

The public participation in environmental conflicts in ‘PX event’ in China and Insights from Canada’s legal practice

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Abstract: Over the recent decade, the ‘PX event’ caused by the construction of PX chemical project is the most representative environmental conflicts event in contemporary China. From the point of view of social evaluation, ‘PX event’ has changed from ‘win-win’ mode to ‘lose-lose’ mode, and the main stream view blames ineffective environmental law and insufficient public participation. This research is based on empirical research on ‘PX event’ and carries on analysis of the defects in the mainstream view. The analysis indicates that in the implementation of the legal rules and public participation, the Xiamen PX event is not in the leading position compared with other PX events. Xiamen PX event being seen as a ‘paradigm’ will obscure its complex game process, and it hampers a reasonable settlement of similar events. The governance troubles of PX event has its source in short term and randomness of the local government power in China. Canada offers instructive examples in addressing environmental conflicts through legal frameworks and public participation mechanisms, which could be adapted to the Chinese context to address governance issues related to PX events.

1 Introduction

Over the recent decade, there happened a series of environmental conflicts events caused by the PX chemical industrial project, or PX events for short in many places in China. Viewed from its origins, a typical example of PX events emerged from Xiamen PX event in 2007, with following typical cases such as Dalian PX event in 2011, PX event in Ningbo Zhenhai in 2012, Kunming PX event in 2013, and Maoming PX event in 2014. The above-mentioned PX events have the similar development orbit, which can be summed up into ‘construction-protest-stop’. Looked from the PX event cause (the goal of civilian-participating protest), There is a similarity between PX events in China and the so called ‘NIMBY conflicts’ (Carissa 2007). That is, both of them aimed at a certain industrial project which can cause environmental pollution. Judging from the response of the government, almost without exception, the government announced measures to stop construction or relocate the project.

It should be noted that the greatest hallmark of differences between PX events in China and NIMBY conflicts in US is that in the PX event, the Chinese public fights largely against the local government instead of the construction project. At least it is proved that PX events with Chinese characteristics are different from a general sense of NIMBY conflicts in

developed countries. It is demonstrated that non-completion of PX chemical industrial projects, the PX events aftermath proves modern Chinese protest against the environment pollution is not the same as that in other developing countries, since the consequence of protest against the environment pollution can not be explained as simple pattern of 'strong-state and weak-society' under the imbalance between government's efforts and social forces(Llewellyn 2011).

It is an interesting phenomenon worthy of serious concerning that a remarkable change has taken place on social evaluation of PX events, as the early Xiamen PX event is reckoned a 'Milestone' for Chinese public participation, presents winning of public opinion and a classic example of positive interaction between the government and people(Shu 2007, Liu and Zhou 2008). In theory, it is summed up as 'participation-governance mode of administrative decision-making, and represents a transition of Chinese administrative decision-making pattern(Wang and Zhang 2011),as well as promoted public participation in environmental governance in China(Johnson 2010). However, the subsequent PX events are considered as a place of irrational social mood display as 'PX events' which has been demonized drastically by public, accordingly, PX events has degenerated into Chinese vicious circle of no solution with no conflict, a modest solution with a small conflict, and a satisfactory solution with a mass conflict(Long and Shu 2010, Feng and Wang 2012).

Based on the fact that 'PX events' has changed from 'win-win' mode to 'lose-lose' mode, it should be admitted honestly that the theoretical logic summed up from Xiamen PX events has not been proved by the following similar events; and PX events on behalf of groups of NIMBY environmental conflicts have run into the governance trouble of dissatisfaction expressed by both government and the public. (Zhang, T.2018)Thereupon, it is very meaningful to study such a wide variation between the 'Paradigm' Xiamen PX events and subsequent 'PX events' in recent years. In fact, some researchers have put forwards the similar confusing problem, that is why Xiamen PX event has become a classic example of protest against PX chemical industrial projects around China though it has once made a good beginning(Huang 2012).

