

Global Map of Environmental & Social
Risks in Agro-Commodity Production



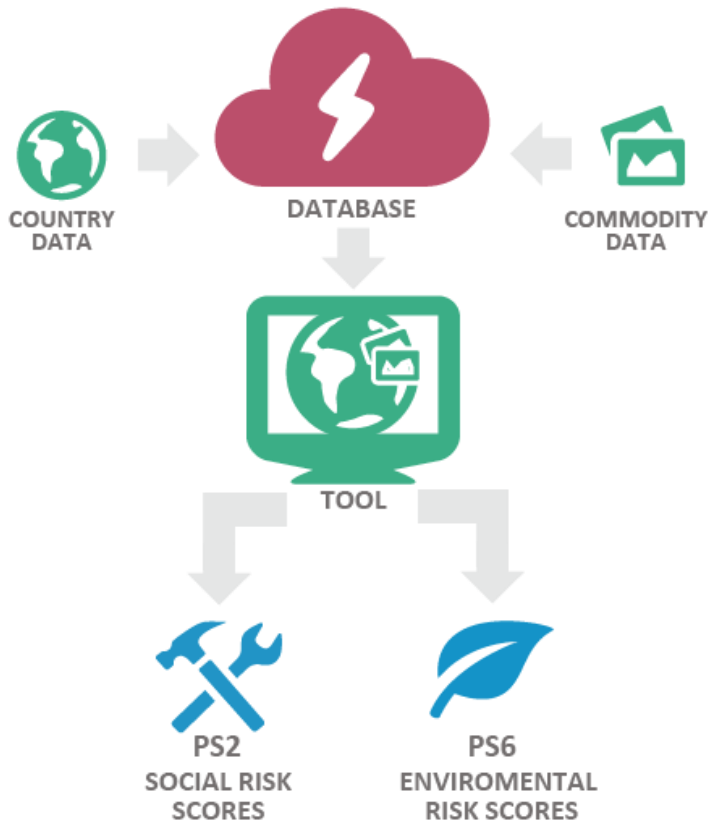
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WHAT IS GMAP?



The Global Map of Environmental & Social Risk in Agro-commodity Production (GMAP) is a **database tool** developed by IFC in partnership with World Wildlife Fund (WWF).

It was developed using a methodology informed by WWF's Supply Risk Analysis. GMAP currently aggregates information on **Environmental and Social (E&S) risks** for about 250 country-commodity combinations and assigns a color-coded risk score that provides a basis for more systematic E&S due diligence, risk management, and decision-making on financing.



HOW CAN GMAP HELP YOU

STRENGTHEN DD PROCESSES



Support financial institutions to strengthen their environmental and social due diligence screening procedures.

SUSTAINABLE SOURCING



Support agribusiness with undertaking high-level risk assessment of sourcing and defining sustainability sourcing strategies.

EXPEDITE DECISION-MAKING



Expedite agro-commodity short-term and trade financing decisions.



METHODOLOGY

GMAP provides a 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

Labor and Working Conditions

- Use of harmful child labor
- Laws related to child labor
- Use of forced labor
- Laws related to forced labor
- Conditions of production
- Laws related to the protection of workers from significant safety issues



