

THE URGENT NEED TO BUILD A PRODUCTION AREA DATASET FOR AGRICULTURAL AND FORESTRY COMMODITIES FOR MANAGEMENT AND TRACEABILITY:

A bottom-up approach

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EXECUTIVE SUMMARY

Traceability of products and goods - including agricultural and forestry commodities - is becoming an essential requirement in Vietnam and in importing markets. Implementing traceability requires accurate and up-to-date production area input data, including data for each farming household's production plots. This report assesses the current state of production area data, identifies limitations that constrain product traceability and the development of effective mechanisms and policies, and recommends the urgent establishment of an accurate, up-to-date and comprehensive production area dataset for management and traceability by mobilizing human resources already available within localities.

- Traceability requirements for products and goods, including agricultural and forestry commodities, are becoming mandatory in major export markets for Vietnam such as the EU. The EU Deforestation Regulation (EUDR) is a prominent example.
- The Government of Vietnam has issued regulations on product and goods traceability. Traceability is currently mandatory for high-risk products and goods. Companies producing or trading high-risk products must trace them and provide product information and data to management agencies. The Government encourages companies to voluntarily establish traceability systems for goods not yet subject to mandatory traceability.
- Current production area data held by management agencies have several shortcomings and do not allow traceability to the production-plot level.
- Companies that develop sustainable sourcing areas through linkages with farming households hold production area datasets for areas that have obtained sustainability certification. However, these companies do not share their data. This creates risks of (i) overlapping sourcing areas among companies and (ii) overlap between production land and forest land, while also wasting resources.
- Management agencies can build their own production area datasets for management and for attracting high-quality private investment by using locally available human resources, particularly village-level officials. This requires consistent direction and coordination from the central level to localities and within each locality.
- Companies should share their production area datasets with management agencies. This would reduce risks and resource duplication. Government should establish both mandatory measures ("sticks") and incentives ("carrots") to encourage data sharing and traceability.
- Government needs to build information infrastructure for collecting, storing and sharing production area information for traceability. The system should ensure accurate and up-to-date input data, secure and confidential information systems, and clear rules governing data access and sharing.



1. TRACEABILITY OF AGRICULTURAL AND FORESTRY COMMODITIES: INTERNATIONAL TRENDS

Requirements for traceability of agricultural and forestry commodities are becoming a global trend. Traceability requirements arise from consumer concerns that products should be of assured quality and safe for users, and that activities throughout the product supply chain comply with the law, including requirements on land use and environmental protection. Meeting traceability requirements requires transparent supply-chain information to build consumer confidence, while also enabling management agencies to check legal compliance, limit fraudulent practices in supply chains and strengthen producer accountability.

Traceability of agricultural and forestry commodities is one of the most important mandatory requirements in several new regulations in major markets. The European Union Deforestation Regulation (EU Deforestation Regulation, hereafter the EUDR) is a prominent example. The Regulation will apply from 30 December 2026 and requires seven commodities entering the EU market to be traceable to each production plot. For example, coffee imported into the EU must be accompanied by sufficient information and evidence for EU authorities to identify precisely the plot of land in the producing country where the imported coffee was grown. More broadly, the EUDR requires production to be deforestation- and forest-degradation-free and all activities in the supply chain - including land use - to fully comply with the laws of the producing country.

Three Vietnamese commodity sectors are strongly affected by the EUDR: rubber, timber and, especially, coffee. The figure on the following page (page 6) provides basic information on these three sectors, including the role of the EU market for each.



Photo 1: A coffee-growing household in Sơn La. Source: Ara-Tay Coffee



Rubber area in Vietnam¹:

915,000 ha

Of which:

50% smallholder rubber	50% estate rubber
------------------------	-------------------

264,000 rubber-growing households each with 1-2 production plots

mainly owned by State-owned companies

In 2025, export value reached:

USD 8.3 billion

Of which, exports to the EU reached USD 772 million, accounting for 9.46% of total export value. The two largest export product groups were natural rubber (NR) and rubber products (RP). In 2025, NR exports to the EU reached USD 115 million (3.3% of total NR export value), while rubber products reached USD 657 million (13% of total RP export value).

Rubber area certified under FSC and PEFC:

134,600 ha

Of which:

12%	88% PEFC-certified
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16,000 ha FSC-certified
All is smallholder area linked to sustainable rubber production with private rubber companies.

