Development and Disease: A Study of Cancer Villages in China

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Abstract

The cancer-village phenomenon provides a focal point to examine worsening environmental health problems in China and raises critical questions for sustainability research and policy. This paper seeks to address various concerns relating to health and environment keeping in view the development trajectory of the state. The geopolitics of cancer and the geographical accountability are the main concerns of the research. The reasons for mushrooming of the 'cancer villages' and the approach of the government towards tackling it have been discussed. There are implications of the disease for the vulnerable sections of the society and recently there has been rise of civil society and NGOs advocating for better environmental measures and health benefits. Though government has started acknowledging the Cancer Villages, the problem is unlikely to lessen in the near future.

Keywords

Cancer Village, Development, Disease, Environment, Health, Pollution.

Introduction

A decade ago, researchers stated that cancer deaths 'have doubled since the 1970s, and are now the leading causes of mortality in rural China'. The observers have noted that a large and growing number (now estimated at more than 500) of villages have unusually high rates of mortalities, and the causes of death are different forms of cancer. More recently, a World Bank report assessing the cost of pollution in China again identified cancer as the main cause of death, showing also that mortality rates for cancers associated with water pollution, such as liver and stomach cancer, are well above the world average.[244] Reports about 'cancer villages' in China have appeared with increasing frequency in Chinese and Western media. All these accounts outline a strong connection between economic growth, pollution and cancer. As the effects of economic reforms rippled through the 1980s, local governments eagerly built new factories but had little experience of environmental controls. The development trajectory of the state has done irrevocable damage to its environment. Economic development got predominance over environment and raised the question of human security. The rural areas of China are the worst victim of neo-liberal globalization as they are subjected to unbalanced economic growth and environmental injustice. For the rural population development is marked with Displacement, Dislocation and Disability. Cancer Village phenomenon in China is the intriguing example of negative impact of economic development of the country.

The cancer-village phenomenon provides a focal point to examine worsening environmental health problems in China and raises critical questions for sustainability research and policy. What is the factor that led to the geographical concentration of cancer villages? Are the government statistics on cancer reliable source of information? Does the geography of accountability play a determining role in the cancer village phenomenon? What effect does the cancer have on the vulnerable section of these villages? How is China responding to the issue of cancer in these regions? What is the role of civil society in cancer villages? How real is the cancer-village phenomenon? What geographic areas tend to have cancer villages? How do nongovernmental organization (NGO) activities and local protests affect the situation? Why does the cancer-village phenomenon appear in China? What is likely to happen in the future? Based on various media reports, this paper seek to address some of these questions.

What are Cancer Villages?

Cancer village is a nomenclature used for those villages that have unprecedented cancer rates. Average cancer rate in these villages are far above the national cancer rate. In some cases cancer rate supersede the birth rate as in Huangmengying Village of Henan Province. Cancer, like any chronic disease is not just a medical issue but has socio-economic implications that evoke the politics of cancer. In brief, a cancer village is a community where rates of cancer are considerably in excess of China's normal death rate of 6 per 1,000/year. The number of such villages is in dispute. A recent estimate suggests, based on accounts in Chinese media, academics and NGOs, that China is home to 459 cancer villages, reaching into every province except for Qinghai and Tibet. Apparently, the first Chinese report linking cancer to environmental pollution was in 1987.

[244] World Bank (2007): The Cost of Pollution in China. Accessible at: http://siteresources.worldbank.org/INTEAPREGTOPENVIRONMENT/Resources/China_Cost_of_Pollution.pdf (accessed 2 August 2013).

Then, investigators in Liaoning province reported that mortality rates for all cancer, stomach cancer and lung cancer in 1970 to 1978 were higher in villages with hexavalent chromium-contaminated drinking water than in the general population.