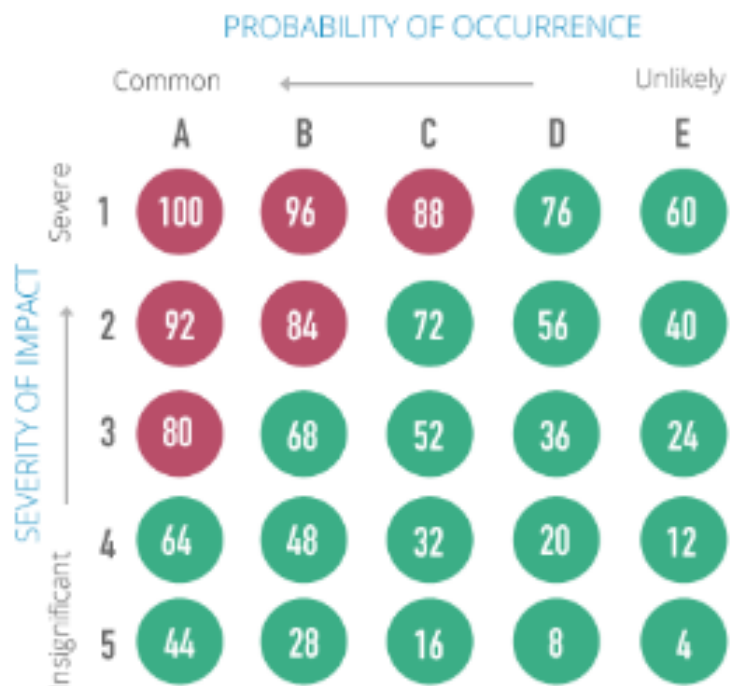
Performance Standard 6

Biodiversity Conservation and Sustainable Management of Living Natural Resources

- Rate of expansion into natural areas
- Impact on protected areas
- Presence and impact on high or unique terrestrial biodiversity
- Presence and impact on high or unique freshwater biodiversity



RISK ASSESSMENT IN GMAP



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: **Probability of an occurrence** vs **Severity of impact**

A higher score on the matrix implies a higher probability of occurrence and severity of impact. Thus, the higher the score, the higher the risk.



