

"Gheorghe Asachi" Technical University of Iasi, Romania



WHAT CHINA CAN LEARN FROM THE PRACTICE OF POLLUTION PREVENTION AND WATER ENVIRONMENTAL MANAGEMENT IN NEW ZEALAND DAIRY INDUSTRY?

Jinping Tian¹, Lujun Chen^{1,2*}, Jiafa Luo³

¹School of Environment Tsinghua University, Beijing 100084, China
²Zhejiang Provincial Key Laboratory of Water Science and Technology, Department of Environment,
Yangtze Delta Region Institute of Tsinghua University, Zhejiang, Jiaxing 314006, China
³AgResearch Ruakura Research Centre East Street, Private Bag 3123, Hamilton 3240, New Zealand

Abstract

China has witnessed a rapid growth of livestock breeding industry. Pollution from livestock breeding industry has also increased unprecedentedly and become a big issue of environmental quality. China has attached great effort to address the issue associated with intensive livestock breeding. In 2009, China and New Zealand started a cooperation project on pollution prevention and waste emission reduction in dairy industry. It is meaningful to borrow experience from well-developed countries to facilitate emission reduction of livestock breeding industry in China. This study presents a comparison of pollution prevention management and practice for livestock breeding in China and New Zealand. Framework on pollution control and water environmental management in the New Zealand dairy industry is carefully discussed, including the government's role in environmental management, dairy farming water environmental management, economic instruments, farmers' involvement in decision making, and land application of farm dairy effluent and nutrient budget. Key lessons that China can learn from the practice of pollution prevention and water environmental management in the New Zealand dairy industry are identified and its policy implementation is also discussed.

Key words: China, emission reduction, livestock breeding, resourcing farm dairy effluent, New Zealand

Received: March, 2016; Revised final: September, 2016; Accepted: October, 2016

[.]

^{*} Author to whom all correspondence should be addressed: e-mail: chenlj@tsinghua.edu.cn