Reports began to appear early this century of abnormally high rates of cancer, attributable to environmental pollution of land, water and air. Most of the incidents reported concern water pollution. An early example was Liukuaizhuang village in Tianjin municipality about 75 miles from Beijing. Scores of chemical factories moved into the village bringing economic success, but also increased incidences of diseases such as bone, lung, liver and breast cancer, and an increasing number of children suffer from leukemia. The broader Yangtze River has been the recipient of highly increased loads of pollutants, adversely affecting the health of water users. (Anna Lora-Wainwright 2010: 80)

There is not much literature on the cancer village phenomenon in the academia. More than the Chinese authors, western writers have discussed the issue openly. Anna Lora-Wainwright examines how villagers in rural Sichuan understand the development of cancer, how they attempt to make sense of why it seems widespread and of why it affects particular individuals. Etiologies of cancer such as negative emotions, smoking, consuming alcohol and preserved vegetables are addressed in order to contextualise environmentally related factors, and explain why they may or not be resorted to. With reference to ethnographic examples, she argues that awareness of pollution's effects on health can only gain strength when it is consonant with locals' experience and moral parameters and when it is perceived to be productive in attracting media attention and obtaining redress from various levels of state bureaucracy. (Wainwright 2010: 79)

A comprehensive account of cancer villages by Liu Mengqin and Fu Chen explains their existence as a 'trade-off between development and poverty'. Liu and Fu identify the main underlying causes of cancer villages in the growing rural–urban gap and continuing rural poverty, which entails the transfer of polluting factories to poor areas. Secondly, as is common, they attribute the problem to an emphasis on economic development without adequate attention to environmental protection, and thirdly to local protectionism. They suggest as a solution first the need to tackle rural poverty and achieve more equal growth in both rural and urban areas. Second, they highlight the need for better law enforcement and the establishment of a control system for environmental law enforcement. Third, they argue for an independent evaluation structure to tackle the challenge of establishing evidence for the connection between cancer and pollution, and to clarify issues of unclear responsibility. Fourth, they highlight the need for basic welfare insurance to counter poverty, which is often closely related to both health and environmental factors. Finally, they stress the need for public participation by strengthening community governance and participation in environmental protection, providing relevant training to villagers and supporting NGOs.

An interdisciplinary study by William Alford et al. of 'the human dimensions of pollution policy implementation', which focused on air quality in rural Anhui province, assessed how 'policy measures have been communicated to, understood by, and acted upon by the citizenry' and concluded that 'the central government's message has yet to be absorbed' (Alford et al. 2002). They stress that campaigns for environmental awareness have little effect and that awareness is rather the result of personal experience, wealth, education and media. Their research is

commendable for pointing out that successful law enforcement requires creating awareness, providing incentives for action, and making national regulations feasible locally.

Jun Jing's work on environmental causes of protest turns a keener anthropological eye on the processes by which villagers realise the harmfulness of pollution. He concludes that awareness of the causal connection between pollution and illness and the decision to take action can only take place when they resonate 'with a society's value system and its symbolic manifestation' (Perry & Selden 2003).

Geographical Concentration of Cancer Villages

Cancer Villages popularly called *'Aizheng Cun'* in China are the villages with unprecedented high cancer rates, much above the national average cancer rates. In some cases the cancer rates and cancer death rate is above the birth rate. Cancer villages are the product of environmental pollution mainly – water and air. In China cancer village phenomenon came into limelight for the first time in 1998. There is no consensus on the extent of cancer villages in China due to lack of availability of official records and censorship. Health in China is a National Secret. According to Sun Yuefei, there are more than 247 *"Aizheng Cun"* in 27 provinces of mainland China that tend to cluster in Eastern China (Liu 2010). However, Lee Liu (ibid) identifies 459 *Aizheng Cun* in 29 of 31 provinces of China. In the eastern provinces the cancer villages are situated in the poor counties near major cities and at the deltas of Yellow, Yangzi and Pearl Rivers, Huai River Valley. The cancer villages are more prevalent in poor farming villages in close vicinity of industrial sites.