At present, the mainstream view blames ineffective implementation of environment law and insufficient public participation. It is deemed that Xiamen PX event represents a new model of political administration of the environment in China called 'PX model'; but the model is doomed to be a flash as the corresponding political and social prerequisites have not been improved effectively(Tian and Wang 2012). In practice, the positive experiences with Xiamen PX event, especially the ability to prevent and respond to groups of NIMBY environmental conflicts, have not been attached great importance as expected(Li and Wang 2014). In the process of administrative decision-making of PX chemical industrial projects, 'The public's right to know, participate, and supervise can not be ensured and fully realized; therefore, government's credit power descends and the mass events happen(Zheng 2013).

The main concern on the above explanation is that the view generally treats 'strengthening public participation' as 'a cure-all solution' to break the PX events' governance plight, and owes the success of Xiamen PX event to the 'open' local government and 'highly qualified' people; meanwhile, it blames the failure of other PX events on 'ignorance' of other local governments and 'neglect' of the successful experiences of Xiamen PX event. It is faced with heckling as follows: since Xiamen PX event has worked out a model for public participation, and the government is repeatedly stressing the democratic decision making and social stability, why do the subsequent PX events still belong to scale of 'the scarcity of public participation'? In other words, it is known for the local governments in the pressure system 1 that 'closed public participation may well lead to mass events', why do the local governments insist on implementing of the 'black-box decision-making' and ignoring 'the task of Maintaining stability'? The behavior above goes against the common sense of the functioning system of Chinese local governments at present, so it is necessary to explore deeply and explain thoroughly to reveal the practical logic of PX events.

2 The enforcement of environmental law and public participation in PX events

This study first practically analyzes and estimates the enforcement of environmental law in PX events. According to the present related laws and regulations in China, the legal issues in PX events are mainly embodied in three domains: the environmental impact assessment, the publicity of information, public participation. With the information available², the enforcement of environmental law and public participation in typical PX events as mentioned above can be summarized as follows:

(1) The operation of the legal system of the environmental impact assessment

Except the Mao ming PX event which is still at ‘ the early stage’ aside, the operation of the legal system of the environmental impact assessment in PX events can be classified into two major findings: first, environmental assessment has been carried out on each project involved, except for Dalian PX event, other projects have no big defects regarding the validity ; secondly, on planning environmental impact assessment, except for Kunming PX event, planning environmental impact assessment has been carried out on each project involved.

However, the result shows that planning environmental impact assessment(EIA) can not be regarded as magic power to negate or stop the construction projects. In general, the EIA system has been widely implemented in PX events, and construction companies have basically fulfilled the legal obligation of EIA(including the project EIA and the planning EIA). Comparing all the PX events, Xiamen PX event is not a good example of the PX events in the implementing of the EIA system.

(2) The operation of laws and regulations in information publicity

The operation of laws and regulations in information publicity can be specified as follows: (a) in Zhenhai PX event and Maoming PX event, the governments have a positive attitude for information publicity and actively implement the obligation of information publicity; (b) in Xiamen PX event and Maoming PX event, the governments have a negative attitude for information publicity , but then their attitude turns around under social pressure and implement the obligation of information publicity basically; it is necessary to point out that, there is a breakthrough in the range and content of disclosed information in Kunming PX event³; (c) in Dalian PX event, the government holds a negative attitude for information publicity and does not implement the obligation of information publicity well.

Comparing with Zhenhai PX event and Maoming PX event, Xiamen PX event does not take the lead in the initiative and the scope of the information publicity; there are even some measures of blocking the information publicity in Xiamen PX event.⁴

(3) The operation of legal rules and public participation

In Xiamen PX event and Maoming PX event, much importance has been placed on public participation; other PX events, more or less, are short of public participation. It is necessary to explain that in individual events(such as Kunming PX event), though there is relative lack of public participation during the process of EIA, the governments explain the measures for the PX events through holding press conferences and talkfest under the pressure of public opinion. However, such an emergency response is considered as an inefficient form of the public participation outside system .

