit your article to this journal [↗](#)



Article views: 17



View related articles [↗](#)



View Crossmark data [↗](#)



RESEARCH ARTICLE



# The credibility and bargaining during the process of policy implementation—a case study of China's prohibition of open burning of crop straw policy

Shengyue Fan, Tianyu Zhang and Mengyao Li

School of Economics, Minzu University of China, Beijing, China

## ABSTRACT

The truncated decision-making of China's public policy process will inevitably lead to palpable bargaining during implementation. However, there are few concerns and researches at present focus on bargaining intensity between government and social actors. Therefore, the Credibility Thesis is introduced to the policy process in this paper, and the differences of credibility perceived by the public, grassroots government and intermediate government are supposed to reflect the bargaining intensity among them. Based on the adjustability of policy targets and credibility differences, policy implementation is divided into eight types to explain diverse situations more systemically and effectively during policy implementation. Besides, taking prohibition of open burning of crop straw policy (POBSP) as an example, this paper measures the changes of credibility at three points of time during policy implementation and analyzes the bargaining situation among farmers and multi-level governments. The case study proves the applicability of the theoretical framework of the policy implementation based on credibility thesis. It can show the feedback procedure and mechanism of policy implementation, and provide a new perspective for the policy analysis and improving policy performance.

## ARTICLE HISTORY

Received 24 February 2020  
Accepted 3 May 2020

## KEYWORDS

Policy credibility;  
bargaining; policy  
implementation; public  
policy; China

## 1. Introduction

Since this century, with the economic and social development, the Chinese government has faced all kinds of unprecedented and complex public policy problems brought by Compressed Development.<sup>1</sup> The rationalism school regards the process of public policy as a process of merit-based selection. It includes all segments of problem definition, agenda setting, project assessment, policy decision, policy implementation and policy assessment.<sup>2</sup> However, the overall optimization requires enough rationality of decision-makers, and the policy decision and implementation are in the changing social situation, with great uncertainty. Meanwhile, policies are constantly being amended. Therefore, the government is in a 'Muddling Through' way to govern the

nation,<sup>3</sup> and always takes rational development as an ideal process benchmark of public policy and strives for that.

China's public policy will be confronted with great 'time constraints' under the dual constraints of the external pressure of special social attention<sup>4</sup> and the accountability system of the central government.<sup>5</sup> The government often lacks time to make detailed policy segments as problem definition, program comparison, trade-offs and so on. Therefore, it shows new features of trade-off and negotiation that the policy-making process is truncated, and the policy implementation is regarded as a supplement to policy-making.<sup>6</sup> Relying on the truncated policy-making mechanism, the government can resolve the social pressure and multi-interest pattern when making decisions, and quickly improve the ability to cope with external pressure. To remedy the missing procedure of the truncated decision-making, policy implementation is represented as a trade-off, negotiation and bargaining process.<sup>7</sup> This mechanism includes both bargaining between the governments of different levels and the game and negotiation between the grass-roots government and the public.

Though there are kinds of literature on policy-making and policy implementation studying the game and coordination between different level governments, there is still a lack of analysis on the bargaining intensity between the government and the public. If public policy is in line with public expectations and preferences, it will be considered highly credible and the public will see the implementation as a smooth process with a low intensity of bargaining and vice versa. It can be seen that public approval of a policy is the key to policy implementation and performance.

The credibility thesis is the embodiment of the function of an institution.<sup>8</sup> Peter Ho argues that the institution is endogenous and its long-term existence is determined by its function that social actors expect the institution to play. It is the credibility, rather than the clear property rights or formality and integrality, that can help judge the suitability of the institution.<sup>9</sup> The credibility thesis explains why some institutions that seem imperfect or even obscure about property rights persist and why they are supported, while some seemingly perfect institutions do not work well. Credibility Thesis is considered to be the key to opening the black box of the institution.<sup>10</sup>

The credibility thesis has been used to research land policy,<sup>11</sup> ecological management policy,<sup>12</sup> ecological restoration,<sup>13</sup> artisanal mining,<sup>14</sup> urbanization policy,<sup>15</sup> water resources management,<sup>16</sup> etc., which show its compelling ability to policy interpretation. However, the current research on credibility thesis mainly focuses on reflecting the functions of the institution. How to form the credibility of the institution, and how credibility plays a role in the process of policy implementation, are still lack of research.

Given the problems above, this paper puts forward a theoretical framework based on the policy implementation, introduces institutional credibility into the policy implementation model, and holds that the difference of credibility perceived by the various actors in the policy implementation determines the intensity of the negotiation and game, which directly push the feedback mechanism in implementation and facilitate policy targets. Under this theoretical framework, taking prohibition of open burning of crop straw policy (POBSP) as a case, this paper applies institutional credibility to analyze the bargaining process during policy implementation between different levels of

government, and between government and social actors. It provides a new perspective to understand and describe government behavior accurately and to analyze the build process of policy performance.

## 2. A credibility theoretical framework for China's policy implementation

### 2.1. Theoretical framework

Since the reform and opening-up in 1979, China has seen a continuous and rapidly growing economy for 40 years, achieving remarkable economic and social development.<sup>17</sup> Simultaneously, public policy has become more complicated, and the policy process has become increasingly democratic and scientific. However, as the largest country in transition, China's public policy reforms have not been caught in the 'dilemma of democratic decision-making'. On the contrary, public policy reforms pushed in many areas show an advantage of 'quick to solve problems', and also received 'timely' responses of local government. This phenomenon has aroused great concern in academia: Why can China maintain the stability of the political system and push forward the reform when making rapid decision-making in the public policy process?

Academics' research on China's 'fragmentation of authoritarianism' highlights the role of the political factors embedded in policy implementation.<sup>18</sup> Political elements such as power structure, relationship networks and interest games have always been the basic perspectives of observing and describing the process of China's policy implementation. The behaviors of local government and officials show their self-interest in the principal-agent structure of policy implementation.<sup>19</sup> The self-interest of local government officials was to some extent the driving force behind the implementation.<sup>20</sup> Due to the decentralized cadre responsibility and evaluation system in the political system, local officials have the motivation to achieve 'hard index' of clear targets, quantifiable, and with 'one vote veto' nature, but ignore the vague, unquantifiable or less binding 'soft index'.<sup>21</sup> In response to external pressure and diverse interests, the government relies on 'truncated decision-making' to make a quick decision and on 'consultation of execution' to promote implementation, and makes up for the shortcomings of hasty decision-making in policy implementation.<sup>22</sup> It highlights some structural characteristics of China's policy implementation. Zhou Xueguang, Lian Hong revealed that there will be an incomplete contract between the superior and subordinate officials in the government. These officials 'collude' and bargain with each other and form an informal institution in the political system.<sup>23</sup>

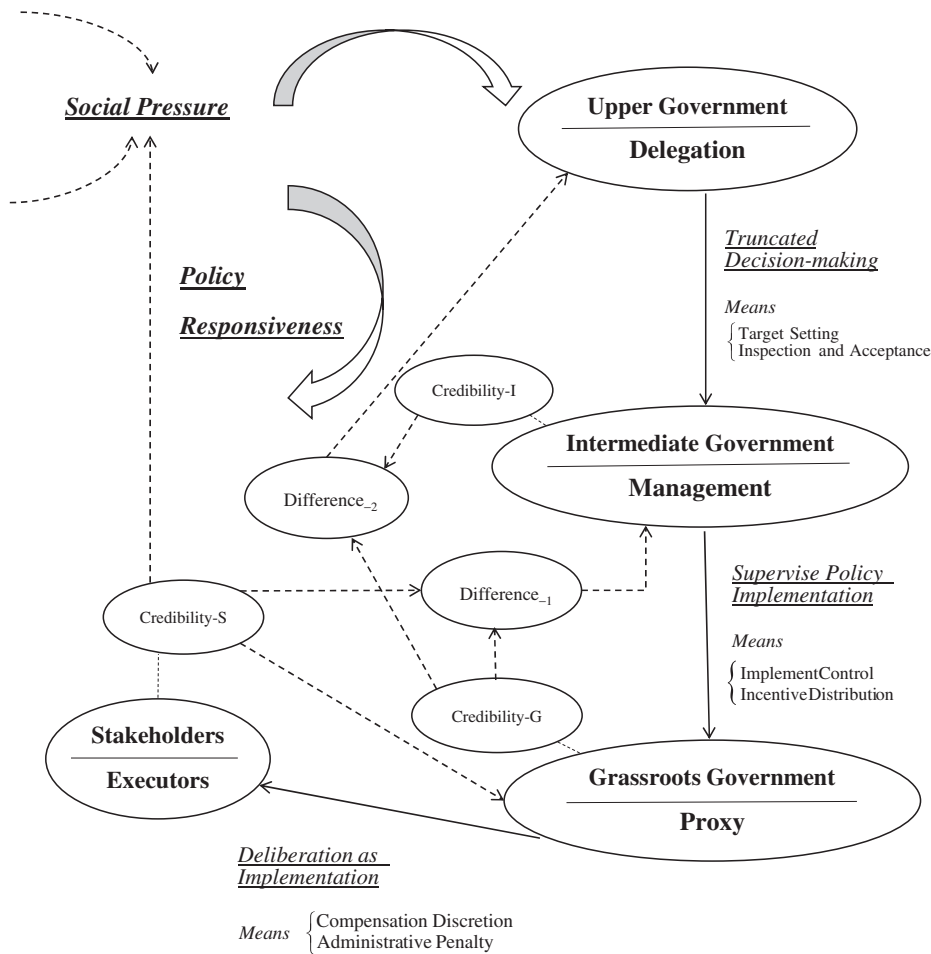
The implementation of public policy is a dynamic process, and the central government, local government, political system, organizational structure, incentive mechanism and other factors will affect the performance of policy implementation. Policy implementation is accomplished in alternating situations between formal structures and 'relationship-led' informal structures.<sup>24</sup> In 'the Ambiguity-Conflict Model' of policy implementation put forward by Matland, the implementation situation is an important factor affecting the policy performance,<sup>25</sup> and the implementer will change the administrative implementation under certain 'scenarios'.<sup>26</sup>