118,600 ha PEFC-certified. Most is estate rubber owned by State-owned companies, mainly under the Vietnam Rubber Group.

Some rubber areas hold both certifications; the overlapping area has not yet been identified.



Production plantation forest area in Vietnam²:

3.9 million ha

Of which:

43% household-owned	53% State forestry companies
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1.8 million ha household-owned
1.1 million households engaged in plantation forestry, averaging 2 plots per household

State forestry companies (SFCs)
Private-company plantation forest area is insignificant.

In 2025, export value reached:

USD 16.7 billion

Of which, exports to the EU reached USD 684.2 million, accounting for 4.1% of total sector export value.

Forest area certified under FSC and PEFC:

745,700 ha

Of which:

81% FSC-certified	19%
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601,000 ha FSC-certified

Certified area includes household land linked with export wood processors and areas of forestry companies. Some plantation forests hold both FSC and PEFC certification; the overlapping area has not yet been identified.

144,700 ha
PEFC-certified



Coffee area in Vietnam³:

710,000 ha

Of which:

95% smallholders

About 700,000 coffee-growing households, each with 2-3 production plots

In 2025, export value reached:

USD 8.77 billion

About 90% of Vietnam's coffee is exported. The EU is the largest market, with export value of USD 3.69 billion (45.1% of total coffee export value).

Coffee area certified under 4C, RA and FT:

343,000 ha

Of which:

67% 4C-certified	31% RA
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230,000 ha 4C-certified

Some coffee areas hold both 4C and RA certification. The overlapping areas have not been identified, so the exact total certified coffee area cannot yet be determined.

108,000 ha
Rainforest Alliance
(RA) certified

5,000 ha
Fairtrade
(FT) certified

¹ Information compiled from the Vietnam Rubber Association, FSC and PEFC websites, and reports by Forest Trends and partners.

² Information compiled from export statistics from the Customs Department, the MAE, and reports by Forest Trends.

³ Data compiled from import-export data from the Information Center (Ministry of Industry and Trade) and information from sustainability-certification organizations' websites.



2. PRODUCT AND GOODS TRACEABILITY: VIETNAM'S REQUIREMENTS

2.1 General regulations on product and goods traceability

The Government of Vietnam has established specific requirements for traceability of products and goods circulating on the market. Decree No. 37/2026/ND-CP dated 23 January 2026 guides implementation of the Law on Product and Goods Quality and includes provisions directly related to product and goods traceability.⁴ The Decree applies to organizations and individuals producing and trading products and goods, as well as organizations and individuals engaged in activities related to product quality, traceability and other relevant matters. Traceability is one of the Decree's core requirements. Specific provisions include:

- Identifying and publishing lists of products and goods by risk level and establishing corresponding management mechanisms for each product group.
- Organizations and individuals exporting goods must ensure that exported goods comply with the regulations of the importing country, contractual requirements and international treaties to which Vietnam is a party.
- Products and goods are classified by risk level - high, medium and low. Risk criteria are based on scientific evidence and data from practical application, the management capacity of state agencies in each period, and the principles of transparency and objectivity.⁵ Depending on the risk level, sectoral management authorities are responsible for reviewing and assessing the risk level of products and goods.
- Sectoral management authorities, based on actual conditions and management requirements, review, update and supplement the lists of medium- and high-risk products and goods.

The Decree also sets requirements for coordination and data sharing among sectoral ministries and requires the development of a digital platform, specifically:

- The Ministry of Science and Technology is the focal agency for developing and operating the National Database on Standards and Quality.
- Sectoral ministries update and share information and data on medium- and high-risk products and goods and do so on a quarterly basis.
- The Ministry of Science and Technology develops, operates and maintains a unified digital platform serving state management, businesses and consumers. The platform must support connectivity, data sharing, statistics, periodic and ad hoc reporting, and provide complete, timely and accurate information for inspection, warning and quality management.

⁴ Decree No. 37/2026/ND-CP providing measures for implementation of the Law on Product and Goods Quality.

⁵ High-risk products and goods are those with a high level and likelihood of hazardous risk that may cause serious or particularly serious consequences without appropriate management measures. Medium-risk products and goods have a medium level or likelihood of hazardous risk and may cause significant harm without appropriate management. Low-risk goods generally have no significant impact under controlled conditions.