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GMAP THE TOOL

HOME

GMAP
Global Map of Environmental and Social
Risks in Agro-Commodity Production

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Welcome to GMAP!

The Global Map of Environmental & Social Risk In Agro-commodity Production (GMAP) enables users to conduct rapid environmental and social due diligence associated with trade and short-term finance, and to make responsible and strategic sourcing, financing, and risk management decisions. Use the tool to access detailed risk analysis reports and risk management guidance.



GMAP THE TOOL

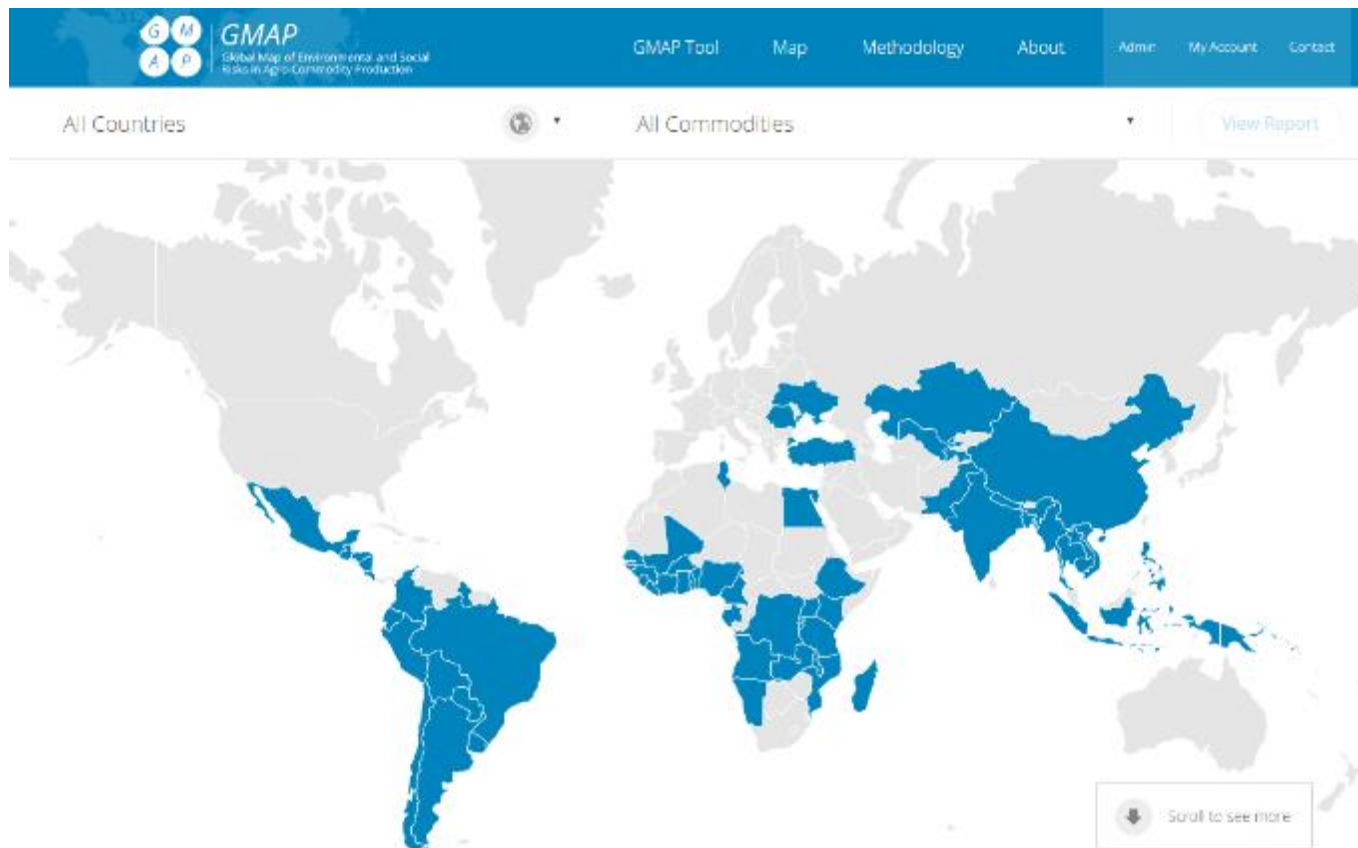
USING THE TOOL - A VISUAL INTUITIVE INTERFACE

