



Terms of Reference

China's Global Trade-linked Land Footprint of Food & Forest linked Commodities

This document details the terms of reference for the development of the report on China's Global Trade/Import linked Footprint for Land-based commodities

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SCOPE

WWF would like to commission a report on assessing China's footprint in the global trade of land-based commodities (Soy, Beef, Palm Oil, Rubber, Maize, Coffee, Cocoa, Tropical Timber) with embedded risk of deforestation and conversion. This report, though not for public disclosure, is intended to help build engagement with government and businesses on addressing the issue of deforestation and land conversion in global supply chains.

BACKGROUND AND RATIONALE

Consumer countries have a big role to play in solving the challenges in deforestation, conversion and other environmental and social impacts in producer landscapes caused by commodities that are traded.

This is relevant now, more than ever, given the continued alarming deforestation and land conversion rates in global biodiversity hot spots, the overall failure in meeting deforestation commitments by both businesses and governments, and COVID 19 further exacerbating government's decision making to build back better in favour of short-term economic growth.



The report on China's Global Trade/Import linked Footprint for Land-based and forest risk commodities will provide an updated trade flow analysis of key forest and ecosystem risk commodities including soy, beef, palm oil, maize, rubber, tropical timber, coffee, and cocoa, to serve as a tool for building engagement with the government and businesses on addressing the issue of deforestation in global supply chains.

Given China's influence as a global importer of:

Palm oil: China is the largest consumer of edible oils in the world and the second largest importer by volume, accounting for 13% (7.6 million ton, 2019) of the total global import amount. China is now the second-largest importer and third-largest consumer of palm oil in the world. Chinese companies are present in all segments of the international palm oil supply chain, from upstream production to midstream refining and trading to downstream processing. This role includes investments in palm oil plantations in Indonesia and Malaysia as well as large imports and consumption of palm oil, especially as an edible oil, driven by a large and growing population.

Beef: China is world's largest imported beef market in 2021, accounting for roughly 30% of world's beef imports. In 2020, China imported beef from 29 countries including Brazil, Argentina, Uruguay, Australia and New Zealand, and Brazil was the largest source of imports, with an import volume of 848,400 tons.

Soy: In the 2020/2021 period, around 166.33 million metric tons of soybeans were imported globally. China was by far the leading importer of soybeans, with an annual import volume of approximately 100 million metric tons in that year. The recovery of China's hog herd, which was devastated by African swine fever, has been the key driver of its surging appetite for soybeans, which are used in animal feed for the massive livestock sector, as well as in cooking oil.

The report will also look at emerging market producer countries for specific commodities to China, where national policy is amenable to Chinese (trade announcements, commitments etc.), or where significant Chinese investment is already underway.

Other commodities(to be covered): Other commodities such as rubber, cocoa, maize, coffee and tropical timber are to be reviewed and assess risks and trade trends.

OBJECTIVES

The report, in narrative form, should provide the latest available information on the trade volumes, global footprint and risk of deforestation of agricultural and forest commodities imported to China, with scope to look at what is re-exported to other countries.

The report should highlight not only the countries but the regions/landscapes that are key trade partners for China and are at risk of deforestation or land conversion contributed by trade volumes coming to consumer countries including China.

In addition, a brief understanding of key consumer countries (or multinationals) sourcing from the same landscapes should be provided. To understand total pressure on the landscape, which countries are involved, and where sustainability measures are being put in place to mitigate the risks associated with deforestation risk commodities.

This data is expected to help create awareness and sensitize the Chinese government and associated stakeholders about their overseas footprint its global agriculture commodities and carbon impact of establishing these crops or resource extraction as well as biodiversity impacts. Given China's 2060 carbon commitments this will be an important area of the report.



The report will also be used to create an engagement strategy with key Chinese private sector stakeholders. This will also help in understanding the overall scenario in the run up to COP 27, ongoing discussions and implementation as part of the FACT Dialogue as well as the CBD COP 15.

QUESTIONS/AREAS TO BE EXPLORED

- (1) Literature review of the research to date on China's trade-linked footprint relevant to key commodities.
- (2) What's is the **current China global footprint (trade flows, land footprint and deforestation risk)** associated with the consumption of agricultural and forest-and risk commodities?
 - a. Likely that 2019-21 data is the latest information available from databases & national statistics. Assess what latest trade data is available.
 - b. **List of expected figures and infographics:** Map outlining key trade commodity flows going to China, Map outlining key biodiverse and protected areas and proximity to commodity trade flows (Ref to University of Boston research), infographic mapping geographical footprint of supply chains. Opportunity to discuss this in more detail during the inception phase.
- (3) For selected countries, where data is available, what is **China's sourcing volumes, land footprint and risk in specific regions/biomes/provinces**?
 - a. Additional: what other large consumer countries are sourcing from the same landscape?
- (4) What's the **estimated footprint in terms of potential greenhouse gas emissions & carbon (from natural resource extraction) from deforestation and land conversion**?
- (5) What would be the environmental (e.g., Biodiversity, Water Security, Habitat Fragmentation) and social impacts (e.g., land tenure rights, economic development) and what are the key implications for future trade?
- (6) What are the associated risks related to rule of law, corruption and ease of business for Chinese companies operating in?
- (7) What needs to be done by the Chinese government, businesses, financial institutions and consumers to reduce the risks of driving deforestation and conversion?