Regarding the development, connection and sharing of data within the national quality infrastructure, the Decree provides that:

- Ministries, ministerial-level agencies and localities are responsible for updating data quarterly or on an ad hoc basis when required.
- Data sharing among components of the national quality infrastructure must be synchronized, consistent, timely, accurate and secure, and must effectively support nationwide management of standards, measurement and quality.

Regarding the application of digital technology to collect, store and share information and to ensure information security, the Decree provides that:

- Organizations and individuals engaged in production and business are encouraged to use technology to collect, store and share quality and product data throughout the supply chain.
- Organizations operating product and goods quality data systems are responsible for ensuring information security and data confidentiality in accordance with laws on cybersecurity and personal-data protection.
- Data collection, processing and sharing must follow the principles of transparency, defined purpose, appropriate scope and accuracy, and the data may be used only for quality-management purposes.

The Decree sets principles for traceability, including:

- Traceability is mandatory for high-risk products and goods.
- Competent authorities are responsible for ensuring information-confidentiality and cybersecurity requirements during product and goods traceability.

The Decree also contains specific provisions for product and goods traceability systems to ensure connectivity and data sharing, including:

- A traceability system must ensure data sharing (among supply-chain participants on a one-step-back, one-step-forward basis), availability of key data elements (which must be collected, stored and updated), transparency, and full participation by traceability parties.
- Traceability data include information such as product or goods name, name of the producer or trader, product origin and applicable product standards.

Under the Decree, responsibilities of organizations and individuals implementing traceability include:

- For high-risk products and goods subject to mandatory traceability, organizations and individuals must connect and share data with the National Product and Goods Traceability Portal.
- They are legally responsible for traceability information and are subject to inspection, examination and supervision by state management agencies.

Overall, the Decree sets specific traceability requirements, particularly for high-risk products and goods. Businesses participating in supply chains for high-risk products and goods must conduct traceability before products enter circulation. The Decree also requires businesses producing or trading risky products and goods to share traceability data with management agencies. At the same time, management agencies are responsible for providing information infrastructure to collect and store data and to ensure information security and confidentiality.



2.2 Regulations on traceability of products and goods under the Ministry of Industry and Trade

To implement Decree No. 37/2026/ND-CP, on 11 June 2026 the Ministry of Industry and Trade issued Circular No. 31/2026/TT-BCT on traceability of products and goods under the Ministry's management.⁶ The Circular focuses on high-risk goods and imposes stringent traceability requirements that supply-chain participants must comply with. The Ministry is currently seeking comments on a draft list of high- and medium-risk products and goods.⁷

Circular 31 contains the following important provisions:

- High-risk products and goods are subject to mandatory traceability. Traders are encouraged to voluntarily trace products and goods outside the risk group.
- Information confidentiality and cybersecurity requirements must be ensured during traceability and during connection and data sharing among parties.
- For traceability, relevant parties must provide information on product identification (for example company name, business registration, product name and image), product origin, name and address of the producer or trader, and standards and technical regulations applicable to the product.
- For goods subject to mandatory traceability, traceability data must be retained for at least 12 months for goods with an expiry date and 60 months for goods without an expiry date.
- Data stored in a trader's internal traceability system must be connected and shared with the Ministry of Industry and Trade's traceability system, ensure data integrity and change-control mechanisms, and be ready for provision to competent authorities when requested.
- Traceability records and data must be stored electronically, with confidentiality, security and data integrity ensured, and must be readily accessible and extractable upon request.
- A trader's internal traceability system must be capable of connecting and sharing data with the Ministry of Industry and Trade's traceability system.
- Traders must ensure that the system can retrieve and provide data within 24 hours of a request from the Ministry of Industry and Trade or another competent authority.
- Traders create accounts and update information in the system in accordance with the functions, data fields and technical guidance provided by the system.
- Traders subject to traceability requirements must build and operate internal traceability systems meeting the applicable requirements; connect and share data with the Ministry's traceability system; or update and declare traceability information directly on the Ministry's system in accordance with its technical guidance.
- Traders are responsible for declaring and updating information on the Ministry's traceability system, ensuring two-way data connectivity and sharing, and are legally responsible for the traceability information provided.
- For high-risk goods, traders must conduct traceability before putting the goods into circulation on the market.

