CHINA REVIEW

Rare Metals Industry and Pollution:

Assessing Chinese Authoritarianism in the 21st Century

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conomic Progress, Political Stability and Environmental Degradation in China

It is common sense amongst political analysts that China in the 21st century is no longer a Communist nation. Deng Xiaoping, the secondgeneration leader of the Chinese Communist Part (CCP), famous proclaimed, "Only (economic) development makes hard sense". Economic progress was the first priority of the post-Mao China. In fact, CCP has always been embracing a very rigid type of state-capitalism (as a means to achieve democratic socialism, according to the CCP) that has focused on the encouragement of foreign investment and manufacturing exports to the rest of the world by compromising some of the basic rights its own peasants since 1978 after the Great Cultural Revolution (1966-1976). As a result, China is now the second largest economy and is the world's fastest growing economy. It has been sustaining an average growth rate of 9.4% for the past 30 years [1].

While China's economic rise is to be commended the CCP elites have been growing concerned about how to properly manage the stark economic gap between rich and poor (Gini coefficient in 2010: 0.47). Although, Deng was aware that eventually, China would become an egalitarian society by "letting some people grow rich first", we never know when and how such an ideal can be realised. Like any developmental state, the insurmountable accumulation of wealth is concentrated in a handful of the central and local Politburo members (and their relatives) and localized capitalists. The Party keeps

maintaining its political stability and legitimacy in the eyes of the people by retaining its high economic growth rate. However, without a greater control of the widespread corruption the CCP knows it risks losing the support of the people.

Economic progress has led to irreversible environmental degradation throughout the country. No country in history has ever faced the environmental problems like China now faces in the 21st century. More than 30% of fresh water of China is now considered undrinkable by the CCP, which affects over 500 million people who are now unable to gain access to clean and safe water. Environmental pollutions of various kinds have caused a wide range of diseases that include: respiratory problems, cardiovascular damage, heavy metal poisoning, and cancer. According to the Ministry of Health, cancer has become China's leading cause of death and this is a direct resulted of the rampant pollution within China.

Environmental pollutions have also increased the rate of social instability throughout the country. Riots and social conflicts are only going to increase in the foreseeable as long as the local Chinese authorities continue to condone irresponsible but preventable landfills and industrial waste dumping.

Chinese Rare Earth Industry and Consequences

In 1992, during his political tour in Southern China, Deng proudly said, "The Middle East has its oil, China has rare earth." Rare earth metals (fifteen lanthanoids plus scandium and yttrium) are the black diamonds of China. In fact, since the 1980s, China has



dominated the market by providing over 97% of the world's supply, while Inner Mongolia accounts for 40% of the global production (See the map for Chinese regions of rare earth metals production).

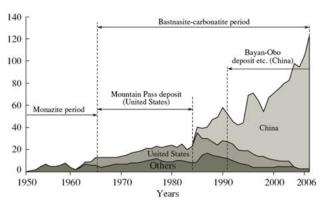
In the fall of 2010 there was the concern amongst the West over halting of rare earth metals to Japan and the United States from China. For the United States rare earth minerals are needed for a wide array of technology. There were calls from the politicians within the United States and Europe to find alternate sources of rare earth minerals to ease the West's reliance on China [2]. However, while China has been able to corner the market on rare earth and establish a strong dominance in its supplies it is not without a cost.

The environmental toll has created a source of social instability causing great concern for the CCP that it has begun to impose further regulations on the mining of the rare earth to minimize its environmental impact. The rising pollution concern has been exacerbated because of illegal mining practices and over exporting of the minerals [3]. In the rare earth mining process it is common for numerous rivers to be come polluted during the extraction with heavy metals, ammonia, and radioactive elements. The lax enforcement in the mining has lead to greater concern for the CCP to enact stricter regulations on the mining practices in an effort to curb the protests against the various mining projects throughout the country.

The village of Shangmankeng in Guangdong province serves an excellent case study of the struggles that China is facing with the environmental damage from the mining. Villagers blame the local officials, corporations, and organized crime in allowing the

illegal mining operations continue. The water reservoir that is used for their rice crops and fish as no longer viable as it has become tainted with uranium and an assortment of heavy metals. The government then had the villagers moved because of the pollution and if they returned to their home village Triad members attacked them [4].

Chan Yu-fai who manages water quality testing for the Hong Kong branch of Gre-



Rare Earth Metal Production from 1950-2006 (China's Rare earth Dominance: http://www.wikinvest.com/wiki/China% 27s_Rare_Earth_Dominance)

enpeace has raised further concerns about the pollution level as Hong Kong frequently buys its water supplies from Heyuan's province Dongjiang River, which had now become too polluted from an excessive amount of uranium and rare earth mineral run off. In 2008 462 illegal mines were closed 220 were rare earth mines [5].