It should be pointed out that the above analysis of the operation of legal rules in PX events is static and individual. It needs to carry out a further systematic analysis to decide whether the administrative decision-making in PX events belongs to ‘law-based decision-making’ or ‘democratic decision-making’. A quantitative analysis of the operation of legal rules is carried out systematically in the aforementioned five PX events by using the quantitative evaluation method, with the key evaluation elements including ‘environmental impact assessment (EIA)’, ‘information publicity’, and ‘public participation’. Specifically, whether the rules(evaluation elements)being implemented or not in this study is evaluated by using ‘yes’ and ‘no’, Y represents ‘yes’, and N represents ‘no’; judging by the initiative and the level of detail during the process of implementing, A, B, C are used to represent ‘very detailed’, ‘detailed’, and ‘brief’. The result of key evaluation elements is shown in Table 1 below:

Table 1 The key evaluation elements of the operation of legal rules in PX events

The key evaluation elements	environmental impact assessment (EIA)	Information publicity	Public participation	overall estimation
Xiamen PX event	Y/A	Y/B	Y/A	3Y2A, good
Dalian PX event	Y/B	N	N	1Y1B, bad
Ningbo Zhenhai PX event	Y/A	Y/A	Y/B	3Y2A, good
Kunming PX event	Y/B	Y/B	Y/B	3Y3B, mediocre
Maoming PX event	—(not involved)	Y/A	Y/A	2Y2A, good

Judging by the above quantitative analysis of the key evaluation elements, the overall operation of legal rules in PX events can be divided into three levels: (1), the operation of the legal rules is good, though there exist defects in some places. The representative cases are Xiamen PX event, Ningbo Zhenhai PX event, and Maoming PX event; (2) the operation of the legal rules is mediocre, there exist a fair amount of defects in some places, and the representative case is Kunming PX event;. (3) the operation of the legal rules is bad, and the representative case is Dalian PX event. As far as the operation of legal rules is concerned, it can be seen Xiamen PX event, Ningbo Zhenhai PX event, and Maoming PX event are at the same level as a whole; therefore, ‘law-based decision-making’ and ‘democratic decision-making’ have been realized basically without no obvious superiority and inferiority relatively.

There is another significant phenomenon that to some extent it is information publicity, public participation that trigger the conflicts, according to the implementation result of the rules. For example, in Zhenhai PX event, the ‘instructions’ released by Ningbo Zhenhai District People's Government on October 24 confirm the message ‘PX chemical industrial project will be built in Ningbo, and some people are defending their rights’ instead which directly lead to the conflict.(Zhong 2012) In Maoming PX event, Maoming municipal government establishes the propaganda-first strategy to steadily push forward the project; however, wide publicity and experts’ interpretations did not well addressed the doubts, but caused panic on the contrary. The PX promotion conference held on March 27 by municipal government makes the netizens know each other, and provides an important condition for the protest on March 30(Wu and Wu 2014, Zhou 2014).

On the basis of the above analysis, Xiamen PX event does not excel in the enforcement of the legal rules. So, if the satisfactory solution of Xiamen PX event is owed to the good operation of legal rules, good fulfilling of legal obligation of the information publicity and public participation; it is impossible to explain why Ningbo Zhenhai PX event, Maoming PX event have not been approved socially, and why the implementation of information publicity rules and public participation rules may trigger PX events..

3 Policy decision and public participation in PX events

As shown above, the analysis of PX events in angle of formal Legitimacy indicates majority of PX events have fulfilled their obligations of EIA, information publicity and public participation by law. However, it is impossible to judge whether the governments seek Legitimacy through passive ‘defensive participation or achieve the public interests through making decisions on multiple opinions substantially. So we should return to the event itself to further refine the substantial factors of influencing the governments’ policy-making in PX events, and restore the background and process of corresponding policy-making. Details of factors of influencing policy decision in PX event are given in Table 2:

Table 2 Factors of influencing policy decision in PX event and its result

Case	Project	Progress	Public Opinion	Interested Parties	Policy Decision
Xiamen PX Event	Haicang PX Project	Under construction	Protest, demand relocation	Tenglong Petrochemical, real estate firms Fujia Dahua	Environmental assessment; project relocated to Zhangzhou
Dalian PX Event	Dalian Fujia Dahua PX Project	Operational	Protest, demand closure and relocation	Petrochemical Company Ltd	Factory closed and relocated; resumed production in 6 months
Ningbo Zhenhai PX Event	Zhenhai Refining Extension (PX)	Not started	Protest, opposition to chemical industry	Sinopec Zhenhai, local villagers	PX project canceled; refining project reassessed
Kunming PX Event	Anning Refining Project (PX TBD)	Preliminary work done	Two protests against PX and refinery projects	PetroChina, Yunnan Petrochemical Co.	Decision pending based on public opinion
Maoming PX Event	Maoming Aromatics PX Project	Not approved	Protest against PX project	Sinopec Maoming Branch	No consensus reached; project not launched

