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Environmental Governance in China: New Developments and Perspectives

Dieter GRUNOW and Thomas HEBERER

“Implementation” has become an important element of research in political science at the latest since the publication of the first book on the topic by Pressman and Wildavsky in 1973. The subtitle of the book gives a precise indication as to why this topic has earned so much attention even to this day: *How Great Expectations in Washington Are Dashed in Oakland; Or, Why It's Amazing that Federal Programs Work at All, This Being a Saga of the Economic Development Administration as Told by Two Sympathetic Observers Who Seek to Build Morals on a Foundation of Ruined Hopes*. In the process of extending public tasks in growing societies – in this time period especially the expansion of welfare functions in OECD countries – public policies were put under observation in order to determine whether policy aims were being followed and goals reached. Effectiveness in task fulfilment and/ or problem-solving in public affairs were the key issues. This did not, and does not, exclude the possibility of purely “symbolic” policy-making – where only making a good appearance in the public sphere is of interest to the protagonists.

The work of Pressman and Wildavsky shifted the observation of public policy from effect evaluation (outcome or impact) to the observation of the implementation process, often termed “process evaluation”. It was conceived of as an important addition to the measurement of outcomes – especially those outcomes as disappointing as in the Oakland case (regarding the unemployment of young people) cited by Pressman and Wildavsky. This new research strategy sought to explain successes and failures in public (political) programmes. In practical terms, it was hoped that such a strategy would help to readjust programme implementation more directly and swiftly.

As the literature review by Hill and Hupe (2009) has shown, implementation research has been gradually broadened over time to include more components or details of the programme formats, the steering instruments, the organizational arrangements, the cooperation networks, staff qualifications, reporting in the political administrative system (PAS) and in the public sphere, the participation of various societal groups, etc. Application to different policy fields and/ or to specific public policies such as those dealing with health, social welfare, security, economy and

education has given rise to more specific analyses (Grunow 2003). The admittedly great diversity between the various approaches and angles has led to the insight and assertion that “no model of architecture fits all policy contexts/ situations”.

A broad array of experiences from many countries has further shifted attention towards specific implementation perspectives – such as criticism of regulatory policy instruments and the trend towards governance principles that include civil society actors – and recently towards increased focus on efficiency. The traditional concern of implementation research with the effectiveness of public policy is now more frequently combined with cost control: Benchmarking, evidence-based programmes, and efficiency evaluation (including cut-back strategies) are the current keywords.

The persistence of these topics over several decades is a strong indicator of the perpetually unsolved (at least partly) problems of implementation. Among the most important reasons for this state of affairs are the increasing complexity of modern societies, the interdependencies/ cross-cutting nature of policy fields, and the international dimensions of how problems develop – as well as the search for solutions. Different countries have developed different routines for their policy cycles, including for the development and implementation of policies. As each country has a specific context (PAS architecture), they might not all have similar experiences of successes and shortcomings in implementation, yet they may still attach similar importance to the implementation as a specific source of output legitimation for the PAS, or even as a partial substitute for input legitimation based on participatory policy-making.

The contributions to this special issue deal with the implementation of public policies. Therein, they concentrate specifically on China as the chosen research location and on environmental protection as the policy field to be investigated (Heberer and Senz 2008). This focus is well chosen, since rapid economic development in China during the last four decades has had its price in terms of environmental deterioration. Meanwhile, China is the worldwide “front runner” in CO₂ emissions; many of its mega-cities are counted among the most polluted in the world. The number of instances of criticism and complaint by the population has also continuously increased. As a consequence of the international debate about global warming, as well as environmental protection policy-making and policy implementation, China has come under particular observation, although emissions anywhere in the world are acknow-

ledged to contribute to global warming. However, any post-Kyoto arrangement without China and the US on board would not be sufficient to reduce the threats to the planet and to mankind that stem from recent developments.

