

# Heavy Fog and Smog in Beijing: A Watershed towards a Green Future

Li Jianjun  
China agricultural University

**Abstract.** The heavy fog and smog in Beijing lets citizens and policy makers reflect on the moral and political ramifications of the rapid economic growth, and determine a strong policy towards a green future. This paper first investigates the serious impact of the fog and smog, and the response of citizens and municipality, then discusses the possible causes of this disastrous fog and smog, and reflects on why and how developing countries like China should accommodate a green future. In discussing the case of heavy fog and smog in Beijing, I aim to show that disastrous environmental incidents related to the rapid economic growth are beneficial to the sustainable development of developing countries like China, and the urge to survive and to live a good life will drive people to take the common requirements and interests of the social community, including future generations, into moral consideration, and guarantee the possibility of a green future, regardless of the possible huge costs.

**Key words:** developing countries, the right to breathe clean air, sustainable development, smog, green future.

As a developing country, China holds 22 percent of the world's population but only 7 percent of the fresh water and cropland, and absolutely it is imperative that China promotes its economic growth and industrialization rapidly in order to meet the basic need of its citizens. However, economic growth and industrialization have suddenly confronted China with disastrous environmental hazards, such as the heavy fog and smog, which endangers citizens' health and needs for future development. This is one of the most serious challenges for developing countries like China. In response to intractable environmental disaster, most of Chinese start to reflect on the rationality of rapid economic growth from the moral and political perspective, and China government has to turn its development track towards the green future regardless of huge cost. In this paper, I will first investigate the extent of fog and smog in Beijing, and the response of citizens and municipality. Then I will discuss possible causes of the disastrous fog and smog, reflect on why and how developing countries like China should accommodate a green future through recourse to the case of heavy fog and smog in Beijing.

## I. THE HEAVY FOG AND SMOG IN BEIJING

During the period from January to March, 2013, Beijing, the capital of China, was engulfed by heavy fog and smog for an extended period of time: air pollution reduced the visibility on roads, and caused millions of citizen difficulty in breathing and a surge in respiratory illnesses, exacerbated asthma, heart problems, hospital visits, particularly among children and the elderly. The city's Emergency Medical Center received 535 patients with respiratory diseases during the second week of January, 54 percent more

than the same period in the previous year. The lingering smog has inspired a new term: “Beijing Cough” (CNTV 2013).

This was the worst and longest air pollution Beijing experienced in recent history, wherein many flights were cancelled or delayed, highways were closed and hospitals were crowded with patients seeking respiratory treatment. The situation was as serious that Beijing municipal administrators and environmental protection agencies vowed to improve the air quality and take immediate measures, including shutting down high-polluting factories and banning a certain number of vehicles from the roads.

There are several highlights during the period of the heavy fog and smog attacked on Beijing, which indicate some trends of social development in China.

Firstly, after having experienced these disastrous incidents regarding air pollution, citizens realized the significance of having the capacity to breathe clean air, and started to call for the right to breathe – which is a fundamental requirement for every living being, current human beings as well as future generations. The citizens appealed to the government to work hard to guarantee their rights to breathe, and asked for strong protections against air pollution that is detrimental to all people’s health. Most Chinese people first realized the real implication of an old saying “breathing the same air, with common fate,” which describes the character of a social community with high solidarity, and emphasizes the individual’s responsibility towards the whole social community. As Ma Yun, a Chinese famous entrepreneur in E-Business, said in distressed mood: “Beijing’s fog and smog make me very happy because nobody can enjoy special air.” Clean air is a common good which every person breathe equally, and concerns the right of all humans to walk outside and breathe in air that won’t choke them or make them sick. If the air is polluted, every person, whether rich or poor, official or civilian, and present or future generation, are not immune or could not avoid harm.