Officials have a great initiative in the implementation of public policies,<sup>27</sup> and will constantly make political decisions based on local conditions, which are also the embodiment of the national will. In particular, the implementation of public policy sometimes relies on political forces under China's political system.<sup>28</sup> Political potential energy is the inherent characteristic of the policy implementation under China's special political system and shows the political logic of the policy implementer.<sup>29</sup>

Under the unitary system, the time dimension is indeed an important perspective to understand the process and governance of China's public policy. Xue and Zhao<sup>30</sup> believes that the procedure of public policy-making has been truncated, and the implementation process serves as a supplement to the policy-making, featuring trade-off and negotiation. In policy implementation, the negotiation and bargaining between the government and the public (social actors), and between the multi-level governments are the core of this theoretical model. The researches on policy implementation, such as Top-Down and Bottom-Up Theory,<sup>31</sup> Ambiguity-Conflict Model,<sup>32</sup> Strategic Action Field Framework,<sup>33</sup> Multiple Streams Framework<sup>34</sup> pay great attention to the interrelation and bargaining among the actors. The intensity of negotiation and bargaining in implementation is certainly related to the types of policy: when the policy meets the expectations of the public, they have a strong willingness to participate in, then policy implementation will be relatively smooth, and the intensity of bargaining is weak; when the policy violates the expectations of the public and does not meet their interests, they are not willing to participate in the policy, or even resist the implementation. It can be seen that there is a close relationship between the bargaining intensity and the credibility of the policy.

Peter Ho<sup>35</sup> points out that the performance of the institution is determined by its function, and can be measured by the credibility. He puts forward the institutional analysis framework of FAT (Formal, Actual and Targeted Institutional Framework). In his framework, three indicators, the institutional perception of social actors, the conflict perception of social actors, and the institutional structure change of property right, are used to make the quantitative analysis of institutional credibility.<sup>36</sup> According to Credibility scales and intervention (CSI) checklist, institutional credibility can be divided into five levels: high, medium-high, neutral, medium-low, and low. Credibility thesis is a new theory put forward in recent years. While it tries to expand the applicable fields, the theory has not involved in policy formulation and implementation under a certain institutional environment.

This paper combines the analysis of bargaining in policy implementation with the theory of institutional credibility, constructs a theoretical framework of policy implementation based on credibility, and remedies the deficiencies of the existing policy implementation theory. This paper combines the principal-supervisor-agent structure proposed by Tirole<sup>37</sup> with the theoretical model of the internal authoritative relationship of the Chinese government proposed by Zhou and Lian<sup>38</sup> to conceptualize the controlling force of governments at all levels as the right of target-setting, inspection and acceptance, and incentive distribution. By combining these three rights with different levels of governments, the central government (principal), intermediate government (manager) and grass-roots government (agent), a public policy implementation model is formed. Figure 1 shows the theoretical framework of the bargaining among



**Figure 1.** The theoretical framework of the policy implementation process based on credibility (TFPIC).

various actors in policy implementation which applying TDDI proposed by Xue and Zhao<sup>39</sup>, with Peter Ho's credibility thesis as the link of policy feedback mechanism.

## 2.2. Policy credibility and the feedback of implementation

In Figure 1, the dotted line on the left is the feedback path in policy implementation, which reflects the bargaining process and intensity of policy implementation. On the bottom left of Figure 1, when the policy transmits to the stakeholders, they will assess the policy's credibility (Credibility-S). When the compensation and the implementation conditions of this policy achieve their expectations, they will think the policy is credible and therefore will complete the policy implementation with the grass-roots government. When policy compensation and implementation condition fall short of their expectations or are quite different from their expectations, they will consider the policy to be of less credible or non-credible and they are indifferent or even rejected to the policy implementation.

Grass-roots government, as the implementer, will assess the credibility (Credibility-G) based on the information they hold and their familiarity for residents. If the policy is highly credible, and the residents can accept implementation conditions and compensation, the policy implementation will be less difficult. If the policy cannot meet the needs of the residents and its credibility is low, it is difficult to implement the policy. To promote policy implementation, the grass-roots government will endeavor to negotiate and bargain with residents. The bargain intensity of the grass-roots government and residents depends on the difference between Credibility-S and Credibility-G. The larger the credibility's difference, the larger the cognitive differences between the grass-roots government and residents. That also means that it is difficult to implement the policy, and the grass-roots government will encounter larger pressure. In the face of implementation pressure, the grass-roots government, on one hand, will lower the residents' expected compensation by negotiation, and adjust the policy targets to reduce the difficulty of implementing to the extent possible, which is the main reason for the uncertain policy outcomes;<sup>40</sup> on the other hand, will submit the problems encountered during the implementation to the intermediate government (manager) through the hierarchical political systems.

When receiving the policy targets arranged by the upper government, the intermediate government, as the supervisor and the manager of the policy, will have an assessment (Credibility-I) of the policy credibility based on the available information. When they receive reports from the grass-roots government on the policy implementation, they will verify the problems encountered by the grass-roots government response to the policy implementation by taking inspection on the grass-roots government, listening to the report, surveying directly into the residents or other means. Then the intermediate government will revalue policy credibility based on the information gathered (Credibility-I). Their intensity of the policy regulation depends on the difference between Credibility-I and Credibility-G. A larger difference leads to that the intermediate government adopts incentive means more frequently and possibly acquiesce in the adjustment of policy targets by the grass-roots government. Meanwhile, it is possible to submit the difficulties encountered in the policy implementation to the upper government by the information transferred through the hierarchical political systems. After receiving the reports of the intermediate government on the difficulties in implementation, the upper government will adopt the same administrative means as the intermediate government to discern the specific situation and problems in policy implementation. Considering public pressure on the policy implementation, the upper government may adjust the policy original targets or even decide to quit the implementation.

Based on the analysis above, it can be seen that the perception of the difficulty during policy implementation of multi-level government causes the difference of their credibility. For one policy, the upper government, as the policymaker and the principal, will be full of confidence in the policy; the grass-roots government, as the agent of policy implementation, has a better understanding of the needs of the residents who abide by the policy. Grass-roots government is also a coordinated player in policy implementation and knows the real pressures in implementation, so the credibility is generally lower than that of upper governments. The intermediate government is the

**Table 1.** Division of policy implementation types.

		Immutable policy target	Adjustable policy target
Large difference of credibility	Adjustable expectations of executors	The government maintains administrative pressure, the public obeyed, the policy can be implemented	The public and the government both give in, and the policy is successfully implemented.
	Immutable expectations of executors	The 'empty institution' exists in name only (Ho, 2016a).	The grass-roots government and the intermediate government adjust the policy target, and reduce the resistance to implementation. The policy can be implemented.
Small difference of credibility	Adjustable expectations of executors	The intermediate government and the grass-roots government will add extra target to the original one, and the policy result is beyond expectation.	The policy has been implemented smoothly, and at the same time, the grass-roots government has carried out its own targets.
	Immutable expectations of executors	The upper government will supervise and inspect the implementation; grass-roots government and intermediate government 'collude' together, and the policy can be implemented.	The policy can be carried out by concessions of the government.

bridge between the grass-roots government and the superior government. It is the difference in policy credibility between different levels of government that drives the feedback path of policy implementation.

Every actor has its targets and interests which will cause a difference in credibility. The process of consultation and bargaining in policy implementation is the process of the government and the public seeking the balance of their interests.

