Pollution control for a healthier Chinese population

Pollution control has for the first time been highlighted as one of the top priorities in China's strategy for national economic and social development in 2016–20, outlined in the 13th 5-year plan made by the Chinese Government.[1] Among all issues, water and air pollution were the predominant problems that got major nationwide attention. Environmental policies could not only boost the development of relevant research in China, but also construct a sustainable environment for a healthier Chinese population as well.

Water pollution poses a serious health risk for rural populations because Chinese grain production relies heavily on irrigation. The results of the 4th UN World Water Development Report showed that as one of the 13 water-deficient countries in the world, China has less than a quarter of the average access to fresh water.[2] The scarcity of irrigation water results in lower production of grain, which is the staple food source for most of China's population. Meanwhile, excessive heavy metals, toxic compounds, *Vibrio cholerae* bacteria, dysentery-causing contaminants, and parasites exist in polluted water.[3] Although sewage treatment and purification are used, drinking water still poses a great threat to human health.

Over the past three decades, the incidence of lung cancer and chronic-obstructive disease are rapidly increasing because of the heavy air pollution.[4] Air pollution control should therefore be implemented immediately to reduce the burden of environment-related disease. A serious political initiative in tackling pollution is a good start.

China, however, needs to clearly define accountability to accomplish its environmental goals. We are looking forward to witnessing substantial actions to reduce pollution emissions and ease the environmental disease burden on the Chinese population.

We declare no competing interests.

Copyright © The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license.

*Peixing Wan,*Erping Long*
longerping@qq.com

Department of Molecular, Cellular, and Developmental Biology (PW), and Department of Ecology and Evolutionary Biology (EL), University of Michigan, Ann Arbor, MI 48109, USA

1 Xinhua. China's 13th Five-Year Plan. March 16, 2016. http://www.xinhuanet.com/english/2016-03/16/c_135194463.htm (accessed April 16, 2018).
2 World Water Assessment Programme. The United Nations world water development report 4: Managing water under uncertainty and risk. Paris: UNESCO, 2012.
3 Wang M, Webber M, Finlayson B, Barnett J. Rural industries and water pollution in China. *J Environ Manage* 2008; **86:** 648–59.
4 Yang G, Wang Y, Zeng Y, et al. Rapid health transition in China, 1990–2010: findings from the Global Burden of Disease Study 2010. *Lancet* 2013; **381:** 1987–2015.