As listed in the previous table, different factors that influence administrative decision making can be analyzed as follows:

3.1 The influence of project itself on administrative decision-making

As can be clearly seen from the above table, if the project concerned is individual PX chemical industrial project(such as

Xiamen PX event, Dalian PX event, Maoming PX event), the government is determined that PX chemical industrial project will be closed and relocated. If the project concerned is an integrated petrochemical project⁷, the government holds an obscure attitude toward PX event because of comprehensive interest concerned. For example, in Ningbo Zhenhai PX event, the government promised 'halting the construction and further justifying the project feasibility' instead of 'cancelling the construction plan'; in Kunming PX event, the government did not provide clear attitude. In other words, when the government promises not to build PX project, it does not make it clear that the chemical project should be closed and relocated. Therefore, the project scale influences the administrative decision-making directly.

3.2 *The influence of project progress on administrative decision-making*

As is seen from the above table, except for Dalian PX event, the projects in other PX events concerned have not been put into production, including four kinds of circumstances such as awaiting approval projects(Maoming PX event), project in pre-approval procedure(Ningbo Zhenhai PX event), awaiting construction project(Kunming PX event), currently under construction project(Xiamen PX event). The governments make decisions of 'cancelling or relocating projects'. In Dalian PX event, the PX factory concerned has gone through the security assessment and recovered the production. The administrative decision-making has been through the process of 'stopping-resuming' which proves the project progress influences the administrative decision-making directly. It is also confirmed by related research literature(Li et al. 2016).

3.3 *The influence of public opinion on administrative decision-making*

By the causes, 'public opinions' from various sources undoubtedly lead to the outbreak of 'PX events'. One should assume that in the classical public event of 'PX events', public opinion takes the role of 'Agenda-Setting' of public policy and belong to the classical 'external pressure pattern'⁸. The relationship between 'Agenda-Setting' and decision-making is not unidirectional linear and has multiple possible patterns(Weng and Gu 2012).

As seen from table 2, public opinion in PX events does not correspond to the final administrative decision-making of the government absolutely. In Xiamen PX event, Dalian PX event, and Maoming PX event, public opinion in PX events does correspond to the final administrative decision-making of the government basically. In Ningbo Zhenhai PX event, public opinion in PX events does correspond to the final administrative decision-making of the government, but there is a little difference between them on the attitudes toward integrated refining & chemical project. In Kunming PX event, public opinion in PX events does not correspond to the final administrative decision-making of the government basically, and the government and the people behave oppositely on petrochemical project. Thus, the influence of public opinion on decision-making is determined by the 'integrating degree' between public opinion and the attitude of government: if the two parties is 'completely consistent' or 'partially consistent', to some extent, public opinion can influence decision making indirectly; if the two parties oppose each other, public opinion will not influence decision-making substantially.

3.4 *The influence of interested parties on administrative decision-making*

Interested parties are unnoticed 'hidden' body, and the most representative one is project construction body. By integrating various factors, the influence of interested parties on administrative decision-making can be divided into two circumstances: (a) in Ningbo Zhenhai PX event, Kunming PX event, and Maoming PX event, the project construction body is the large state-owned enterprises such as Sinopec and PetroChina, and they are highly consistent with the government, and their opinions can influence decision-making of the government indirectly;(b) In Xiamen PX event, and Dalian PX event, project construction body is the private enterprises with social capital holdings. Considering the self-interest, the enterprises does not expect to stop construction and production. However, opinion of the private enterprises can not influence the decision-making of the government obviously, and even there happen some behaviors of petitioning and safeguarding rights in Beijing from these business owners.⁹