Though what happened in Shangmankeng village and Dongjiang River should not be considered isolated incidents, rather they are common occurrences throughout all of China. In Baotou, Inner Mongolia the pollution has killed their lakes from a rare earth mineral mine 100 miles away from the city. While the local council paid the residents compensation for their loss of income they were warned that the water needed for irrigation was no longer fit for human or animal consumption nor could it be used for irrigation. In the workshops that process the rare earth minerals the workers are frequently offered no protective clothing as they handle the chemicals [6].

While polluting plants have been closed villagers comment that they often continue to operate at night

under protection of the local CCP leaders and the mafia as the business was too worth too much for it be permanently shut down. Companies have been allowed to pollute harm their workers because of the lax environmental standards and cheap labour costs in China has made mining rare earth minerals impossible other countries to compete. Dudley Kingsnorth, an Australian expert on mining, stated that the Chine-



Rare Earth Metals Production Distribution of China (Source: APN News: http://apnnews.com/2011/03/30/huge-rareearth-deposit-discovered-in-china/)



se companies could operate at a third of the cost of other mining companies because of their lax standards. He estimated that it would take at least ten years before China could reach Australian level mining regulations [7].

Environmental protests are rising throughout China as more people are voicing their concerns about the environmental pollution [8]. The growing social instability over environmental damage is of concern to the CCP and while there have been efforts to improve the mining procedures into a more sustainable practice for China. It is unknown whether the fiats handed by the central government will be properly enforced at the local level. Without the proper enforcement throughout all levels of government and only targeted attack on corruption within the Party the illegal mining will continue and will only impede the Party's ability to sustain its economic growth. Achieving China's impressive economic growth will be meaningless if the government will be unable to sa-

fely feed its people or irrigate its crops let alone the unknown health burden that the country is facing in the future because of the lax environmental regulation [9].

Conclusion

Leung Man-to, a Hong Kong cultural commentator, argues that for most of the general citizens of China, they never ask for a full-fledged democracy. They only humbly request for a "ordinary" society. By "ordinary" it means a society that cherishes justice and minimal standard of due process. In other words, even if economic stability is guaranteed in the next 20 years, there is a growing political and social pressures among Chinese citizens are inevitable. Such pressures are further compounded by the deterioration of citizens' habitats since by any standard, any "ordinary" society should obviously ensure the rights to breathe fresh air and drink clean water.

Notes:

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- For a general review of the Chinese economy since 1949, please see China Focus, CESRAN, under the section of Economy: http://cesran.org/index.php? option=com_content&view=category&layout=blog&id=261&Itemid=283&Iang=en
- 2) Judy Dempsey, "Germany to Raise Alarm Over China Rare Earth Restrictions at G-20," The New York Times, 21 October 2010.; Judy Dempsey, "Decline in Rare-Earth Exports Rattles Germany," The New York Times, 19 October 2010.; Tiffany Hsu, "As China slashes exports of rare earth elements, U.S. mine digs for more," Los Angeles Times, 20 February 2011.; Keith Bradsher, "Taking a Risk for Rare Earths," The New York Times, 8 March 2011.
- 3) "China may further tighten environmental standards for rare earth production," *Xinhua*, 07 November 2010.; "China to control rare earth extraction, pollution," *Reuters*, 7 January 2011.
- 4) "South China Villagers Slam Pollution from Rare Earth Mine," Radio Free Asia, 22 February 2008. http://www.rfa.org/english/news/china pollution-20080222.html
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- 6) Lindsey Hilsum, "Chinese pay toxic price for a green world," The Sunday Times, 6 December 2009.
- 7) Lindsey Hilsum, "Chinese pay toxic price for a green world," The Sunday Times, 6 December 2009.
- 8) Malcolm Moore, "China's Middle-Class Rise Up in Environmental Protests," *The Telegraph*, 23 November 2009.; Austin Ramzy, "China Environmental Protests Gather Force," *Time*, 23 November 2009.; a more updated list on environmental protests can be found at The Wilson Center http://www.wilsoncenter.org/index.cfm?fuseaction=topics.item&news id=237983&topic id=1421#protests
- 9) "Rare Earth Mining Zones Aim For Sustainable Use," Xinhua, 11 February 2011.; "New Standards for Rare Earth Sector," *China Daily,* 7 January 2011.; "Rare Earth industry to be regulated," *Global Times,* 15 February 2011.; Keith Bradsher, "In China, Ilegal Rare Earth Mines Face Crackdown," *The New York Times,* 29 December 2010.; "China cap emissions for rare earth miners," *Agence France Presse,* 1 March 2011.