### 2.3. Classification of policy implementation types

Consultation and bargaining in implementation are determined by the difference in policy credibility between the residents and the grass-roots government. According to the credibility, the adjustability of residents' expectations and the nature of the policy target, the policy implementation is divided into eight types (Table 1). Table 1 effectively explains the seemingly contradictory phenomenon of the intermediate government in the policy implementation: on the one hand, it does its utmost to exert greater pressure on the grass-roots government and forces subordinate officials to take measures to ensure that the tasks assigned to them are fulfilled.<sup>41</sup> On the other hand, in response to the supervision and inspection by the upper government, the intermediate government will adopt various strategies and even collude with the grass-roots government to skimp on or weaken the policy implementation.<sup>42</sup>

The decrease in the credibility difference is no more than two ways: the residents lower the expectation of the policy compensation, or the grass-roots government lowers the policy targets. Clearly, the grass-roots government tends to change policy targets to reduce the difference of policy credibility and implement a trouble-free policy. However, whether the policy targets can be changed is determined by the nature of



the policy, which can be broadly divided into two categories: one is the immutable nature. There are only two options for immutable policy targets: implementation and rejection. Taking POBSP as an example, it is difficult for the grass-roots government to adjust the policy targets, and the pressure of policy implementation is hard to reduce. Therefore, the grass-roots government will request the intermediate government to provide more compensation or adjust the policy targets. The second is the variable nature of the policy targets. There is a continuous shift spectrum between implementation and the rejection, and the policy targets can slide between implementation and rejection. The grazing ban policy, for example, can be adjusted from total prohibition, partial prohibition to free grazing according to the difficulty of implementation. China's prohibition policy of grassland grazing, which began in 2002, has been implemented in a top-down way without negotiation with farmers and herders. The government sent a large number of caretakers to patrol, and the illegal grazing herders would be punished accordingly. The strict supervision was offset by the flexible confrontation of herders: by daylight, they were monitored by the government's grazing-ban brigades, and then they will graze at night. Besides, some means were often used to evade or reduce fines, such as interceding with acquaintances, bribing officials, and even tangling by an importunate woman. The targets of the policy have been changed, and the prohibition policy of grassland grazing has also become un-credible<sup>43</sup>.

The precise definition and measurement of institutional credibility are the key to success for the theoretical framework of the policy implementation based on credibility (TFPIC). The following example is the implementation of the prohibition of open burning of crop straw policy (POBSP) in Baiquan County, Heilongjiang Province. We quantitatively measure the credibility and its changes perceived by farmers, grass-roots governments and intermediate governments at different times of policy implementation, and analyze the policy changes in the implementation, so as to verify the feasibility of TFPIC.

### 3. The measurement of credibility and data source

#### 3.1. The measurement of credibility

Peter Ho designed indicators by three dimensions, which are the institution perception, conflict perception and institutional change to measure the credibility. This paper mainly focuses on policy implementation and relevant changes during the observed period to measure policy credibility. Institutional change is not involved in this process because it is difficult for actors to get a consensus to set a precise benchmark and the institutional change in credibility calculation is of less weight.<sup>44</sup> Therefore, only institutional perception and conflict perception were considered to measure policy credibility.

Four questions were set for institutional perception: What is the actual effect of the policy? What is the actual impact on yourself? Do you think the policy is fair? Are you satisfied with the current policy? Five questions were set for conflicts perception: source: the type of conflicts; frequency: the number of conflicts occurred in a given time; group: in which groups the conflict occurred; results: whether the conflicts were

**Table 2.** POBSP Credibility indicators and weights.

Indicator	Weight of farmers' indicators	Weight of government's indicators
Part 1 institutional perception		
Policy Awareness Section	0.5	0.5
1 What results have been achieved?	0.2	0.4
1.1 What has changed of the air pollution?	0.2	0.4
1.2 How do you dispose crop straw?	0.8	0.6
2 What are the impacts of the POBSP on you?	0.4	0.2
3 Is the POBSP fair?	0.2	0.1
4 Are you satisfied with POBSP?	0.2	0.3
Part 2 conflicts perception of institution		
Conflict Perception of Policy	0.5	0.5
1 Did you comply with the POBSP?	0.2	0.2
2 Did the POBSP cause conflicts?	0.2	0.2
3 In which groups did conflicts occur?	0.2	0.2
4 How long did the conflicts last?	0.2	0.2
5 Are you satisfied with the resolution of the conflicts?	0.2	0.2

resolved and whether the resolution was satisfactory; duration: the length of the conflict, for a total of five evaluation dimensions (see Table 2).

The determination of the various indicators' weight in Table 1 is a key part of the quantitative measurement of the policy credibility. This paper took the AHP method (analytic hierarchy process) to endow the weight of every indicator.<sup>45</sup> The weight of indicators are calculating as follows:

Determination of the indicators' weight in the government dimension. We invited 15 officials from the Agriculture and Livestock Bureau and Environmental Protection Bureau of Baiquan county, and a research group composed of authors held a seminar on the evaluation of the POBSP's performance, and the team also emphasized the necessity of evaluation. Under the guidance of the research team, the judgment matrix of relevant indicators was filled according to the scale (Table 2).

Determination of indicators' weight in the farmer dimension. Fifteen farmers were chosen to participate in a similar seminar in the area where the POBSP was implemented and the research team introduced them to the indicators in Table 1. In order to eliminate the systematic error of survey data and weights caused by investigating the same farmers, the 15 farmers were randomly selected and were not in the survey samples. Under the guidance of the research group, the judgment matrix of relevant indicators was filled according to the scale (Table 3).

Putting the matrix of judgments obtained in the above process into the software (V.12.1) (<http://www.ahp.tools>) of YAAHP Hierarchical analysis, the judging matrix and weight values for each indicator (see Table 1) were got. To eliminate the deviation of individual perception of the indicator weight, 15 judgment matrices were averaged out to define the final weight. For the credibility of the indicator  $i$ ,

$$P_i = w_i f_i \quad (1)$$

where  $w_i$  is assumed to be the weight of the index  $f_i$ .

**Table 3.** Scale explanation table.

Scale value	Description
1	Two indicators are equally significant
3	One indicator is slightly more significant
5	One indicator is moderately more significant
7	One indicator is intensively more significant
9	One indicator is definitely more significant
2,4,6,8	Median of judgment

Suppose Credibility-S, Credibility-G, Credibility-I to be the evaluation value of policy credibility of executors, the grass-roots government and the intermediate government, respectively. Then:

$$\text{Difference-1} = \text{Credibility-G} - \text{Credibility-S} \quad (2)$$

$$\text{Difference-2} = \text{Credibility-I} - \text{Credibility-G} \quad (3)$$

### 3.2. Data source of POBSP

The previous two surveys were conducted in late December 2018 and mid-February 2019 respectively. After learning that the POBSP had changed, we made our third investigation in late March 2019.

178 residents from Dazhong village, Yonghe village, Dongfeng village of Xingnong and Jianguo villages were randomly selected for investigation. To ensure the authenticity of the farmers' answers, we adopt the method of the semi-structured interview to take household interviews, which avoids the interference of sampling form to the real ideas of individuals as much as possible.

For the investigation of the grass-roots government, 27 officials responsible for POBSP from the Dazhong village and Xingnong town were selected as responders. For the investigation of the intermediate government, our team selected 15 officials from the Agriculture and Livestock Bureau of Baiquan county, Environmental Protection Bureau (responsible for implementing POBSP) and some personnel of environmental pollution control. Sample characteristics are shown in Table 4.

To ensure the comparability of survey results, the samples of three surveys are identical.

## 4. The credibility of POBSP and the bargaining in the implementation—a case study of Baiquan county in Heilongjiang province

### 4.1. Study area

The study was carried out in Baiquan county of Heilongjiang Province, China. Located in central Heilongjiang, eastern Qiqihar and between Wuyuer River and Tongken River, Baiquan lies in the transition area between the ranges of Xiaoxinganling Mountains and Songnen Plain, extending from the piedmont plain of eastern Xiaoxinganling Mountains to lower plain in the southwest edge. The county area is 3599.15 km<sup>2</sup>, of which the arable land area is 250,200 ha, grassland area 11,900 ha, water area 53,000 ha. The average annual precipitation is 490 mm, mostly concentrated in July and August each year. The average annual temperature of 1.8 degrees C, and its frost-

**Table 4.** Survey the characteristics of the sample of POBSP.

<i>N</i> = 220	Overall sample quantity	Farmers	Grass-roots government	Intermediate government
The number of respondents	220	178	27	15
Sex (%)				
Male respondents	73.18	71.3	81.48	80
Female respondents	26.82	28.7	18.52	20
Age distribution (%)				
≤20	0	0	0	0
21–30	0.45	0.56	0	0
31–40	10.91	10.11	14.81	13.33
41–50	35.45	31.46	51.85	53.33
51–60	41.36	43.26	33.33	33.33
≥61	11.82	14.04	0	0
Education (%)				
Less literacy	11.36	14.04	0	0
Primary school	24.09	29.78	0	0
Junior high school	41.36	49.44	7.41	6.67
High school	11.82	6.74	33.33	33.33
Higher education	11.36	0	59.26	60
Household net income		27,908.54		
Agricultural income (%)		63.77		
Non-agricultural income (%)		36.23		
Family population		3.13		
Amount of labors (%)		67.74		
Amount of non-labors (%)		32.26		
Family cultivated area		57.22		
Working outward (%)		23.03		

*Note.* The data in the table were calculated based on the first sample survey.

free period averages last 122 days. In 2017, the county's total population was 596,000, of which 515,000 were rural people. The GDP was 8.73 billion yuan (1 US dollar = 6.9 RMB). The proportion of the three industries is 36.3: 31.6: 32.1. Its economy is dominated by the agricultural industry. The county's total grain output was 828,000 tons, including 505,000 tons of corn and 274,000 tons of soybeans.