The screenshot displays the GMAP website interface. At the top, a blue navigation bar contains the GMAP logo (four circles with letters G, M, A, P) and the text "GMAP Global Map of Environmental and Social Risks in Agri-Commodity Production". To the right of the logo are links for "GMAP Tool", "Map", "Methodology", "About", "Log-in", and "Contact". Below the navigation bar, there are filters for "All Countries" and "All Commodities", each with a dropdown arrow, and a "View Report" button. A world map is visible in the background, with China highlighted in blue. A "Log-in" modal is centered on the screen, featuring a close button (X) in the top right corner. The modal contains the text "Log-in" and "Enter your email address and password to access your account and saved reports." Below this are two input fields labeled "USER NAME" and "PASSWORD". A link "Don't remember your Password?" is positioned to the right of the password field. At the bottom of the modal is an "Enter" button. In the bottom right corner of the map area, there is a "Scroll to see more" button with a magnifying glass icon.



GMAP THE TOOL

USING THE TOOL - A VISUAL INTUITIVE INTERFACE





GMAP THE TOOL

COUNTRY-COMMODITY



GMAP is a web platform where you can use the tool to **select a country-commodity** combination and view its risk score, analysis report, and risk management guidance.



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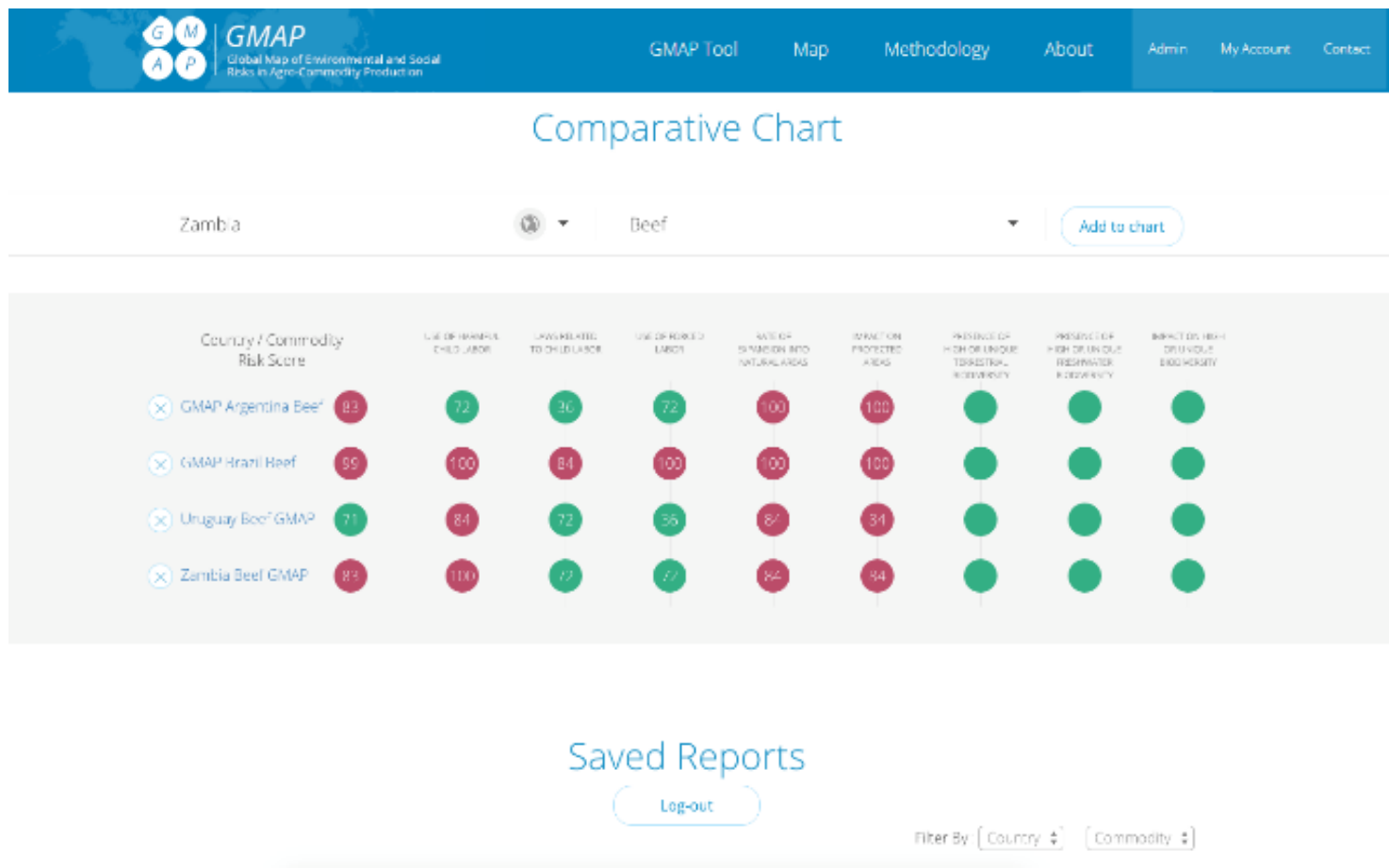
USING THE TOOL - A VISUAL INTUITIVE INTERFACE





GMAP THE TOOL

USING THE TOOL - COMPARATIVE CHART



GMAP THE TOOL

USING THE TOOL - REPORT



You can view the country-commodity **report** to understand how the risk score was attained, find out more detailed information on commodity production in that country, possible regional discrepancies, and certification status, as well as explore ways that production risk might be mitigated and managed.