APPROACH

Commodities: We will focus on the following key forest and ecosystem risk commodities including palm oil, soy, beef, maize, coffee, cocoa, rubber and tropical timber.

Given the complexity of the analysis, we propose a phased approach:

Phase 1, address **question (1, 2)**, by taking reference from the methodology followed in the Riskier Business 2020 as well as developing additional methods wherever necessary, to map out traded volumes up to the latest available data, estimate global land footprint, GHG emissions, carbon loss, biodiversity and deforestation-risk analysis. Express the global footprint of imported commodities in terms of GHG emissions, carbon and biodiversity impacts, at the national level The risks will be examined in each landscape and a set of specific recommendations or wish list will be produced where possible.

Phase 2, address **question (3,4,5)** by exploring data on critical landscapes (biomes/regions/provinces), i.e., for which the highest volumes are traded to China and that have high deforestation rates, including assessment of the key sectors for the traded commodity to estimate the footprint and deforestation risk. Traded volumes, land footprint and deforestation-risk analysis at sub-national level will be produced. Develop producer country specific case studies to assess environmental impact of trade, and analysis of how this footprint maps onto the Nationally Determined Contribution plans for forested nations.

Phase 3, address **question (6, 7)**, map the associated risks for natural resource extraction for Chinese companies (corruption index, rule of law, ease of doing business) in specific countries and map where environmental risks (forest loss), social risks (IPLCs conflict) and economic (climate change) overlap. Provide set of recommendations for stakeholders to reduce deforestation and land conversion risks.

DELIVERABLES

Phase 1:

- a) A summary and analysis report based on the updated data at country level on traded volumes (broken down by commodity forms), estimated land footprint, and deforestation/conversion risk analysis.
- a) A summary and analysis report based on the updated data with updated information and graphs at sub-national level* where possible on traded volumes (broken down by commodity forms), key sectors (company breakdown), estimated land footprint, and deforestation risk analysis. Technical comment and follow up data analysis if needed.

Phase 2: A summary and analysis report based on greenhouse gases and carbon data and graphs at national level associated with the land footprint of commodities traded to China. Technical comment and follow up data analysis if needed.

Phase 3: Development of case studies for specific producer countries covering; level of trade (current & projected) with China, biodiversity risk, government legislation & policies. (Other themes may also be covered and discussed during phase 1). Producer country case studies developed to feed into final report.

Phase 4: Development of final report (& supporting ppt) synthesizing data with technical analysis (political, economic, social) of the trade flows, GHG and carbon mapping, producer country analysis and high-risk areas (landscape mapping). With development of recommendations for urgent action for both producer country stakeholders and China, high.

Detailed timeline here - TBC

Time	Progress
May 2022 – Aug 2022	Data collection and report drafting
Aug 2022 – Oct 2023	Draft report Phase 1, Phase 2, Phase 3
Oct 2022 – Dec 2022	Draft report Phase 4
Jan 2023	Final Report Phase 4

BUDGET AVAILABLE

Organisation/Project	Budget Holder	Amount (£) inc. VAT
WWF-UK	WWF-UK	Maximum £49,900

PROPOSAL GUIDELINES

Proposals must be submitted and titled [NAME OF ORGANISATION/CONSULTANT] CHINA COMMODITY TRADE FLOW REPORT to John Dodsworth by email (Jdodsworth@wwf.org.uk) by no later 24th May 2022.

Proposals from consultants should include the following:

1. Overview of the consultant's understanding of the assignment (max 2 pages)
2. Indicative workplan, budget and timeline
3. Initial ideas regarding the tools and methodologies that may be relevant (max 2 pages)
4. Indication of individuals/organizations that would be consulted as part of this work, if any



5. Examples of similar work that the Organisation/Consultant has undertaken previously (max 3)
6. Consultants/organisations are encouraged to include any additional information they believe demonstrates their value add

SELECTION CRITERIA

1. Availability to start the report and analysis June/July 2022
2. Knowledge of China and drivers of deforestation
3. Demonstrated expertise in trade flow mapping, environmental impact assessment and deforestation issues
4. Consultant/Organisation's understanding of the assignment



ANNEX A: CRITERIA FOR CHOOSING THE LANDSCAPES FOR PHASE 3

Initial landscapes or countries will be chosen based on risk and volumes traded to China (Risky Business refresh data on sub-national footprint), as follows:

Within the highest risk countries where a commodity is imported to China:

Trade, impact and conservation value

1. Highest volumes of commodities traded to the China in recent years
2. Highest rates of deforestation/conversion
3. Highest biodiversity/climate mitigation value of natural ecosystems under risk

Future trade and Geopolitics

4. Political scenario and future trade prospects with China – higher likelihood of further trade?
5. Locations where China has political/market influence

Potential for collaboration

6. Which other consumer countries are buying from the same region?
7. Which companies are sourcing from the same region?

What to include in the case studies? (This will be discussed in more detail with the consultant & WWF offices)

In a chosen landscape:

- Description of the main impacts so far (including critical biodiversity loss and future trends)
- List of key issues (top 5) to be addressed if we are to be successful in tackling deforestation in that landscape
- Other consumer countries sourcing from the same area (top 3)
- Specific recommendations

to take into consideration

- Chinese government announcements related to COP26 and COP15
- China has signed on the Declaration of no more deforestation by 2030 at UNCCC COP26 on 2nd this month, in addition to 60 banks (36 from China) have committed to conserve global biodiversity at CBD COP15 in Kunming 2022.