Secondly, the public and decision makers started to become suspicious of the rationality of rapid economic growth, and questioned the moral and political ramifications. The intensive outbreak of suffering caused by the fog and smog in Beijing in the successive 3 months, made that almost all citizens, including rural residents, became the victims of rampant pollution, which endangered all persons’ fundamental conditions for a good life. As such the citizens and decision makers wanted to know what happened, and some people started to wonder whether it is morally and politically justified to simply pursue a rapid economic growth in the name of development while disregarding the burden on ecological environment of a developing country as China. Naturally, the rapid economic growth created an impressive development story in China, which made that most Chinese citizens now have a prosperous life with luxuries such as cars, and Chinese leaders proudly announce that China has made great progress on the issue of human rights by lifting hundreds of millions of people out of poverty. However, can these achievements be justified when they come hand in hand with huge environmental costs? The fearsome impact of air pollution makes that Chinese people rethink the relationship between self and others, including future generations, and between human and nature, especially the

tension between economic development and environmental pollution, and reflect on the cost of rapid economic growth.

Thirdly, a fantastic event happened during these disasters gave an even more dramatic twist to the story. When most citizens hid themselves in their houses or offices in order to avoid the open air a wacky Chinese multimillionaire and environmentalist, Chen Guangbiao, took to the Beijing streets which were covered in thick gray haze, and handed out to passers-by yellow and green cans of smog-free, non-carcinogenic air, which his company developed. How sad and dreadful! I would like to see it as a metaphor for the tragedy of a human civilization. If we do not take action as soon as possible in dealing with climate change, air pollution, water pollution and other environmental hazards, soon all our efforts will be such as the yellow and green cans handed out by Chen: only a drop in the bucket, to no avail for saving humankind.

Based on the above observations, I predict that the heavy fog and smog in Beijing is a watershed towards a green future for Beijing because it creates a deep awareness with Chinese government and citizens of the significance of clean air, and other environmental disasters. Chinese people now realize that they have an urgent duty and moral responsibility towards others, a social community and future generations.

## **II. WHY CHINA SHOULD ACCOMMODATE A GREEN FUTURE**

In order to ensure the right to breathe and deal with the heavy fog and smog in Beijing, the first step is to find the causes of these incidents. Experts attributed the disaster to a combination of excessive emission and the absence of wind which caused the polluted air to be trapped in Beijing. Thus Beijing administrators introduced stricter automobile regulations in February, and announced that about 200 companies found to be emitting hazardous gases would be closed within the year, with some 1,200 scheduled for closure by 2015.

The question that is in need of answering is: could these measures effectively clean the air and be smoothly extended? After all, these will cause the costs of living to rise, and for some people to lose their job, and thus will run counter to the interests of some citizens. Moreover, they are just some temporal measures which cannot fundamentally solve the problem. Maybe it will give rise to more critical questions, such as poverty-related issues, the decay of local economies, even cause protests in other regions. It is a disputed ethical issue, even though these measures had positive results in Beijing, because these could make some industries or companies emitting hazardous gases to move to other regions or cities, or even fragile rural communities. Clearly, there is no ethical justification for these policies. It rather resembles the case of developed countries transferring their polluting industries to developing countries.

What would be a legitimate alternative? In order to answer this question, we must reconstruct the fundamental causes of these ecological disasters. On my view, the cause of the fog and smog in Beijing is a narrow-minded and unsustainable idea of development,

which affirms everything that is “very fast,” “very new,” and “very big” in economic terms and that of urban development, but disregard ecological and social costs. This concept of development became an image of the good life, and functioned as a standard of modernization. To a certain extent, this idea functioned as the driving force that guided China in surpassing Japan, and become the second biggest economy in the past few years. Certainly, the achievements in industrialization and capitalism have been a huge triumph because they not only stimulate mass production, but also create a huge consumer society in which the dominant values are making money and satisfying one's luxury interests, without taking other social consequences, like hazardous gases emission and natural resource exhaustion, into consideration. It is clear that the development slogan of “very fast,” “very new,” and “very big” did not only bring Chinese fresh flowers and fine wines, but also ecological dangers such as polluted air and water. For example, when China's gross national income per capita as of 2011 reached \$4,940, rendering it just into the upper middle income group, China's per capita carbon dioxide output levels go beyond the levels for that group (Miura, 2013). As a consequence, when Chinese people strove for economic development and were enchanted by the economic miracles, the disastrous fog and smog suddenly shocked and awoke them.