⁶ For details, see Circular No. 31/2026/TT-BCT of the Ministry of Industry and Trade on traceability of products and goods under the Ministry's management.

⁷ <https://moit.gov.vn/tin-tuc/thong-bao/bo-cong-thuong-lay-y-kien-gop-y-du-thao-thong-tu-ban-hanh-danh-muc-san-pham-hang-hoa-co-muc-do-rui-ro-trung-binh-muc-do.html>. The draft list of high- and medium-risk products is provided in the document: "1. DU THAO TT DANH MUC SPHH RUI RO.Lay y kien.pdf".



- For goods not subject to mandatory traceability, traders that voluntarily implement traceability may receive incentives such as a green check mark indicating voluntary traceability, permission to use the green check on products, packaging and e-commerce platforms, priority technical support and guidance for connecting to the Ministry's traceability system, and communication and promotion through mass media or Ministry-organized product promotion activities.

Circular 31 of the Ministry of Industry and Trade sets specific traceability requirements for products and goods under the Ministry's management. Traceability is mandatory for high-risk products. The responsibilities of traders producing and trading high-risk products and goods are clearly specified, including designing and operating their own internal traceability systems and sharing data with the Ministry's traceability system, or directly registering product traceability information through the system designed and managed by the Ministry.

Circular 31 also provides incentive mechanisms for pioneering businesses that are not required to conduct traceability but voluntarily apply it to their products and goods. Incentives include product promotion, technical assistance and trade promotion.

The Circular also makes clear that the Ministry is responsible for designing information infrastructure to receive and manage data provided by businesses.

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Photo 2: Residents of Chiềng Sinh Commune, Điện Biên Province, participate in training on the production area data-collection tool. Source: Nguyễn Trọng Cường



2.3 Regulations on traceability of products and goods under the Ministry of Agriculture and Environment

As the agency responsible for agricultural and forestry products and goods, the Ministry of Agriculture and Environment (MAE) has also issued provisions on traceability for agricultural and forestry commodities. Specifically, on 7 January 2026 the Ministry issued Decision No. 25/QĐ-BNNMT on the Plan for implementing traceability of agricultural, forestry and fishery products.⁸ The Plan has the following objectives:

- Complete the system of legal regulations, documents and guidance materials on traceability of agricultural, forestry and fishery products and goods and agricultural inputs under the Ministry's management.
- Promote broader social participation in agricultural-product traceability to improve state-management effectiveness, ensure quality and food safety, protect consumer health and the environment, and proactively support international integration.
- Develop and operate the Ministry's agricultural-product traceability system in a public and transparent manner.

The Plan's objectives are divided into different phases, as follows:

By the end of 2026

- Develop and pilot an agricultural-product traceability system, initially for durian.
- By 1 July 2026: assess, complete and put into use the agricultural-product traceability system for most major food crops, with minimum traceability data including information on farming households participating in the supply chain; production areas/facilities and production and harvest times; and information on stages in the supply chain.
- Develop and issue nationwide unified standards for agricultural traceability data and information exchange.
- Pilot production-area logs and cultivation diaries; by the end of 2026, essentially complete traceability application for durian and other agricultural products.
- Develop and issue mechanisms, policies, legal documents and guidance materials to support agricultural-product traceability.
- Invest in or lease systems, equipment and technical infrastructure to ensure stable and continuous operation of the agricultural-product traceability system and information security and safety.

2027-2030 period

- Upgrade and complete traceability-system functions to enable recording and management of information at all major stages of the chain.
- Establish technical infrastructure and digital solutions for traceability.
- Connect, share and synchronize data with the National Traceability Portal and local traceability portals to form a complete interconnected system.
- Develop and issue a list of priority key agricultural product groups that must implement traceability, update them in the system and form agricultural traceability chains.

⁸ <https://thuvienphapluat.vn/van-ban/Linh-vuc-khac/Quyiet-dinh-25-QD-BNNMT-2026-Ke-hoach-trien-khai-truy-xuat-nguon-goc-nong-lam-thuy-san-688596.aspx>



- Establish and operate a centralized, shared traceability database for agriculture, forestry and fisheries under the Ministry's management.
- Ensure the collection, standardization, storage and governance of traceability data for state management, inspection, supervision, statistics and analysis.
- On the basis of standardized data, deploy tools for analysis, aggregation, monitoring and early warning.

