

Discussion on NIMBY Phenomena and Governance Strategies

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ABSTRACT: NIMBY phenomenon is a resistance to the polluting factories, public infrastructure and service facilities by the local residents. With the rapid development of China's industrialization and urbanization, NIMBY phenomenon will no longer be the case, while the research about the NIMBY phenomenon by domestic scholars has just started, especially on the various types of empirical research. Therefore, based on the reviews of literature, the author proposed classification of NIMBY and different hedging strategies for different NIMBY phenomena.

KEYWORD: NIMBY environmental justice governance strategies

1 ORIGIN OF NIMBY PHENOMENA AND LITERATURE REVIEW DOMESTIC AND ABROAD

NIMBY researchers initially mainly pay attention to the harm to local residents caused by some high polluting factories, and then gradually expanded to include all areas of new energy, waste treatment, solid waste treatment and some special social services, which mainly include the following: NIMBY phenomenon research about high polluting factories by Hayden Lesbirel, NIMBY phenomenon research about new energy facilities by British scholar Dan van der Horst, NIMBY phenomenon research about selection process of facilities for the homeless and AIDS by American scholar Lois M. Takahashi, NIMBY phenomenon research about transgenic crops by Holland scholar Tjard De Cock Buning, NIMBY phenomenon research about placement of the disabilities and the dilemmas in this sort of NIMBY phenomenon by Taiwanese scholar Shu-Hsiang Hsu studied the NIMBY phenomenon caused by solid waste treatment in Taiwan. He took the location of incinerator in Taiwan as an example, made the conclusion that with the further enhancement of democracy consciousness, public awareness of environmental justice and civil rights protection awareness is growing, which means dealing with the NIMBY

phenomena caused by the location of incinerator and the in the similar situations, the government only relied on unilateral coercive measures had be of no avail, at the same time, only economic compensation could not matter either. Therefore, he advocated that in order to solve the similar NIMBY phenomena, the most effective way is to promote the public participation and let the public participate in the whole process of projects especially the evaluation process, only in this way, can greatly improve the project's acceptance and support by the public. Therefore, the real question is not doubting the existence of NIMBY conflicts, rather than how to solve these conflicts in systematic ways and conceive a kind of conflicts solving mechanism that is based on institutions.

Reviewing domestic and foreign literatures, we find that the researching area of NIMBY phenomena has shifted, from those polluting facilities in the early period to new energy facilities, waste disposal, solid waste disposal and some special social service agencies and so on. Meanwhile, the governance strategies have also changed, from only economic compensation in the beginning to diversified compensation methods, which mainly include the following methods: improving the legitimacy of public policies, establishing reasonable and perfect compensation mechanisms, making sure the public participation channels free.

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2 THE CLASSIFICATION OF NIMBY PHENOMENA

According to functions of facilities, service levels and whether it has publicity, this paper divide NIMBY facilities into the following.

2.1 According to functions of NIMBY facilities

(1) Energy facilities. These facilities mainly include nuclear power plants, coal-fired power plants, refinery and petrochemical plant and so on. Energy facilities can bring lots of benefits to the local residents, but since their external costs will bring great harm to the residents surrounding these facilities, especially harm to their health. Conflicts caused by these facilities happened in the whole process of China's industrialization, especially in those suburban and margin areas, such as PX project happened in the city of Xia Men recently.

(2) Waste disposal facilities. These facilities mainly include refuse incineration plants, sewage treatment plants, and nuclear waste disposal fields and so on. These facilities may affect the living qualities of local residents, threatening their safety and health, or devaluating their houses. Along with stronger awareness of environmental health, the amount of social conflicts caused by these facilities is growing rapidly, such as the abortion of a garbage transfer station which located at the gate of one community in a city of Guang Dong Province in 2008.

(3) Transport infrastructure facilities. These facilities mainly include Bus Rapid Transit (BRT), subway, high way, rail way, airport and so on. Improving travel efficiencies, these facilities also bring some negative effects to the local resident, such as noise pollution, declining of air quality and so on. With the accelerating process of China's urbanization, NIMBY movements caused by transport infrastructure facilities are increasing rapidly. The most typical one is the abortion of maglev railway which is from Shanghai to Shanghai Hangzhou in 2007.

(4) Social services facilities. These facilities mainly include crematoriums, funeral parlors, mental hospitals, special education institutions and so on. With the function of meeting needs of public life, these facilities will let residents nearby feel unhappy or even disgust, then are not willing to live nearby.

