

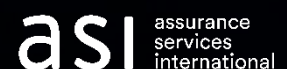


RISK INFORMATION
ALLIANCE

Indonesia - Cocoa

Risk assessment overview

July 2026



Assessment description

SCOPE	
Geographical scope	Indonesia – whole country
Commodity or product	Cocoa
Other scoping element, if any	N/A
DETAILS	
Period of development for the initial draft (prior to consultation)	December 2025 – June 2026
Rationale for development	Third pilot for the RIA indicators and methodology.
Language(s)	English
DEVELOPERS	
RIA Members involved in development	Preferred by Nature Local subcontractor: <ul style="list-style-type: none"> • Peni Agustijanto (Consultant)
Expert outreach, if applicable	In the period January – June 2026, 10 experts/stakeholders were consulted, including CSOs, cooperatives and government representatives.
Stakeholder consultation	Ongoing

Key highlights

Process highlights

The risk assessment follows the RIA draft methodology in place and assesses legality and sustainability indicators related to land tenure, management, and environment, conversion risks, social issues and corruption, trade and taxes.

The first draft of the risk assessment was developed based on publicly available information by a local consultant. The draft assessment process and review was led by Preferred by Nature.

AI tools have been used with moderation to support the identification of relevant sources of information and knowledge. All assessment findings have been drafted and reviewed by experts.

Following the consultation period, the risk assessment will be made publicly available as an open resource, supporting risk-based approaches to sustainability, starting with RIA Members' own assurance systems. It is also designed as a shared knowledge base for the cocoa sector to support due diligence, smallholder engagement, landscape initiatives, and continuous improvement efforts aligned with global sustainability frameworks.

Content highlights

- Most indicators of this assessment have a non-negligible risk conclusion.
- **Negligible risk:** a small share of indicators (encroachment into cocoa farms, legal rights of Traditional Peoples, management of natural fire, pests and diseases, forest and ecosystem degradation, workers' housing and facilities, legal requirements on freedom of association, environmental taxes, link to armed conflict) have a negligible risk conclusion.

- **Non applicable indicators:** there is a handful of non-applicable indicators (land use planning and management planning, legal requirements for farm infrastructure, invasive species and GMOs, trade restrictions or sanctions and CITES).
- **Precautionary approach:** There are quite a number of indicators which have a non-negligible risk conclusion out of precautionary approach. A general risk picture was identified at national level, but there is a lack of sufficient sources and data specifically for the cocoa sector. Such indicators may change risk level based on sufficient additional elements of expertise and evidence. Examples include the protection of water bodies, negative impact on soil, the use of chemicals in a way that prevents harm, the use of open burning / fire, the conversion of forest, the impact on cultural, archeological or historical sites, modern slavery, legal requirements on gender equality, non-discrimination and harassment, and data and document falsification.
- Non-negligible risks are driven by the **following factors:**
 - There is a dominance of smallholders and informal production systems.
 - There is a gap between strong formal regulations and actual implementation and enforcement. This is applicable throughout the whole assessment.
 - The Indonesian legislation often does not meet best sustainability practices.
- **Examples of key non-negligible risk** include:
 - Unclear land tenure rights, relating to land security, planning and sustainable management.
 - High level of environmental degradation linked to the use of chemicals and fertilisers.
 - Structural conditions of informal labour arrangements and livelihood vulnerability leading to weak implementation of legal and responsible practices related to farm workers.

Main results

Findings



1. LAND RIGHTS AND THIRD PARTIES' RIGHTS

- Most indicators are under a **non-negligible risk** conclusion.
- The context of **land tenure and land management rights** for cocoa production in Indonesia is characterised by a gap between a comprehensive legal framework and limited practical implementation. Although regulations require clearly defined, registered, and legally secure land rights, in practice many cocoa-producing areas—dominated by smallholder farmers—operate under informal or incomplete documentation.
- The formal regulatory framework requires cocoa farmers to comply with three main **instruments of formalisation**: business registration through a Business Identification Number (NIB), environmental compliance through an SPPL (or equivalent), and plantation registration through STDB. In practice, however, the situation among cocoa smallholders is characterised by very low levels of full compliance and a high degree of informality.
- External sources do not show widespread, systematically documented cases of cocoa smallholders directly violating **community or Indigenous rights** at scale, unlike in commodities such as palm oil. However, there is consistent evidence that cocoa expansion—especially in smallholder systems—can contribute to land conflicts, tenure insecurity, and gradual erosion of customary land systems, particularly in frontier and Indigenous regions.