It would be specially mentioned that besides the main builders of the construction project, there probably exist other interested parties in PX events, and they influence the administrative policy more complicatedly. More specifically: (a) in Xiamen PX event, we must take note of an important interested parties: proprietor and real estate developers in Haicang district. A viewpoint has been proposed that the scarce seaside Landscape and the prospect of a huge appreciating real

estate prices make the location of PX chemical industrial project- Haicang district becomes a treasure place that property developers rush to build apartment buildings, besides, a large number of real-estate projects have been in existence around PX chemical industrial project; therefore, the relocation of PX chemical industrial project satisfy everyone's best interest(Xue, 2008). There is no direct evidence that the real-estate industry is involved in the event, but during the whole developing process, owners of the property 'Future Coast' in the district are the first group which raised the PX issue and actively participated in various activities; accordingly, this makes someone question the participation motivation of the so-called 'Xiamen residents' 10. Thus it can be seen that in Xiamen PX event, real estate investor and the property owners should be considered to influence the government decision-making indirectly. (b) In Ningbo Zhenhai PX event, people in the nearby villages are also non-neglect stakeholders. As mentioned, the PX event was aroused by villagers' collective appeal to higher administrative authorities in the villages near Zhenhai Petrochemical company but not included into the relocation area. In the practical process of the PX event, it were the villagers 'who caused PX event, but the event developed in a completely different direction out of expectation'. The government said after 'detering the project from being prompted', all of construction project work at an earlier stage stalled out. Mianfeng Village which was originally planned to move away from the chemical district naturally had no longer been concerned; so the complaining opinions of the villagers are boiling(Zhong 2012). Thus, in Zhenhai PX event, people in the nearby villages have no effect on making administrative decisions.

In conclusion, in PX events, substantial effects of different factors on administrative decisions can be categorized into three types: (1) the project scale and project progress has direct consequences on administrative decisions;(2) whether 'public opinion' have an impact on administrative decisions depends on its compatibility with government attitude. On the basis of consistency, 'public opinion' has some indirect effect; (3) whether stakeholders have an impact on administrative decisions depends on specific conditions, and can not be generalized.

4 Rethinking on 'Xiamen PX event'

Based on the preceding analysis, we need to rethink differently about Xiamen PX event, then we can have a more comprehensive and deeper insight in present PX events in China. And for all the regular evaluation on Xiamen PX event, basically it has been fully affirmed from the perspective of 'winning of public opinion' and it includes two aspects specifically: first, the government decision-making responds positively to 'public opinion' and realizes the Win-Win plan, and finally relocate the PX project out of Xiamen city; secondly, the government actively introduces the procedure technique for public participation, and establish the dialogue platform to dissolve the crisis(Luo and Qin 2012, Hu and Tang 2009); and this is the significance of 'demonstrative' value of Xiamen PX event that the researchers generally believed. However, according to the analysis above, we can see these two points are worthy of thinking:

(1) Based on the above analysis, 'public opinion' in PX events does not certainly hinder the decision-making of the government. It can not be simply thought that government in Xiamen PX event keeps an open mind, but local governments are closed and conservative in other PX events. The key issue here is that 'public opinion' in PX events is not necessarily the representative of the whole benefits, but shows a clear 'Nimby' feature, that is, residents protest basing on cognition of 'not building in my backyard' with strong self-interest motivation. Research has been reported that the participation of residents in Xiamen PX event mainly aimed to protect the environmental quality of their own living area which is a kind of environmental egoism. And it is proven by the fact that Xiamen residents reacted quietly to the relocation of PX project in Zhangzhou(Zhou 2011). In this sense, a simple 'response' to the public opinion is a kind of 'irresponsible' government decision-making instead; and the measure whether both the government and the public win is based on the rational decision-making aiming at public value, rather than turning from public opinion into government decision-making.