The international dimension of this issue, and the various international conferences – such as in Copenhagen – that are seeking new international agreements, have led to an alignment of policy-making personnel worldwide. This also holds true for policy-making in China within the field of environmental protection: A long list of renewed or new legislation is available – it has often been combined with the upgrading of public (political and administrative) organizations, who are now taking greater responsibility within this policy field. However, policies are also just words on a piece of paper. Their relevance and effectiveness can only be demonstrated in the context of implementation. There can be no doubt that we have “implementation gaps” in this policy field all across the globe. However, their identification is especially urgent in China, Europe and the US – and other countries with a proportionally large share in the “production” of environmental damage.

There are two main sets of factors that are important for any analysis of the possibilities and the failures (gaps) in the implementation of environmental policies:

- The first set of factors concerns the characteristics of the problems that these policies have to deal with: Many problems stem from natural phenomena (like earthquakes); many stem from uncontrolled and/ or misunderstood interventions in nature (“human footprint”); the discussion over questions such as “How large is the human footprint?” or “Should we exploit nature according to our economic interests?” indicates another special aspect of the policy problems faced and the conflicting interests with regard to nature and natural resources. These arguments are well focused in the debate about sustainability. As we know from many studies about the policy cycle, conflicting interests might (at least somehow) be balanced in policy-making, but they can show up again as problems in the implementation phase – this is especially true for environmental protection issues.
- The second set of factors concerns the architecture of the PAS under scrutiny: overall concepts of state, the special role (“rule”) of public law, (administrative) arrangements for implementation, etc. These factors have to be understood in light of their contribution to any

successes and failures in the implementation process. Obviously, this also has to do with both the size of a country and the number of people who live within its borders: The complexity of the architecture is a consequence of such factors. This complexity makes it difficult to know “what happens in the country”; for a nation as large as China, it is easy to list all the environmental programmes of the central government but almost impossible to have a precise account of what actually happens in the implementation locations. This is especially true for those seeking to take a scientific approach to these questions: One has to work with various sources of information and has to include any original empirical studies. Such an approach helps to understand the challenges in effective implementation processes in China (and elsewhere).

This “definition of the situation” was one starting point for empirical research about the policy field of environmental protection in China. Like Pressman and Wildavsky’s book, the diagnosis of there being little effectiveness in environmental policies was the starting point for the analysis of the causes of these implementation gaps – by using examples from urban and rural locations in China and by looking also at some developments in Germany for a comparison. The focus, therefore, was not on monitoring a special policy cycle but instead on reviewing local implementation practices in various locations. However, this did not exclude an investigation into the multi-level processes that precede or accompany any local (non-)actions.

The research project was initiated by Professors Dieter Grunow and Thomas Heberer from the University of Duisburg-Essen (Germany) and carried through in cooperation with the China Centre of Comparative Politics and Economics in Beijing (particularly with the cooperation and support of Professors Yu Keping, He Zengke and Li Huibin). Funding from the Haniel Foundation (Duisburg, Germany) allowed for a three-year Ph.D. scholarship for Ms. Ran Ran, who completed her Ph.D. successfully in 2009, in Duisburg. The empirical work for the project was essentially carried out in three urban locations in 2007: Xiamen, Shihezi and Yingkou, as well as in three rural areas in 2009: Nanfeng County, Shouguang County and Deqing County. Since there was such a paucity of previous academic research on the topics the project dealt with, the basic political and administrative structures and practices needed to be outlined. This included studying the distribution of environmental policy (EP) tasks among the local administration and the cooperation between

different local public bureaus; it also included getting to know the relationship between local (party) politics and the local administration – and their use of incentives and controls. It also entailed researching instances of cooperation or conflict with neighbouring counties and the coordination/ control function of higher levels of administration; the role of the population, NGOs and the media; and the quite different environmental problems in the various research locations. The empirical research included in-depth interviews with those representatives of the different functions and practices for each EP.

The six cases herein showed high degrees of variation. The comparison between them is, therefore, an important aspect of the research design. In addition, the project also includes a comparative view on selected German experiences (in the Ruhr district and in the former East Germany); colleagues from China visited these regions for three weeks in 2006 and 2008. They were also engaged in preparing for the research visits of the Duisburg team to China, and contributed to the research process. As a result, the research concept included an international comparative component, which also is demonstrated in the contributions made to this special issue.