2. MANAGEMENT ACTIVITIES AND ENVIRONMENTAL PROTECTION

- Most indicators under a **non-negligible risk conclusion** (with a number of precautionary approach conclusions). There are also a few negligible and not applicable conclusions.
- In relation to **land management requirements**, SPPL and associated Environmental Approval (Persetujuan Lingkungan) are often missing.
- There are no applicable requirements relevant to the establishment of **infrastructure**, in particular irrigation systems. Roads and irrigation used in cocoa farming do not usually lead to negative impacts on the environment.
- Risk of **unauthorized pesticides** being purchased and used in cocoa plantations. Where such products are available on the markets, farmers tend to purchase them without any control or guidance.

- Risk of non-compliant **pesticide and hazardous waste management** in cocoa production, including the unsafe storage, handling, and disposal of pesticide containers and other hazardous materials, due to weak enforcement, limited monitoring, inadequate waste infrastructure, and widespread informal practices, potentially resulting in regulatory breaches and contamination of soil, groundwater, and water bodies.
- Despite legal prohibition, the practice of slash and burn to clean or open agricultural land may still be applied. There is also a risk of open air burning of organic waste (cocoa pods).
- Risk that cocoa farmers use **groundwater** for irrigation without prescribed licenses and approvals. There is insufficient evidence to conclude that **water resources** are sufficiently protected from cocoa production impact.
- There is insufficient evidence to conclude that cocoa production impact on **soil health** is sufficiently managed or minimised.
- Cocoa is **not considered as an invasive species**, nor its production rely on or leads to a proliferation of invasive species.



3. ECOSYSTEM CONVERSION, DEGRADATION AND HCV PROTECTION

- **Forest conversion** for agriculture has long been a major driver of deforestation in Indonesia, shaped by pro-investment policies and a regulatory framework that permits land-use change, with agricultural expansion remaining the dominant cause of forest loss. Cocoa has played a measurable but comparatively smaller role in this process. Ongoing forest conversion persists due to weak enforcement, unclear land tenure, and legal ambiguities, which also make it difficult to clearly assess and control cocoa-related deforestation today.
- Risks of **conversion** of other ecosystems, such as peatlands, are negligible as other commodities are the dominant drivers of peatland conversion. Forest and ecosystems **degradation** is not relevant as cocoa farms are not established under shade trees in pre-existing forests.
- **High-conservation values** (HCV) are insufficiently protected in the context of cocoa production.
- **HCV1:** Cocoa expansion and intensification can lead to habitat loss, forest fragmentation, and degradation of ecosystems, resulting in declines or local disappearance of endemic and endangered species, as well as increased human–wildlife conflict.
- **HCV2:** Intact forest landscapes (IFL), large-scale ecosystems, and ecosystem mosaics are highly sensitive to cocoa production, particularly where agricultural expansion overlaps with or encroaches on these areas.
- **HCV3:** Expansion of cocoa plantations often involves clearing tropical forests, which are among the most biodiverse and irreplaceable ecosystems. Cocoa production also poses a non negligible risk to key ecosystems particularly where such areas overlap with or are adjacent to cocoa landscapes.

- **HCV4:** Cocoa production poses non negligible risks to ecosystem services, particularly those related to water catchment and erosion control. Conversion for cocoa farming can disrupt the functions natural forests and well-functioning ecosystems have in regulating water flows, maintaining water quality, and stabilizing soils.
- **HCV5:** Cocoa production can create risks for the needs and rights of local communities and Indigenous peoples. Inadequate management of cocoa production can indeed negatively impact communities by contributing to environmental degradation, including loss of ecosystem services on which livelihoods depend (such as soil fertility, water availability, and forest resources). As a result, communities may face reduced income opportunities, food insecurity, and increased vulnerability to environmental risks.
- **HCV6:** Cultural, archaeological and historical sites may be affected by land conversion, farm expansion, and infrastructure development associated with cocoa production if they are not properly identified and protected. These impacts can lead to damage, degradation, or loss of sites of cultural or historical importance, which are often irreplaceable.



4. HUMAN RIGHTS

- There is no evidence that revenue from cocoa is currently financing armed conflicts in Indonesia.
- All other relevant indicators have a **non-negligible risk conclusion**.
- Non-negligible risk concluded out of precautionary approach for **modern slavery**: despite a formal legal prohibition of forced and compulsory labour, Indonesia’s documented modern-slavery prevalence and lack of transparent, plantation-wide compliance data in the cocoa sector create a material risk that forced labour or trafficking may occur or go undetected.
- **Child labour** remains a relevant risk in Indonesia’s cocoa and plantation sectors, particularly due to structural and socio-economic factors rather than widespread formal employment of children. While legal prohibitions exist, in practice child involvement in agricultural activities is often normalised, especially among smallholder farmers where children assist family members during peak periods such as harvesting.



