

Palm Oil Traceability Protocol

April 2019



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1. Introduction

PepsiCo is committed to using its role in the global palm oil supply chain to promote sustainable production. We strive to source only sustainable palm oil while helping to lift production standards across the broader palm oil sector. At PepsiCo, we believe acting ethically and responsibly is not only the right thing to do, but also the right thing to do for our business. We expect all of our palm oil suppliers to conduct business responsibly, with integrity, honesty, transparency and adherence to the principles described in our [Global Supplier Code of Conduct](#).

We have a comprehensive Global Policy on Sustainable Palm Oil that outlines our commitments to no deforestation, no conversion of peatlands, and no exploitation of the rights of indigenous peoples and local communities (“NDPE commitments”). We work with our suppliers to help ensure compliance with our Policy and support their sustainability efforts.

As part of our work to ensure policy compliance, PepsiCo has a goal to achieve 100% traceability to the mill level for all palm oil and palm kernel oil. PepsiCo recognizes that traceability is not an end goal. It refers to knowing the origin of palm products, from upstream to downstream sources, and it is also the first step in better understanding long and complex supply chains that often involve multiple tiers of suppliers and thousands of intermediaries.

To help achieve the 100% traceability target, PepsiCo has developed this palm traceability protocol in collaboration with palm experts and industry partners¹. In 2016, the Protocol was introduced via webinars and distributed to all direct suppliers, along with a recommended reporting template which requires the names of all palm oil and palm kernel oil mills, their location coordinates and the percentage of PepsiCo’s volume that is traceable to the mills.

Building better information systems is a critical step to achieving our goals and prioritizing opportunities for improvement.

This protocol is an updated version of the 2016 Verification Protocol, and the major changes are outlined below:

- Clearer interpretation of supplier requirements (section 2)
- Guideline on verification process (section 3)
 - Verification body requirements
 - Scope of verification
 - Methodology of choosing upstream actors for verification
- Conducting verification visits (section 4)
 - Detailed description on the process that verification bodies should follow for conducting verifications

¹ Proforest and Control Union were these main contributors.

1.1 How to use this Traceability Protocol

The Palm Oil Traceability Protocol consists of two sections:

- Palm Traceability Reporting Requirements
- Verification Guideline

Chapter 2 of this document describes the traceability reporting requirements for palm suppliers of PepsiCo. It details the minimum traceability data that must be reported to PepsiCo. The approach to gather and collect this data shall be defined by the suppliers and are not prescribed by PepsiCo. Existing traceability systems that meet the minimum traceability expectations of this Protocol can be leveraged in order to avoid duplication of work.

The palm traceability data provided to PepsiCo will be subject to a verification assessment. During a third-party evaluation, a recognized verification body will verify the accuracy and completeness of the reported palm traceability data. The general concept of traceability data verification is described in Chapter 3.

Chapter 4 provides more detailed guidance on how to conduct the palm traceability data verification assessments. This chapter is primarily written for verification bodies. However, it might also be used by suppliers as reference for implementing the traceability requirements as it provides insight in the scope and methodology of verification.

2. Palm Traceability Reporting Requirements

2.1. Definition of Traceability

The PepsiCo palm traceability reporting requirement aims to align with existing palm traceability initiatives. The definition of traceability used by PepsiCo is based on the outcome of the traceability working group of the Sustainable Trade Initiative (IDH, in Dutch “Initiatief voor Duurzame Handel”).

Traceability is defined as knowing all palm sources within one’s supply chain all the way to plantation level (including smallholders) and traceability to the oil mill is an intermediary step in achieving full traceability.

2.2 Reporting requirements for suppliers of PepsiCo

In accordance with the traceability definition, as first step towards full traceability, all entities that are part of PepsiCo’s palm supply chain are required to maintain and report *all* palm oil mills who have delivered palm oil (PO), palm kernel oil (PKO) and/or their derivatives to PepsiCo. For each palm oil mill the report should include the geo-coordinates.

The tier 1 supplier should provide a palm traceability report to PepsiCo for each quarter. The traceability report provided to PepsiCo should include at least:

- List of all palm oil mills
- Geo-coordinates for each mill
- Name of parent company of the mill
- Certification/verification status (if applicable)

Additionally, the traceability report provided to PepsiCo should include for each quarter:

- Total percentage of traceable oil to palm oil mill level
- Volume supplied to PepsiCo by the tier 1 supplier

PepsiCo acknowledges that there are different methodologies for implementing traceability. Under this protocol, it is the responsibility of a supplier to define which methodology is most appropriate for its supply chain, provided that the system complies with the palm traceability reporting requirements detailed in this section.

The template for the palm traceability report provided to PepsiCo may be decided by suppliers. In order to support suppliers in their palm traceability process, PepsiCo has provided a simple reporting spreadsheet which may be used.

All traceability data provided to PepsiCo will be subject to an annual third-party verification assessment by a third-party verification body. The details of the verification assessment are explained in chapter 3 and 4 of this Protocol.

2.3 Stepwise traceability

In order to obtain palm supply chain traceability, cooperation amongst the supply chain operators is essential. The palm oil supply chain usually consists of thousands of palm oil growers (plantations) and palm oil mills, a limited number of primary refineries, and thousands of upstream actors (e.g. secondary refineries, traders, manufacturers).

For the purpose of this Protocol, the following stages and actors in the palm supply chain are defined:

- Palm Oil Grower/ Palm Plantation
- Palm Oil Mill
- Crushing site (PKO)
- **Storage location** } First aggregator: operational site which purchases and physically collects
- **Primary Refinery** } the oil from the palm oil mills
- Secondary Refinery
- Trader
- Manufacturer
- **Tier 1 supplier** } Tier 1 supplier: company which supplies the palm oil directly to PepsiCo
- End user

One single actor can cover multiple stages. For example, a processing plant can cover both primary refining and secondary refining, and also have storage locations. Clarification of each of the stages and actors are given in Appendix VI – Glossary of terms of this Protocol.

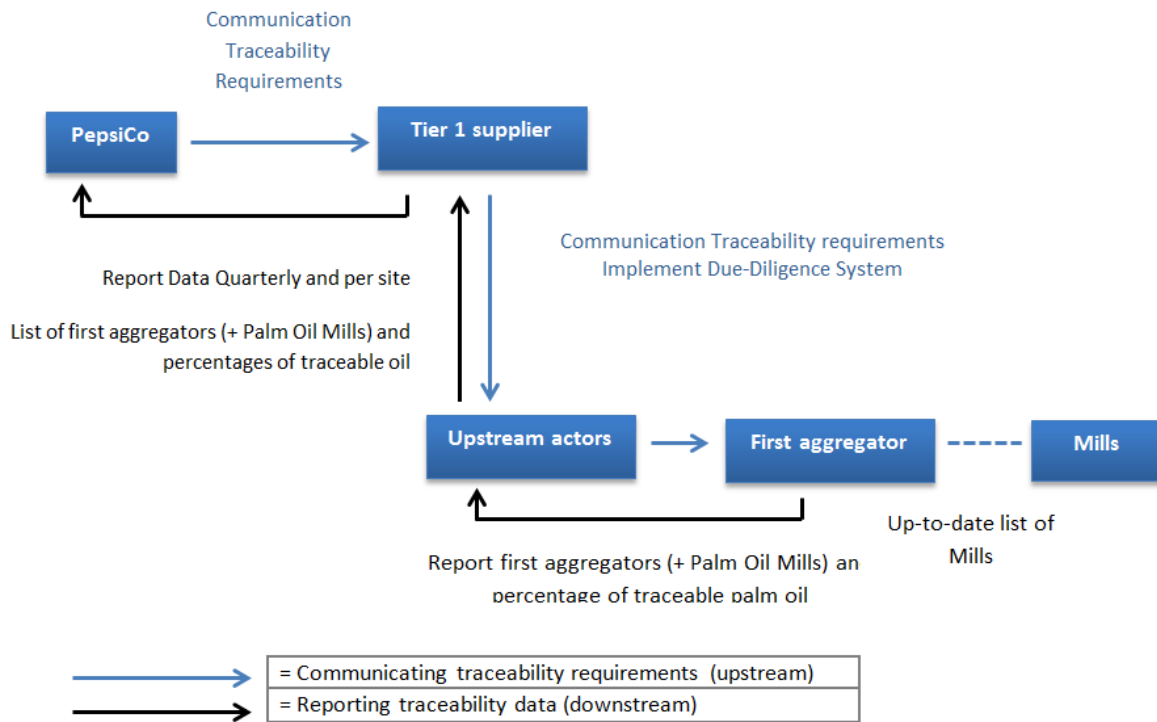
The first aggregators have the most control in the traceability process towards the palm oil mills. In some cases, first aggregators are vertically integrated with palm oil mills and can ensure full traceability. In other supply chain structures, first aggregators purchase palm oil from traders or other actors and do not have a direct relationship with the palm oil mill. In those situations, it can be complicated for first aggregators to achieve traceability.

In the process of gathering palm traceability data, the role of the tier 1 suppliers, who do not typically engage directly with palm oil growers and palm oil mills, is to communicate the requirements and empower the upstream actors -up to the “first aggregators”- to collect and report complete and accurate traceability data (see figure 1). The first aggregator is an operational site (e.g. primary refinery or storage location of a trader) which purchases and physically collects the oil from the palm oil mills and therefore has full insight to all supplying mills.

The first aggregators should report the list of palm oil mills and their geo-coordinates linked to the shipment of palm oil and provide the data to the downstream actors and the tier 1 supplier. Each quarter, the tier 1 supplier should provide the palm traceability data to PepsiCo.

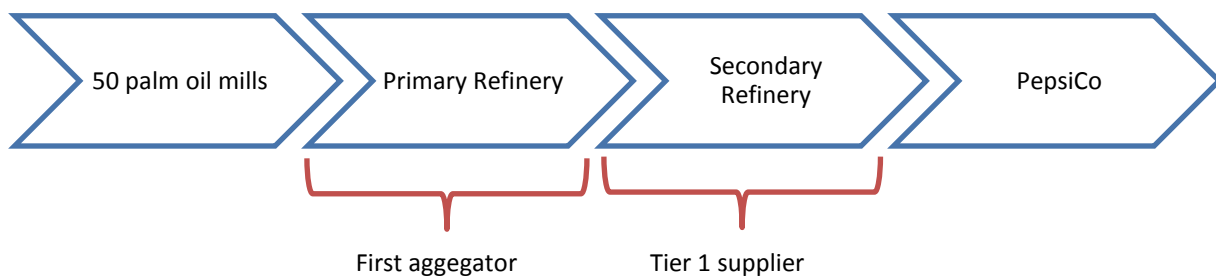
In case there are unknown sources (palm oil mills) in the supply chain, this should be reflected in the report through the traceability percentage of the palm oil which is traceable to the oil mills. A detailed explanation of the traceability calculation can be found in paragraph 2.4 of this Protocol.