Cancer villages tend to concentrate near wealthy cities in China's East, where international business has invested in joint ventures and manufacturing plants to take advantage of cheap labour and lax environmental laws. Such villages may increasingly be emerging in less developed West where jobs are scarce and information about pollution is difficult to obtain (Judith Shapiro 2008). Cancer Villages have mushroomed around the downstream of River Yantaze, Huai River, Yellow river, which are getting polluted by paper units, chemical and fertilizer units etc. Hebei and Henan have the largest number of officially reported cancer villages. Guangdong and Jiangsu, China's richest provinces, have the largest number of counties with officially reported cancer villages. Hunan has the largest number of unofficially reported cancer villages, followed by Hebei. Shandong and Hunan have more unofficially reported cancer counties. The provinces are ranked by an average score of two items: number of cancer villages and percent of total cancer counties (the total number of villages is not available for the provinces). Because the sizes of the provinces are so different, using the number of cancer villages alone is not a fair way to rank the provinces. For examples, Hainan and Chongqing are small. Although they have less than 10 cancer villages in only a few counties, they have a high percentage of counties with cancer villages. The top-12 provinces include six coastal provinces with their six neighboring inland provinces. These provinces form a cancer-village belt in eastern China, starting with Hebei in the north and ending with Hainan in the south. The belt includes 396 cancer villages – 86.3 percent of the country's total – and 203 officially reported cancer villages – 84 percent of the country's total. Those provinces also have the largest number of cancer counties, adding up to 174 (78 percent of all cancer counties in China). The belt contains over 55 percent of China's population and over 59.3 percent of China's gross domestic product (GDP). It contains all China's most developed areas as well, except for Shanghai, Beijing, and Tianjin. However, there is a large income gap within the belt between the wealthy

coastal provinces and their poor inland neighbors. For instance, Zhejiang and Jiangsu's per capita GDP is about three times that of their inland neighbor Anhui.

Geographical Politics of Data & Geography of Accountability

The emergence of modern nation- state also saw the dependency of state on data and statistics to understand any socio-economic problems. The view that quantification of socio-economic phenomenon offers a better understanding to the policy-makers and mentors them to implement policies conducive to a given situation gained prominence in policymaking circles. However, quantification does not always give true picture of the success or failure of any policies especially when such quantification deals with complex physical- social phenomenon like Cancer Villages. The question of reliability of the statics is much more complicated in case of China. Lack of democracy and the concept of 'national secret' prevent the health institutes and local officials from sharing any data with regard to cancer patients (Watts 2008). Even the local people are prohibited from talking about the health issue with any outsider. The people of China cannot easily challenge the hegemony of the Communist Party and have to comply with the instructions given by the party. Any non-compliance on the part of people can lead to police action against them. Under such scenario, even the WHO statistics with regard to cancer prevalence in China are rather limited in scope.

Geography of accountability is yet another face of politics of cancer. The human need to have someone to blame for their damage and this blame game runs through local level to the worldwide community. In the Chinese province of Henan, the farming community blames the pollution of water caused due to industrialization as main cause of cancer. This is to some extent a true claim, however, cancer has other risk factors associated with it. The farming community forgot their own role in polluting the environment. The cancer villages are also popular for indiscriminate and reckless usage of agro-chemicals. Industrial units in these places put the blame on the pollution and environment control board for the wide spread cancer case. The claim of industrial units that the failure on the parts of the local governments to provide appropriate dumping place put the question of accountability on the state authorities. The industrial units blame the farming community responsible for air pollution in the region as the farming community contravene with the state instructions that prohibits the burning off the stalks in the cornfield post-harvesting (Watts 2008). When we come to government level, the various ministries are involved in blame game – the health department blaming the agricultural department and vice-a-versa.

Why Is It in China that Cancer Villages Are So Widespread?