5. WORKERS’ RIGHTS

- This theme assesses the practices and legal requirements applicable in the context of an employer – employee relationship, i.e. instances of **hired and paid workers** in cocoa farms.
- Most indicators have a **non-negligible risk conclusion**.

- There is a relatively comprehensive legal framework for **occupational health and safety** (OHS), but the context of cocoa production—characterised by smallholder systems and informal labour—creates significant gaps between legal requirements and actual practice. While national laws require employers to ensure safe working conditions, provide personal protective equipment (PPE), and implement hazard controls, these requirements are often not effectively translated into day-to-day operations in cocoa plantations.
- **Recruitment and contracting:** labour in cocoa production is largely informal, relying on verbal agreements, seasonal hiring, family labour, and community-based systems rather than formal contracts. This informality creates a gap between legal frameworks and actual practice, as recruitment often falls outside effective oversight and blurs the distinction between employment and non-employment relationships. The use of intermediaries, casual work arrangements, and limited documentation further weakens accountability and consistent application of labour standards.
- There is a relatively comprehensive legal framework governing **wages and worker compensation**, but the actual situation in the cocoa sector—particularly in plantations and smallholder systems—is characterized by uneven and often weak implementation.
- In the context of cocoa production, the organisation of **working hours, overtime, rest periods, and leave** is strongly shaped by the seasonal and labour-intensive nature of plantation work, which creates significant challenges for compliance. In practice, peak harvest periods require a rapid increase in labour input, and longer working hours often become the norm rather than the exception, making it difficult to adhere to legal limits on working time and overtime.
- The widespread use of informal, smallholder-based production systems means that workers are often engaged as casual or seasonal labour, limiting opportunities to **form or join trade unions**. At the same time, low awareness of labour rights and limited access to worker organisations—particularly in remote rural areas—further restrict the effective exercise of freedom of association.
- The prevalence of informal and fragmented employment—often involving casual or family labour without formal contracts—creates conditions for **unequal treatment** in wages, working conditions, and access to benefits, compounded by weak oversight in rural areas. **Gender inequalities** are particularly pronounced, with women concentrated in lower-paid and less secure roles, while limited monitoring and enforcement further increase the risk that discriminatory practices persist without effective remedy.



6. ECONOMIC AND TRADE CONDITIONS

- This theme scope is going beyond activities at farm or forest level and includes practices throughout the Indonesia cocoa the supply chain.
- There is a **mix** of non-negligible risk conclusions, some taken out of precautionary approach, not applicable indicators and one negligible risk conclusions.
- **Corruption** remains a significant issue in Indonesia, with widespread risks affecting business and public administration, including bribery, misuse of resources, and corruption in natural resource sectors such as agriculture. In the cocoa sector, these risks are reinforced by informality, non-transparent practices, and the prevalence of “grey” or

facilitation payments, particularly in local administrative processes and supply chains involving intermediaries. Fraud risks are also high due to manual, cash-based systems, weak controls, and performance pressures that can incentivise data manipulation, while enforcement remains constrained by institutional challenges.

- The context of **taxes and fees** in Indonesia's cocoa sector is characterised by a comprehensive but fragmented legal framework combined with significant practical implementation challenges, particularly linked to informality, weak documentation systems, and uneven governance across the supply chain. A wide range of fiscal obligations may apply—including land and area taxes, royalties or non-tax state revenues, VAT, corporate income tax, export duties, and environmental taxes—but their effective application varies significantly depending on the degree of formalisation of actors along the value chain.
- Although trade and export requirements for cocoa in Indonesia are clearly defined, their practical application is shaped by a number of structural and operational challenges within the sector. A key contextual element is the fragmented and partly informal nature of the upstream supply chain, where cocoa is sourced from a large number of smallholders and intermediaries. This fragmentation makes it difficult to ensure consistent documentation and traceability of products, which are essential for complying with formal export procedures.