GMAP THE TOOL

USING THE TOOL – A REPORT OVERVIEW



Dashboard



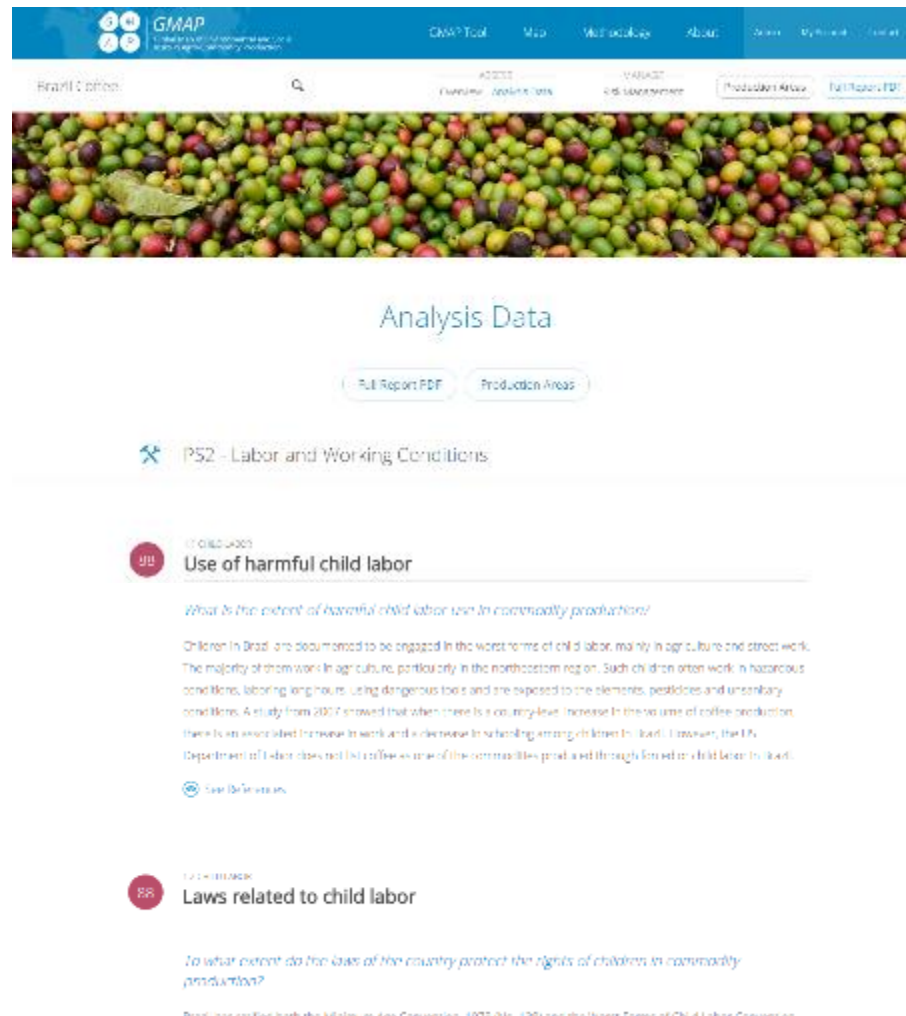
Beef: 24%
Pork: 100%

View the interactive map



GMAP THE TOOL

USING THE TOOL – ANALYSIS DATA FOR REPORT



GMAP
Global Map of Agricultural Production and
Harmful Child Labor

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Analysis Data

[Full Report PDF](#) [Production Areas](#)

PS2 - Labor and Working Conditions

Use of harmful child labor

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

Children in Brazil are documented to be engaged in the worst forms of child labor, mainly in agriculture and street work. The majority of them work in agriculture, particularly in the northeastern region. Such children often work in hazardous conditions, laboring long hours, using dangerous tools and are exposed to the elements, pesticides and unsanitary conditions. A study from 2007 showed that when there is a country-level increase in the volume of coffee production, there is an associated increase in work and a decrease in schooling among children in Brazil. However, the ILO Department of Labor does not list coffee as one of the commodities produced through forced or child labor in Brazil.

[View full report](#)

Laws related to child labor

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

Brazil has ratified both the Millennium Declaration (2000) and the United Nations Convention on the Rights of the Child (1989).