#### 4.2. Implementation of POBSP in Baiquan county

The POBSP was fully implemented in Baiquan County in 2018. All villagers were required to sign a pledge of not burning straw during the province's prescribed period in September 2018. In the autumn of 2018, the non-burning propaganda spread throughout the county. In October 2018, the Baiquan County People's Government issued another announcement: from the date of the announcement to 15 May 2019, there will be a total prohibition on the open burning of straw in Baiquan County, and the offender shall be fined no more than 2000 yuan once.

To improve the straw disposal technology, the county finance fully supported the construction of 4 straw block fuel stations, respectively, located in Fuye village of Sandao town, Xingfa village of Baiquan town, Tuanjie village of Shangsheng township and the Dazhong village of Dazhong township, and the annual total processing capacity achieved about 15,000 tons. There are 5 straw block fuel stations under construction, with a planned annual total processing capacity of 12,500 tons. However, even if all were set up and put into operation, the utilization capacity of the straw block is less than 10.1% of the straw output. Baiquan county government planned to subsidize

the main bodies engaged in straw production and management, including farmers, family farms, cooperatives and leading enterprises, and mobilized social forces for straw disposal.

POBSP was implemented by the government of all townships and towns in the county. The county government stipulated that if a large-scale burning of straw occurred, and was found by the supervision of the upper government, the main leaders of the township government should be held accountable, and that the effect of POBSP implementation should be considered as the performance appraisal of the grass-roots government. All relevant governments draw up personnel that can be mobilized to patrol the field in an all-round manner to stop the burning of crop straw. According to the actual situation of the local government, the straw-burning will be fined 2000 yuan once, and also there will be punished for administrative detention.

In 2018, POBSP was implemented in the village committees, which informed and confirmed each villager in an aspectant way. Yet, villagers used to dispose of the straw by the way of on-site burning before 2018. If incineration is prohibited, it is necessary to bunch the straw and transport them to the disposal station designated by the county government. The cost of bunching and transporting is 300–450 yuan/ha, and the reason for the diverse cost is that there is a difference in transport distance. Because it is highly cost caused by the average farmland (4 ha), farmers generally oppose this policy. They don't, however, dare to burn straw under the strong constraints of government policies. In our investigation, we learned that there was a burning point of straw, which was later stopped and punished by township government officials in November 2018.

### **4.3. The credibility and policy implementation of POBSP**

The key factor determining the success of the implementation is whether the policy meets the expectations of the executor. A policy that meets the expectations of the executors is considered credible and easy to implement, otherwise, it will be difficult to implement. The policy credibility is measured by the indicators in Table 1, based on Peter Ho's approach. According to the time-node changes in policy implementation, we conducted three surveys. The survey periods were in mid-December 2018 (first survey), mid-February 2019 (second survey) and late March 2019 (third survey) and the changes of credibility by different actors were measured at different periods.

#### **4.3.1. The first survey**

This sample survey was conducted in mid-December 2018, and the credibility of POBSP was measured (see Table 5).

The values range for credibility is [0,1]. The larger the value, the larger the credibility. As can be seen from Table 5, the farmer's credibility for POBSP is 0.2759, which is relatively low. In the composition of farmers' credibility, the results of policy accounts for 17.81%, whether to obey with POBSP 35.76% and the sum of them is 53.63%. These two large values are the result of impelling implementation by the government, which cannot reflect the real expectations of farmers to POBSP. Only 46.37% of the above values are truly reflected in the expectations of farmers to POBSP, with a

**Table 5.** The credibility of POBSP in first survey.

	Farmers (N = 178)		Grass-roots government (N = 27)		Intermediate government (N = 15)	
	Credibility	Percent	Credibility	Percent	Credibility	Percent
<b>1. Institutional perception</b>	<b>0.1303</b>	47.23	<b>0.3206</b>	50.99	<b>0.4063</b>	49.90
1.1 What results have been achieved?	0.0493	17.87	0.1399	22.24	0.1723	21.15
1.2 What are the impacts on yourself?	0.0259	9.37	0.0482	7.66	0.0600	7.37
1.3 Is POBSP fair?	0.0250	9.06	0.0343	5.45	0.0400	4.91
1.4 Are you satisfied with POBSP?	0.0302	10.93	0.0984	15.64	0.1340	16.46
<b>2. Perception of conflicts</b>	<b>0.1456</b>	52.77	<b>0.3081</b>	49.01	<b>0.4080</b>	50.10
2.1 Did you comply with the POBSP?	0.0987	35.76	0.0971	15.44	0.1000	12.28
2.2 Did POBSP causing conflicts?	0.0179	6.47	0.0571	9.07	0.0894	10.97
2.3 In which groups did conflicts occur?	0.0254	9.21	0.0230	3.65	0.0200	2.46
2.4 How long did the conflicts last?	0.0007	0.24	0.0585	9.30	0.1000	12.28
2.5 Are you satisfied with the resolution of the conflicts?	0.0030	1.09	0.0726	11.55	0.0987	12.11
<b>Credibility of POBSP</b>	<b>0.2759</b>		<b>0.6287</b>		<b>0.8143</b>	

Note. The data in the table were calculated based on the first sample survey.  
The bold values are the summation of credibility.

credibility value of 0.1279. This shows that even if the policy against the expectations of farmers, by the impelling way, the policy can still make a certain effect.

The grass-roots' credibility for POBSP was 0.6287, which is about 2.28 times of the farmers. According to Equation (2), it is known that,

$$\text{Difference-1} = \text{Credibility-G} - \text{Credibility-S} = 0.6287 - 0.2759 = 0.3528$$

The larger the Difference-1, the greater the gap in POBSP recognition between grass-roots governments and farmers, and the harder of policy implementation. Under the urging of the intermediate government, there is increasing pressure on policy implementation.

To implement POBSP, the grass-roots government has been ordering all staff except those on the duty of towns and townships every day since October to go to farmland to prevent farmers from burning straw sneakily. For reasons of increasing the density of inspections, the grass-roots government has set up POBSP patrol teams in each village, with 8-10 members, which were responsible for the village's POBSP supervision.

Under the strict supervision of POBSP, farmers can only collect their crop straw and pile them to the farmland with the cost of 8 yuan per acre, or bunch the straw and send them to straw disposal station established by County Government with the cost of 15–20 yuan per acre. The higher cost and higher labor input turn down the willingness of farmers to participate in PBOSP. On the one hand, the grass-roots government urged farmers to bunch up crop straw; on the other hand, they reported difficulties in policy implementation to the central government to get more support, and also, they hoped that the upper government can apprehend their efforts in implementation.

The county government, as a policy management agency, will estimate the credibility of PBOSP based on the information reflected by various channels. In Table 5, the

intermediate government's credibility for POBSP was 0.8143, which is about 1.30 times the credibility of the grass-roots government. According to Equation (3),

$$\text{Difference-2} = \text{Credibility-I} - \text{Credibility-G} = 0.8143 - 0.6287 = 0.1856$$

The value difference indicated the cognitive difference between the intermediate government and the grass-roots government on the farmers' acceptance of POBSP. The greater the value difference, the greater administrative pressure of the intermediate government force on the grass-roots government, and thus the intermediate government may force much inspection and incentive. Of course, as the difference increases, the intermediate government is more likely to submit the problems of POBSP to the upper government with delegated authority according to the hierarchy system.

#### 4.3.2. The second survey

It is the first year for Baiquan county to implement the POBSP. After the harvest of crops, due to the strict supervision of the grass-roots government, crop straw was in the mass not burned. Except for a small amount of straw being transported to a government-designated straw disposal station, most of the straw was stacked in farmland, and the land plowed after harvest has not been carried out. Thus, from early March to early April of the second year, plowing must be carried out, otherwise, it will directly affect the planting of crops. With the approaching of plowing time in March, the farmers' behaviors of burning straw occasionally occur, which brings more pressure and difficulty to the grass-roots government to implement POBSP.

In late February 2019, we investigated the credibility of three actors in the implementation of POBSP again and calculated whether the credibility varies according to the difficulty of policy implementation (Table 6).

As can be seen from Table 6, the credibility of three actors in the implementation of POBSP in mid-February 2019 decreased to certain degrees, among which the credibility of farmers decreased most, at 29.1%, and that of grass-roots government and the intermediate government is 31.90% and 6.46%. Besides, in the farmer group, the policy results and policy obedience account for 63.16% of the farmers' credibility, and the credibility that reflecting the farmers' willingness to implement POBSP is only 0.0719, account for 36.84%. This means that farmers regard the POBSP as low credible and policy implementation was under great resistance.

The credibility difference between farmers and the grass-roots government does not change much from the first survey (Difference-1 = Credibility-G-Credibility-S = 0.3460). The difference between intermediate government and the grass-roots government is 18.75% larger than the first survey (Difference-2 = Credibility-I-Credibility-G = 0.2204), which shows that the pressure on the intermediate government to implement policy is increasing.

Due to the conditional limit, it is impossible to measure the credibility and its changes of entrusted government. However, it can be inferred that if the implementation pressure is increased, it is more likely for the intermediate government to report difficulties to the upper government and propose suggestions for adjusting the POBSP.