Figure 1: Palm traceability data process flow between actors in the palm supply chain



In the below example (figure 2) the primary refinery is classified as the first aggregator because it directly purchases palm oil from 50 different palm oil mills. The first aggregator is required to maintain and communicate the list of supplying oil mills to the secondary processor. The secondary refinery, which in this example is also the Tier 1 Supplier, should collect this information. Every quarter, the Tier 1 Supplier should report the list of palm oil mills that are part of their supply chain to PepsiCo.

Figure 2: Example of a palm supply chain



2.4. Defining traceability percentage

Next to the list of palm oil mills and geo-coordinates, suppliers should indicate the percentage of palm oil volume supplied that is traceable to the palm oil mill. In case all palm oil mills are known this will be 100%. However, in case there are unknown palm oil mills in the supply chain, the traceability percentage should be determined.

To define the traceability percentage, all incoming traceable palm oil within the last quarter is calculated as the percentage of the total incoming traceable and non-traceable palm oil. For each quarter, the percentage has to be calculated according to the following formula:

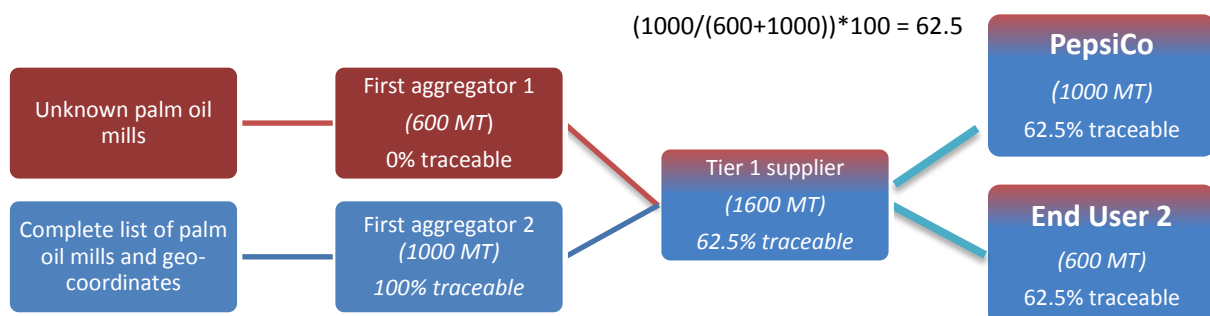
$$\frac{\text{Amount of traceable palm oil}}{\text{Total volume of palm oil}} \times 100 = \text{Percentage of traceable palm oil}$$

For example, in figure 3: Tier 1 supplier buys palm oil from 2 different suppliers. Both suppliers buy their palm oil directly from the palm oil mills; therefore, they are the first aggregators in this supply chain. Aggregator 1 purchases 600 MT from a number of unknown palm oil mills. Aggregator 2 purchases 1000 MT from palm oil mills that are all traceable. In total, tier 1 supplier buys 1600 MT palm oil. Applying the above traceability formula, the percentage of traceable palm oil is 62.5%:

$$\frac{\text{(Amount of traceable palm oil)} \quad \mathbf{1000}}{\text{(Total MT of palm oil)} \quad \mathbf{(600 + 1000)}} \times 100 = \mathbf{62.5 \%} \text{ (Percentage of traceable palm oil)}$$

Tier 1 supplier can sell their palm oil to PepsiCo and other buyers and report the traceable list of palm oil mills, their GPS coordinates and a traceability percentage of 62.5%.

Figure 3: Example how to define palm traceability percentage



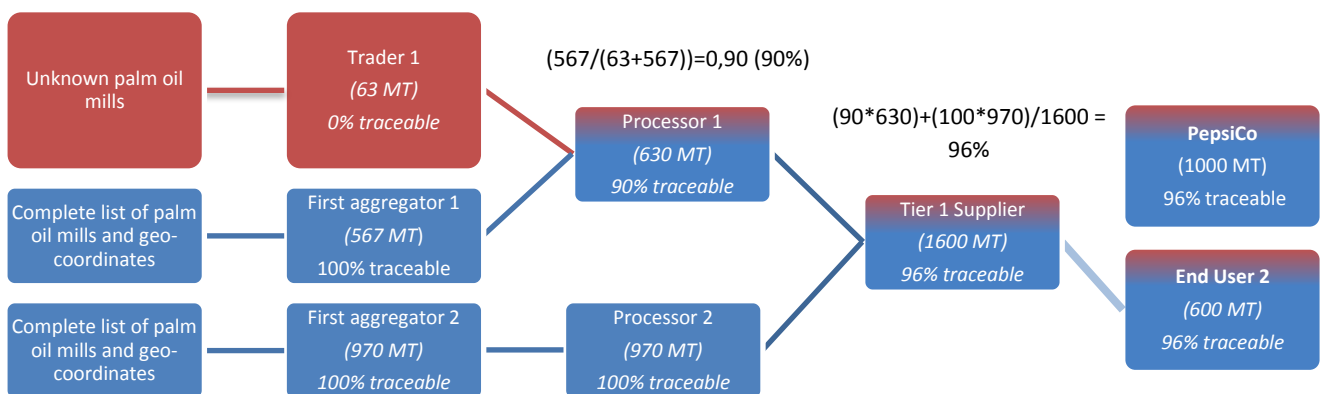
If the supply chain consists of multiple upstream suppliers that report different traceability percentages, the tier 1 supplier should calculate the average percentage value for all received volume according the following formula:

Percentage of traceable palm oil (%) is:

$$\frac{(\text{Percentage of traceable palm oil supplier A} \times \text{volume supplied by supplier A}) + (\text{Percentage of traceable palm oil supplier B} \times \text{volume supplied by supplier B})}{\text{Total volume of traceable and non-traceable palm oil supplier A+B}}$$

For example, in figure 4: Tier 1 supplier is sourcing 1600 MT palm oil from two processors (Processor 1 and Processor 2). Processor 2 is buying 970 MT traceable palm oil from first aggregator 2. Processor 1 is buying 640 MT palm oil from first aggregator 1 and 63 MT from a trader. First aggregator 1 has provided the list of palm oil mills. However, the trader has sourced from a number of unknown mills. Processor 1 is allowed to physically mix the untraceable palm oil from Trader 1 and the traceable palm oil from first aggregator 1, however, they will need to calculate and provide the traceability percentage of the total volume.

Figure 4: Example how to define palm traceability percentage in case of multiple upstream suppliers



2.5 Reporting requirements per actor

Depending on the palm supply chain complexity, traceability reporting will require cooperation amongst all supply chain operators to obtain the desired traceability data and to report this to PepsiCo. The role of the most central operators in the supply chain is described below.

2.5.1. Tier 1 suppliers (Suppliers of PepsiCo)

Tier 1 suppliers are the direct suppliers of PepsiCo. In the process of gathering palm traceability data, the role of the tier 1 suppliers is to communicate the palm traceability reporting requirements and empower the upstream actors -up to the “first aggregators”- to collect and report accurate and complete traceability data. Furthermore, the tier 1 suppliers are responsible to provide the traceability data on a quarterly basis to PepsiCo.

For the tier 1 suppliers of PepsiCo the following requirements apply:

- Tier 1 supplier is responsible for palm traceability requirements awareness amongst upstream suppliers. This includes safeguarding communication of the requirements to the upstream supplier(s)/ first aggregator(s)
- Implement an administrative system for each operational site to:
 - o Maintain the list of first aggregator(s) linked to the incoming shipments (incl. an up-to-date list of palm oil mills and geo-coordinates)
 - o Track the total percentage of traceable oil to palm oil mills for each quarter (see section 2.4)
- Report every quarter to PepsiCo:
 - o The total percentage of traceable oil to palm oil mills (see section 2.4)
 - o All first aggregators and the list of palm oil mills with geo-coordinates for each mill linked to each of these first aggregators.

The tier 1 supplier should report accurate and complete data. It can be presented on a single document or a range of documents like delivery/shipping documents or specific traceability documentation (see Appendix I for an example of a reporting template).

In case any gaps are being observed on data that has already been reported to PepsiCo, PepsiCo should be informed as soon as possible, and the revised data should be provided. Examples of potential gaps could be that the list of palm oil mills that were provided to PepsiCo was incomplete or that the traceability percentage was calculated incorrectly.

2.5.2. Upstream Supply Chain Actors

In this Protocol upstream supply chain actors are considered all actors in the supply chain from the First Aggregator up until the tier-1 supplier of PepsiCo. Therefore, in this Protocol, the remaining upstream actors, such as palm oil mills and palm plantations that supply to the first aggregator are left out of the definition. In this Protocol upstream supply chain actors can be, for example, secondary refineries, traders, and primary refineries. In the process of gathering palm traceability data, the role of the upstream supply chain actors is to communicate the palm traceability reporting requirements to their palm oil suppliers and to provide the traceability data to their buyers.

For the upstream actors the requirements are similar as for the tier 1 suppliers:

- Safeguarding communication of the requirements to the upstream supplier(s)/ first

aggregator(s)

- Implement an administrative system to:
 - o Collect and maintain the list of first aggregator(s) linked to the incoming shipments (incl. an up-to-date list of palm oil mills and their geo-coordinates)
 - o Quarterly track the total percentage of traceable oil to palm oil mills (see section 2.4)
- Report to its buyers (tier 1 suppliers):
 - o The total percentage of traceable oil to palm oil mills (see section 2.4)
 - o All first aggregators and the list of palm oil mills with geo-coordinates for each mill linked to the traceable palm oil volume.

Same as tier 1 suppliers, the upstream actors should report accurate and complete data. It is not acceptable to exclude palm oil mills from the list.

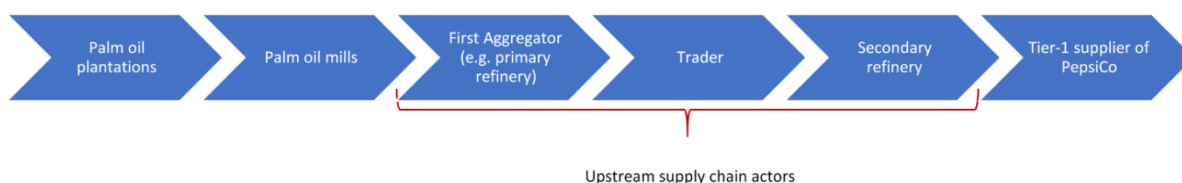
In case any gaps are being observed on data that has already been reported to suppliers, suppliers should be informed as soon as possible, and the revised data should be provided.