In most cases, the continuing misery is attributed to official corruption that poses an obstacle to implementing environmental regulations. For instance, an article examining three cancer villages (in Shandong, Jiangsu and Zhejiang) published in Nanfang Wang as part of a report on water pollution, documents how villagers' attempts at seeking redress failed due to insufficient evidence or through uncooperative officials bribed by polluting industries. (Dushi Nanfang 5 November 2007, accessible at http://www.nddaily.com/A/html/ 2007-11/05/content_299441.htm (13-09-2014)

Development and Environmental Policies

China has followed the "grow first and clean up later" approach to development, which led to an acceleration of environmental pollution and serious environmental health problems. China's encouragement of the development of township and village industries in the 1980s has also caused severe pollution in rural areas. Furthermore, both China's development and environmental policies favor urban areas. Environmental programs have been urban-centered. These efforts focus on environmental "bright" spots and neglect "dark" spots, creating a divide in environmental protection. Environmental agencies lack administrative power and financial support because they are part of the government that puts economic growth first. (Lee Liu 2010)

Economic, Social, and Political Disparities

China's urban–rural disparity is one of the worst in the world and has been increasing. Many rural areas are extremely poor. Due to economic, social, and political disparities, the poor rural people continue their tradition of drinking water directly from natural sources. Compared to their urban counterparts, the villagers are more likely to be excluded in the decision-making process when a potentially polluting factory is put in their areas; they are powerless against the alliance of corporation and government. (*Ibid.)*

Lack of Freedom and Democracy

China is well-known for its lack of freedom and democracy. This is even more so for the vulnerable groups (people at the bottom of the society). Due to strong central governmental control over the media, legal systems, and NGO activities, the voices of the victims are not heard early enough to control pollution at an earlier stage, resulting in greater damages to the environment and human health.

Corruption and Lack of Laws and Law Enforcement

China has depended on administrative measures instead of legal means to deal with environmental violations. Polluting factories often bribe governmental officials so that they will ignore or help to disguise the pollution problem. When pollution is really out of control, factories are usually required to pay a fine, which costs a fraction of the money it would have to spend on pollution control. China has established many environmental laws, but they are seldom enforced. Cancer victims have filed many lawsuits against the polluters, but few have been successful. There are no government reports that establish a direct link between a factory's pollution and villagers' cancers. As a result, it is impossible for the victims to obtain compensation. Many newly established plants are well equipped with pollution-control facilities; however, they rarely use them because of corruption and lack of environmental law enforcement.

Initial State Responses

Denial. Not only did the regime deny that large cases of environmental degradation led to adverse health effects, but also governments at all levels worked to ensure that information about cancer villages did not spread. Local governments prevented outsiders from learning more about village environmental risks, and they banned foreign reporters from visiting. Local government officials pressured doctors to remain silent on the link between pollution and high cancer rates. They also harassed local residents who complained. (McBeath & McBeath 2014: 5)

Blaming the Victims. A common response to industrial pollution incidents is to blame those who suffer. Some villagers blamed those who 27 were afflicted—because of their bad temper, preference for strong alcohol and cigarettes. (*Ibid :* 6)

Ignoring the Problems. An explanation of the lack in response of government officials at all levels is that the solution might lead to shutting down manufacturing facilities providing jobs and tax revenues.

Interjurisdictional Problems. Another factor explaining the lack of state environmental response, particularly at the provincial level and below, is one province's lacking jurisdiction to engage in environmental cleanup in another province. This was mentioned by Anhui officials who sought to clean up the Kui river, when they realized that the primary source of river mentioned above, Yunnan's environmental authorities failed to inform downstream provinces of Guangxi and Guangdong, arguing that when water left the province it was of good quality. Related to this, polluting factories may move to poorer western regions where their potential to spur local growth clouds knowledge of their adverse environmental impact. (Meng 2014)

Changes in China's Handling of Environmental Disasters

Problem Recognition; Moving the Issue to the Government's Agenda.