**Table 6.** The credibility of POBSP in second survey.

	Farmers (N = 178)		Grass-roots government (N = 27)		intermediate Government (N = 15)	
	Credibility	Percent	Credibility	Percent	Credibility	Percent
<b>1. Institutional perception</b>	<b>0.1002</b>	51.28	<b>0.2872</b>	53.06	<b>0.3584</b>	49.90
1.1 What results have been achieved?	0.0430	22.01	0.0430	7.94	0.1611	21.15
1.2 What are the impacts on yourself?	0.0259	13.23	0.0482	8.90	0.0600	7.37
1.3 Is POBSP fair?	0.0127	6.47	0.0269	4.96	0.0384	4.91
1.4 Are you satisfied with POBSP?	0.0187	9.57	0.0817	15.08	0.0990	16.46
<b>2. Perception of conflicts</b>	<b>0.0952</b>	48.72	<b>0.2541</b>	46.94	<b>0.4033</b>	50.10
2.1 Did you comply with the POBSP?	0.0127	6.48	0.0622	11.49	0.1067	12.28
2.2 Did POBSP causing conflicts?	0.0045	2.28	0.0571	10.54	0.0894	10.97
2.3 In which groups did conflicts occur?	0.0064	3.25	0.0230	4.24	0.0200	2.46
2.4 How long did the conflicts last?	0.0002	0.08	0.0585	10.81	0.1000	12.28
2.5 Are you satisfied with the resolution of the conflicts?	0.0001	0.07	0.0534	9.86	0.0874	12.11
<b>Credibility of POBSP</b>	<b>0.1954</b>	100.00	<b>0.5413</b>	100.00	<b>0.7617</b>	100.00

Note. The data in table were calculated based on the second sample survey.  
The bold values are the summation of credibility.

#### 4.3.3. The third survey

The video conference (from the Internet) on preparing the spring-sowing in Heilongjiang Province, has made it clear that the agricultural and rural bureau of all counties and districts should accelerate the tasks of straw-leaving and field-cleaning. Three free-burning things were also clearly stipulated: residues of crops, straw of high stubble, desolate grass and jetsam around the field or ditch. Their purpose was to reduce plant diseases and insect pests.

Such a policy is a revision of the POBSP. How does the modified POBSP implement? How does it affect the games among residents, grass-roots government and intermediate government? We conducted a third survey with these questions in late March 2019.

When we went to the countryside, we found that the crop straw stacked in the farmland was gone, leaving only the ashes of burned-straw. From the burning remains, it is clear to see that the location of straw burning is in the farmland or the edge channel of the farmland.

The survey results of the policy credibility of different actors are shown in Table 7.

It can be seen from Table 7 that the three actors in implementation have significantly increased the evaluation of POBSP's credibility. They are 0.6045, 0.7524 and 0.8181, among which farmers' credibility has increased most. Compared with the second survey, the farmers' credibility is increased by 209.52%. The credibility of the grass-roots government is increased by 38.4%, and that of the intermediate government is increased by 7.4%. Why does farmers' credibility increase so much? What does it have to do with the flexibility of policy implementation of grass-roots governments?

Through semi-structural interviews with farmers and grass-roots government officials, it can be seen that since the relevant departments of the provincial government issued a new prohibition policy on straw burning according to which leftover straw and high stubble straw can be burned, grass-roots governments allow farmers to burn straw stacked in farmland as the leftover straw. To prevent the air pollution caused by large-scale straw burning, the grass-roots government stipulated the burning time and



**Table 7.** The credibility of POBSP in the third survey.

	Farmers (N = 178)		Grass-roots government (N = 27)		intermediate Government (N = 15)	
	Credibility	Percent	Credibility	Percent	Credibility	Percent
<b>1. Institutional perception</b>	<b>0.2065</b>	34.16	<b>0.3398</b>	45.16	<b>0.4021</b>	49.15
1.1 What results have been achieved?	0.0430	7.11	0.1305	17.34	0.1611	19.69
1.2 What are the impacts on yourself?	0.0259	4.28	0.0482	6.40	0.0600	7.33
1.3 Is POBSP fair?	0.0554	9.16	0.0417	5.54	0.0450	5.50
1.4 Are you satisfied with POBSP?	0.0823	13.61	0.1195	15.88	0.1360	16.62
<b>2. Perception of conflicts</b>	<b>0.3980</b>	65.84	<b>0.4126</b>	54.84	<b>0.4160</b>	50.85
2.1 Did you comply with the POBSP?	0.1000	16.54	0.1000	13.29	0.1000	12.22
2.2 Did POBSP causing conflicts?	0.0951	15.72	0.1000	13.29	0.1000	12.22
2.3 In which groups did conflicts occur?	0.0254	4.20	0.0230	3.05	0.0200	2.44
2.4 How long did the conflicts last?	0.1000	16.54	0.1000	13.29	0.1000	12.22
2.5 Are you satisfied with the resolution of the conflicts?	0.0776	12.84	0.0897	11.92	0.0960	11.73
<b>Credibility of POBSP</b>	<b>0.6045</b>	100.00	<b>0.7524</b>	100.00	<b>0.8181</b>	100.00

Note. The data in the table were calculated based on the third sample survey.  
The bold values are the summation of credibility.

place of every village. According to the weather forecast, the grass-roots government shall inform the fire protection of straw burning in advance to prevent secondary damage.

This flexible policy implementation of the grass-roots government has been positively responded and cooperated by farmers, which is manifested in their credibility difference ( $\text{Difference-1} = \text{Credibility-G} - \text{Credibility-S} = 0.1479$ ). It means that the credibility difference after adjusting policy targets is not large. The straw-burning has been going swimmingly without producing large-scale air pollution. It also avoids secondary disasters such as fires.

As the policy manager, the intermediate government actively promotes the straw cleaning task in farmland. The intermediate government also acquiesces in the grass-roots government to interpret new regulations that straw can be burned under certain circumstances, and even revise it in a way conducive to the policy implementation. After adjusting the policy targets, the credibility difference of POBSP ( $\text{Difference-2} = \text{Credibility-I} - \text{Credibility-G} = 0.0657$ ) between intermediate government and the grass-roots government does not change much, and the policy implements smoothly and effectively.

## 5. Discussion

A policy's credibility and its difference can truly reflect the bargaining intensity and implementation difficulty among different actors in the process of policy implementation. There are two targets of the POBSP: one is the complete prohibition of crop straw burning; the other one is to remove the straw from the farmland to not affect crop planting in the next year.

During the implementation, POBSP can be divided into two stages: the first stage is before the adjustment of policy targets by the provincial government. In this period, production cost has greatly increased due to straw disposal, and farmers are comprehensively resistant to POBSP and have no willingness to participate under the premise that policy subsidy cannot be increased. We can see this reflected in the low POBSP's

credibility, and it also leads to the larger pressure and increasing difficulties in the implementation of grass-roots governments and intermediate governments (see Table 8). For the POBSP, the credibility difference is 0.3460 between farmers and grass-roots government, and is 0.2204 between grass-roots government and intermediate government. The large credibility difference increases the intensity and difficulty of bargaining in policy implementation. As the first target of POBSP has no room for adjustment, the coercive force of the government is necessary to prevent straw burning. It is hard to achieve the target that removes the straw in farmland in a non-burning way. Massive straw, remained in farmland, directly affects the land plowing and sowing in the coming year.

In the second stage, according to the problems reflected in the implementation of POBSP, the upper government adjusts policy targets, changing the first target from a comprehensive ban to a conditional ban on crop straw burning, which means the straw can be burned in a specified time and place. The games among the farmers, the grass-roots government and the intermediate government were under the new circumstance, which comforts to farmer's burning habit, greatly reduces the disposal cost of the straw, and increases the farmers' willingness to participate. In Table 7 we can see, the credibility of three actors in the third survey increase much. In particular, the farmer's credibility increased by 209.52%. At the same time, the credibility difference between farmers and grass-roots government decreased by 57.25%, and that between grass-roots government and intermediate government decreased by 70.19%. Therefore, the credibility of the adjusted policy has expeditiously increased among farmers, the difficulty of policy implementation of grass-roots government has decreased rapidly, and the bargaining degree among actors has been greatly reduced.

There are three levels of governments in Figure 1, the upper government, intermediate government and grass-roots government. Theoretically speaking, the upper government is the policymaker and must consider policy completely credible. The value of credibility should be equal to 1. In reality, the upper government, which has the authority in the policy process, has the dual capacity to formulate and adjust policies. When the difficulties in implementation feedback to the upper government in Figure 1, the upper government can take into account the decision to insist on or adjust the policy targets, which determines the bargaining intensity in implementation. Therefore, it is not necessary to measure the credibility perceived by upper governments.