GMAP THE TOOL

USING THE TOOL – A REPORT OVERVIEW

The screenshot displays the GMAP tool interface. At the top, there is a navigation bar with the GMAP logo and the tagline "Journal of Sustainable Business & Society". Below this, a search bar and several filter buttons are visible. The main content area features a large image of a green field. The title "Risk Management" is prominently displayed, followed by the subtitle "Together, we are making tomorrow's markets". Below this, there are three tabs: "Agribusiness", "Financial Institutions", and "IFC Internal Only". The "Agribusiness" tab is selected, and a progress bar shows three steps: "1. Identify", "2. Assess", and "3. Mitigate". The first step, "1. Identify", is highlighted, and the sub-header "Prioritize Supply Chain" is shown. The main text explains that the GMAP Tool helps inform strategy development by identifying which supply chains have high associated environmental and social risks. It states that this information should be used to prioritize your company's supply chains for further investigation. A key finding is noted: "In many cases, farmer production is sold to several different supply chains, rather than being purchased by a single trader, which means that multiple commodities from a single supplier or aggregator are purchased, and not fungible commodities." At the bottom, there are two columns: "RECOMMENDATIONS" and "REQUIREMENTS". The recommendations include: "Identify high-risk supply chains using scores", "Conduct a third-party audit", "Conduct a field-level assessment", "Conduct a risk assessment", and "Conduct a supply chain assessment". The requirements include: "Have a clear vision", "Have a clear understanding of the risks associated with the supply chain", and "Have a clear understanding of the risks associated with the supply chain".

GMAP
Journal of Sustainable Business & Society

RDA Coffee

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Risk Management
Together, we are making tomorrow's markets

Agribusiness | Financial Institutions | IFC Internal Only

< Agribusiness | 1 | 2 | 3 >

1 Identify: Prioritize Supply Chain

The **GMAP Tool** helps inform strategy development by identifying which supply chains have high associated environmental and social risks. This information should be used to prioritize your company's supply chains for further investigation.

In many cases, farmer production is sold to several different supply chains, rather than being purchased by a single trader, which means that multiple commodities from a single supplier or aggregator are purchased, and not fungible commodities.

RECOMMENDATIONS

- Identify high-risk supply chains using scores
- Conduct a third-party audit
- Conduct a field-level assessment
- Conduct a risk assessment
- Conduct a supply chain assessment

REQUIREMENTS

- Have a clear vision
- Have a clear understanding of the risks associated with the supply chain
- Have a clear understanding of the risks associated with the supply chain



CASE STUDY: SOY / BRAZIL

GMAP Score: 91 - Red/High Risk

GMAP findings: Potential negative environmental impacts from ecologically sensitive biomes; risks of harmful child / forced labor and OHS not expected as soybean is harvested mechanically.

Environmental and Social Action Plan (ESAP)

- As part of its EHS Management System, company X will develop a Sustainable Sourcing Policy
- As a minimum, the Company's pre financed soybean suppliers located in environmental sensitive regions (Amazon, Chaco, and Cerrado) must be consistent with:
 - RTRS cut off dates (RTRS) for land conversion (May 2009) and High Value Conservation Areas mapping (where it does exist);
 - Amazon Soy Moratorium cut of date (June 2008) requirements in Brazil;
 - Legal requirements, such as Rural Environmental Cadaster
 - Respect of Indigenous People Land;
 - Forced labor list; and, verification of embargoed areas as identified by IBAMA
- In order to implement this Policy, company X will include within its existing credit review process and requirements, the above mentioned E&S verification points
- Company X will be monitoring/reporting on its supply chain through its Sustainability Report



CASE STUDY: INDONESIA / OIL PALM

GMAP Score: 97 - Red/High Risk

GMAP findings: incidence of harmful child / forced labor ; expansion into natural areas, including natural and critical habitats

Environmental and Social Action Plan (ESAP)