The requirements in Decree No. 37/2026/ND-CP, Circular No. 31/2026/TT-BCT and Decision No. 25/QD-BNNMT convey the following clear messages:

- Traceability of products and goods, including agricultural and forestry commodities, is currently mandatory for products prioritized for traceability (for example, products classified by ministries as high-risk). These requirements will be extended to other products and goods in the future.
- The list of product groups subject to mandatory traceability will be updated regularly, with the scope of products expanding over time.
- Traceability requires accurate and up-to-date input information on products and goods; information systems must be synchronized and continuous across all stages of the chain and between local and central management agencies.
- Companies with products and goods subject to mandatory traceability must provide management agencies with complete and accurate information (for example, product origin and activities that create the product) to support state management, inspection and assessment.
- Companies whose products and goods are not currently subject to mandatory traceability are encouraged to apply traceability through support measures provided by the State.
- The State provides information infrastructure to manage and store data for traceability.

Traceability requires information on supply-chain activities, including the production plot, the household using the plot and crops grown on the land. Focusing on the production area database as a key traceability input, Section 3 below provides information on the current state of this data source.

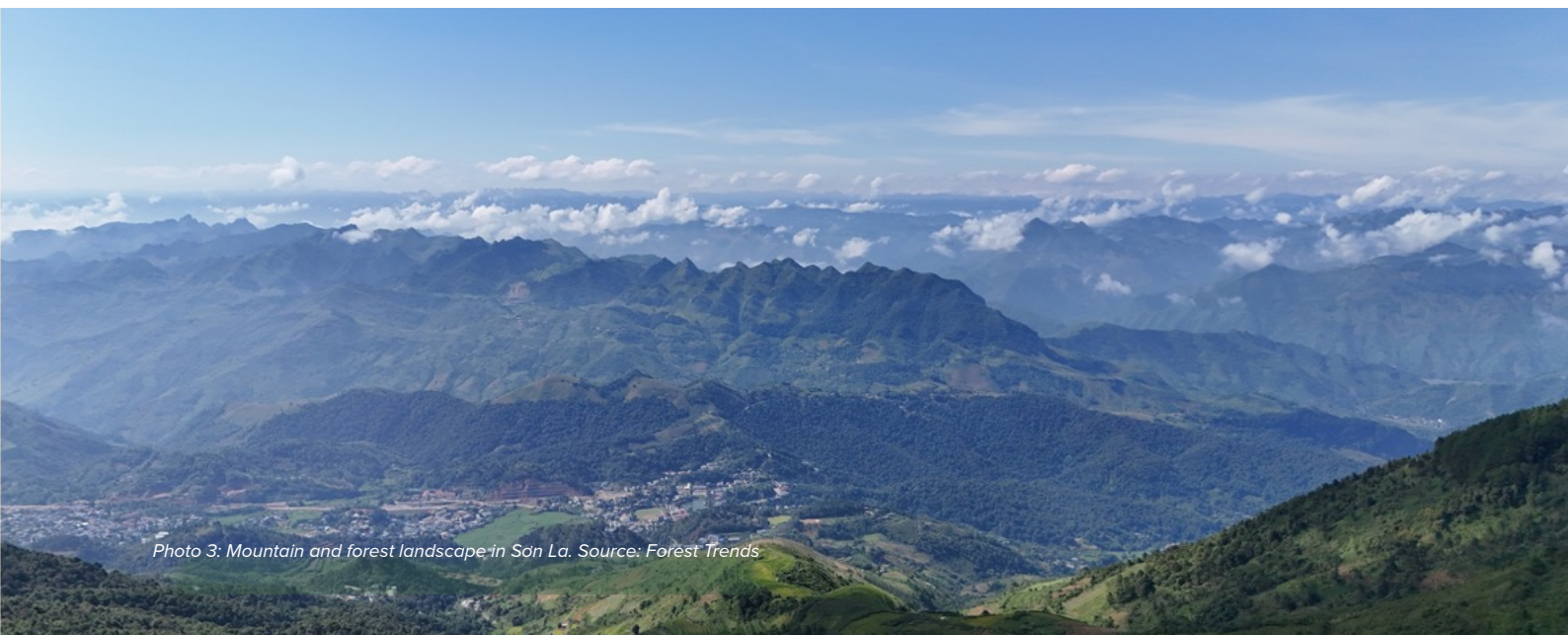


Photo 3: Mountain and forest landscape in Son La. Source: Forest Trends



3. CURRENT STATUS OF PRODUCTION AREA DATA: STATISTICAL INFORMATION FROM MANAGEMENT AGENCIES

A basic characteristic of Vietnam's agricultural and forestry commodity supply chains is the large number of farming households participating in production (264,000 households in rubber, 1.1 million households in plantation forestry and 700,000 households in coffee), fragmented production land (1-3 cultivated plots per household), and difficult access to production plots because of challenging terrain.

