

Summer 2015

# Environmental Degradation in Urban and Rural China: A Local Perspective

Taili Ni

tni@pugetsound.edu

Follow this and additional works at: [http://soundideas.pugetsound.edu/summer\\_research](http://soundideas.pugetsound.edu/summer_research)

---

## Recommended Citation

Ni, Taili, "Environmental Degradation in Urban and Rural China: A Local Perspective" (2015). *Summer Research*. Paper 253.  
[http://soundideas.pugetsound.edu/summer\\_research/253](http://soundideas.pugetsound.edu/summer_research/253)

This Article is brought to you for free and open access by Sound Ideas. It has been accepted for inclusion in Summer Research by an authorized administrator of Sound Ideas. For more information, please contact [soundideas@pugetsound.edu](mailto:soundideas@pugetsound.edu).

**Environmental Degradation in Urban and Rural China:  
A Local Perspective**

Taili Ni  
International Political Economy and Chinese Language & Culture  
University of Puget Sound  
Nick Kontogeorgopoulos

## **Acknowledgements**

This research project was made possible by the University of Puget Sound T.A. Davis Research Scholar grant. This grant made possible the travel to both Shanghai and Baqiao, the interview locations for this project. I would also like to thank Professor Nick Kontogeorgopoulos for his guidance and assistance as the faculty advisor to this project. Finally, a thank you goes to the residents of Shanghai and Baqiao for allowing me to interview them and for their patience with my level of Mandarin.

## **Introduction**

This research approaches the issue of China's environmental deterioration from a local perspective. China's recent rapid economic development has greatly increased quality of life for Chinese citizens, but it has come with a serious tradeoff. China has become notorious for its severe pollution, with pollution levels double the highest level the World Health Organization regards as reasonably safe (Economy and Lieberthal 2007, 92). The Chinese government has done much to highlight the measures it is taking to address high levels of pollution, but the country's unprecedented levels of manufacturing, resource extraction, inconsistent environmental policies and lifestyle changes work against environmental sustainability.

This research aimed to place a local citizen perspective into the issue of China's environmental crisis. This research investigated how urban and rural populations are coping with environmental changes, as well as the opinions of those groups on the Chinese environment. The eleven interview questions attempted to address three main research objectives. The first was to discover what types of environmental damages are the most prevalent and impactful to these particular urban and rural populations, and to determine what kinds of coping mechanisms and changes are made to address those damages. The second was to assess the perspective of these Chinese citizens on the future of the environment. Specifically, what thoughts do they have on the government's handling of growing pollution and what do they expect the environment to be like in the future? The third objective was to explore the tradeoff relationship of economic development and environmental harm. By asking interviewees about the ways in which their lives have

changed due to economic change and increasing pollution I hoped to develop an idea of whether or not they felt that the tradeoff's consequences were worth the benefits.

Interviews with residents in Shanghai and Baqiao provided a case study to this question and provided insight into how urban and rural Chinese feel about the deterioration of their natural environment in light of the accompanying economic improvements.

## **Methods**

This research project targeted two groups of Chinese citizens: urban and rural. The purpose of this was to discover any differences between the two perspectives as well as to encompass different kinds of environmental issues experienced by different Chinese populations. For example, city dwellers would be expected to see more of the effects of automobile pollution while rural residents might experience more of the water pollution from runoff from factories placed outside of cities. I traveled to Shanghai to conduct interviews with urban residents. As China's largest city and economic hub, it was one of the best places to look for an urban outlook on China's environment situation. Any economic benefit or environment setback affecting an urban area could surely be found in Shanghai. For the rural perspective, I sought out residents of a small village across the Yangtze River from Shanghai called Baqiao, or literally, "Eight Bridges". Baqiao is about a three-hour drive from Shanghai and only twenty minutes from a much smaller urban area, but it remains a rural, agricultural area. Baqiao's proximity to a small urban area makes it an ideal place to study the ramifications of environmental damages brought on by economic growth.

The only conditions for deciding which people to interview were age and location. All of the interviewees are eighteen years or older and have lived in either Shanghai or

Baqiao for at least the last ten years. Most of the village residents have lived in Baqiao for their entire lives, so I chose people by going to their houses and asking to interview. In Shanghai I primarily interviewed family members and acquaintances. I conducted in-person interviews with residents of these locations. Most of the interviews were conducted in Mandarin. For some, I was able to take notes either by myself or with a relative's assistance. Sometimes I recorded the interview and then translated it onto paper later. There were also a few cases in the village where the person was only comfortable speaking in the local dialect, which I do not speak. For these individuals, a family member acted as my translator. I interviewed thirteen residents in Baqiao, and nine in Shanghai.