2.2 According to service levels

(1) Neighborhood facilities. In order to develop local level communities, these facilities are built to provide social services in a small scale, such as garbage transit station, small sewage disposal factories, and small parking lots and so on.

(2) City-wide facilities. These facilities are built to meet needs of developing cities, such as large garbage incineration plants, large sewage disposal factories, and infectious disease hospitals and so on.

(3) Regional-wide facilities. These facilities are built to meet needs of developing the whole regional, such as industrial parks, roads, railways, airports and so on.

(4) National-wide facilities. These facilities are built to meet needs of national strategies, including nuclear power plants, petroleum reserve bases, and grain reserve bases and so on.

2.3 According to whether it has publicity

(1) Profit-oriented commercial facilities. Since these facilities are commercials and can bring lots of economic benefits to local governments, they are always supported by the authorities. But they can also generate some potential risks to the residents that are living nearby. These facilities mainly include energy development projects, such as the exploitation of coal, petroleum and so on. All these projects may cause serious environmental problems, affect the lives of local residents.

(2) Nonprofit-oriented public facilities. Built by governments or NGOs, these facilities can meet the need of national development strategies, at the same time, they also include the facilities built to improve living qualities of local residents, most of them are public infrastructures, such as transportations, garbage and some hazardous waste disposal facilities. Facilities built by NGOs mainly include variant kinds of special medical institutions, such as metal hospitals, AIDS treatments and so on, which may also result in NIMBY phenomena.

3 DIFFERENT ACTION STRATEGIES OF AVOIDING NIMBY PHENOMENA

Theoretically speaking, the only principle to avoid this paradox predicament is the principles of Pareto optimality and fairness. What Pareto optimality is that there is no other methods of the conflicting party to better off, but will not make any other parties' situations worse; and Pareto fairness means that the conflicting parties or the arbiters won't put forward reasonable protests.

Based on the principles of Pareto optimality and fairness, how to avoid the NIMBY phenomena? From the perspectives of the existing literatures, most scholars advocate the methods of the publicity of government information, the third party intervention, public participation, reasonable compensation and so on. Though these methods and strategies can ease the extension of NIMBY phenomena in some extent, yet they didn't propose different avoidance mechanisms and action

strategies in different NIMBY phenomena. Since NIMBY dilemma are caused by the co-existence of NIMBY facilities' publicity and risk, based on the dimension of "risk-uncertainty" the author propose different avoidance strategies for different NIMBY phenomena. The classifications are following.

(I)high-risk—low-uncertainty(II)high-risk—high-uncertainty(III)low-risk—low-uncertainty(IV)low risk—high-uncertainty.

First, in category I and II, since those facilities with high risks, the public sectors should put these facilities into isolated places, to reduce the influence scope and impact to minimum as far as possible. Meanwhile, forbidding the phenomenon that in the name of public interests, building high polluting facilities, because we should fully respect the public environmental rights. To those public infrastructures of category II, we should take risk management actively, predict the following scientifically, such as the location and safety of these facilities, the impact on the surrounding environment and other serial problems. And they should also ensure policies information open, transparent procedures, and accept the supervisions of the local residents and other non-governmental public organizations.

Second, in dealing with facilities that though have low risk yet make people unhappy which belong to the category III and IV, most scholars advocate the principle of "beneficiaries' compensation", which means those benefits from the facilities should make effective compensation to those majorities that burden the external costs. Here the author emphasizes that the compensation mentioned above not only includes material items, but also includes necessary non-material items, which Japanese scholar Toyotaka Sakai called social loss.

Last, the most important thing is that the governments should change the planning concepts and governance logic, make sure give up the resistance "governances" based on the logic of "minimum resistance path", to the traditional model "decision-announced-pressing" to consulting democracy governance logic of "participation-voluntary-cooperation". And we should respect the citizens' environmental rights fully, changing the traditional economic doctrine mode, which means "the emphasis on economic benefits, light on social benefits", rather take the new modern project concepts that emphasize on economic benefits and social benefits.

4 CONCLUSION AND DISCUSSION

It seems that NIMBY phenomena are reflected as the dislike and disgust to the NIMBY facilities by local residents, but the essence of NIMBY phenomena is

the gambling of concerned shareholders, which reflects the rise of citizenship and civic rights and the pursuit of environmental justice. With the further development of China's urbanization and industrialization, NIMBY phenomena won't be the only case, while researching on it by domestic scholars is just in the beginning stage, especially the empirical research on different kinds of NIMBY phenomena. Therefore, how to avoid or mitigate NIMBY phenomena will be another new challenge for the Chinese governments and academic circles in the near future.

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