2.5.3. First Aggregators

The first aggregator is the entity in the supply chain that purchases and physically collects palm oil from the palm oil mills. A first aggregator is usually a primary refinery or a storage location of a trader². In the process of gathering palm traceability data, the role of the first aggregator is to keep a list of the palm oil mills that supply palm oil to the first aggregator. Furthermore, first aggregators are responsible for providing this traceability data to their buyers.

For the first aggregator the following requirements apply:

- Maintain a list of all palm oil mills who have delivered palm oil in the past year. For each palm oil mill the list should include, at least:
 - o Name of palm oil mill
 - o Geo-coordinates of the palm oil mill
 - o Parent company, owning the palm oil mill
 - o Certification/verification status (if applicable)
- The list of palm oil mills should be updated every quarter, provided new palm oil mills are involved in the supply chain, and reported to the buyer. If there have not been any palm oil mills added, the old list shall remain valid.
- The list should include all palm oil mills who have physically delivered to the first aggregator. It is not acceptable to exclude specific palm oil mills from the list.
- The specific volume supplied by each palm oil mill does not have to be reported

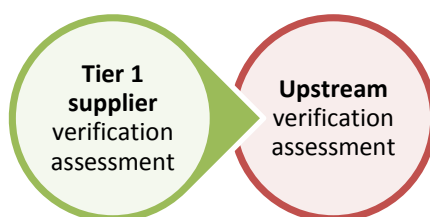


² Operational, processing or logistical facility on a geographical location with precise boundaries within which products can be mixed.

3. Verification Guideline

3.1 Traceability Data Verification Process

All palm traceability data provided to PepsiCo by the tier 1 supplier throughout the last 12 months will be subject to a verification assessment. During a third-party evaluation, a verification body will verify the accuracy and completeness of the reported palm traceability data. Each tier 1 supplier of PepsiCo will be required to arrange for a third-party verification assessment. The necessity of upstream verification assessments (up to the First Aggregator) that are to be conducted for each supply chain is determined based on the results of this tier 1 supplier verification assessment.



The first step of the verification is for tier 1 suppliers to complete the supply chain risk assessment survey. This survey will need to be completed by the tier 1 supplier. The aim of the risk assessment survey is for a verifier to get a basic understanding of the palm supply chain structures of a tier 1 supplier. Furthermore, the outcome of the risk assessment survey will indicate the need for any upstream supply chain verification assessments to ensure accuracy of the mill data provided along the chain. The risk assessment survey will need to be completed by the tier 1 supplier and shared with the verifier before the verification assessment can start. After this, the verifier will perform a verification assessment with the tier 1 supplier. During the assessment, the verifier will verify the answers provided in the risk assessment and thereby assess the accuracy and completeness of the palm traceability data provided to PepsiCo. The palm traceability data provided to PepsiCo will need to be in compliance with the palm traceability reporting requirements of PepsiCo as described in Chapter 2 of this Protocol.

After finalizing the tier 1 supplier verification assessment, the risk level resulting from the risk assessment will indicate whether upstream supply chain verifications assessment are recommended. The risk status, determines the number of upstream supply chain verification assessments which should be carried out.

In case of a low risk status, upstream verification assessments are not required. In case of high or medium risk status, the Tier 1 supplier is to complete a post verification risk assessment survey to identify the verification indicators which caused the risk assessment score to be medium or high. PepsiCo will work with the Tier 1 supplier to create action plans to mitigate these risks. In case of medium or high risk outcomes which are unable to be mitigated through an action plan, upstream verification assessments in the supply chains of the tier 1 supplier are recommended to ensure the accuracy of the palm mill data. Upstream verifications include first aggregators (the operational site which purchases and physically collects the oil from the palm oil mills) but do not include any palm

oil mills and plantations (see definition of upstream supply chain actors in section 2.5.2 of this Protocol).

After the verifier has completed the verification assessment at tier 1 supplier level the verification body that performed the verification will issue a verification statement. In case of non-conformities, the verification statement can only be issued when all non-conformities have been closed. This verification statement will include a statement from the verifier that the supplier has successfully completed a third-party verification assessment on the accuracy and completeness of the palm traceability data linked to the volumes supplied to PepsiCo and will indicate the level of risk identified during the audit. This statement will indicate the likelihood of the accuracy of the data that has been verified and determine if there are any additional steps which need to be taken including determining if an upstream verification is recommended to increase the assurance level on the quality of the data provided.

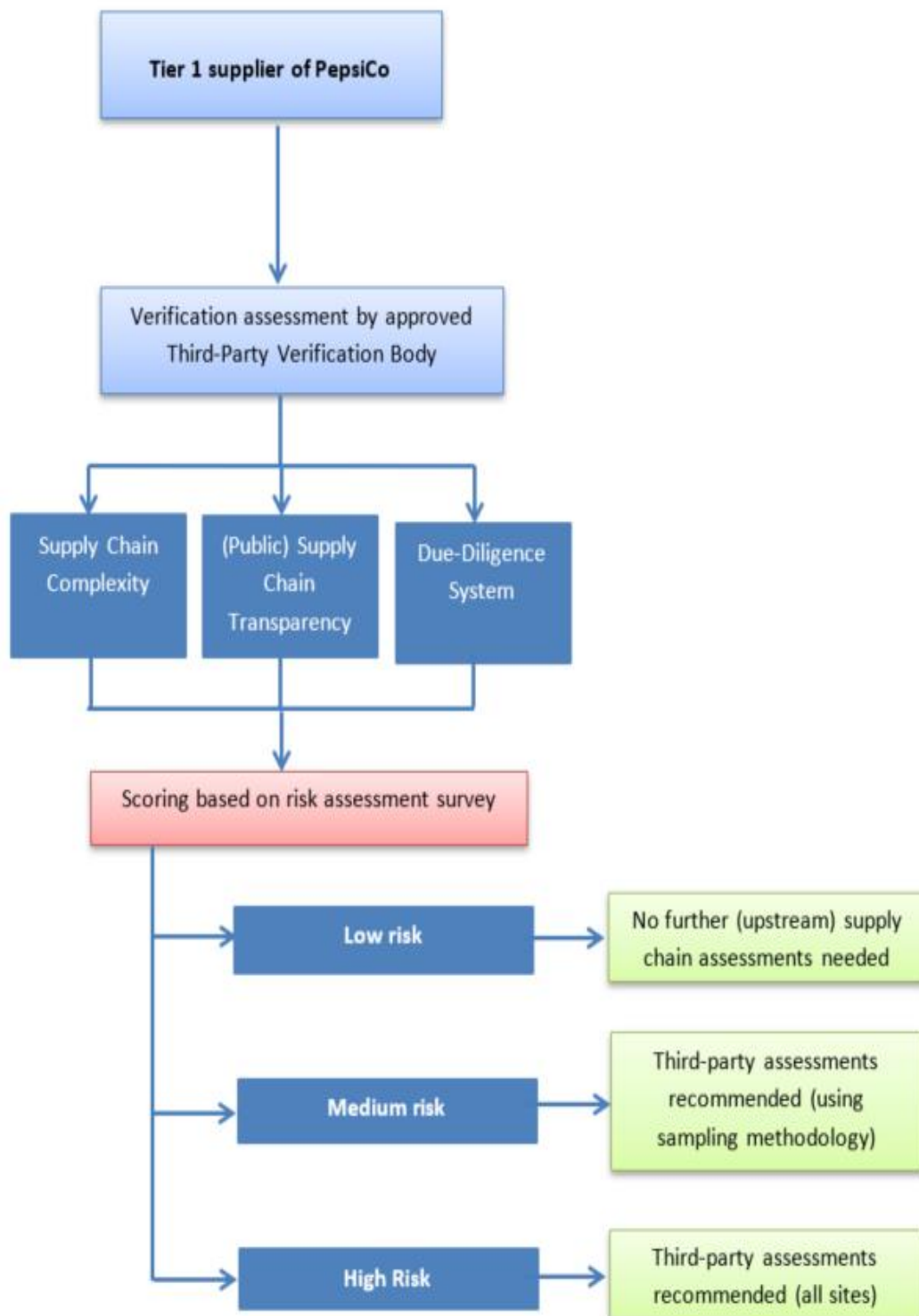
Following a verification assessment by a recognized VB, the supplier should share with PepsiCo:

- 1) The latest verification statement indicating the risk status
- 2) The supplier risk assessment survey using the latest standard template version provided (see Appendix V for an example of the excel template)

The purpose of the supplier risk assessment survey is for PepsiCo to gather general data and keep track of the overall risk status in the supply base. This will enable the development of prioritized and tailored actions to lower the overall risk status in the supply chain.

For those suppliers who are applying a traceability system which they believe is equivalent to PepsiCo's, the supplier may share this system to be benchmarked against the PepsiCo Protocol upon request. Please see Appendix III for more details on benchmarking. Figure 5 illustrates the general verification process, including the risk assessment indicators.

Figure 5: Workflow Tier 1 Verification Assessment



3.2 Criteria for Third-Party Verification Bodies

All verification assessments must be performed by an *approved* verification body. Suppliers can select a verification body of their own choosing, considering that the verification body is an independent third-party, compliant with the below minimum criteria and approved by PepsiCo. PepsiCo will keep a list of approved verification bodies and provide this to suppliers regularly. In case a supplier wants to work with a verification body that is not yet approved, they should send a request for approval to Natasha Schwarzbach, Sustainable Commodities PepsiCo Global: natasha.schwarzbach@pepsico.com.

PepsiCo's suppliers are expected to directly select and contract the verification bodies that they will work with. This means that third-party verification bodies are working with the supplier exclusively and therefore, verification bodies and suppliers do not have to disclose the details of the findings of the verification assessment to PepsiCo. Ideally, the verification body that conducts the tier 1 supplier verification assessment should be the same company to conduct the upstream verifications.

All third-party verifiers must comply with the following minimum criteria:

- The third-party is recognized by a national public authority or an accreditation body which is a member of the International Accreditation Forum (IAF)
- The third-party conducts verifications in conformity with ISO 19011 standard, establishing guidelines for quality and/or environmental management systems verification
- The workflow of the certification process complies with the requirements of ISO/CE 17065:2012
- The third-party ensures competent employees and verifiers which have experience with the RSPO certification scheme

Only after PepsiCo has granted the approval, the verification body can continue with the assessment.

Part of the approval process requires all verifiers and reviewers involved in the verification assessment to attend PepsiCo Traceability Verification Protocol training. The training will be given in the form of a 1-2 hour webinar, during which the verification procedure, reporting requirements and definitions will be explained in detail. The training can be organized upon request. With this training PepsiCo aims to align interpretation differences between verification bodies as much as possible.