Additional information contributing to this project came from background research into the environmental problems China is facing and into what actions the government has taken to address these issues. A particularly helpful resource was the Chinese documentary film by Cai Jing called *Under the Dome*, released in early 2015. In this film, Cai Jing gives a voice to the population's growing concerns regarding Chinese pollution and its seemingly irreversible consequences. In particular, she focuses on the health impacts of the worsening environment, and addresses her frustration with the lack of serious efforts made to combat pollution (Under the Dome 2015). This documentary gained a lot of popularity in China and was subsequently censored by the government. It was influential in helping me come up with the set of questions I wanted to ask because it gave me a glimpse into the civilian perspective. Furthermore, I drew from research into environmental legal cases in China that have occurred in the past five years. This research helped me realize that although China has erected environmental courts to address violations of environmental law, they are not always as effective as people are led to

believe. Thus, this research aimed to look into citizens' thoughts on government actions regarding the environment.

### **Budget**

The allotted budget for this project was the University grant sum of \$3,250. This amount was sufficient for round-trip airfare to Shanghai, as well as road transportation to Baqiao. I had no housing costs since I was able to stay with family, but the stipend also went to food and other transportation costs while I was in China. In addition, the budget covered the cost of a small recording device and tapes, which I used for many of the interviews.

### **Results/Findings**

The first objective of the interview was to discover the types of environmental changes people have noticed, as well as any adjustments they have made to cope with such changes. I asked interviewees to rate the state of China's environment as either A) Very good, B) Good, C) Fair, D) Poor, or E) Very poor. Of the nine interviewed subjects in Shanghai, six chose "fair" and three chose "poor." The most commonly cited reason for choosing "fair" over "poor" was that Shanghai has recently become a more attractive city. Despite this, Shanghai residents still cited a lot of environmental problems that have become prevalent in the last two decades. The biggest concern was air quality, with all nine of the interviewees mentioning the smog and blaming the increasing number of vehicles on the streets. While cars were cited as the main culprit of air pollution, even fireworks, which are used very frequently in Shanghai, were mentioned as a contributing factor to the smoggy skies. One subject said, "The roads are getting more and more congested. We have very few days to see blue skies now." Another reflected, "When I was

young, I remember marveling at the sky full of bright stars. Now you can only see occasional twinkles through the smog. People joke that if we let air quality worsen, soon we will be walking around with oxygen tanks on our backs.” In addition to air pollution, about half of the Shanghai residents interviewed reported seeing a lot more garbage, plastic bags, and packaging waste lying around streets. The oldest person I interviewed in Shanghai, who has lived in the city for seventy years, also discussed the disruptive increase in noise pollution caused by “too many cars, too many people.”

When asked about the major causes of environmental change in China, seven out of the nine interviewees put heavy blame on the Chinese government. While some cited car exhaust and factory pollution as the major causes, the majority said the environment primarily suffered at the hands of government negligence. They said the focus on economic development ignored environmental protection, and that government officials were shortsighted and focused solely on immediate economic gains. This lack of foresight and planning came up frequently, with one person saying, “There’s a policy issue. The old policy of ‘develop first and clean afterwards’ is wrong. The two should go hand in hand.” One individual also pointed out that the government has been slow to raise awareness of environmental protection among Chinese citizens.

All of the Shanghai interviewees were very concerned with the health impacts of the pollution they notice in the city. In response to how environmental changes affect their daily lives, they all discussed negative health impacts, and their resulting lifestyle changes. They all mentioned being more wary of when they go outside and the increasing incidence of respiratory disease. Almost all of the residents mentioned a friend or relative who had recently contracted a respiratory disease. Due to these concerns, many people said that

they wear masks when they go outside, especially while riding bicycles or driving motorbikes, and one person installed air purifiers at home to try and combat the smog outside. One individual also said she no longer exercises outdoors anymore because the poor air makes it harder for her to breathe. However, another person reported making more of an effort to exercise in an attempt to keep his lungs healthy in the face of deteriorating air quality.

In Baqiao, the responses differed in many ways from those in Shanghai. The perceived causes of environmental degradation and the changes people noticed were different from those the Shanghai residents reported. To begin, there was a wider range of answers to the multiple-choice question regarding the state of the environment. Of the thirteen people interviewed, five answered “fair,” four said “poor,” two said “very poor,” one said “good,” and another rated it as “very good.” The few who rated the environment as “good” or “very good” explained that Baqiao’s environment was good relative to other areas in China. Two of the interviewed residents did not perceive great environmental changes over the past decades. One woman who has lived in Baqiao for over sixty years said the only change she has noticed is she can no longer drink the canal water.