(2) For public participation, given the legislative state at that moment, introducing the public participation into the planning EIA stage in Xiamen PX event can be regarded as 'an exploration of absence of operational laws', and it is worth affirming fully. Meanwhile, the choice of citizen representatives and the arrangement of speaking orders in the public symposium should also be recognized and appreciated(Zhu 2008). However, it is worth rethinking into two aspects: first, during the whole process of public participation, the concerned stakeholders- Tenglong Petrochemical company has been

neglected selectively; secondly, according to the later investigation, those active participants in Xiamen PX event did not think it is the result of political engagement but the other exterior factors. In short, 'Xiamen PX event is by no means the victory of public opinion'. In that sense, if it is thought simply that citizens changed the decision through public participation in PX event, it is a wrongdoing of simplifying the complicated social facts to be in accord with the theoretical imagination.

Under comprehensive analysis, a few key facts in Xiamen PX event can be summarized as follows: firstly, Haicang PX project is a singular chemical project funded by private enterprise; secondly, when the event broke out, Haicang PX project has just started building; thirdly, the government failed to fulfill its supervisory responsibilities, and resulted in the fact construction projects are in conflict with regional location, and contradiction between chemical industry and real estate industry in Haicang district becomes increasingly conspicuous¹¹; fourthly, 'public opinion' urged relocation of PX project, and express their appeals through different ways such as unsanctioned 'mass stroll'; fifthly, there are other stresses including concerned stakeholders such as real estate developers and public opinion at home and abroad.

To do further analysis, practical logic in Xiamen PX event can be reconfigured: first and second facts determine that relocation of PX project confront less resistance; third, fourth and fifth facts provide the powerful dynamic for relocation of PX project from different aspects. The final governmental decision-making in Xiamen PX event can be regarded as the result of various factor function together; on the other hand, it can not be identified simply as 'victory of public opinion' just because public 'opinion' keeps high conformity with governmental decision-making, there are many levels of complicated social facts hidden in them.

Based on the above analysis, aimed at the key problem 'why the win-win Xiamen PX event becomes a classical example against PX', this article explains as follows: the conclusion of Xiamen PX event being taken as a successful example is based on the appearance 'public opinion is in agreement with government policy'. 'The government's policy must respond to the public opinion' has become the only standard, and it is essentially a type of extensive moral evaluation which simplifies the facts. In reality, the origin, development and ending of 'PX event' is a result of interaction of multiple factors. 'Public opinion' is not, should not be the only factor that influences the government decision-making. Furthermore, from the superficial understanding, 'the victory of public opinion' concealed the complicated gaming process in Xiamen PX event; and it implies moral anticipation and the discourse violence to take Xiamen PX event as a successful example, and may cause a blockage for dealing with the similar events with a reasonable solution. The present governance trouble in PX event is not from simple 'win-win' to 'lose-lose'. It began with moral evaluation and discourse violence in Xiamen PX event, and being repeated and intensified once and again in the subsequent events.

5 *Comparative Insights from Canada*

5.1 *Public Participation as a Legal Mandate*

One of the key deficiencies in the PX events in China is the limited scope of public participation in decision-making processes. In contrast, Canada mandates robust public involvement in environmental governance through laws such as the Impact Assessment Act (2019). This Act requires federal authorities to conduct comprehensive assessments of projects with significant environmental impacts, including industrial developments similar to PX chemical projects. Public hearings and consultations are mandatory, and stakeholders, including local communities, environmental groups, and Indigenous peoples, are invited to participate in the decision-making process. This ensures transparency, enhances trust, and minimizes conflicts by addressing concerns at an early stage.

For China, adopting similar mandatory public consultation mechanisms could prevent local governments from acting arbitrarily and encourage the integration of community concerns into project designs, fostering a more cooperative environment.

5.2 *Independent Oversight and Transparency*

The "PX event" highlights the short-termism of local governments in China, which often prioritize economic benefits over environmental and social considerations. Canada mitigates such risks through independent oversight mechanisms. For example, the Canadian Environmental Protection Act, 1999 (CEPA) empowers federal agencies to monitor compliance with

environmental standards and impose penalties for violations. It also ensures that environmental decision-making is based on scientific evidence, reducing the influence of political or economic pressures.

Introducing independent oversight bodies in China to oversee environmental projects like PX facilities could address the arbitrariness of local government actions and enhance the legitimacy of decisions, reducing public mistrust and conflict.