Indicators' overview

Land rights and third parties' rights	Management activities and environmental protection	Ecosystem conversion, degradation and HCV protection
<p>Land tenure and management rights are secure.</p> <ul style="list-style-type: none"> Land tenure rights are clearly defined, legally secure, and registered in compliance with applicable legal requirements. Land management rights are clearly defined, legally secure, and registered in compliance with applicable legal requirements. <p>Required permits, planning and protection from illegal activities are in place.</p> <ul style="list-style-type: none"> Harvesting or operational permits are in place and are issued and registered according to legal requirements. Legal requirements for land-use planning and management planning are complied with. Land areas under management are protected from illegal encroachment and activities. <p>Rights of third parties are respected.</p> <ul style="list-style-type: none"> Legal requirements related to the rights of Indigenous Peoples are complied with. Legal requirements related to the rights of Traditional Peoples are complied with. Legally recognized customary and community rights are identified and respected. The rights of Indigenous Peoples are respected and upheld according to the principles of Free, Prior and Informed Consent (FPIC). The rights of Traditional Peoples are respected and upheld according to the principles of Free, Prior and Informed Consent (FPIC). The rights of local communities are respected and upheld. 	<p>Management activities are legally conducted.</p> <ul style="list-style-type: none"> Legal requirements for management activities and related operational requirements are complied with. Legal requirements related to the management of the impacts caused by natural processes such as fires, pests and diseases are complied with. <p>Infrastructure associated with management activities is developed and maintained, ensuring minimum impacts on social and environmental values.</p> <ul style="list-style-type: none"> Legal requirements for the protection of social and environmental values during development and maintenance of infrastructure associated with land-use activities are complied with. Development and maintenance of infrastructure associated with land-use activities are done in a way that minimises adverse impacts on social and environmental values. <p>Waste resulting from management activities is managed and minimized.</p> <ul style="list-style-type: none"> Legal requirements related to the storage, treatment and disposal of waste during management activities are complied with. The volume and impacts of waste storage, treatment, and disposal as a result of management activities are managed and minimised. <p>Pollution resulting from management activities is controlled and minimized.</p> <ul style="list-style-type: none"> Legal requirements related to pollution, resulting from management activities are complied with. Pollution, resulting from management activities is controlled and minimised. <p>Water resources are protected and used responsibly during management activities.</p> <ul style="list-style-type: none"> Legal requirements related to the use and protection of water resources are complied with. Buffer zones are established and maintained around streams, rivers, wetlands, and ponds. Water bodies and resources are protected and used responsibly with the aim of ensuring long-term viability. <p>Soil is protected during management activities, and negative impacts are minimised with the aim of securing soil's health.</p> <ul style="list-style-type: none"> Legal requirements related to the protection of soils during management activities are complied with. Negative impacts from management activities on soil's physical, chemical and biological conditions are managed and minimised to secure soil health. <p>Chemicals and fertilizers are used responsibly in management activities with minimal negative impacts on the environment.</p> <ul style="list-style-type: none"> Legal requirements related to the use, application, storage, and disposal of chemicals and fertilizers in management activities are complied with. The use, application, storage, and disposal of chemicals and fertilizers in management activities are conducted in a manner that prevents harm to the environment. Hazardous chemicals are not used in management activities. <p>The use of burning or fire for land preparation and waste management is avoided, whenever possible, and in case of use, is justified and impacts are minimised.</p> <ul style="list-style-type: none"> Legal requirements related to the use of open burning/fire in operations for land preparation and waste management are complied with. The use of open burning/fire in operations for land preparation and waste management managed and negative impacts minimized. <p>Invasive species in production are controlled and GMOs are not used.</p> <ul style="list-style-type: none"> Legal requirements related to the use, monitoring and control of invasive species are complied with. The use of invasive species is monitored, controlled and impacts mitigated. There is no commercial use of GMO. 	<p>Forests and other ecosystems are not converted nor degraded.</p> <ul style="list-style-type: none"> There is no conversion of forests: <ul style="list-style-type: none"> a) Conversion of forests, including plantations, after 2008; b) Conversion of natural and semi-natural forests and forest plantations after 31 December 2020; c) Conversion of forests, including plantations, to agriculture after 31 December 2020. There is no conversion from natural non-forest ecosystems, such as peatland, wetland and biodiverse grassland: <ul style="list-style-type: none"> a) after January 2008; b) after 31 December 2020. There is no degradation of natural forests since 31 December 2020. There is no degradation of non-forest natural ecosystems: <ul style="list-style-type: none"> a) after January 2008; b) after 31 December 2020. <p>High conservation values are protected, maintained or enhanced.</p> <ul style="list-style-type: none"> Legal requirements related to biodiversity conservation, protected sites, and the protection of endemic, rare, threatened, or endangered species and their habitats are complied with. Concentrations of biological diversity including endemic species, and rare, threatened, or endangered species that are significant at global, regional or national levels are identified protected, maintained or enhanced (HCV1). Intact forest landscapes and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional, or national levels, and which contain viable populations of the great majority of the naturally-occurring species in natural patterns of distribution and abundance, are identified and protected, maintained or enhanced (HCV2). Rare, threatened, or endangered ecosystems, habitats or refugia are identified and protected, maintained, or enhanced (HCV3). Basic ecosystem services in critical situations, including the protection of water catchments and control of erosion of vulnerable soils and slopes, are identified and protected, maintained, or enhanced (HCV4). Sites and resources fundamental for satisfying the basic needs of local communities or Indigenous Peoples are identified and protected (HCV5). Sites, resources, habitats, and landscapes of global, national or local cultural, archaeological, or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or Indigenous Peoples are identified and protected, maintained, or enhanced (HCV6).