The village residents focused heavily on water and soil pollution instead of air pollution. A canal runs through Baqiao and has long been a primary source of water both for household and agricultural use. Recent and dramatic changes to the quality of this canal were at the forefront of most of the villagers’ environmental concerns. Baqiao residents brought up the garbage filling the canal, the weeds blocking the flow of water, and the toxicity of the water due to chemical waste and wastewater from factories. All of the interviewees here reminisced about drinking, bathing, and washing food in the canal

many years ago. This behavior is not at all safe anymore. The deterioration of the canal water has also presented itself in a lack of fish and shrimp, which used to be a food source for the residents. This loss of biodiversity is also reflected in the small animal and bird populations. One resident reported seeing far less types of these creatures, and a subsequent rise in harmful insect populations. Without the toads and birds to consume these insects, their populations have soared. This individual complained that the lack of biodiversity can be attributed to heavy pesticide use in recent years. He reported that these pesticides also pollute the soil and water. According to one interviewee, the fish that can be found in the canal smell and taste like diesel from the industrial wastewater. He commented on the implications that has for the crops grown in the village, saying he imagines they cannot be healthy to consume.

The most commonly cited reasons for deteriorating environmental quality were pesticide use and low public awareness. Overuse of pesticides was a big concern for many of those interviewed, with many people discussing the recent increase in chemicals with dismay. Many of the interviewees in Baqiao also expressed concern for the lack of awareness people, including themselves, had about environmental issues. One individual said, "A lot of people aren't aware of environmental issues. They throw garbage everywhere even though we have garbage cans now. That's why the canals and ponds are full of trash." While about a third of the interviewees mentioned government prioritization of the economy over the environment as a cause of pollution, they placed a much heavier focus on the issue of awareness.

Most of the interviewed residents reported making adjustments in their lives due to pollution and in order to avoid negative health consequences. As in Shanghai, people

acknowledged an increase in respiratory disease due to poor air quality, but there was more concern about health problems from pesticides. Two participants had close relatives who died from lung cancer after spending years spraying pesticides on crops without protective wear. Another woman's baby was born with a red-colored mole on his face that had to be surgically removed. She explained that these odd moles are becoming a frequent occurrence on newborns, and that they are thought to be the result of unsafe chemicals that make their way into food. Another parent observed a high number of children coughing and missing school because of illnesses. One interviewee expressed some skepticism regarding the causes of increasingly poor health. He said, "There are more sick people today but it is difficult to attribute that to a particular cause. Many of the illnesses today, like the cardiovascular ones, are mainly caused by our changed diet. So it's hard to say." To attempt to reduce potential negative effects, residents conscientiously wash produce before use, and some even soak fruits and vegetables for hours. In addition, people are careful to use filtered tap water, boiled water, or bottled water. Of course, alternatives to polluted water, like bottled water, can end up further contributing to environmental problems.

The second objective of this research was to assess Chinese citizens' perspective on the future of the environment, as well as their thoughts on the government's role in environmental issues. In Shanghai, there was a lot of optimism for the future despite heavy criticism of the government. Only one individual could not picture a greener, cleaner future because, "The problem is so serious that I don't see how it can improve." Aside from this response, the other Shanghai interviewees looked forward positively, many of them joking that "it can't get much worse so it must get better." Of the nine people interviewed in

Shanghai, seven of them expressed frustration with government negligence regarding the environment. They discussed how the government has not done nearly enough to address China's deteriorating environment. Only two of the urban participants mentioned government efforts to clean up the city. One person said the government has cleaned up the Suzhou River, while another commented on the rising number of greeneries in the city and China's efforts to penalize polluting factories. The rest of the interviewees discussed government shortsightedness, criticizing officials for ignoring environmental needs in favor of economic gains. One individual responded, "I think the government officials focused on short-term economic development without consideration of environmental impacts. We do have environmental protection agencies within the government but they have no power." Another answered, "The government hasn't done enough. Officials are a privileged class of people so they have a different view in terms of economic versus environmental values."

In Baqiao there was also a lot of optimism for the future. Many people predicted that pollution will decrease in the coming years, as environmental awareness is already on the rise. Twelve of the thirteen interviewed residents expressed faith that both individual citizens and government authorities will make environmental health a high priority in the near future. Only one person voiced heavy doubt, saying that, "The environment will undoubtedly worsen because to fix it people would need to stop driving cars, and factories would have to shut down or move far away. These things won't happen." When asked about the government's role in handling environmental issues, some responded with positive feedback, while others were very critical. Many people said the government is making an effort to address environmental problems. For example, one individual

explained that the government has planted the new trees alongside the roads and canal. She also brought up a new policy where the government pays villagers for their crop waste to prevent them from burning it in the usual fashion. Now, if someone is caught burning this waste they are fined. These kinds of examples highlight positive attributes of China's response to its pollution issue. On the other hand, many others discussed the Chinese government's failure to take an effective leadership role in environmental protection, criticizing skewed government values and unenforced policies.

