



Report

China Rapeseed GMAP

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Methodology

GMAP provides an early and high-level country and commodity-level evaluation of environmental and social risks associated with agro—commodity primary production. The criteria and indicators align with the IFC 2012 Performance Standards on Environmental and Social Sustainability, in particular the supply chain-related requirements of Performance Standard 2 and Performance Standard 6.

PS2

Performance Standard 2
Labor and Working Conditions

PS6

Performance Standard 6
Biodiversity Conservation and
Sustainable Natural Resource
Management

Risk Matrix

The methodology uses a traditional risk matrix to quantify production risk. A risk score for each indicator is derived from a combination of two factors

1

Probability of an occurrence

2

Severity of impact

Score Summary



Labor and Working Conditions

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Labor and Working Conditions

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1.1 CHILD LABOR

Use of harmful child labor

What is the extent of harmful child labor use in commodity production?

Children living in rural China are more likely to work; however, the central region where rapeseed production is more common has the lowest percentage of child labor. There are reported instances of child labor as recently as April 2016 but were not directly tied to the agricultural industry. Rapeseed is not listed as good produced by child labor in China.

References

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- *International Labor Organization. 2017. "Ratifications for China." http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103404*
- *U.S. Department of Labor. 2016. "List of Goods Produced by Child Labor or Forced Labor." <https://www.dol.gov/ilab/reports/child-labor/list-of-goods/>*

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1.2 CHILD LABOR

Laws related to child labor

To what extent do the laws of the country protect the rights of children in commodity production?

Chinese law prohibits children under the age of 16 to be employed per the Minimum Age Convention, 1973 (No. 138) which imposes penalties of no more than 3 years and a fine. The country has also ratified the Worst Forms of Child Labour Convention, 1999 (No. 182). Lack of reporting has made it hard to determine the statistics on Child Labor. National policies support the abolishment and practice of Compulsory labor, the use of a Re-education through Labour (RETL) program, and has implemented a Plan of Action Against Human Trafficking (2013-2020).,

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- U.S. Department of State. 2016. "Country Reports on Human Rights Practices in 2016" <https://www.state.gov/j/drl/rls/hrrpt/humanrightsreport/index.htm?year=2016&dliid=265328#wrapper>
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Use of forced labor

To what extent is production of the commodity associated with forced labor in the country?

Rapeseed is not listed as good produced by forced labor in China. The country ranks 40 out of 167 in the 2016 Global Slavery Index. It is estimated that nearly 3.4 million people live in modern slavery in China. The lack of persistence for reported cases is believed to be an indicator that forced labor is declining, although there are still incidences of sex trafficking, harmful conditions for workers with disabilities, and an exploitation of extended work hours. Local officials tend to over prioritize economic development performance reporting in lieu of being honest about forced labor. It is difficult to pin-point forced labor incidents with rapeseed production but it is known in general to occur in the agricultural sector.

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Laws related to forced labor

To what extent do the laws of the country prevent the exploitation of forced labor in commodity production?

Chinese law prohibits forced and compulsory labor but has not ratified the Abolition of Forced Labor Convention, 1957 (No. 105) or the Forced Labor Convention, 1930 (No. 29). If there were cases of forced labor that became public the government consistently enforced the law. Penalties include imprisonment up to three years and fine or ten years and a fine, for more serious cases. Information about forced labor and slavery in China are inconsistent and difficult to obtain.

References

- International Labor Organization. 2017. "Ratifications for China." http://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103404
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Conditions of Production

To what extent do workers in commodity production face physical and/or chemical occupational health and safety (OHS) hazards?

The typical pesticides used in rapeseed production (China included, though specific chemicals may change depending on the cultivar in use) include glyphosate (WHO Classification III - Slightly Hazardous), metazachlor (III - Slightly Hazardous), quinmerac (U - Unlikely to present acute hazard in normal use), cycloxydin (III - Slightly Hazardous), thiacloprid (II - Moderately Hazardous), boscalid (EPA states "suggestive evidence of carcinogenicity, but not sufficient to assess human carcinogenic potential") and alpha-cypermethrin (II - Moderately Hazardous). These chemicals have been documented to cause harmful health conditions to agricultural workers in China though insecticides seem to be the more directly underlying culprit. It is estimated that there is nearly a 4% chance out of every 100 thousand workers to die working in the agricultural sector. Mechanization of rapeseed production is being developed and beginning to be adopted and would help to reduce a historically and conventionally labor intensive practice.