Human rights

There is no contribution to international crimes and armed conflict.

- Harvest or trade in products do not contribute to international crimes or armed conflict.

Modern slavery, including forced and compulsory labour, are not taking place.

- Legal requirements on modern slavery, in all its forms, are complied with.
- Modern slavery, in all its forms, is not used, promoted, or supported in any way.

Child labour is not occurring and employment of young workers is responsibly managed.

- Legal requirements related to child labour and young workers are complied with.
- Child labour is not present, and the employment of young workers is responsibly managed.

Workers' rights

Health and safety - facilities and activities are safe and support worker's health.

- Legal requirements related to occupational health and safety of workers are complied with.
- Activities are safe and support worker's health, and workers have access to and use appropriate Personal Protective Equipment for the activities undertaken.
- Housing and facilities are safe and support worker's health.

Workers' rights related to recruitment and contracting are respected.

- Legal requirements related to contracts, working permits, competence certifications and other training requirements are complied with.

Workers are paid fairly and responsibly.

- Legal requirements related to workers' wages and other payments, such as social insurance, are complied with.
- Workers' wages meet or exceed recognised standards established living wages for the sector.

Working hours, overtime, rest time and time off are fair and responsible.

- Legal requirements related to working hours, overtime, rest time and time off, are complied with.
- ILO conventions related to working hours, overtime, rest time and time off, are complied with.

Freedom of Association, the Right to Organise and the Right to Collective Bargaining are upheld.

- Legal requirements related to the Freedom of Association, the Right to Organise and the Right to Collective Bargaining are complied with.
- Workers has the Right to Organise and the Right to Collective Bargaining as specified in the ILO Fundamental Principles and Rights at Work.

There are equal opportunities for all, and no discrimination against workers.

- Legal requirements related to gender equality, non-discrimination, and protection from harassment in the workplace are complied with.
- Workers are free from discrimination and are protected against harassment.
- Gender equality is protected following best practices.
- Right to maternity and paternity leave is ensured as defined by ILO 183 and is observed and implemented.

Economic and trade conditions

Corruption, fraud and conflict of interest

- Legal requirements related to fraud and corruption, including bribery are complied with.
- Bribery and corruption do not take place.
- Data and document falsification do not occur.

Taxes, fees and royalties are paid according to legal requirements.

- Legal requirements related to payment of royalties, land/area taxes and fees are complied with.
- Legal requirements related to payment of value-added taxes and/or other sales taxes are complied with.
- Legal requirements related to payment of corporate taxes are complied with, including profit taxes.
- Legal requirements related to payment of trade and/or export taxes and fees are complied with.

Legal requirements related to environmental taxes are complied with.

Trade and transport of products are conducted according to legal requirements and do not contribute to illicit trade.

- Legal requirements related to trade and transport of products are complied with.
- Legal requirements related to applicable trade restrictions and sanctions are complied with.
- Legal requirements related to the classification of products are complied with.
- Legal requirements related to export and/or import are complied with.
- Legal requirements related to offshore trading and transfer pricing are complied with.
- Legal requirements related to due diligence or due care are complied with.
- Legal requirements related to the harvesting, collection and trade of CITES species are complied with.

- Non-negligible risk: there is a non-negligible risk that the indicator is not met.
- Non-negligible risk – precautionary approach: there is no sufficient information to conclude negligible risk.
- Negligible risk: there is a negligible risk that the indicator is not met.
- Not applicable: the indicator is not applicable in the target country and commodity context.



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The **Risk Information Alliance (RIA)** is a collaboration of organisations working together to address the growing complexity of corporate due diligence and responsible business practices. By pooling resources, funding, and expertise, RIA facilitates the joint production of credible, high-quality, and up-to-date risk data across commodities, sectors, and geographies.

Through the development of a shared methodology, indicators, and a blueprint for a risk data storage platform, RIA enables its members to share and access risk data efficiently and cost-effectively. This collaboration supports better-informed sourcing decisions, stronger sustainability investments, and more consistent due diligence outcomes.

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