- As part of its EHS Management System, company X will develop a Sustainable Sourcing Policy
- FFB suppliers are required to sign Company X' Supplier Code of Conduct
- Company X will include in its mills' existing credit review process/requirements for FFB suppliers against the following:
 - Independent FFB smallholders must have a valid Environmental License (as applicable under regulation);
 - Independent FFB smallholders should be regularly inspected to prevent any occurrence of harmful child labor and/or forced labor;
 - Independent FFB smallholders should not be encroaching Indigenous People Lands; and,
 - Independent FFB smallholders' lands were not converted to agriculture after RSPO cut of dates or in disagreement with High Value Conservation (HCV) area mapping.
- Company X will implement a training program for its field staff dealing with FFB suppliers on sustainable agricultural practices to help farmers improve yields, quality, and support third party certification
- Company X will annually monitor/report on its Sustainability Sourcing Policy



CASE STUDY: IVORY COAST / COCOA

GMAP Score: 95 - Red/High Risk

GMAP findings: cocoa sourcing in Ivory Coast is high risk due to harmful child / forced labor and expansion of cocoa production in natural / critical habitats.

Environmental and Social Action Plan (ESAP)

- As part of its EHS Management System, Cocoa Trader X will increase traceability and/or third party certification in cocoa throughout the life of IFC investment, in collaboration with clients and other partners, to achieve a traceable and sustainable supply, free from harmful child / forced labor, and not produced by deforesting natural and critical habitats;
- Cocoa Trader X will be developing a corporate Sustainability Sourcing Policy, defining a multi-year sustainability sourcing plan (baseline and operational targets, specific activities, key milestones and schedule) to increase procurement of traceable and certified cocoa each year, at each origin;
- The sourcing plan will propose partnerships for activities addressing productivity intensification and monitoring of child labor, and being implemented by other stakeholders at countries of origins.
- Cocoa Trader X Company will report to IFC all activities performed to increase sustainability in its sourcing and promote sourcing of certified cocoa.



CASE STUDY: SOLOMON ISLANDS / TUNA SOURCING

GMAP Score: 77 - Red/High Risk

GMAP findings: sustainability risks inherent to wild capture fisheries, human rights and labor concerns of the longline sector, and risks of forced labor and human trafficking on distant water fishing vessels

To manage this significant reputational risk, company X will adopt an Ethical Sourcing Policy which promotes transparent and voluntary labor agreements, freedom of movement, and crew safety. This policy specifically covers fundamental labor standards and practices, namely (i) voluntary labor; (ii) human trafficking; (iii) underage workers; (iv) OHS conditions (compliance with national legal/regulatory requirements, prevention of workplace hazards, provision of sanitary working environment, and living spaces and provisions onboard vessels)

Company X will recruit an NGO - <http://www.verite.org/research/promoting-responsible-labor-practices-fishing> - to conduct a labor/OHS audit of its licensed long liners supplying its tuna base

Environmental and Social Action Plan (ESAP)

- Screening of the Taiwanese long liners before granting fishing licenses;
- Scope of the audit against its Ethical Sourcing Policy will be extended to a sample of 30 longline operators (having obtained their fishing licenses from National Fisheries Development - NFD) at its Noro (Solomon Islands) operations.



IN CONCLUSION

1

IT'S UNIQUE

Using a unique methodology aligned to IFC's Performance Standards on Environmental and Social Sustainability, the GMAP facilitates rapid financing and sourcing decisions for International and National Financial Institutions and Agribusinesses.

2

IT'S PROVEN

In an earlier 2013-2014 pilot, eight participating IFC client banks used GMAP as part of their E&S due diligence process for agro-commodity trade finance. Additionally, the IFC worked with two large agro-commodity trader clients, which incorporated the methodology into their respective sourcing policies and risk management processes. During the pilot period, **\$675 million of GMAP-screened agribusiness trade finance investment was enabled.**

3

IT'S PROPRIETARY

Only proprietary platform that allows for a high-level screen for trade and short-term financing to align with IFC Performance Standards.

4

IT'S BACKED

It's backed by the soft commodity production expertise and global reach of the IFC and WWF.



www.ifc.org/gmap

Join us and invest in
data-driven sustainability

Contact us at info@gmaptool.org for questions



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