In 2013, the government of China acknowledged that indeed environmental degradation had serious health effects. In a report issued by the Chinese Center for Disease Control and Prevention, Yang Gonghuan who directed the study said there were "cancer villages" along the Huai river. The report mentioned that water surveillance data along the river since the 1980s indicated that cancer incidence in affected areas was 50 percent higher than the national average. (Shan & An 2013).

Adoption of New Approaches.

The significant new approach was to embed response to environmental degradation in the latest Five-year plan. It stated:

In recent years, toxic and hazardous chemical pollution has caused many environmental disasters, cutting off drinking water supplies, and even leading to severe health and social problems such as cancer villages. The plan outlined a crackdown on the use and production of 58 types of toxic chemicals; it criticized enterprises for inadequate pollution risk control. Ma Jun, author of *China' s Water Crises* and probably China's most authoritative critic of national water policies, said the acknowledgement reflected greater environmental transparency.

Lower-governments.

The most serious test of implementation, however, will be the capacity of the national state to integrate policy and programs with the local states, often following different missions and goals. Since devolution of power to provinces and cities/townships after China's marketizing reforms, conflicts between national and provincial/county authorities have increased. However, environmental protests have focused on local factories, plants and local government officials who seem powerless to constrain private actions that clearly violate the law. (Aiyer 2007) Local authorities and institutions clearly are the major wild cards in the implementation of new national policy on environmental protection.

The present 5year plan of China focuses on increasing investment in infrastructure and health care insurance and environmental reforms from corporation and individuals. Geographical and socio-economic inequalities, together with lack of equitable national social support system account for the high variations of health outcomes in different parts of china. Under its National Cancer control Program of China, the state initiated the cancer early detection and treatment demonstration program in 2005. The government also sponsored cervical and breast cancer screening program which benefitted 2 million rural women (You-Lin Qiao et al. 2009). Under China national plan for NCD prevention and treatment (2012-2015), cancer was acknowledged as one of the major NCD that affects the people health in china (Chinese Centre for Disease Control and Prevention 2012). Ecological environment is seen as one of the risk factor (ibid). The state acknowledge that cancer leads to costly health care expenditure as well as high disability that can improvise people leading to serious socio-economic problems if they are not timely and effectively controlled (ibid). The Chinese government adopted various modern and scientific strategies for the prevention of NCDS including cancer (ibid). However, lack of awareness with regard to NCD including cancer, institutional and structural impediments, inappropriate allocations of health recourses are some of the challenges, which prevent the success of these policies (ibid). One of the core objectives of the 12 five-year plan is to consolidate and implement successfully the strategies for prevention and treatment of NCD including cancer. It advocated for the institutional and structural cooperation to create a social environment for the prevention and treatment of NCD.

In Henan, the local and state government started taking initiative to improve the quality of water as a first step towards cancer village phenomenon. Shenqiu Authorities took action in 2005 by connecting village water supplies to 47 newly dug well. 20 villages of the county that reported to have highest cancer rates were among those benefitting. Such step to provide clean drinking water may be seen as a local government initiative to curb cancer case. However in reality, the project was a " part of March 2005 decision by the State Council, China's Cabinet to promote projects that can guarantee safe drinking water in rural areas nationwide." (ibid). By 2006, there has been number of initiatives taken by the government to improve the situation in Henan. The Henan government agreed to spend 240 million yuan to improve public water system in 800 villages along The Huai River. The central government invested 60 billion Yuan on fighting against the pollution in Huai River.