References

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- Hu, Qiong, Wei Hua, Yan Yin, Xuekun Zhang, Lijiang Liu, Jiaqin Shi, Yongguo Zhao, Lu Qin, Chang Chen, and Hanzhong Wang. 2017. "Rapeseed Research and Production in China." *The Crop Journal, Advances in Crop Science: Innovation and Sustainability*, 5 (2): 127–35. doi:10.1016/j.cj.2016.06.005.

Laws related to the protection of workers from significant safety issues

To what extent do the laws of the country prevent workers from significant safety issues in the production of the commodity?

China has ratified only four out of eight Fundamental conventions and 20 out of 177 technical conventions relating to occupational safety and forced labor. The country has yet to ratify the Safety and Health in Agriculture Convention 2001 (No. 184) as of 2017. The Chinese State Administration for Work and Safety sets and enforces occupational health and safety regulations. Workers are allowed to report violations without the risk of employment loss however there seems to be a growing consensus that regulations and penalties for infringement have not been effectively managed.,

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Rate of expansion into natural areas

To what extent is production/harvest of the commodity expanding, and to what extent is that expansion into undeveloped areas?

Over the decade from 2004 to 2014 the harvest area for Rapeseed in China has been stable, increasing only 4.35%, with a slight dip from 2006 and 2007 that rebounded quickly. In 2014 the estimated total coverage was nearly 7.6 million hectares. China's forested area has increased 32.6% since 1990 and current logging bans and monitoring programs "have led to significant expansion of forest cover."

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- Viña, Andrés, William J. McConnell, Hongbo Yang, Zhenci Xu, and Jianguo Liu. 2016. "Effects of Conservation Policy on China's Forest Recovery." *Science Advances* 2 (3). doi:10.1126/sciadv.1500965.

Impact on protected areas

To what extent is commodity production negatively impacting designated protected areas and/or cultural heritage sites in the country?

There are over 2,100 IUCN protected areas in China however, only a small handful are represented near or that overlap with Rapeseed production. These include Nature Reserves and World Heritage sites (Category V) and other non-categorized aquatic and terrestrially reserved spaces. A majority of the protected territory is located in Western China within the Qinghai, Xinjiang, and Gansu provinces and does not coincide with rapeseed production. Areas that do intersect with rapeseed tend to be much smaller, fragmented, and spatially separated from each other.

References

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Presence and impact on high or unique terrestrial biodiversity

To what extent do areas of high or unique terrestrial biodiversity exist within or near the region of production and to what extent is the commodity known to negatively impact those areas?

There are a small number of AZE sites that overlap with rapeseed production. These include: the Anhui Chinese Alligator National Reserve due west of Shanghai, the Poyang Hu wetlands, the Fanjing Shan Nature Reserve, the Baicun, Leigong Shan Nature Reserve, Dayao Shan Nature Reserve, the Wuyuan Forest, and the Daba Shan Nature Preserve., Numerous Important Bird Areas (IBAs) blanket the region where Rapeseed is predominantly grown, most of which are wetlands and nature reserves that play vital roles for habitat and breeding grounds.

References

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- Birdlife International. Important Bird Areas - Data Zone. <http://www.birdlife.org/datazone/site/search>

Presence and impact on high or unique freshwater biodiversity

To what extent do areas of high or unique freshwater biodiversity exist within or downstream of the region of production and to what extent is the commodity known to negatively impact those areas?

Rapeseed production is primarily focused in the Yangtze River Valley Basin. This particular river basin is listed globally as one of the top ten rivers most at risk due to dangerous levels of toxins in drinking water sources, incidence of eutrophication, and a high endemism of freshwater biota. The Lower Yangtze freshwater ecoregion contains around 30 recorded endemic species. Two noteworthy species that occur in the Lower Yangtze include the critically endangered Yangtze river dolphin or baiji (*Lipotes vexillifer*) and critically endangered Chinese alligator (*Alligator sinensis*). Rapeseed production and other forms of crop cultivated in the Yangtze use heavy loads of nitrogen as fertilizers and the CCICED (China Council for International Cooperation on Environment and Development) suggests that 92% of nitrogen discharged into the Yangtze is from the agricultural sector., This area overlaps with the following RAMSAR wetland sites: the Anhui Shengjin Lake National Nature Reserve, Hubei Chen Lake Wetland Nature Reserve, Hubei Honghu wetlands, Nan Dongting Wetland and Waterfowl Nature Reserve, Xi dongting Lake Nature Reserve, Hubei Dajiu Lake wetland, and Poyanghu.

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