Perhaps it is important to remember the warnings of Friedrich Von Engels:

Let us not, however, flatter ourselves overmuch on account of our human victories over nature. For each such victory nature takes its revenge on us. Each victory, it is true, in the first place brings about the results we expected, but in the second and third places it has quite different, unforeseen effects which only too often cancel the first. The people, who, in Mesopotamia, Greece, Asia Minor and elsewhere, destroyed the forests to obtain cultivable land, never dreamed that by removing along with the forests the collecting centers and reservoirs of moisture they were laying the basis for the present forlorn state of those countries. When the Italians of the Alps used up the pine forests on the southern slopes, so carefully cherished on the northern slopes, they had no inkling that by doing so they were cutting at the roots of the dairy industry in their region; they had still less inkling that they were thereby depriving their mountain springs of water for the greater part of the year, and making it possible for them to pour still more furious torrents on the plains during the rainy seasons. [...] Thus at every step we are reminded that we by no means rule over nature like a conqueror over a foreign people, like someone standing outside nature – but that we, with flesh, blood and brain, belong to nature, and exist in its midst, and that all our mastery of it consists in the fact that we have the advantage over all other creatures of being able to learn its laws and apply them correctly. (Von Engels 1934[1876])

It is clear that the viewpoint of sustainability or pragmatist ethics, is incompatible with this development strategy as the cause of Beijing's heavy fog and smog, because one-dimensional economic growth would seriously endanger the basic interests and rights of citizens while it simultaneously increases national wealth, for example, the right to breathe is impeded on and the requirements of a leading a good life are violated. Reducing air pollution is now a most pressing issue, but it is very unlikely that the problem of hazardous air pollution will be solved under the current perspective on development.

For instance, after Beijing administrators stipulated traffic restriction by license plate supervision, the rich would buy more cars in order to maintain their luxurious standard of living, so the effect of the toxic gas reduction measures would be largely canceled out by the increase in the number of automobiles, as well as the relocation of factories. Under the current concept of development, no policy or measure would solve the problems without exacerbating social inequality.

As Mr. Chen Guangbiao told Reuters, “I want to tell mayors, county chiefs and heads of big companies: Don’t just chase GDP growth, don’t chase the biggest profits at the expense of our children and grandchildren, and at the cost of sacrificing our ecological environment.” (Jones 2013) If Chinese leaders don’t want to drink air from a can, they should listen. As the heavy fog and smog has shown, after years of heady growth, China faces some fundamental challenges, especially in development of a sustainable economy and in satisfying the citizens’ urgent needs for a good life. Without a doubt, any Chinese development strategy of pursuing unrestrained GDP growth is detrimental to interests of the present generation and that of the future, and such a policy is illegitimate and not tolerated by Chinese citizens. Instead of such a development policy, China should aim for long-term sustainable development and steer towards the green future.

### III. HOW TO TURN TOWARDS THE GREEN FUTURE

Beijing and China's possibility for a green future depends on solving the “green paradox” (van Someren and van Someren-Wang 2012). On the one hand, the rapid economic growth has become a necessity to satisfy the needs and fulfill expectations for a good life of the large majority citizens; on the other hand, it also had tremendous detrimental ecological and social effects, such as heavy fog and smog in Beijing. On my view, China should pay more attention on the environmental costs and uncertainties of rapid economic growth, and embrace an idea of slower but better growth, respect the excellent traditional civilization including its historical experience and lifestyle, rethink the idea “small is beautiful” – which maybe would rather presuppose a community model with low carbon but high harmony, and then gradually lead to a new development agenda aimed at a green, sustainable, recycling and low carbon society which would “meets the needs of the present without compromising the ability of future generations to their own needs” (WECD 1987). But this implies a real psychological transformation and ideological revolution.

Firstly, this transformation needs a community consciousness which believes that all members are stakeholders of some common goods, and that anyone who acts selfishly will endanger the interests and health of all. In terms of the Beijing or China example, these common goods at least should include fresh air, pure water and pollution-free land. So for the sake of ourselves and others, we should have a moral duty or obligation to reduce those projects which potentially or directly harm these common goods, even if it could slow down economic growth and constrain our interest in luxury. If we could

cultivate such community consciousness, maybe we will find a promising solution that would contribute to consider the interests of future generations in dealing with crises of current societies and satisfying the needs of the present. Perhaps the development of the present generation is not in conflict with the rights to a green future. But it depends on the following hypotheses: there are some common interests between the present and future generation in some extent, and we could be able to identify them. If this is possible, we could find a workable path to protect the interests of future generations, by implementing the fundamental interests and rights of the present, such as the right to breathing in fresh air, and assist more and more developing countries in acting in light of a green future. After all, for all countries, satisfying the needs and interests of the current generation is a top priority.