In accordance with common audit practices, verification bodies are expected to apply the **four-eye principle**. This means that next to the verifier (auditor), who conducts the on-site assessment, the organization should appoint a reviewer (certifier) who will review the assessment findings and report of the verifier. Both the verifier and reviewer will need to complete the above mentioned training before starting their involvement in the program. The reviewer is responsible for internal quality control, verifier interpretation guidance, implementation of PepsiCo Verification Guideline, and issuance of the verification statement.

Verifiers and reviewers are requested to comply with the minimum qualifications:

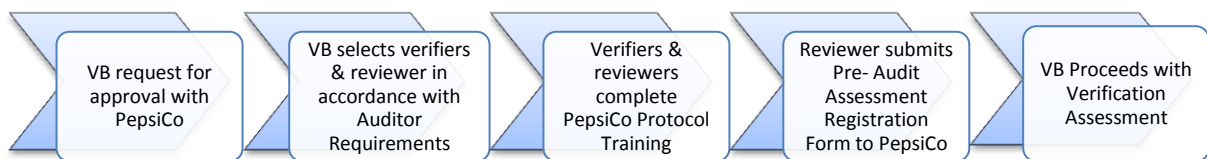
- Sufficient experience with RSPO certification scheme and knowledge of palm supply chain and traceability systems
- For verifiers: Auditing experiences
- For reviewers: Experience taking certifier decisions.

After the approval is granted but before conducting the on-site assessment, the verification body should complete a Pre-Audit Registration Form and submit this to PepsiCo. In this way, PepsiCo is able to keep track of all scheduled assessments by approved verifiers and reviewers. The template is enclosed in Appendix IV of this Protocol.

The Verification Body is responsible for complying with the minimum criteria and ensuring qualified & trained auditors. If needed, PepsiCo may ask for some background information of the auditors, such as CVs or training certificates.

Verifiers and reviewers should perform the verification assessment following best verification practices. Verifiers and reviewers are expected to make their judgment as to the best methods and structure for performing the verification assessment.

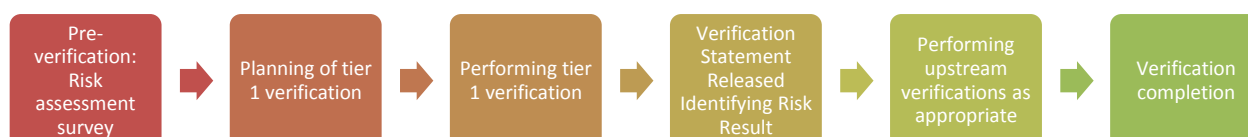
Figure 6: Verification Body Approval Process



4. Conducting Third-Party Verification Assessments

Each tier 1 supplier of PepsiCo is required to arrange for a third-party verification assessment. As part of the final report, verifiers should be able to make a statement to the effect that based on review of documentation, the palm traceability data of suppliers and the list of palm mills and their geo-coordinates provided to PepsiCo over the last 12 months appears to be accurate and complete.

Generally, the verification assessment can be divided into 6 steps:



4.1 Pre-verification: Risk assessment survey

After a verification body is selected, the verifier should request the tier 1 supplier to complete the supply chain risk assessment survey. The risk assessment is designed as a tool for verifiers to get insight in the palm supply chain structures of a tier 1 supplier and the traceability data management systems or tools that a supplier has already implemented. Subsequently, the verifier will get insight in the risks of potential gaps in the reported palm traceability data. The answers given in the risk assessment survey should be verified by the verifier during the tier 1 verification assessment. The outcome of the risk assessment survey, the risk status, will determine the necessity for upstream third-party verification assessments.

Each tier 1 supplier will need to complete the risk assessment survey and share the completed file with the verifier before the verifier can start the verification assessment. The risk assessment survey template is developed by PepsiCo and included in Appendix IIA of this Protocol.

4.1.1 Risk Assessment Structure

The risk assessment consists of three different verification categories and each category is divided into indicators. For each indicator, the supplier can choose from a selection of two or three possible answers. Each answer is linked to a number of points and the total number of points defines the risk status of the supplier. The scorecard with the number of points per answer can be found in Appendix IIB of this Protocol. The four verification categories are:

Verification Categories	
1	Supply Chain Complexity
2	Palm Traceability Due-Diligence System
3	(Public) Supply Chain Transparency

Each of the categories and sub-indicators will be shortly explained below. An overview of the risk assessment structure is given in figure 8 on page 24.

4.1.1.1 Supply Chain Complexity

Verification bodies should assess the supply chain complexity of supply chain(s) that are linked to the

supplied volume to PepsiCo. Supply chain complexity can be divided into three sub-indicators: Number of operational facilities, number of legal entities and variations in the supplier base.

- **Number of Operational Facilities**

The number of operational facilities shall be determined by the number of outsourced and owned facilities that have physical possession of the product along the supply chain. The key word is *physical possession of the product*. It includes both storage sites and processing sites. Transportation is not considered as site.³ All (outsourced) sites between PepsiCo and the palm oil mills should be included in the calculation of the number of operational facility; this includes all (different) first aggregators and the tier 1 supplier, but excludes palm oil mills. For example, in the supply chain in figure 6 between PepsiCo and the palm oil mills there are 3 operational facilities: 2 (different) first aggregator and the tier 1 supplier (colored in green).

- **Number of Legal Entities**

The number of legal entities shall be determined by the number of companies that have *legal ownership* of the product. This means that there is an economic transaction between parties to purchase the palm oil. The key word is *legal ownership of the product*. Legal entities that do not physically possess the product should be included in the calculation. In case of outsourced activities (e.g. subcontractors for storage, transport or other activities) these entities shall be excluded from the calculation as long as they do not take legal ownership of the product. All entities between PepsiCo and the palm oil mills should be included in the calculation of the number of legal entities; this includes all (different) first aggregators and the tier 1 suppliers but excludes palm oil mills. For example, in the supply chain in figure 6 between PepsiCo and the palm oil mills there are 4 legal entities: 2 (different) first aggregator, 1 trader and the tier 1 supplier (colored in red).

- **Variety in Supplier Base**

The variety in supplier base refers to the frequency that new upstream suppliers become part of the supply chain. The verifier should analyze if the tier 1 supplier has a fixed number of suppliers or if there are regularly new suppliers in the supply chain. In the context of this indicator, variations in the supplier base include changes in the list of palm oil mills, first aggregators, traders, processors etc.

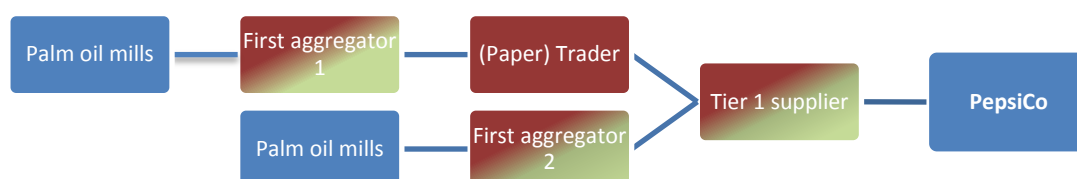


Figure 6: Example on how to calculate the number of operational facilities and legal entities. The green highlighted actors represent the operational facilities and the red highlighted actors represent the legal entities. One actor can be an operational facility and a legal entity.

³ A site is considered one location with the same address. This means that, for example, storage tanks located at the same site of the refinery and owned by the refinery do not have to be calculated as separate sites. Only storage tanks located at sites (locations) other than the processing site must be calculated as a separate storage site and thus as an independent operational facility.

4.1.1.2 Palm Traceability Due-Diligence System

Verification bodies should assess the existence of a palm traceability due diligence system. A due diligence system consists of measures to improve the accuracy and completeness of palm traceability data in accordance with the PepsiCo Palm Traceability Reporting Requirements. An effective due diligence system *may* consist of the following 7 sub-indicators⁴:

- ***Palm Traceability Warranty***

A warranty refers to some type of guarantee through which the tier 1 supplier assures the implementation of the PepsiCo Palm Traceability Reporting Requirements along the suppliers in the supply chain. There are different forms of a warranty, for example:

- Terms of Contract: compliance to the PepsiCo Palm Traceability Reporting Requirements could be explicitly included in Terms of Contract with suppliers. The terms should also include a reference that the same conditions should be applicable to all upstream supply chain actors.
- Self-Declaration: upstream suppliers could be requested to sign a self-declaration form wherein they commit to implement the PepsiCo Palm Traceability Reporting Requirements. Within a self-declaration form, suppliers can also inform its buyers which mitigating measures they have taken to ensure accuracy and completeness of the palm traceability data provided.
- Without any warranty, the received palm traceability data would be processed on a basis of “good faith”.

- ***Palm Traceability Supplier Risk-Assessment***

A supplier risk-assessment is an analysis in which the tier 1 supplier assesses the possibility of gaps in the implementation of the PepsiCo Palm Traceability Reporting Requirements by suppliers along the supply chain, up to palm oil mill level. A successful *supplier* risk-assessment reviews suppliers along the palm supply chain for difficulties and (potential) gaps in complying with the PepsiCo Palm Traceability Reporting Requirements.

- ***Palm Traceability Supplier Training***

A supplier training is a clear action in which the tier 1 supplier provides education to their upstream suppliers ensuring that supply chain actors are familiar with the PepsiCo Palm Reporting Traceability Requirements and have skills and knowledge to ensure implementation and compliance.

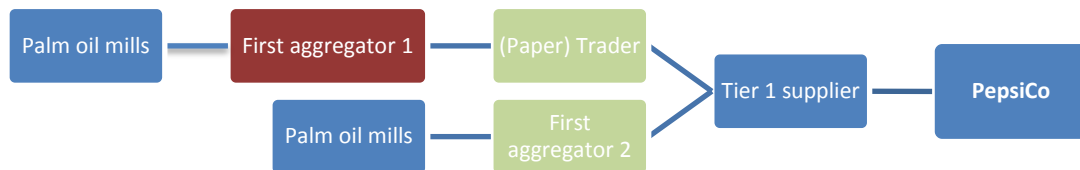
- ***Palm Traceability Supply Chain Verifications***

Supply chain verifications refer to verifications during which suppliers along the palm supply chain(s) of a tier 1 supplier are assessed against compliance with the PepsiCo Palm Traceability Reporting Requirements. Under the scope of this Protocol, a palm traceability supply chain verification should not be confused with a single chain-of-custody certification verification. In order to qualify as a palm traceability supply chain verification at least 1 first aggregator should be verified and the verification should be conducted on an annual basis.