5.3 *Multi-Level Governance Framework*

Canada's multi-level governance framework emphasizes collaboration between federal, provincial, and local governments. This framework ensures that environmental decision-making is coordinated and consistent across levels of government, avoiding the fragmentation often observed in China. For instance, the Pan-Canadian Framework on Clean Growth and Climate Change aligns federal and provincial priorities, ensuring that environmental policies are implemented uniformly while allowing for regional adaptations.

China could benefit from a similar coordinated approach, where national environmental standards are complemented by region-specific implementation strategies. This would prevent local governments from making ad hoc decisions driven by short-term goals and ensure a consistent application of environmental laws.

5.4 *Legal Certainty and Long-Term Planning*

A recurring issue in the PX events is the lack of long-term planning and predictability in decision-making. Canada addresses this through clear legal frameworks that prioritize environmental sustainability alongside economic development. For example, British Columbia's Environmental Assessment Act requires proponents of major projects to prepare detailed assessments of long-term environmental, social, and economic impacts. These assessments are scrutinized by independent review panels, ensuring that projects meet rigorous sustainability criteria before approval.

Adopting such forward-looking legal requirements in China could enhance the predictability and sustainability of project approvals, reducing the likelihood of public backlash.

5.5 *Proposed Recommendations for China*

Drawing on Canada's legal practices, the following recommendations could be considered to address governance challenges in PX events: (1)Mandate Public Participation: Enact laws requiring comprehensive public consultation and stakeholder engagement in all phases of project planning and implementation.(2)Establish Independent Oversight: Create independent regulatory bodies to monitor and enforce compliance with environmental laws, ensuring decisions are science-based and insulated from local political pressures.(3)Adopt Multi-Level Governance: Develop a coordinated governance framework that aligns national and local environmental priorities while allowing for regional adaptations.(4)Enhance Legal Certainty: Implement legal frameworks that prioritize long-term sustainability, including mandatory assessments of long-term impacts and independent review processes.

6 *Conclusion*

Based on the preceding analysis, the government decision-making in PX events shows the obvious short term and capriciousness. On one hand, laws and regulations such as 'Environment Impact Assessment Law' have been seemingly enforced; but they are not effective basis of constraining and influencing the government decision-making. And to some extent, they have become assisting tools with executive power to achieve strategic goals. On the other hand, government decision-making is not necessarily consistent with the 'public opinion', and can be influenced by multi-agent complicated interest in many ways.(Feng, L.2020) Decision-making dominated by strategic thinking and practical thinking means the government's basic attitude of making decisions is to take one step at a time. When the 'primary task' or 'the balance of gambling forces' have changed, the government will probably take new strategies, and the corresponding decision-making will change along with it. During this process, in the sense of formalized society ruled by law, environment law has been implemented; however, it can not have a substantial effect on the government decision-making, and can not achieve the rule of law in the sense of substantive government by law. In this mode, each resolution of the event does not mean the realization of the environmental public benefit; but for the public, the growing psychological expectation of 'enlarging the

situation' deepens the governance predicaments of subsequent similar events.(O'Brien, K. J.,2005) In that sense, the root of the governance predicaments of PX events is both from the short term and capriciousness of operations of governmental authority and from the overflow of formalized society ruled by law and absence of the rule of law in the sense of substantive government by law.

Therefore, a series of deep-seated contradictions of Chinese environmental legislation are exposed in PX events: the present sustained growth of Chinese public's requirements for environment quality contradicts with the operation of administrative power stressing the short-term effect. The main crux of the governance predicaments of PX events is that environmental law is not the authorized basis of regulation of the administrative power, and to some extent it has become the tool to help administrative power to achieve a specific goal. In a word, the legal system has been tamed by the power system without restricting and supervising. In the system structure, if environment law has been implemented more unidirectionally, the dominance of the administrative power will be more strengthened; as a result, it will be far away from the rule of law with public expectations which can show the authority of law.