Implications for the Vulnerable Section

Any form of disease has a negative impact on the vulnerable sections of society, especially women and children. Unlike the Global North where the approach towards health is individualistic, in Global South it is not an individualistic issue. Due to the absence of effective and efficient health insurance policies both in urban and rural China, even a minor disease could lead to disproportionate burden especially on women and children. In the patriarchal and traditional societies like rural China, the diagnosis of cancer among the male members of family draws the family into vicious circle of debt and poverty. Consequently, women and children of these families have to endure the long lasting burden of the disease. Women occupy a secondary position by and large in the Global South and their situation becomes all the more deplorable when they themselves suffer from burden of cancer. In order to meet the daily expenses of her family a

woman forces herself to work under exploitative conditions and in some cases even drags herself into prostitution. In the entire process, she is subjected to prejudice and stigma. The burden of cancer has negative implication on the children of these families. The financial implications of the disease compel the parents to send their children to work rather than to schools. Young boys start working in the farmland of rich farmers. The situation is no better for girls as they are supposed to either take care of the household activities or work as domestic help in cities. School dropout rates are high especially among girls.

Cancer has profound psychological effects on the cancer victims especially on vulnerable communities. The rural and poor communities of the cancer villages consider cancer apart from poverty as another torment that they are enduring. Insecurity and fatalistic attitude develops among the cancer patients and family. Apart from this, the stigma associated with the disease greatly influences the psychology of the patients as well as the family and the village as a whole. Higher cancer rates in these villages have assigned them the nomenclature of "Cancer Village" which has negative impact on the villagers. The rural society of Global South is still traditional and the identity of the individual is attached to their villages. Under such circumstance, any negative image of the village also creates a negative identity of the person.

Geopolitics of Disease

The cancer question is highly political. The root cause of the spread of cancer relates to power and access to resource and information both at local as well as national levels. The geopolitics of health plays a crucial role in the cancer phenomenon existing in Global South. Global South lacks resources necessary for the early diagnosis and treatment of cancer. The provision of intellectual property rights prevents the domestic companies of China from producing the generic version of cancer treatment medicine. Consequently, it becomes difficult for the marginalized sections of these countries to get affordable treatment for cancer.

Research too plays a vital role in understanding any phenomenon. Countries like China lack sufficient resources to carry out research on prevention and cure of a chronic disease like cancer and AIDS. They heavily relay on the international funding for the same. Global North controls the funding agencies that provide financial and other form of research assistances to India and China for the said purpose. In the geo-politic of disease, communicable diseases that are threatening to lives of individual are getting more support than non-communicable disease like Cancer and Diabetes. Due to over growing transnational flow of humans and goods, transmission of these viruses become more obvious and certain. AIDS and Hepatitis B act as potential threat for the internal and more prominently human security of Global North. Subsequently, Global North gives overdue importance to initiatives with regard to prevention and cure of various communicable diseases. China is getting assistance from WHO under Global Action Plan Against Cancer. Bills and Melinda Gates Foundations of USA is the founder of the said project. Again, assistance is being provided to cancer caused due to AIDS. However, the drive is imbalanced since the focus is on the China's western provinces. As such, there is not much for the eastern province of china where most of the cancer villages are located.

Medicinal trail on the cancer patients are not new phenomenon. The pharmaceuticals firms of Global North often conduct medicinal trail on the people of Global South. In the mainland china,

the pharmaceutical see China as potential market, however, actual drug trails do not take place in China (Cheng 2013). Intellectual property right theft in china is very rampant and the company worry that the drugs being trailed may be copied and made available on the market in myriad forms, long before the trail is over (ibid). In his article, Cheng argues that clinical trials are difficult because the patient follow up in rural china is difficult. This is primarily due to shift to neo-liberal policies in health reforms.

Role of Civil Society

In the Henan province NGO's and organisations like Green Peace, Huai River Guardian and local activists are trying to provide clean drinking water in the affected villages. The efforts of Huo Daishan , a journalist turned activist is worth mentioning. Huo has tried to provide assistance to people residing in areas with worst pollution. He has raised funds since 2004 for providing water purifiers in these villages. He has also encouraged media outlet to publicize the problem. In 2004, using his media connections and influence, Huo managed to convince the state-run CCTV television reporters to conduct a week-long investigation into Huangmengying's Water Supply. Water Samples were tested and most samples were found to contain elevated levels of nitrate nitrogen and manganese which health experts say may cause cancer or brain damage.