There are two new improvements for introducing credibility theory into the analysis of policy implementation: first, it is a quantitative analysis of the bargaining intensity among various actors in policy implementation. Applying the thesis and framework of

**Table 8.** Changes in the credibility and its difference between the third and the second survey.

	Farmers	Grassroots government	Intermediate Government	Difference-1	Difference-2
Third survey	0.6045	0.7524	0.8181	0.1479	0.0657
Second survey	0.1953	0.5413	0.7617	0.3460	0.2204
The difference	0.4092	0.2111	0.0564	-0.1981	-0.1547
Change rate (%)	209.52%	38.40%	7.40%	-57.25%	-70.19%

*Note.* The data in the table were calculated based on sample survey. The calculation of credibility in late March 2019.

institutional credibility, the credibility perceived by farmers, the grass-roots government and the intermediate government in policy implementation is quantitatively calculated. Then their credibility difference is discussed in detail. We suppose that it is the credibility difference among actors of the policy that determines the intensity of bargaining between adjacent actors. During different stages of POBSP's implementation, the change of credibility and their difference trace out the reaction and games among three actors. It provides a new perspective on the in-depth quantitative study of policy implementation. Second, policy implementation is divided by the credibility difference and policy targets. The credibility difference can lead to a change in policy targets, which will reflect in their bargaining. Thus, in the light of the credibility difference and the adjustability of policy targets, we divided policy implementation into eight types (Table 1). It enriches the analytical theory of policy implementation.

## 6. Conclusion

The truncated decision-making of China's public policy process will inevitably lead to palpable bargaining during implementation. The credibility difference between the residents and the grass-roots government (agent), and between the grass-roots government and the intermediate government reflect cognitive differences and bargaining intensity among them. Multi-level governments have different perceptions of difficulties in policy implementation, resulting in differences in their credibility. The government and the public have different targets and actions, resulting in differences in their credibility. The consultation and bargaining in policy implementation is the process of the government and the public seeking the balance of their interests. According to adjustability (immutable or adjustable) of policy targets and the difference (large or small) of policy credibility, the policy implementation is divided into eight types, which more systematically and effectively explains the seemingly contradictory phenomenon of the intermediate government in policy implementation: on one hand, the intermediate government set extra policy targets to the grass-roots government, forcing subordinate officials to take vigorous actions to ensure that the targets assigned by their superiors are fulfilled; on the other hand, the intermediate government will collude with the grass-roots government to weaken the implementation of the policy.

Taking Baiquan county of Heilongjiang Province as an example, according to the changes of credibility difference and the bargaining intensity among farmers, grass-roots government and intermediate government in the three periods of POBSP's implementation, we put forward the TFPIC to judge the changes of each actor in motivation and behavior sensitively and accurately. The TFPIC can reflect the feedback process and mechanism of policy implementation, analyze the leading factors of the policy results, as well as provide theoretical evidence for policy analysis and improving policy performance.

## Notes

1. Whittaker et al., "Compressed Development," 439–467.

2. Lasswell, *The Decision Process*; Sabatier and Weible, *Theories of the Policy Process*; Baumgartner and Jones, "Agenda Dynamics and Policy Subsystems," 1044–1074; Jones, *Reconceiving Decision-Making in Democratic Politics*.
3. Lindblom, "The Science of 'Muddling Through,'" 79–88; Zhou et al., "A Behavioral Model of 'Muddling Through' in the Chinese Bureaucracy," 120–147.
4. Zhu, "Government Advisors or Public Advocates?," 668–686; Zhao, "Conflicts of Values in Policymaking," 41–52; Ma, "The Rise of Social Accountability in China," 111–121; Cai, "Power Structure and Regime Resilience," 411–432.
5. Chan and Rosenbloom, "Four Challenges to Accountability in Contemporary Public Administration," 11S–33S; Cai and Zhu, "Disciplining Local Officials in China," 98–119; Hsu, "In Search of Public Accountability," S40–S50; Ma, "The Rise of Social Accountability in China," 111–121.
6. Xue and Zhao, "Adaptive Reform and Limitations of the Public Policy Process in the Course of Transition," 45–67; Xue and Zhao, "Truncated Decision Making and Deliberative Implementation," 1–29.
7. Zhou and Lian, "Bureaucratic Bargaining in the Chinese Government," 80–96; Zhou and Lian, "Modes of Governance in the Chinese Bureaucracy," 69–93; Feng, "Policy Implement Cost and Occurring Mechanism of Bargaining among the Chinese Governmental Hierarchy," 340–324; Chen et al., "Making a Competitive Selection or a Compromise?," 59–72; Tang and Chen, "Motivation, Incentive and Information," 76–81; Ding and Ding, "A Case Analysis of the Distorted Policy-Implementation Game and Its Effects," 804–809.
8. Ho, "In Defense of Endogenous, Spontaneously Ordered Development," 1087–1118; Ho, "The 'Credibility Thesis' and Its Application to Property Rights," 13–27; Ho, "An Endogenous Theory of Property Rights," 1121–1144; Ho, "Reprint of 'Institutional Function Versus Form,'" 845–853.
9. Ho, "The 'Credibility Thesis' and Its Application to Property Rights," 13–27.
10. Ho, "An Endogenous Theory of Property Rights," 1121–1144.
11. Ho, "Myths of Tenure Security and Titling," 352–364; Ho, "Empty Institutions, Non-Credibility and Pastoralism," 1145–1176; Ho, "Who Owns China's Housing?," 66–77; Davy, "After Form," 854–862.
12. Fan et al., "Institutional Credibility Measurement Based on Structure of Transaction Costs," 212–225.
13. Zhao and Karlis, "Local Perceptions of Grassland Degradation in China," 1206–1223.
14. Fold et al., "Grounding Institutions Through Informal Practice," 922–931.
15. Zhang, "The Credibility of Slums," 876–890; Li and Ho, "Formalizing Informal Homes, a Bad Idea," 891–901; Jesper, "Whose Urban Development?," 942–951.
16. Sharlene and Hermans, "Institutional Function and Urbanization in Bangladesh," 932–941; Nor-Hisham and Ho, "A Conditional Trinity as 'No-Go' Against Non-Credible Development?," 1177–1205.
17. Lin, *Demystifying the Chinese Economy*, 1–20.
18. Mertha, "Fragmented Authoritarianism 2.0," 995–1012.
19. Duckett, 2006. *The Entrepreneurial State in China*, 3–14; Pei, *China's Trapped Transition*, 33–44; Yu and Gao, "The Behavioral Logic and Institutional Basis of Local Developmental Government," 95–112 + 206–207; Zhao et al., "Local Government Role Prototype, Interest Choice and Behavioral Differences," 90–106.
20. Zhu, "An Analysis on the Policy Implementation Behavior of Local Governments," 40–46.
21. O'Brien and Li, "Selective Policy Implementation in Rural China," 167–186; Lin, "Research on the Implementation Mechanism of Environment Policy," 102–110; Chen and Xue, "Soft Implementation Constraint' and Political Gaming in China's Nuclear Power Puzzles," 147–160.
22. See note 6 above.
23. Zhou and Lian, "Modes of Governance in the Chinese Bureaucracy," 69–93; Zhou, "Collusion Among Local Governments," 1–21 + 243.
24. Gong, *Theoretical Study on the Implementation of Government Reform Policy*.

25. Matland, "Synthesizing the Implementation Literature," 145–174.
26. Hu and Cui, "Implementation of Ambiguous Policy," 145–174.
27. Waldo, *The Administrative State*.
28. He and Kong, "Chinese Experience in Public Policy Implementation," 61–79 + 220–221.
29. He and Kong, "Political Potential Energy in the Implementation of Chinese Public Policy," 4–25 + 204.
30. See note 6 above.
31. Susan and Michael, "Policy, Bargaining and Structure in Implementation Theory," 219–240; Rice, "Street-Level Bureaucrats and the Welfare State," 1038–1062.
32. See note 25 above.
33. Moulton and Sandfort, "The Strategic Action Field Framework for Policy Implementation Research," 144–126.
34. Kingdon, *Agendas, Alternatives, and Public Policies*; Fowler, "Problems, Politics, and Policy Streams in Policy Implementation," 403–418.
35. See note 8 above.
36. Ho, "In Defense of Endogenous, Spontaneously Ordered Development," 1087–1118; Ho, "Empty Institutions, Non-Credibility and Pastoralism," 1145–1176.
37. Tirole, "Hierarchies and Bureaucracies," 181–214; Tirole, "The Internal Organization of Government," 1–29.
38. Zhou, and Lian, "Modes of Governance in the Chinese Bureaucracy," 69–93.
39. Ho, "In Defense of Endogenous, Spontaneously Ordered Development," 1087–1118.
40. Xue and Zhao, "Adaptive Reform and Limitations of the Public Policy Process in the Course of Transition," 45–67.
41. Ai, "An Organizational Study of the Inspecting-Responding Process," 68–87.
42. O'Brien and Li, "Selective Policy Implementation in Rural China," 167–186; Zhou and Lian, "Modes of Governance in the Chinese Bureaucracy," 69–93; Zhou, "Collusion Among Local Governments," 1–21 + 243.
43. Chai et al., "The Impasse of Grazing-Ban Policy," 93–98; Fan et al., "Evaluation of Public Value Performance of Ecological Construction Projects," 86–93; Nie and Fan, "Public Value Analysis and Performance Evaluation of Ecological Governance Policy," 110–119.
44. See note 12 above.
45. Xu, *Metrology Geography*, 226–253.

## Acknowledgments

We would like to show our great appreciation to Prof. Peter Ho, who puts forward the credibility thesis, for his comments, suggestion, and any other help.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

This work was supported by the [National Natural Science Foundation under Grants [numbers 41371529 and 41071353].