⁴ There might be other tools or implemented actions that can be considered to be part of a palm traceability due diligence system. It is up to the verification body to determine and review these actions during the verification. All actions should be directly linked to compliance with the PepsiCo Palm Traceability Reporting Requirements as described in Chapter 2 of this Protocol.

For example, in the supply chain in figure 7, tier 1 supplier could initiate a palm traceability data verification with its direct suppliers: (paper) trader and first aggregator 2 (colored in green). Furthermore, tier 1 supplier could go a step further and initiate/request a verification with the palm supplier of the trader: first aggregator 1 (colored in red). If tier 1 supplier initiates verifications for all three suppliers in the supply chain on their compliance with the PepsiCo Palm Traceability Reporting Requirements, this would qualify as a full palm traceability supply chain verification.

Figure 7: Example of palm traceability data verification assessments in the supply chain.



There are three different types of verifications:

- Internal verifications: Used to confirm or improve the effectiveness of the management system. An internal verification of the supply chain is performed by suppliers in the supply chain themselves. For example, by employees of the supplier. Internal verifications should be genuinely independent and free of bias. The scope of the internal verifications should be the verification of compliance with the PepsiCo Palm Traceability Reporting Requirements. Under the scope of this Protocol, internal verifications should be executed at least once per year.
- Second-party verifications: Are performed by customers. For example, the tier 1 supplier that performs a verification with its upstream suppliers. The scope of such verifications should be the verification of compliance with the PepsiCo Palm Traceability Reporting Requirements. Under the scope of this Protocol, second-party verifications should be executed at least once per year and should include all legal entities in the supply chain(s) including first aggregators.
- Third-party verifications: Are performed by independent organizations such as verification bodies or regulators. They are approved by PepsiCo and compliant to the minimum criteria for verification bodies as described in Chapter 3 of this Protocol. The scope of third-party verifications is the verification of compliance with the PepsiCo Palm Traceability Reporting Requirements. Under the scope of this Protocol, third-party verifications should be executed at least once per year. In case of multiple supply chains, it is allowed to apply a random sample (based on the square root), as long as all involved legal entities including the first aggregators are part of the verification scope. In case shortcomings are observed, the sample must be doubled.

- *Palm Traceability Certification Programs*

There are certification and verification programs that contain traceability requirements similar to the PepsiCo Palm Traceability Reporting Requirements. If any of these schemes are

already implemented in the supply chain it can reduce the risk of gaps in the reported palm traceability data. Examples of such schemes are:

- Roundtable on Sustainable Palm Oil (RSPO)
- Indonesian Sustainable Palm Oil (ISPO)
- Malaysian Sustainable Palm Oil (MSPO)
- International Sustainability Carbon Certification (ISCC)
- UTZ Certification/Rainforest Alliance

In the risk assessment survey, a distinction is made between implementation by tier 1 supplier and full supply chain compliance, including first aggregators.

- ***Palm Traceability Data Quality Control System***

Quality control refers to a procedure implemented by the tier 1 supplier to check the quality of palm traceability data provided by upstream actors before submitting it to PepsiCo. Quality control can be performed through reviewing the following indicators: Punctual delivery of data, missing information (e.g. traceability percentage), completeness of the palm oil mills list, validation of geo-coordinates, and evaluation of any conflicting or confusing data (with regards to prior provided data or publicly available information).

- ***Palm Traceability Data Management System***

A management system refers to the way in which the tier 1 supplier controls and handles the information regarding traceability. In this context, the management system is a system to manage information of suppliers inside the company. Examples of items which could be part of a management system:

- Up-to-date procedures covering the implementation of the PepsiCo Palm Traceability Reporting Requirements.
- Up-to-date records and reports that demonstrate compliance with PepsiCo Palm Traceability Reporting Requirements.
- Identification of roles and responsibilities for the implementation of the PepsiCo Palm Traceability Reporting Requirements.

4.1.1.3 Supply Chain Transparency

Verification bodies should assess the commitment of tier 1 suppliers in terms of product traceability. Supply chain transparency indicates the insight and visibility of information about sourcing locations (palm oil mills) in combination with the readily availability of such information for the public. Supply chain transparency can be divided into two sub-indicators: Public traceability commitment and traceability publications.

- ***Public Traceability Commitment***

A public traceability commitment is a public assurance by the tier 1 supplier to comply with the PepsiCo Palm Traceability Reporting Requirements or an equivalent commitment. This commitment should be openly communicated to the public, for example, on the company website.

- ***Palm Traceability Publications***

Traceability publications refer to all published traceability data by tier 1 suppliers, describing the supply chain and sources of the palm product, such as the palm oil mills. Under the scope of this protocol, data qualifying as traceability publication should include the *full* list of palm oil mills linked to their supply chain(s).

4.1.1.4 Benchmarking against PepsiCo Traceability Protocol

In order for a traceability system to be recognized by PepsiCo, the scheme must comply with the indicators that are defined by PepsiCo and included in Appendix III of this Protocol. If a tier 1 supplier believes that they have a palm traceability system which is equivalent to PepsiCo’s, supplier may share this system to be benchmarked upon request. If the system is benchmarked as equivalent to the PepsiCo’s Protocol, the Palm Traceability Reporting Requirements still remain applicable but no additional measures are required in terms of external verification of the reported data. This is embedded in the risk assessment survey scoring system and will automatically translate into a low risk status.

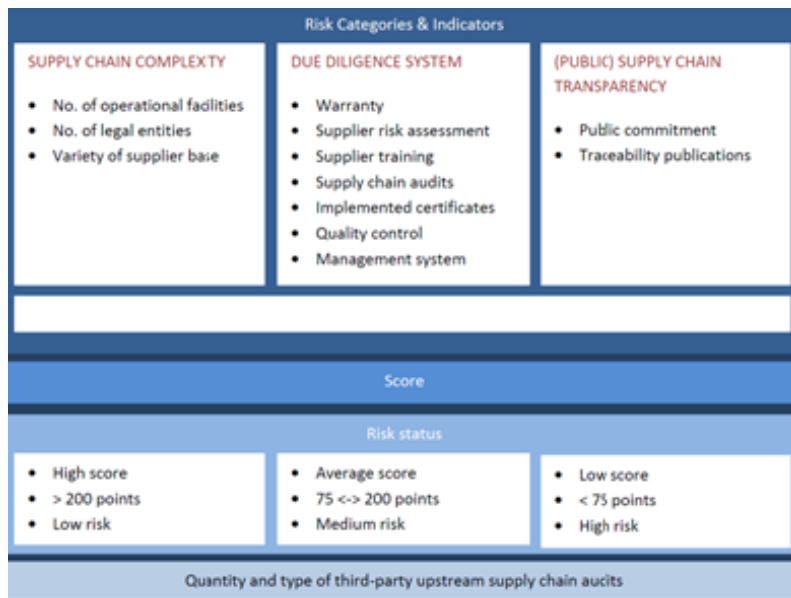


Figure 8: Structure of Palm Supply Chain Risk Assessment

4.1.2 Risk Assessment Outcome

When the risk assessment survey is completed by the tier 1 supplier, the initial risk status will be determined. The risk status can be low, medium or high. Generally, a high score represents a low risk of gaps in the reported palm traceability data; while a low score represents a high risk of gaps in the reported palm traceability data.

The tier 1 supplier will need to submit its risk assessment survey to the verifier, who will verify the answers during the tier 1 supplier verification assessment. The initial risk status will provide the tier 1 supplier with an indication of the necessity of upstream verification assessments. A risk score is only finalized when the answers have been verified by an approved verification body.

Low Risk

A low risk indicates that the data received by the supplier and reviewed as part of the verification assessment are with all likelihood accurate and of good quality. Verifications further upstream in the chain are not necessary to confirm quality and accuracy of the data.

The risk of incorrectly reported traceability data up to the source is relatively low, which means:

- An approved Verification Body shall perform a surveillance verification assessment at the tier 1 supplier once every calendar year to check compliance with the PepsiCo Palm Traceability Reporting Requirements. After the initial verification, subsequent verifications can be performed remotely when no significant structural changes have occurred to the supply chain complexity or palm traceability due diligence system. The Verification Body is always responsible for deciding the type of audit.
- Upstream verification assessments are not necessary.

Medium Risk

A medium risk indicates the possibility of existing gaps in the data received by the supplier and reviewed as part of the assessment. Verifications of some suppliers further upstream in the chain is recommended to confirm quality and accuracy of the data.

The risk of incorrectly reported traceability data is medium, which means:

- An approved Verification Body shall perform a surveillance verification assessment at the tier 1 supplier once every calendar year to check compliance with the PepsiCo Palm Traceability Reporting Requirements. After the initial verification, subsequent verifications can be performed remotely when no significant structural changes have occurred to the supply chain complexity or palm traceability due diligence system. The Verification Body is always responsible for deciding the type of audit.
- In case of medium risk status, it is requested the supplier fill out the post verification risk assessment survey provided by PepsiCo. After submitting the post verification risk assessment survey, PepsiCo will work with the supplier to develop an action plan to reduce the risk assessed in the initial verification. Ability to reduce risk will determine if upstream verification is necessary.
- In the case that risk is unable to be mitigated, an upstream verification assessment is necessary to ensure accurate and complete palm mill data and implementation and compliance with the PepsiCo Palm Traceability Reporting Requirements. An approved verification body should perform upstream verification assessments with additional entities along the supply chains of the tier 1 supplier. The selection of these entities can be done through sampling (square root) and should include, at least, one first aggregator. The upstream verifications do not need to include palm oil mills and plantations.

High Risk

A high risk indicates that there is a high likelihood that gaps exist in the data received by the supplier and reviewed as part of the assessment. Verifications of all the suppliers further upstream in the chain is recommended to confirm quality and accuracy of the data

The risk of incorrectly reported traceability data is high, which means:

- An approved Verification Body shall perform a surveillance verification assessment at the tier 1 supplier once every calendar year to check compliance with the PepsiCo Palm Traceability Reporting Requirements. After the initial verification, subsequent verifications can be performed remotely when no significant structural changes have occurred to the supply chain complexity or palm traceability due diligence system. The Verification Body is always responsible for deciding the type of audit.
- In case of high risk status, it is requested the supplier fill out the post verification risk assessment survey provided by PepsiCo. After submitting the post verification risk assessment survey, PepsiCo will work with the supplier to develop an action plan to reduce the risk assessed in the initial verification. Ability to reduce risk will determine if upstream verification is necessary.
- In the case that risk is unable to be mitigated, upstream verification assessments are necessary in order to ensure accurate and complete palm mill data and implementation and compliance with the PepsiCo Palm Traceability Reporting Requirements. An approved verification body should perform upstream verification assessments with additional entities along the supply chains of the tier 1 supplier. Because of the high risk, the verification body should assess all entities up to the first aggregators. The upstream verifications do not need to include palm oil mills and plantations. .