In the process of resolving the dilemma in governance, the critical step and path is to realize the reforming of administrative decision-making, that is, taking public interest as a guidance, achieve a fundamental change of the government decision-making from 'embeddedness¹² governance' to 'good governance'. To be specific, it is necessary to have a correct understanding of the relation between 'responding to the public opinion' and public participation ideologically; and it is also necessary to take into full account various relevant information to evaluate comprehensively.(Dai, M. 2024) Avoid taking 'public opinion' or 'science' as the single standard to regard PX event and easily leading to extensive moral evaluation. Ensure fully considering and reflecting value preference and benefits claim of different subjects to keep social communication on the track of rationalism and not to widen the gap between the value preference and benefits claim of different subjects. Meanwhile, the system construction focuses on achieving the objective of effective risk communication, identifying several key factors of process for public participation and taking full consideration of three main areas: neutrality of procedure, interaction of procedure, and self-sufficiency of procedure. Correspondingly, the situation of Chinese environmental legislation and public participation can be pushed to develop in a better direction.

Notes

1. The 'Pressure system' is a theoretical generalization of the current operation mechanism of local government in China, It emphasizes that the operation of local government is the decomposition and response to the pressure of different sources. See Yang, Xuedong, 2012. Pressure system: A brief history of a concept. Social Science, 11,4-12.

2. The main sources include relevant research literature, news reports and public website information.

3. In Kunming PX event, all of the entire EIA report, attachment and the approval of Mep are open to the public, and it is a notable improvement from the earlier abridged edition of the report of the public EIA report.

4. In the early stage of the event, Xiamen municipal government has taken control of media, blocked off BBS, blocking mobile phone SMS and other means to control information transmission; There are also some problems in the information disclosure of the eia stage in the later stage of the event, Such as the 'sudden disappearance' of online voting platform. See Zhang, Dongfeng, 2007. Sudden death of Xiamen PX online poll. Nanfang Metropolis Daily, 11th December; Bi, Shuzhi, 2007. Examine the plight of the public from closing the voting Page of Xiamen PX project. Yanzhao Metropolis Daily, 12th December.

5. The 'interest parties' here, in addition to the government and the public, other stakeholders involved in the PX event, mainly involved project construction subject, project special interest group and so on.

6. According to the related laws in China, a mass demonstration is not allowed. There have been protests against PX events in China, mostly peaceful gatherings that participants, in an effort to avoid arrest, have described as 'mass strolls'. So in this passage, 'mass stroll' equals to 'demonstration'.

7. For example, in the Kunming PX event, the petro china Yunnan refinery project is a major national energy project, placing dreams on changing Yunnan oil wasteland, It could be said that it is a great trend towards the inevitable. See Peng, Liguog and Gong, Junnan, 2013. PX National public relations. Southern Weekend, 25th July.

8. Analysis of various models of the Chinese government in the public policy agenda setting, see Wang, Shaoguang,

2006. The model of China's public policy agenda. *Social Sciences in China*, 5, 86-99.

9.If Xiamen Haicang PX project was stopped, the Tenglong Aromatic hydrocarbons company would suffer huge economic losses, they are forced to take all forms and levels of safeguarding rights.

10.For example, an official of Xiamen municipal party committee believes that the public who participated in the symposium was not a real 'citizen representative', but they are 'basically interest parties'. See Zeng, Fanxu and Jiang, Zhigao, 2008. A PK war between Xiamen citizens and PX project, *Southern People Weekly*. 1,12-18.

11.On June 7, 2007, Xiamen municipal government acknowledged at the press conference: It was not prudent enough to approve some real estate projects by haicang district five or six years ago, and it did not connect well with the original plan. See Xue, Zijin, 2008. Who wants to get rid of the PX project? *Legal Person*, 6, 14-16.

12.Specifically, the concept of 'embeddedness' rooted in 'embeddedness theory' of new economic sociology, this article uses the theory for reference to describe the real scene of administrative decision-making in PX events, that is, in PX events, the government does not make administrative decisions with stability and predictability based on the established rules, but embed the administrative decisions into the present Chinese political and economic system and social networks. That is, with the constraint of 'maintaining stability', in accordance with the present primary task, among 'multiple game' of government's will, corporate interests, the demand of 'public opinion' and public pressure, the government takes 'useful' strategies to act accordingly.

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