The internal structure of this special issue adheres to the following general guidelines:

- This introduction is enriched by a contribution concerning the historical reconstruction of the development of problem awareness and the definition of environmental issues in China and their reflection in policy-making and research.
- The first set of contributions is closely related to the perspectives of the cooperative project (China, Germany); the approach is guided by comparative work undertaken within those countries. The variation is basically focused on specific environmental problems in the research location: desertification, pollution of coastal areas, deforestation, over-fertilization, cleaning up of industrial sites, etc. The two articles about the Duisburg–Beijing project are complemented by another problem-related case: the drying up of rivers.
- The second set of contributions adds to the dimensions of implementation analysis by focusing on specific implementation architectures and procedures – as well as their strengths and weaknesses. These are: the handling of access to information; regional control structures; and forms of participation (and protest) by the public.

The contribution of Richard L. Edmonds describes the development of societal and political concerns about environmental issues in China. It illustrates that scientific research on these issues is still in a preliminary phase – one that is often restricted by a conflict of interest with economic development and by questionable (official) data. The article also indicates that, with the increasing role of China in the world economy and in its role as heavy polluter, there is more concern in China itself about the topic. *Ipso facto*, the contribution outlines the context for the subsequent papers that look at recent developments in more detail.

The first set of articles commences with the contribution of Dieter Grunow, who sets up a framework of analysis for the implementation process by referring to concepts of “policy field” and “policy cycle”. They help to specify the components of empirical research that were used in the study done by the team from Duisburg and Beijing. The paper also introduces the concept of “case comparison”. Through this, it can be shown that many environmental problems are similar in Germany and China – leading to similar demands with regard to policy-making and implementation. However, the political and administrative architectures are very different in many respects – with quite diverse complications in problem-solving and citizens’ consent in the context of environmental protection. Looking at the six cases that were researched in China – through expert interviews and documentary analysis – the article concentrates on local implementation architectures and processes. Although ecological problems are often different in the six research locations, the local arrangements are rather similar in their potentials and deficiencies. Especially important is the evidence of a lack of control and enforcement capacity, for example with regard to emissions standards. The deficiencies of coordination between local public actors and between neighbouring cities/ counties are severe drawbacks to effective implementation. The comparison with Germany shows that this is not just a kind of “slackness”, but that there are quite a few organizational and procedural implementation problems that demand well-considered solutions.

The contribution by Thomas Heberer and Anja Senz also refers to the Duisburg–Beijing research cooperation and therefore also focuses on the local implementation of environmental policies in China. It argues that the Chinese central government in recent years has put more emphasis on environmental protection – but, due to the fact that the party-state in many ways lacks effective institutions to implement policies and laws, central policies ultimately do not have the expected effects at the

local level. The paper thus analyses the behaviour of local agents and examines the reasons why they do, or do not, implement central policies – and why they might modify them according to local interests. The central hypothesis is that three factors connected to weak institutions – the political priorities of the centre, the specific interests of local actors and structural/ administrative constraints – explain the behaviour of local actors in the environmental field. Nevertheless, the comparative approach of the study also provides evidence that within the same macro-context, local performance might be quite different.

The contribution of Niels Thevs picks up on a specific intervention in nature: the exhaustive use of water in irrigation. His case is taken from the Tarim Basin in the southern part of the Xinjiang Uyghur Autonomous Region. Due to the extremely arid climate in the Tarim Basin, all agriculture there and along the Tarim River depends on irrigation. From the 1950s until the 1970s, the area under irrigation was steadily enlarged, resulting in an increasing demand for water. As a result, between 2007 and 2009 the entire Tarim River ceased to carry water during spring and early summer – in other words, during the planting and irrigation season, thus putting great pressure on the water resource administration as well as on individual water users. The article demonstrates that water users have contradictory goals, ones quite typical in the ecological context: Fulfil economic targets and use less water. The decisions made at the agricultural level are driven by individual choices intended to combat the threat of water scarcity and the prospect of crop failure rather than being based on a long-term adaptation to water scarcity.