4.2 Planning of tier 1 supplier verification

After the risk assessment survey is completed by the tier 1 supplier, the verifier can start to plan for the tier 1 supplier verification assessment.

The initial verification is preferred to be an on-site visit. After the first year, the third-party verification may be performed remotely on the condition that there have not been any significant structural changes to the supply chain complexity or palm traceability due-diligence system. The decision for the type of assessment (remote or on-site) is always to be made by the Verification Body.

The planning of the verification can consist of the following steps⁵:

4.2.1 Information gathering

Prior to starting the verification assessment, the verifier shall request from the tier 1 supplier all the information necessary to plan the verification assessment. The following information needs to be available, and should be reviewed by the verifier prior to the verification assessment:

- Quarterly traceability reports submitted to PepsiCo during the last 12 months (including the list of palm oil mills and the traceability percentage per quarter)
- Completed risk assessment survey

It is up to the verifier to determine whether the provided information is sufficient or if any additional information is needed. The verifier should compare the information provided in all documents and ensure that the assessment survey correctly reflects the palm traceability data provided on a quarterly basis.

4.2.2 Verification assessment plan

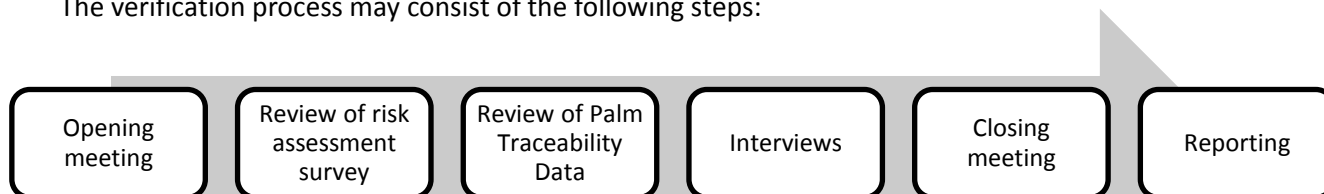
The verifier should have laid out an assessment plan before starting the assessment. The plan should include the day, time and location of the verification, what documents the verifier will look for and, in case of interviews, who the verifier would like to be present during the verification assessment.

⁵ The steps should be considered as guidance and not as requirement. It is up to the verification body to decide the adequate planning and preparation steps during a verification assessment.

The assessment plan should also cover the verification assessment scope, any reference documents for the tier 1 supplier, the necessary estimated amount of time for each part of the assessment and confidentiality and information security. This is similar to what in certification standards is known as a verification plan. The assessment plan must be shared with the tier 1 supplier in due time before starting the assessment, allowing sufficient time for the tier 1 supplier to prepare the verification assessment.

4.3 Performing tier 1 supplier Verification

The verification process may consist of the following steps:



4.3.1 Opening meeting

The opening meeting marks the start of the verification assessment. It is usually held with the company's/facility's primary contact person and the local management and chaired by the verifier. The meeting gives the verifier the opportunity to confirm the objective, scope and agenda for the assessment, to explain the assessment process and to confirm the availability of the interviewees.

4.3.2 Review of risk assessment survey answers

After the opening meeting, the verifier should confirm and review the risk assessment survey completed by the tier 1 supplier prior to the verification. The verifier should take this opportunity to ask the supplier questions related to the answers that were provided in the risk assessment survey. The verifier should also ask for documentation related to different verification categories and indicators outlined in the risk assessment survey. By verifying the risk assessment survey answers the verifier should be able to have a clear understanding of the palm supply chain structure(s) of the tier 1 supplier and of the management system that the tier 1 supplier has implemented to ensure accurate and complete palm traceability data from its suppliers. During this section of the assessment, the verifier should determine the final risk score and thereby, the necessity for any upstream verification assessments.

Below table shows some examples of documents that can be used to verify each indicator of the risk assessment survey. The table is by no means exhaustive. It is up to the verifier to decide and request relevant documentation.

Number of operational facilities	<ul style="list-style-type: none"> - Shipping/loading and transportation documents; - Storage records
Number of legal entities	<ul style="list-style-type: none"> - Purchase orders; - Receipts showing different product owners
Variety in supplier base	<ul style="list-style-type: none"> - List of suppliers (incl. First Aggregators); - Quarterly palm traceability reports; - List of palm oil mills; - List of traders/brokers; - Purchase orders; - Transportation documents

Warranty	<ul style="list-style-type: none"> - Signed Terms of Contract where compliance with PepsiCo Palm Traceability Reporting Requirements are explicitly included; - Contracts showing the palm traceability requirements between the tier 1 supplier and their suppliers; - Self-declarations where upstream suppliers have committed to implement the traceability requirements (can include which mitigation measures they are taking to ensure accuracy and completeness of the data provided)
Supplier risk assessment	<ul style="list-style-type: none"> - Risk assessment reports related to reviewing accurate and complete palm traceability data
Supplier training	<ul style="list-style-type: none"> - Presentations prepared and used; - Training attendance lists (showing the date of the training)
Supply chain verifications	<ul style="list-style-type: none"> - Internal, second-party or third-party verification reports from the supply chain actors; - Internal, second-party or third-party reports from the tier 1 supplier
Implemented certification programs	<ul style="list-style-type: none"> - <i>Valid</i> certificates of certification schemes with a traceability requirement similar as PepsiCo's Palm Traceability Reporting Requirements from suppliers and from the tier 1 supplier - (e.g. RSPO, ISPO, MSPO, ISCC, UTZ)
Quality control	<ul style="list-style-type: none"> - Documents showing the standard operating procedures for palm traceability data handling at the tier 1 supplier; - Process flow of palm traceability data; - List and contact information of people involved in palm traceability data handling
Management system	<ul style="list-style-type: none"> - Up-to-date procedure manuals covering the implementation of the PepsiCo Palm Traceability Reporting Requirements; - Up-to-date records and reports demonstrating compliance with the reporting requirements; - Identification of roles and responsibilities for the implementation of the PepsiCo Palm Traceability Reporting Requirements; - Standard operating procedures for the palm traceability data; - Manuals for implementing the palm traceability data; - Internal training documents about palm traceability data handling at first-tier supplier
Public traceability commitment	<ul style="list-style-type: none"> - Website claims and declarations; - Annual corporate social responsibility reports available online to the public emphasizing the commitment to trace palm oil back to its sourcing locations.
Traceability publications	<ul style="list-style-type: none"> - Website publications about mills where the palm oil comes from; - Lists available to the public with names of mills sourced from

4.3.3 Review of Palm Traceability Data

Another part of the verification is to validate the palm traceability data that is submitted to PepsiCo and to verify compliance with the PepsiCo Palm Traceability Reporting Requirements. During this section of the assessment, the verifier should have a close look at the following aspects of the submitted palm traceability data:

- Traceability percentage calculation (in accordance with section 2.4 of this Protocol)
- Volumes supplied to PepsiCo and used for the traceability percentage calculation
- Complete list of mills (in accordance with relevant palm supply chain data available to the verifier; regardless of certification status of mills)

- Geo-coordinates of the palm oil mills
- Quarterly updates

The verifier should be able to make a statement to the effect that based on review of documentation, the palm traceability data of suppliers and the list of palm mills and their geo-coordinates provided to PepsiCo and connected to the volume supplied to PepsiCo over the last 12 months, appears to be accurate and complete.

In case the verification of the risk assessment survey answers (section 4.3.2) has indicated that the tier 1 supplier has not implemented an adequate palm traceability due-diligence system, the verifier should verify how the tier 1 supplier obtains the list of palm oil mills (and geo-coordinates) and how accurate and complete palm traceability data is ensured by the tier 1 supplier.

4.3.4 Interviews

Next to documentation review, the verifier should use interviews as a means to gather more information about compliance with the PepsiCo Palm Traceability Reporting Requirements and how palm traceability is implemented by the tier 1 suppliers. They should interview the person who is in charge of implementing palm traceability.

4.3.5 Closing meeting

At the end of the verification assessment a closing meeting shall be organized. During the closing meeting the preliminary verification assessment results will be shared by the verifier. The verifier will also tell the tier 1 supplier if and how many upstream verifications should be conducted by presenting the final risk score of the risk assessment survey verification. In case this risk score differentiates from the initial risk score, the risk score of the verifier should be considered the final one.

In case of a medium or high risk score, the reviewer should issue a statement describing the risk status, provided that any arising non-conformity is closed. During the closing meeting, the verifier should share a summary of the results, the final risk status, and in case of non-conformities, an overview and explanation of the non-conformities.

4.3.6 Tier 1 Supplier Verification Reporting

The main goal of the report is to clearly state the findings of the verification assessment, with a detailed description of the non-conformities, if there are any. The results of the tier 1 verification assessment will need to be reported and shared with the facility, preferably within 3 weeks after the closing meeting. In case of a medium or high risk status the verification report should include a statement that an upstream verification assessment is recommended. Prior to moving forward with an upstream verification, the supplier is to complete a risk assessment survey to identify the cause of the high or medium risk score. If the risk is unable to be mitigated through an action plan an upstream verification may be required at which time the risk score can be subject to change depending on the results of these upstream verifications.

The tier 1 supplier verification assessment report should include, at a minimum:

- Details of the facility verified
- Date of assessment
- Type of audit (e.g. remote/on-site – initial/surveillance)
- Name of person who conducted the assessment + verification body they represent
- Findings (+ what documents were reviewed) for each aspect of the risk assessment verification categories:
 - o Supply chain complexity
 - o Due diligence system
 - o Public supply chain transparency
- Final risk status
- Recommended upstream verification assessments and status (e.g. completed/planned), if any
- Type of report (e.g. preliminary or final)
- Overview of non-conformities, if any (including open/closed)
- Overall outcome of the assessment

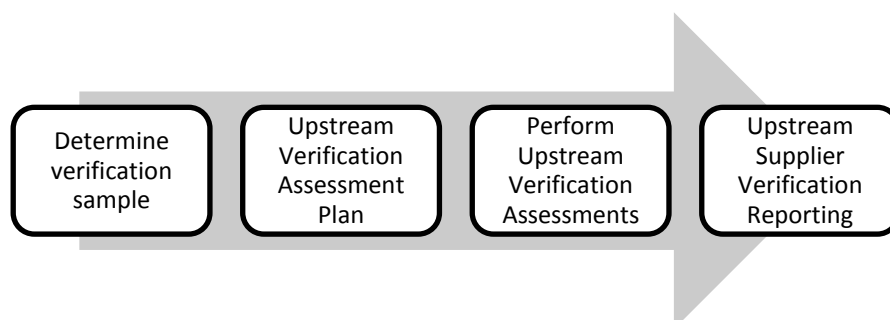
For reporting, both conformity and non-conformity, sufficient evidence should be provided to determine post-assessment what was verified and enabling recollection of evidence in case of the results being disputed. The procedure for handling non-conformities is described in paragraph 4.5.1 of this Protocol.