The final objective of my interview questions was to grasp a better understanding of the Chinese perspective on the economic and environmental tradeoff. I have described in detail the kinds of environmental degradation the interviewed participants experience as a result of economic development. These changes have lowered their quality of life and destroyed their natural surroundings in many ways; however, the lifestyle changes that economic development has brought about should also be discussed. In both Shanghai and Baqiao there have been countless improvements to quality of life in the past decades. Material life has improved dramatically, roads are better and transportation is affordable and efficient, there is better access to food and water, and houses are larger and more affordable, just to name a few of the ones mentioned in the interviews. Of the twenty-two total interviewees, sixteen stressed the importance of the environment over the economy, two advocated for the necessity of economic development over the environment, and three said that the two were equally important. There were no significant differences between the answers of Baqiao residents and Shanghai residents. The majority acknowledged the many material improvements to their lives due to economic development, but reasoned that without a healthy environment further development and a high quality of life cannot

be sustained. One person said, “If the environment is poor we cannot live well, even with economic developments. We are like fish stuck in dirty water—what kind of life is that?” Those that said economic development was more important emphasized the wealth and life improvements that result. One individual pointed out that “the wealth created can be used to clean the environment.”

### **Reflections**

It was very interesting to learn about the different opinions and experiences the Shanghai and Baqiao participants revealed. All kinds of pollution run rampant in China today, but certain areas are affected by different problems, and these differences shape local perspectives. Baqiao is within 125 miles of Shanghai, and yet the village residents focused on very different environmental issues. It was also interesting to learn just how much the environment has changed. The older generations, especially those who have lived in Baqiao for over seventy years, spoke with nostalgia when they told me about the formally crystal-clear canal, the disappearing bird and animal species, and the clear and starry skies from their childhoods. This sense of longing for cleaner days was a common thread between all the interviewees, regardless of their opinions of the causes of environmental damage or their thoughts on government action. I spoke to many grandparents who expressed happiness and gratitude at being able to provide lots of material goods for their grandchildren, but who also somberly acknowledged their sadness for the natural environment younger generations are inheriting.

This research project allowed me to gain insight into part of the Chinese perspective to the current environmental crisis. The project also allowed me to practice my Mandarin and gain experience using new vocabulary and interview language. This research changed

slightly as it progressed. First, the objectives became clearer to me as I finalized the interview questions. Second, I was not able to interview as wide a population as I had hoped. It was more difficult than I had expected to find willing participants, especially in Shanghai. I attempted to widen my prospective participants by going to public places such as parks and malls, but I received a lot of rejection when I approached people to be interviewed. This was a setback I had not previously considered. Furthermore, I planned to interview at least one environmental agency or green NGO in Shanghai. After sending out emails and making phone calls to over ten such organizations, I realized that communication with them was almost impossible.

### **Future Study**

The results of the interviews conducted in this research project raised a lot of questions. In particular, the project brought up two key issues that I would be interested in researching further. First, hearing so many people criticize government ineffectiveness on environmental issues raised the question of why there is such a large enforcement gap in China between policy and implementation. It would be interesting to unpack the reasons for such enforcement difficulty and learn what efforts are being made to address this problem. Second, because so many of the people I talked to discussed a lack of awareness of environmental issues as a major cause of pollution, it could be beneficial to see what efforts are being made to increase environmental awareness and education.

### **Conclusion**

This research offered me a unique opportunity to speak directly with Chinese citizens about the environmental changes their country is experiencing. Their individual experiences and opinions will continue to be invaluable sources because they are not

voices that are easily accessible in a lot of the existing literature on this subject. The interviews helped place a new, local perspective into the larger conversation about China's environmental degradation, and highlighted many issues and concerns that are not always the ones discussed.

**Works Cited**

“Chai Jing’s Review: Under the Dome—Investigating China’s Smog,” YouTube video, 1:43:55, posted by “Linghein Ho,” March 1, 2015.  
<https://www.youtube.com/watch?v=T6X2uwlQGQM>.

Economy, Elizabeth and Kenneth Lieberthal. 2007. “Will Environmental Risks in China Overwhelm its Opportunities?” *Harvard Business Review* 90-96.