## Notes on Contributors

*Shengyue Fan* is a professor at the School of Economics, Minzu University of China, Beijing, China. His research interests include the policy process, regional sustainable development and ecological economy. Email: [syfanac@163.com](mailto:syfanac@163.com)

**Tianyu Zhang** is a Ph.D. in Economy at Minzu University of China. His research interests include institutional efficiency analysis. Tel.: +8615560855550. Email: [arthurzty@outlook.com](mailto:arthurzty@outlook.com)

**Mengyao Li** is an MD at the School of Economics, Minzu University of China, Beijing, China. Her research interests include the policy process. Tel.: +8618511613123. Email: [948886781@qq.com](mailto:948886781@qq.com)

## References

- Ai, Y. "An Organizational Study of the Inspecting-Responding Process Within the Chinese Governmental Hierarchy: A Case Study of the End-of-Year Assessment of Family Planning in County A." [In Chinese] *Chinese Journal of Sociology* 31, no. 3 (2011): 68–87. doi:[10.15992/j.cnki.31-1123/c.2011.03.003](https://doi.org/10.15992/j.cnki.31-1123/c.2011.03.003).
- Baumgartner, F. R., and B. D. Jones. "Agenda Dynamics and Policy Subsystems." *The Journal of Politics* 53, no. 4 (1991): 1044–1074. doi:[10.2307/2131866](https://doi.org/10.2307/2131866).
- Cai, Y. S. "Power Structure and Regime Resilience: Contentious Politics in China." *British Journal of Political Science* 38, no. 3 (2008): 411–432. doi:[10.1017/S0007123408000215](https://doi.org/10.1017/S0007123408000215).
- Cai, Y. S., and L. Zhu. "Disciplining Local Officials in China: The Case of Conflict Management." *The China Journal* 70 (2013): 98–119. doi:[10.1086/671339](https://doi.org/10.1086/671339).
- Chai, H. F., Q. X. Li, R. Fu. "The Impasse of Grazing-Ban Policy and the Future of Pasture Management." *Issues in Agricultural Economy*, no. 1 (2009): 93–98.
- Chan, H. S., and D. H. Rosenbloom. "Four Challenges to Accountability in Contemporary Public Administration: Lessons from the United States and China." *Administration & Society* 42, no. 1\_suppl (2010): 115–335. doi:[10.1177/0095399710361851](https://doi.org/10.1177/0095399710361851).
- Chen, L., J. Zhao, and L. Xue. "Making a Competitive Selection or a Compromise? An Explanatory Framework and Consensus Centered Model in the Process of Policymaking in China's Economic Transition." [In Chinese] *Management World*, no. 8 (2010): 59–72. doi:[10.19744/j.cnki.11-1235/f.2010.08.008](https://doi.org/10.19744/j.cnki.11-1235/f.2010.08.008).
- Chen, L., and L. Xue. "Soft Implementation Constraint' and Political Gaming in China's Nuclear Power Puzzles." *International Economic Review* 2 (2011): 147–160.
- Davy, B. "After Form. The Credibility Thesis Meets Property Theory." *Land Use Policy* 79 (2018): 854–862. doi:[10.1016/j.landusepol.2017.02.036](https://doi.org/10.1016/j.landusepol.2017.02.036).
- Ding, H., and M. J. Ding. "A Case Analysis of the Distorted Policy-Implementation Game and Its Effects." [In Chinese] *Wuhan University Journal (Philosophy & Social Sciences)* 57, no. 6 (2004): 804–809.
- Duckett, J. *The Entrepreneurial State in China: Real Estate and Commerce Departments in Reform Era Tianjin*, 3–14. London: Routledge, 2006.
- Fan, S. Y., J. F. Yang, W. W. Liu, and H. Wang. "Institutional Credibility Measurement Based on Structure of Transaction Costs: A Case Study of Ongniud Banner in the Inner Mongolia Autonomous Region." *Ecological Economics* 159 (2019): 212–225. doi:[10.1016/j.ecolecon.2019.01.019](https://doi.org/10.1016/j.ecolecon.2019.01.019).
- Fan, S. Y., Y. Nie, and Y. Zheng. "Evaluation of Public Value Performance of Ecological Construction Projects in China's Ethnic Minority regions-A Case Study of Naiman Banner in Inner Mongolia." *Journal of Minzu University of China (Philosophy and Social Sciences Edition)* 42, no. 5 (2015): 86–93.
- Feng, M. "Policy Implement Cost and Occurring Mechanism of Bargaining Among the Chinese Governmental Hierarchy: Based on Analysis Example of Prohibition of Grazing in Sidong County." [In Chinese] *Chinese Journal of Sociology* 5, no. 3 (2019): 340–324. doi:[10.15992/j.cnki.31-1123/c.2017.03.009](https://doi.org/10.15992/j.cnki.31-1123/c.2017.03.009).
- Fowler, L. "Problems, Politics, and Policy Streams in Policy Implementation." *Governance* 32, no. 3 (2019): 403–418. doi:[10.1111/gove.12382](https://doi.org/10.1111/gove.12382).
- Fold, N., A. N. M. Allotey, P. Kalvig, and L. Moeller-Jensen. "Grounding Institutions Through Informal Practice: Credibility in Artisanal Mining of Aggregates." *Land Use Policy* 79 (2018): 922–931. doi:[10.1016/j.landusepol.2017.06.022](https://doi.org/10.1016/j.landusepol.2017.06.022).

- Gong, H. B. *Theoretical Study on the Implementation of Government Reform Policy: Taking the Reform of Administrative Approval System in Ningbo as an Example (1999–2013)*. Beijing: China Social Sciences Press, 2013.
- He, D. H., and F. B. Kong. "Chinese Experience in Public Policy Implementation." [In Chinese] *Social Sciences in China*, no. 5 (2011): 61–79+220–221.
- He, D. H., and F. B. Kong. "Political Potential Energy in the Implementation of Chinese Public Policy—an Analysis Based on the Forestry Reform Policy of the Last Two Decades." [In Chinese] *Social Sciences in China*, no. 4 (2019): 4–25+204.
- Ho, P. "In Defense of Endogenous, Spontaneously Ordered Development: Institutional Functionalism and Chinese Property Rights." *Journal of Peasant Studies* 40, no. 6 (2013): 1087–1118. doi:[10.1080/03066150.2013.866553](https://doi.org/10.1080/03066150.2013.866553).
- Ho, P. "The 'Credibility Thesis' and Its Application to Property Rights: (In)Secure Land Tenure, Conflict and Social Welfare in China." *Land Use Policy* 40 (2014): 13–27. doi:[10.1016/j.landusepol.2013.09.019](https://doi.org/10.1016/j.landusepol.2013.09.019).
- Ho, P. "Myths of Tenure Security and Titling: Endogenous, Institutional Change in China's Development." *Land Use Policy* 47 (2015): 352–364. doi:[10.1016/j.landusepol.2015.04.008](https://doi.org/10.1016/j.landusepol.2015.04.008).
- Ho, P. "An Endogenous Theory of Property Rights: Opening the Black Box of Institutions." *The Journal of Peasant Studies* 43, no. 6 (2016a): 1121–1144. doi:[10.1080/03066150.2016.1253560](https://doi.org/10.1080/03066150.2016.1253560).
- Ho, P. "Empty Institutions, Non-Credibility and Pastoralism: China's Grazing Ban, Mining and Ethnicity." *The Journal of Peasant Studies* 43, no. 6 (2016b): 1145–1176. doi:[10.1080/03066150.2016.1239617](https://doi.org/10.1080/03066150.2016.1239617).
- Ho, P. "Who Owns China's Housing? Endogeneity as a Lens to Understand Ambiguities of Urban and Rural Property." *Cities* 65 (2017): 66–77. doi:[10.1016/j.cities.2017.02.004](https://doi.org/10.1016/j.cities.2017.02.004).
- Ho, P. "Reprint of 'Institutional Function Versus Form: Evolutionary Credibility of Land, Housing and Natural Resources.'" *Land Use Policy* 79 (2018): 845–853. doi:[10.1016/j.landusepol.2018.09.026](https://doi.org/10.1016/j.landusepol.2018.09.026).
- Hu, Y. F., and Y. Y. Cui. "Implementation of Ambiguous Policy: The Case of Socialized Aged Care Service Policy in China." *Journal of Public Management*, no. 2 (2015): 145–174. doi:[10.16149/j.cnki.23-1523.2015.02.009](https://doi.org/10.16149/j.cnki.23-1523.2015.02.009).
- Hsu, S. P. "In Search of Public Accountability: The 'Wenling Model' in China." *Australian Journal of Public Administration* 68, no. S1 (2009): S40–S50. 00624. x. doi:[10.1111/j.1467-8500.2009](https://doi.org/10.1111/j.1467-8500.2009).
- Jesper, W. Z. "Whose Urban Development? Changing Credibilities, Forms and Functions of Urbanization in Chengdu, China." *Land Use Policy* 79 (2018): 942–951.
- Jones, B. D. *Reconceiving Decision-Making in Democratic Politics: Attention, Choice, and Public Policy*. Chicago: University of Chicago Press, 1994.
- Kingdon, J. *Agendas, Alternatives, and Public Policies* (2nd ed.). New York, NY: Harper Collins College Publishers, 1995.
- Lasswell, Harold Dwight. *The Decision Process: Seven Categories of Functional Analysis*. College Park, MD: University of Maryland Press, 1956.
- Lindblom, C. E. "The Science of 'Muddling Through.'" *Public Administration Review* 19, no. 2 (1959): 79–88. doi:[10.2307/973677](https://doi.org/10.2307/973677).
- Lin, M. "Research on the Implementation Mechanism of Environment Policy—an Institutional Analysis Framework." [In Chinese] *Sociological Research*, no. 1 (2003): 102–110.
- Li, S., and P. Ho. "Formalizing Informal Homes, a Bad Idea: The Credibility Thesis Applied to China's 'Extra-Legal' Housing." *Land Use Policy* 79 (2018): 891–901. doi:[10.1016/j.landusepol.2016.10.024](https://doi.org/10.1016/j.landusepol.2016.10.024).
- Lin, Y. F. *Demystifying the Chinese Economy*, 1–20. [In Chinese] Beijing: Peking University Press, 2012.
- Ma, J. "The Rise of Social Accountability in China." *Australian Journal of Public Administration* 71, no. 2 (2012): 111–121.
- Matland, R. E. "Synthesizing the Implementation Literature: The Ambiguity-Conflict Model of Policy Implementation." *Journal of Public Administration Research and Theory* 5, no. 2 (1995): 145–174. doi:[10.1093/oxfordjournals.jpart.a037242](https://doi.org/10.1093/oxfordjournals.jpart.a037242).