If there are not any non-conformities the reviewer can close the assessment process after the assessment report and issue a verification statement for the tier 1 supplier. The verification statement needs to indicate the risk score of the assessment. A new statement maintaining the same supplier information (e.g. facilities included in the assessment, name, address, date of issuance of the statement etc.) but with updated risk score can be issued if any upstream verifications are performed. This is described in more detail in paragraph 4.5.2 of this Protocol.

4.4 Performing Upstream Supply Chain Verifications

Upstream supply chain verifications should *only* be done in case the tier 1 supplier verification results show a medium or high risk status. The structure and set-up of the risk assessment is described in paragraph 4.1 and 4.3.2 of this Protocol.

In case of upstream supply chain verifications, the steps for the verifier to take are the following:



4.4.1 Determine Verification Sample

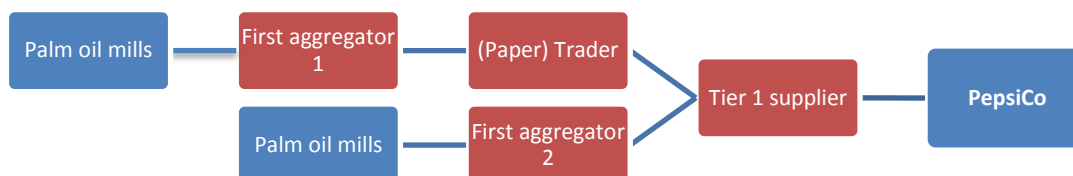
The number of upstream assessments that should be conducted is based on the risk status:



For medium risk the verifier should determine the number of suppliers in the supply chain that need to be verified through sampling. The size of the sample is based on the number of legal entities involved in the supply chain up to the First Aggregator. The results of the verification assessment at the tier 1 supplier should be able to tell the verifier the number of legal entities in the supply chain of PepsiCo. To calculate the number of entities to be verified, the verifier should apply a square root calculation.

For example, in the supply chain of figure 9, there are 4 legal entities (highlighted in red). In case of a medium risk, the sample will be calculated by taking the square root of these 4. Thus, in this example the number of upstream verification assessments is 2. In case the sample size is in decimals, the verifier should round up the outcome (e.g. $4,3 = 5$).

Figure 9: Example of sampling procedure for a medium risk palm supply chain



In case the number of legal entities is unknown, the verifier should make an assumption of the number of legal entities and align this with the tier 1 supplier. The verifier can make use of the documents that were reviewed during the tier 1 supplier verification assessment. Upstream suppliers who have already completed a palm traceability verification assessment, and who have a valid verification statement in accordance with this Protocol, should be taken out of the sample.

The selection of the entities that will need to be verified should always be done by the third-party verifier. The selection must include at least one first aggregator. For the selection of the entities the verifier could use a risk analysis. By doing a risk analysis, the verifier selects those entities in the supply chain where the chances of finding inconsistencies are (expected to be) highest.

In case shortcomings are observed to the reported data at any of the selected entities, the sampling size should be doubled. This process should be continued until all entities involved have been verified.

For high risk suppliers, the verifier would need to verify all legal entities in the supply chain.

4.4.2 Upstream Verification Assessment Plan

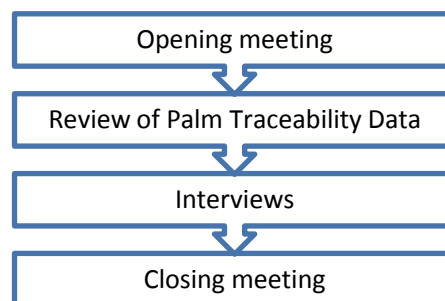
The verification assessment plan should be prepared by the verifier and should clearly describe the purpose and scope of the verification and any reference documents. The plan should be shared with the tier 1 supplier. If needed, the tier 1 supplier should communicate and inform their upstream suppliers about the verification assessments. The plan should then also be shared with the selected upstream supplier by the verifier in due time to allow time to arrange for preparation of the verification. There should be one assessment plan for each upstream supplier that will be verified.

For upstream supplier verifications, it is advised to do an annual on-site visit. However, third-party verification bodies may decide that after the first year, they are comfortable performing a remote verification.

4.4.3 Perform Upstream Verification Assessments

The aim and scope of the upstream verification assessments is similar to the tier 1 supplier verifications. The verifier should validate the palm traceability data connected to the volumes supplied (indirectly) to PepsiCo and verify compliance with the PepsiCo Palm Traceability Reporting Requirements. The verifier should be able to make a statement to the effect that based on review of documentation, the palm traceability data of suppliers and the list of palm mills and their geo-coordinates appears to be accurate and complete.

The set-up of upstream supply chain actors could be similar as for tier 1 supplier verification:



4.4.4 Upstream Supplier Verification Reporting

Same as for tier 1 supplier verification assessment reports, the main goal of the report is to clearly state the findings of the verification assessment, with a detailed description of the non-conformities, if there are any. The report will need to be shared with the facility, preferably within 3 weeks after the closing meeting. The upstream supplier verification assessment report should include, at a minimum:

- Details of the facility verified
- Date of assessment
- Name of person who conducted the assessment + verification body they represent
- Findings (+ what documents were reviewed) for each aspect of the verification

- Overview of non-conformities, if any (including open/closed)
- Overall outcome of the assessment

For reporting, both conformity and non-conformity, sufficient evidence should be provided to determine post-assessment what was verified and enabling recollection of evidence in case of the results being disputed.

If there are not any non-conformities, the verifier can close the assessment process after the assessment report and issue a verification statement for the facility. This is described in more details in paragraph 4.5.2 and Appendix IV of this Protocol).

The procedure handling of non-conformities is similar to the tier 1 supplier verification assessments. The details are described in paragraph 4.5.1 of this Protocol.

4.5 Verification Completion

4.5.1 Handling of non-conformities

In case non-conformities have been found, the verifier should analyze whether each non-conformity is a *minor* or *major* deviation. A non-conformity would qualify as a major deviation if it is a result of a gap in the traceability management system. The decision for the type of non-conformity is always made by the third-party verifier.

For medium risk supply chains, in case *major* non-conformities are observed to the reported palm traceability data at any of the selected entities, the sampling size should be doubled. This process should be continued until all entities involved have been verified.

For each non-conformity, major or minor, the facility should implement an adequate corrective action. A corrective action is considered a direct measure to solve the non-compliance. Evidence for implementation of the corrective action should be provided to the verifier for review. Only after the approval of the verifier, can the non-compliance be closed.

Minor NCs	Major NCs
Corrective action to be taken by facility	Corrective action to be taken by facility Medium risk: Double sampling size

4.5.2 Issuance of Verification Statement

After the verification is completed and all non-conformities have been closed, the verifier should issue a verification statement to the supplier. This declaration serves as proof that the supplier has successfully completed a third-party palm traceability verification assessment and complies with the PepsiCo Palm Traceability Reporting Requirements. The verification statement should contain the following minimum information:

- Name of supplier
- Country of supplier
- Scope of verification
- Verification body

- Statement number
- Authorized by verification body (Name, function)
- Risk level identified
- Issue date of statement
- Start date of statement

Should a previously identified medium or high risk score at a 1st tier supplier change following upstream verifications, a new statement can be issued with the revised score by approved body who conducted the verification at the supplier.


PepsiCo has created a standard Verification Statement template that will be provided to all approved Verification Body after they have completed the PepsiCo Palm Protocol training. Only Verification Statements using the standard template will be accepted.

Once the reviewer has issued the verification statement to the supplier, a copy of the same should be submitted to PepsiCo by the VB. The supplier should similarly provide the verification statement in the next quarterly traceability to mill submission. Furthermore, if the risk assessment result of the verification was medium or high, the supplier should complete and submit the Post Verification Supplier Risk Assessment Survey. This form only requests general information on risk assessment scoring as to be used by PepsiCo to further communication with suppliers and to provide support where needed.

Appendix I: Palm Traceability Reporting Template

A reporting template (Excel) has been developed to deliver the desired traceability data of the PepsiCo reporting requirements. In the section below a few screenshots are provided on the structure of the template. The template provided should be considered as a voluntary tool, since equivalent templates which are already implemented by suppliers providing the same data are also accepted by PepsiCo.

- Quarterly traceability overview

	B	C	D	E	F
1					
2					
3	Supplier information				
4	Supplier name:				
5	Country:				
6	Country:				
7	Contactperson				
8	Email				
9	Phone number				
10	Year:				
11	Quarter:				
12	Volume supplied (MT):				
13	Traceability percentage:				
14	First Aggregator (FA) Indicate below if FA is in scope (Y/N) - Oil Mills to be included in specific tab page				
15	First Aggregator 1 [Name / reference]				
16	First Aggregator 2 [Name / reference]				
17	First Aggregator 3 [Name / reference]				
18	First Aggregator 4 [Name / reference]				
19	First Aggregator 5 [Name / reference]				
20	First Aggregator 6 [Name / reference]				
21	First Aggregator 7 [Name / reference]				
22	First Aggregator 8 [Name / reference]				
23	First Aggregator 9 [Name / reference]				
24	First Aggregator 10 [Name / reference]				
	Quarterly traceability overview First Aggregator 1 First Aggregator 2 First Aggregator 3 First Aggregator 4 First Aggregator 5				

- Traceability data per First Aggregator

	B	C	D	E	F
1	First Aggregator Name/Code:				
2	Mill Name	Geo Coordinate / Longitude	Geo Coordinate / Longitude	Parent company (if applicable)	Certification / Verification status
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

Appendix IIA: Tier 1 Supplier Risk Assessment – Excel template

Phase I - First Tier Supplier Risk Assessment survey (to be completed by the first-tier supplier of PepsiCo)

General Information	
(First-Tier Supplier of PepsiCo) Name:	
Country:	
Date of completion of risk-assessment: (dd-mm-yy)	
Name of contact person:	
Email address of contact person:	
Verification performed by (if applicable):	
Name of Pepsi procurement manager:	
Email address of Pepsi procurement manager:	

Category	Indicator	Answer (extended list)	Points	Notes or clarifications (indicate references to evidence/documents)
1. Supply Chain Complexity	No. of Operational Facilities	< than or equal to 4 facilities	15	
	No. of Legal Entities	1 entity	100	
	Variety in supplier base	< than or equal to once per 12 months or never (fixed)	15	
2. Due-Diligence System	Warranty	Self-Declaration	15	
	Supplier Risk Assessment	No risk-assessment	0	
	Supplier Training	Only direct suppliers	15	
	Supply Chain Audits	First-party (internal)	20	
	Valid Certificates	Implemented only at 1st tier supplier	5	
	Quality Control	High Quality	15	
	Management System	Lack of procedures but a general understanding	10	
3. (Public) Supply Chain Transparency	Public commitment	Public accessible	15	
	Traceability publications	Public documents available	25	

SCORE	250
RISK STATUS	Low

Score (points)	Risk Status
200	Low
75 > < 200	Medium
75	High

General Supply Chain Overview

Phase I Observations
(To be completed by the third-party reviewer)

Appendix IIB: Tier 1 Supplier Risk Assessment – Scorecard

Through the evaluation of the traceability documentation, verification indicators obtain a value that will give the total score of tier 1 supplier of PepsiCo.