However lack of democracy is one of the major threat that is curtailing the efforts to combat cancer in China. The state security officers and the police intimate villagers when they speak to media with regard to cancer and health scenario. An official from the Shenqiu county environmental protection bureau in Henan province dismissed media reports of local cancer village as 'media hype'. Again, media is accused on creating a negative image with regard to cancer villages in both these states. It creates stigma and isolation when the media use terms "cancer villages".

What Is Likely to Happen in the Future?

China's cancer-village phenomenon is likely to worsen in the future, partly because the health impact of environmental pollution tends to be long-lasting. In addition to cancer villages, the media has also reported electronic-waste villages, weird-disease villages, and lead-poisoned villages in China, which may lead to more cancer villages. Furthermore, most of the hypothesized causes of cancer villages will continue to exist. China is likely to continue its urban growth–centered policies. Zhou Zunsheng, China's Minister of Environmental Protection, states that environmental protection in China is still like a person climbing a steep hill while carrying a heavy load.[245] Chinese officials tend to argue that China is still in the middle stage of industrialization, and economic growth is the priority. The implication is that environmental protection is still not a priority of the government. Consequently, environmental pollution will get worse—and so will the related health problems. Economic, social, and political disparities are likely to persist. It is unlikely that we will see major improvement in terms of freedom and democracy in China. Corruption is unlikely to be controlled. Polluting industries will keep moving inland as inland regions continue to follow the "grow first" approach to development. It is also likely that we may hear less about the phenomenon if the government bans the reporting of cancer villages and silences the protesters.

[245] Ministry of Environmental Protection 23 August 2009: 'Environmental Problems Hinder China's Modernization', *Xinjing Daily*, http://news.163.com/09/0823/02/5HCA4RJF0001124J.html (accessed 26 Feb 2013).

In that case, the phenomenon may actually become even more widespread.

On the other hand, the central government is paying more attention to pollution. Some local governments are taking actions to deal with cancer villages and other environmental problems. Guangdong's government invested RMB40 million *yuan* to manage the trash mound that was blamed for causing the cancer village Yuanfeng. Governmental actions have not resulted in any improvement in the cancer villages, but it seems the matter at least did not get worse in some places. It appears that the government has been more aggressive in dealing with lead-poisoned villages than cancer villages. Reports say that the government has started relocating the 15,000 residents in the 10 lead-poisoned villages in Jiyuan, Hebei Province, while keeping lead smelters going. The battery factory that was blamed for causing lead poisoning in Longyan, Fujian, has been ordered to stop production.

Souvid Datta[246] argues that since the acknowledgement of cancer villages, the government has mapped out ambitious environmental initiatives in five-year plans, although experts say few have been realised. The first nationwide blueprint for climate change was issued in December 2013. Since January, the government has required 15,000 factories to publicly report real time figures on their air emissions and water discharges. It pledged $275 billion to clean up the air and amended the country's environmental protection law to allow for stricter punishments. With all that said, in China, what the central leadership wants is often not what local governments delivers. A crucial part of the environmental overhaul will be public oversight and awareness, otherwise, promises could end up being empty words. This is something which needs to be addressed that whether victims continue being treated as collateral damage, whether government politics and funds trickle down to genuine effect, and of course, whether coming developments can empower China's population to face up to the consequences of its growth.

The politics of cancer reflects the state response to the problems of cancer patients and families. In this whole politics of cancer, state shows little concern to the social problems associated with cancer. Rehabilitation of cancer patient is an important aspect and the state cannot overlook its functional and moral responsibility in this regard. Geography of accountability and blame game need to be resolved and the state must take responsibilities of its action as the lives of the people are very precious. A half- hearted attempt to reconsolidate the communist party power in China is harmful in long run.

[246] Excerpts from an interview with Souvid Datta, an environmental photographer, by Pauline Eiferman for 'Roads and Kingdoms' magazine.

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