- Mertha, A. "Fragmented Authoritarianism 2.0': Political Pluralization in the Chinese Policy Process." *The China Quarterly* 200 (2009): 995–1012. doi:[10.1017/S0305741009990592](https://doi.org/10.1017/S0305741009990592).
- Moulton, S., and J. R. Sandfort. "The Strategic Action Field Framework for Policy Implementation Research." *Policy Studies Journal* 45, no. 1 (2017): 144–126. doi:[10.1111/psj.12147](https://doi.org/10.1111/psj.12147).
- Nie, Y., and S. Y. Fan. "Public Value Analysis and Performance Evaluation of Ecological Governance Policy in Western Minority of Ongniud Banner in Inner Mongolia." *Journal of Minzu University of China (Philosophy and Social Sciences Edition)* 44, no. 6 (2017): 110–119.
- Nor-Hisham, Md. B. S., and P. Ho. "A Conditional Trinity as 'No-Go' against Non-Credible Development? Resettlement, Customary Rights and Malaysia's Kelau Dam." *The Journal of Peasant Studies* 43, no. 6 (2016): 1177–1205. doi:[10.1080/03066150.2016.1253559](https://doi.org/10.1080/03066150.2016.1253559).
- O'Brien, K. J., and L. Li. "Selective Policy Implementation in Rural China." *Comparative Politics* 31, no. 2 (1999): 167–186. doi:[10.2307/422143](https://doi.org/10.2307/422143).
- Pei, M. *China's Trapped Transition*, 33–44. Cambridge: Harvard University Press, 2006.
- Rice, D. "Street-Level Bureaucrats and the Welfare State: Toward a Micro-Institutionalist Theory of Policy Implementation." *Administration & Society* 45, no. 9 (2013): 1038–1062. doi:[10.1177/0095399712451895](https://doi.org/10.1177/0095399712451895).
- Sabatier, P. A., and C. M. Weible (Eds.). *Theories of the Policy Process*. Boulder, CO: Westview Press, 2014.
- Sharlene, L. G., and L. M. Hermans. "Institutional Function and Urbanization in Bangladesh: How Peri-Urban Communities Respond to Changing Environments." *Land Use Policy* 79 (2018): 932–941. doi:[10.1016/j.landusepol.2017.09.041](https://doi.org/10.1016/j.landusepol.2017.09.041).
- Susan, B., and H. Michael. "Policy, Bargaining and Structure in Implementation Theory: Towards an Integrated Perspective." *Policy and Politics* 12, no. 3 (1984): 219–240.
- Tang, X., and W. W. Chen. "Motivation, Incentive and Information: The Theoretical Framework and Typological Analysis of China's Environmental Policy Implementation." [In Chinese] *Journal of National School of Administration*, no. 1 (2017): 76–81. doi:[10.14063/j.cnki.1008-9314.2017.01.016](https://doi.org/10.14063/j.cnki.1008-9314.2017.01.016).
- Tirole, J. "Hierarchies and Bureaucracies: On the Role of Collusion in Organizations." *The Journal of Law, Economics, and Organization* 2, no. 2 (1986): 181–214. doi:[10.1093/oxfordjournals.jleo.a036907](https://doi.org/10.1093/oxfordjournals.jleo.a036907).
- Tirole, J. "The Internal Organization of Government." *Oxford Economic Papers* 46, no. 1 (1994): 1–29. doi:[10.1093/oxfordjournals.oep.a042114](https://doi.org/10.1093/oxfordjournals.oep.a042114).
- Waldo, D. *The Administrative State: A Study of the Political Theory of American Public Administration*. New York, NY: Routledge, 2017.
- Whittaker, D. H., T. Zhu, T. Sturgeon, M. H. Tsai, and T. Okita. "Compressed Development." *Studies in Comparative International Development* 45, no. 4 (2010): 439–467. doi:[10.1007/s12116-010-9074-8](https://doi.org/10.1007/s12116-010-9074-8).
- Xu, J. H. *Metrology Geography*, 226–253. [In Chinese] Beijing: Higher Education Press, 2006.
- Xue, L., and J. Zhao. "Adaptive Reform and Limitations of the Public Policy Process in the Course of Transition." [In Chinese] *Social Sciences in China*, no. 9 (2017): 45–67.
- Xue, L., and J. Zhao. "Truncated Decision Making and Deliberative Implementation: A Time-Based Policy Process Model for Transitional China." *Policy Studies Journal* 0, no. 0 (2018): 1–29. doi:[10.1111/psj.12290](https://doi.org/10.1111/psj.12290).
- Yu, J. X., and X. Gao. "The Behavioral Logic and Institutional Basis of Local Developmental Government." [In Chinese] *Social Sciences in China*, no. 5 (2012): 95–112+206–207.
- Zhang, Y. "The Credibility of Slums: Informal Housing and Urban Governance in India." *Land Use Policy* 79 (2018): 876–890. doi:[10.1016/j.landusepol.2017.05.029](https://doi.org/10.1016/j.landusepol.2017.05.029).
- Zhao, J., L. Chen, and L. Xue. "Local Government Role Prototype, Interest Choice and Behavioral Differences—a Local Government Theory Based on Policy Process Research." [In Chinese] *Management World*, no. 2 (2013): 90–106. doi:[10.19744/j.cnki.11-1235/f.2013.02.008](https://doi.org/10.19744/j.cnki.11-1235/f.2013.02.008).
- Zhao, H., and R. Karlis. "Local Perceptions of Grassland Degradation in China: A Socio-Anthropological Reading of Endogenous Knowledge and Institutional Credibility." *The Journal of Peasant Studies* 43, no. 6 (2016): 1206–1223. doi:[10.1080/03066150.2016.1192609](https://doi.org/10.1080/03066150.2016.1192609).



- Zhao, D. Y. "Conflicts of Values in Policymaking." [In Chinese] *Management World* 10 (2008): 41–52.
- Zhou, X., H. Lian, L. Ortolano, and Y. Ye. "A Behavioral Model of 'Muddling Through' in the Chinese Bureaucracy: The Case of Environmental Protection." [In Chinese] *The China Journal* 70 (2013): 120–147. doi:[10.1086/671335](https://doi.org/10.1086/671335).
- Zhou, X. G. "Collusion Among Local Governments: The Institutional Logic of a Government Behavior." [In Chinese] *Sociological Studies*, no. 6 (2008): 1–21 + 243.
- Zhou, X. G., and H. Lian. "Bureaucratic Bargaining in the Chinese Government: The Case of Environmental Policy Implementation." [In Chinese] *Social Sciences in China*, no. 5 (2011): 80–96.
- Zhou, X. G., and H. Lian. "Modes of Governance in the Chinese Bureaucracy: A 'Control Rights' Theory." [In Chinese] *Sociological Studies*, no. 5 (2012): 69–93.
- Zhu, X. F. "Government Advisors or Public Advocates? Roles of Think Tanks in China from the Perspective of Regional Variations." [In Chinese] *The China Quarterly* 207 (2011): 668–686. doi: [10.1017/S0305741011000701](https://doi.org/10.1017/S0305741011000701).
- Zhu, Q. W. "An Analysis on the Policy Implementation Behavior of Local Governments——with 'Switching out to Limit Power Consumption as an Example.'" [In Chinese] *Journal of Xi'an Jiaotong University (Social Sciences)* 32, no. 2 (2012): 40–46. doi:[10.15896/j.xjtuskb.2012.02.017](https://doi.org/10.15896/j.xjtuskb.2012.02.017).