Verification Categories	Verification Indicators	Scoring	Points (P)	
1 Supply Chain Complexity	No. of Operational Facilities	< than or equal to 4 facilities	15	
		Between 5 and 10 facilities	10	
		> than or equal to 10 facilities or unknown amount	0	
	No. of Legal Entities	1 entity	100	
		Between 2 and 4 entities	15	
		> than or equal to 4 units or unknown amount	0	
	Variety in supplier base	< than or equal to once per 12 months or never (fixed)	15	
		Between once per 6 months and once a month	10	
		> than or equal to once a month	0	
2 Due-Diligence System	Warranty	Included in Terms of Contract	15	
		Self-Declaration	15	
		Only communication (good-faith) or no warranty	0	
	Supplier Risk Assessment	Risk-assessment till mill-level	10	
		No risk-assessment	0	
		Supplier Training	Training of all actors in supply chain	25
			Training to only direct upstream suppliers	15
			No supplier trainings	0
		Supply Chain Verifications	Third-party	200
	Second-party		40	
	First-party		20	
	No Supply Chain Verifications		0	
	Implemented Certificates	Implemented in full supply chain	10	
		Implemented only at Tier 1 Supplier	5	
		No certificates obtained	0	
Quality Control	High Quality	15		
	Limited Quality	0		
Management System	Procedure manual in place	15		
	No procedure but traceability part of management system	10		
	No procedure or other form of system to manage and control traceability data	0		
3 (Public) Supply Chain Transparency	Public commitment	Public accessible	15	
		No public available	0	
	Traceability publications	Public traceability publication available	25	
	Public traceability publication not available	0		

Appendix III: Benchmarking against PepsiCo Traceability Protocol

As indicated in the Palm Oil Traceability Protocol of PepsiCo, PepsiCo does recognize existing traceability schemes against the PepsiCo reporting requirements. When a recognized system is used by a supplier of PepsiCo, the reporting requirements will remain the same but no additional measures would be required on the external verification of the reported data.

In order to be added as a recognized scheme, a request can be sent to benchmark the traceability scheme according to PepsiCo's requirements. After approval, the scheme shall be added as a recognized traceability system under the PepsiCo Palm Oil Traceability Protocol.

As part of the benchmark, the scheme shall be verified against the following indicators:

1. The scheme should be managed by an organization independent from the system user.
2. The system requirements/methodology must be transparent and all relevant scheme documents must be shared with PepsiCo.
3. The system should adhere to the traceability definition as given in section 2.1 of the Traceability protocol (at least similar content must be addressed)
4. The system should include all supply chain operators, at least up to the first aggregators. Systems with a limited scope who exclude traceability obligations for certain supply chain operators shall not be accepted.
5. The system should enable users to obtain and report the following traceability data:
 - a. Mill Name / Reference
 - b. Geo-coordinates
 - c. Parent company (if applicable)
 - d. Certification/verification status (if applicable)
 - e. Traceability percentage (% of Palm Oil Traceable to Oil Mill)
6. The system should require all Palm Oil Mills within the physical supply base to be included in the reporting. It is not accepted to exclude specific Palm Oil Mills from the reporting at the level of the first aggregator.
7. The system should not allow any Mass Balance methodology which allows to claim full traceability without having all Palm Oil Mill reported
 - a. Methodology based on percentage of traceable oil (section 2.5 of the Traceability Protocol) may be applied by supply chain operators between PepsiCo and the first aggregator.
8. The system should enable users to report the traceability data to PepsiCo on a quarterly basis
 - a. List of Mills should be updated at least every 3 months in case there has been a change/update in the supply base.
9. The system should include an integrity assurance, whereby *traceability claims are verified by a third party organization* to verify the accuracy and completeness of the reported data. The verification should at least comply to the following indicators:
 - a. The verification should be conducted by a third party who complies to the following conditions:
 - i. Independent verification organization, with proven expertise in the Palm Oil Sector

- ii. Conducts verifications in conformity with standard ISO 19011 establishing guidelines for quality and/or environmental management systems verifications.
 - iii. Appointment of competent employees which are trained on the traceability scheme.
- b. Verification of the scheme user should be conducted at least every 12 months.
- c. The third-party verification of the system user may include a risk based sampling methodology for the upstream supply chain units which:
 - i. Verify as least the square root of legal entities in the supply chain up and including the first aggregators, to confirm accurate data has been reported.

Appendix IV: Verification Body Pre-Audit Assessment Form- Excel Template

	A	B	C	D	E	F	G
	Legal Entity	Verification Body Name	VB Address	Auditor Name	Has this auditor attended a PepsiCo Traceability Protocol Training? (Yes/No)	Date of Scheduled Audit (MM/DD/YYYY)	Units included in Scope of the Audit
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Appendix V: Post Verification Supplier Risk Assessment Survey – Excel Template

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2														
3														
4														
5														
6														
7														
8														
9														
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22														
23														
24														
25														
26														
27														
28														

Verification Categories	Verification Indicators	Points Allotted
Supply Chain Complexity	No. of Operational Facilities	
	No. of Legal Entities	
	Variety in supplier base	
Due-Diligence System	Warranty	
	Supplier Risk Assessment	
	Supplier Training	
	Supply Chain Verifications	
	Implemented Certificates	
	Quality Control	
(Public) Supply Chain Transparency	Management System	
	Public Commitment	
	Traceability Publications	
Total Score		0
Risk Assessment Result		HIGH

Appendix VI: Glossary of terms

Reporting requirements

Delivery	A transfer of ownership from one organization to another
Palm Oil Traceability	Traceability is defined as knowing all palm sources all the way to plantation level and having the ability to follow a uniquely identifiable consignment through the supply chain. Traceability until the palm oil mill level is an intermediary step in achieving full traceability.
Physical Handling	Receipt, storage and dispatch or a combination of these where there is a risk of mixing certified and non-certified product
RSPO	Roundtable on Sustainable Palm Oil
Supply Chain	The series of all processes/steps and entities from the palm oil mill up to PepsiCo

Supply Chain Operators

Crushing plant	Facility for crushing palm kernels to produce PKO and PKE
Facility	Location or company where product is stored, transported, or processed.
First aggregator	Operational site of an entity which purchases and aggregates the palm products directly from the palm oil mill
Manufacturer	The manufacturer uses oil palm products for manufacturing products designed and intended for consumption or end use in any way without further repackaging or processing.
Oil Palm Growers / Palm Plantation	Producer of Fresh Fruit Bunches (FFB) that are harvested from the palm trees
Palm Oil Mill	Facility where the FFB's are collected to be sterilized and stripped. The palm fruit is pressed to separate the oil from the "cake" (a mixture of kernel and fiber). The oil is then purified and clarified. Outputs: CPO, PKO
Parent company	Organization that has a legal relationship (ownership) of another organization. Example: one parent company can own multiple palm oil mills.
Refinery (Primary)	Facility where CPO/PKO are refined to remove color, odor, and flavor. Outputs: RBDPO, PFAD, RDB PKO
Refinery (Secondary refining /processing)	Fractionation to separate solid (stearin) and liquid (olein) fractions, Distillation, Hydrogenation, Interesterification, glycerolysis. o Outputs: Olein/Stearin, Emulsifier, Oleo chemicals, etc.
Storage location	Storing/ aggregating palm oil products possibly from multiple origins.
Tier 1 Supplier	Direct supplier of PepsiCo

Trader	Actor in the supply chain which purchases and sells palm products via one of the following options: -Physical trading: Trader obtains both physical and financial ownership of the goods via owned or rented storage locations or processing via tolling agreements - Paper trading: Trader obtains financial/economic ownership without having physical possession of the products.
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Palm Products

CPO	Crude Palm Oil
FFB	Fresh Fruit Bunches
Palm Olein	liquid fraction of palm oil that is produced by partial crystallization at controlled temperature
Palm Stearin	solid fraction of palm oil that is produced by partial crystallization at controlled temperature
PKO	Palm Kernel Oil
PO	Palm Oil
RBD PO	Refined Bleached Deodorized Palm Oil
RDBD PKO	Refined Bleached Deodorized Palk Kernel Oil

Verification Protocol

Verification statement	Declaration which serves as proof that the supplier has successfully completed a third-party verification assessment. It shows also that quarterly and annually supplied information has been verified to be accurate and complete.
Upstream actors	Upstream supply chain actors are buying the oil from the first aggregator and supplying it to the tier 1 supplier. They are in the middle of a palm supply chain.
Due diligence system	Due diligence is the process of systematically researching and verifying the accuracy of a statement.
Internal verification	Internal verifications are used to confirm or improve the effectiveness of management systems. They are executed internally by employees of the facility being verified and are used to declare that an organization complies with a reference standard. Internal verifiers should be genuinely independent and free of bias.
Legal ownership	Economic transaction related to the purchases of the product. An entity having legal ownership of a palm product would have an enforceable claim or title over the product, and should be recognized as such by law.
Risk assessment	Overall process or method where risk factors are identified that have the potential to have a negative verification result. Analyze and evaluate the risk associated with the traceability requirements.
Second-party verification	Second party verifications are external verifications. They are usually done by customers or by others on their behalf but can also be done by regulators or any other external party that has a formal interest in an organization.

Third-party verification	Third party verifications are external verifications. They are performed by independent organizations such as verification bodies.
Verifier	Person responsible for the verification of risk assessment and traceability data provided by the suppliers. Verifier can be more than one person depending on the scope of the verification. In certification schemes the verifier is identifiable as the auditor
Reviewer	Person responsible for the review of the findings reported by the verifier on risk assessment and traceability information. The reviewer should not be involved during the verification but have comparable background to the verifier. The reviewer should also be able to reach the final verification decision.
Upstream verification	Evaluation of compliance with the reporting requirements by the upstream actors