Secondly, we should transcend narrow economic development ideas which only seek rapid economic growth but disregard the green future. In the last two thousands of years, China kept its sustainable prosperous development as a great social community by following the dominant idea of “the harmony between nature and human”, which however faded into the background with the encounter with Western expansion, the industrial revolution, the insularity of the Qing government etc. It is a pity that modern Chinese misunderstood and denied their precious cultural heritage, and roughly embraced an anthropocentric idea of development in the wake of shattering of the Celestial Empire dream and pursuing for Western powers. Perhaps, Chinese traditional cultural resources may contribute to this transcendence of the old economic growth model. First of all, Confucianism emphasized the significance of “benevolence” or “humanity” (仁, ren or jen), and the way to practice benevolence (忠恕之道, the principle of chung and shu), that is “Do not do to others what you do not wish yourself.” and “Do to others what you wish yourself.” (FungYu-lan 1948). According to Confucianism, the fundamental prerequisite of benevolence “consists in loving or caring for others” and involves “constraining yourself and restoring rite or social relationship,” the ideal or the ultimate good is to attain the harmony of the holistic life system or community which includes everything between heaven and earth including human beings, animals and so on. If every person could constrain his or her desire for luxury and positively participate in the holistic life system or community, many disasters like polluted air and poisonous food would be averted. Secondly, Taoism revered nature and insisted that human beings should obey the law of nature and do not overuse natural resources. Thirdly, Buddhism asks humans to concern about the future generation and not to harm life, in light of the reincarnation hypothesis. In general, I believe that we could find some inspiration in dealing with air pollution and climate change through the creative transforming for Confucianism, Taoism, Buddhism and other traditional culture resources, and thus transcend current considerations and steer towards a green future.

Finally, in order to do so, strong political will and action is necessary. In this respect, Chinese government seems to show great resolve. “We will upgrade the country's economic development model to enable people to enjoy clean air, and safe drinking

water and food" (Zhu 2013), Premier Li Keqiang said at a news conference on March 17, 2013, where he vowed to make an "iron fist" (Bushe 2013) to tackle the pollution in China, and expressed that China government would take more vigorous efforts to clean up such pollution by phasing out old factories and creating a new development model, and shouldn't pursue economic growth at the expense of the environment because such growth won't satisfy the people. Then, what is a development and growth that would satisfies the people? Would it include the appeals from disadvantaged groups, and the interests of future generations? How to implement this ambition? Undoubtedly, all these questions would challenge traditional development ideas, and decide China's pathway and direction towards a green future and sustainable development. So, Chinese government should pay attention to possible risks and uncertainties of the various development plans in a precautionary way, and assess their longer-term consequences for the present and future generations as soon as possible, intentionally introducing new ideology and social system which takes full account of the requirements of sustainable development and right claims of present generation in its development strategy decision, especially for fresh air, pure water and rural landscape, and clarifies its obligation or respons.

#### IV. CONCLUSION

As is clear from continuous recent environmental incidents, such as hazardous air pollution, the transformation of China's economic development model has become a matter of urgency. Firstly, these disastrous environmental incidents let the current generations rethink the rationality of pure economic growth, and pay more attention to the environmental costs of current development. Secondly, terrible air pollution experiences introduced reflections on the right to breathe and call for the government of developing countries like China to take their duty or responsibility in guaranteeing some requirements and some basic goods for humanity, including future generations. Thirdly, if the government could not take strong proper measures to turn towards a sustainable development model in order to completely prevent these environmental hazards such as heavy fog and smog in Beijing, the socio-economical sustainable development will encounter great challenges. So I believe that seriously and equally considering the requirements of the current generation is not in conflict with the interests of future generation. In my opinion, there is not necessary a conflict between the development of the present generation and rights towards a green future. However, developing countries like China should intentionally introduce some inspired ideology and social systems (which include traditional civilizational resources), take full account of sustainable living requirements and rights claims of present generation (especially for fresh air, pure water, and rural landscape), and clarify their obligations towards others and the future.

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