Huan Qingzhi's contribution is the first of the second set of articles, which refer to specific organizational elements in implementation, control and participation. The article analyses the structures and functions of (six) regional Supervision Centres for Environmental Protection (SCEPs), which were established by the Chinese Ministry of Environmental Protection (MEP) in recent years. The role of these organizations – as MEP-affiliated institutions (事业单位, *shiyew danwei*) rather than as its regional agencies (派出机构, *paichu jigou*) – is analysed with a focus on the South Centre located in Guangzhou. In this analysis, some light is shed on the complexity in strengthening/ reconstructing the vertical supervision of environmental protection in China. Huan shows how the South Centre works in reality, from its major achievements to the difficulties it has experienced in exercising its power. The article summarizes that the capacity for control is insufficient and that a fundamental problem for

the SCSC is that a clearly defined and closely cooperative relationship between the three actors – the MEP, the SCSC and the local governments – still does not exist.

The contribution by Arthur P. J. Mol takes on another aspect of implementation design: the Government Information Regulations that are widely considered to be a milestone in China's information policy history. The Environmental Information Disclosure Decree was the first to operationalize these general regulations into a sectorized information disclosure system on the environment – especially with regard to industrial risk management. This article assesses the implementation of the environmental information disclosure system about six months after the decree took effect, on 1 May 2008. Through a review of the websites of all 31 provincial Environmental Protection Bureaus (EPBs) and the Ministry of Environment Protection, the conducting of an experiment with actual information disclosure requests as well as interviews with all provincial level EPBs, this paper concludes that the implementation of the environmental information disclosure system still falls short. Future improvements should focus on further publicity for the regulations and decree so as to enhance public participation; the establishment of an independent evaluation and supervision system for information disclosure; the exchange of experiences and best practices among EPBs; and on strengthening the legal status of environmental information disclosure. Only then will this information disclosure policy be able to play an important role in industrial risk management.

The Liu Xianbing's contribution begins with the observation that the provision of better public access to corporate environmental information is believed to help initiate the former's participation in environmental activism. However, it is thus far unclear as to what extent the public actually uses corporate environmental information, and which factors are predictors of public environmental protest. With the intention of closing this research gap, the article uses data from a questionnaire conducted in August 2009 in a selected study area: Suzhou, a city in the Jiangsu Province. A total of 343 valid responses were successfully obtained. The survey indicates that nearly 60 per cent of residents who live near factories worry about the impact of emissions on the surrounding environment as well as the corresponding risks to human health. However, they are still reluctant to act against their neighbouring polluters. Nearly 10 per cent of respondents have never taken action against the polluting companies, and occasional participators in protest account

for 66.2 per cent of the total surveyed. An interesting observation is that these people prefer to practice their activities on their own. Other forms of environmental activism, which require residents to directly communicate with the government or even with the polluters, were undertaken infrequently (scores ranged between 5 and 25 per cent).

To summarize and contextualize the contributions to this special issue, it can be asserted that empirical research concerning the implementation of environmental protection policies in China is still in its inception, and clearly needs a much broader scope of case reviews and comprehensive observations. Some of the possible and necessary academic approaches to this end are demonstrated in these pioneering contributions. The results show an increasing awareness among political, administrative and societal actors regarding ecological issues in China during the last decade. Possibilities for sustainable action do exist, but currently they are – at best – used very selectively. The research has presented not only many environmental problems, challenges and disasters but also examples of effective reactions and good performance. In the Duisburg–Beijing cooperative project these examples were: strategies against desertification; prevention of the intrusion of salt water into the ground water; arrangements for local garbage collection in rural areas; prevention through popular protest of a dangerous chemical plant being built; training of farmers to avoid excessive use of fertilizers; and the control of vehicle emissions. These things have been achieved in spite of the many structural, procedural and individual deficiencies in implementation and its multi-level controls. It is highly unrealistic to expect a diffusion of best practices throughout China without taking many of these obstacles out of the equation, as Dieter Grunow's paper notes. In this mould, a glance towards other cases in the international milieu (such as in the Duisburg–Beijing project regarding Germany) might help to identify possible alternative options – not to simply copy them, but rather to identify possible new directions for effective change processes in the policy field of environmental protection in China.

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