Tracing products produced on household land requires information for each household plot, including its legal status and geographic location.

There are currently two information systems related to production area data for agricultural and forestry commodities. The first is the statistical information system of the national statistical agency, specifically the National Statistics Office (Ministry of Finance), together with statistics from specialized management agencies under the MAE. The second is data held by companies on their own sourcing areas.

3.1 Statistical information on production area data from management agencies

Information from management agencies related to production areas includes (a) statistics from the National Statistics Office (Ministry of Finance) and (b) information from specialized agencies of the MAE.

Information from the National Statistics Office

This source includes information related to production areas, including yields and outputs of annual crops, perennial crops and some crops by locality. Available information focuses on several major crops such as rice, maize, tea and sugarcane, with data covering only 1990-2024 (2024 figures are estimates).⁹

For plantation forests and coffee, the National Statistics Office data include:

- Coffee: national area by year for 2005-2024.
- Plantation forests: plantation forest area by province and year for 2008-2024; newly established concentrated plantation forest area classified as production forest by year for 2005-2024.

The National Statistics Office data do not include rubber.

The Office also publishes selected indicators from the 2025 Rural Census, focusing mainly on the number of agricultural and forestry households in rural areas as of 1 July 2025. It also publishes results of the 2016 Rural, Agriculture and Fisheries Census, mainly covering the number of households engaged in agricultural and forestry production. These censuses do not include information on farming households' cultivated land.

The Office provides information on current land use, including agricultural production land, perennial-crop land and forest land, with statistical land-area data for 2018-2023. The data cover total national area, classified by land allocated to users and management entities. Land information is not detailed to the household level.

⁹ For details, see: <https://www.nso.gov.vn/nong-lam-nghiep-va-thuy-san/>



Each year the National Statistics Office publishes a Statistical Yearbook. The most recent yearbook was issued in 2025 with data updated through 2024. It includes agricultural and forestry information such as the area of several major crops (including coffee and plantation forests), as well as crop yields and outputs.

Information from agencies under the MAE

Agencies under the Ministry, such as the Department of Crop Production and Plant Protection, the Department of Forestry and Forest Protection, and the Department of Land Management, collect information annually within their respective mandates. This includes area, yield and output of major crops (Crop Production and Plant Protection); plantation forests, including production forest area (Forestry and Forest Protection); and cadastral data (Land Management). These sources are commonly compiled from provincial technical agencies such as the Sub-departments of Crop Production and Plant Protection, the Sub-departments of Forestry and Forest Protection, or the DAEs. Provincial data are usually aggregated from commune-level agencies. When necessary, specialized agencies of the Ministry may ask local technical agencies to compile and report data on specific topics. For example, when updated figures on coffee and rubber areas are needed, the Department of Crop Production and Plant Protection sends official requests to provincial DAEs to compile and report the data.

As noted above, traceability requires accurate, up-to-date information detailed to the farming household and individual production plot. Current information systems for production area data on crops including coffee, rubber and timber, drawing from the National Statistics Office and specialized MAE agencies, do not allow traceability of agricultural and forestry commodities because of several fundamental limitations.

First, the information does not closely reflect actual conditions, especially land use. Annual statistics on crop area, yield and output are collected by local focal agencies and then aggregated nationally, creating risks to accuracy. Some localities still lack cadastral data for agricultural and forestry land and therefore lack information on households' production plots. According to leaders in localities such as Sơn La and Điện Biên, developing cadastral data for all land categories across the province would require very large budgets - about VND 1.7 trillion for Sơn La and VND 1.2 trillion for Điện Biên.¹⁰ These amounts far exceed local financial capacity.

Household land-use activities are often complex. Household production land is fragmented; each household has 2-3 small production plots, often in areas with difficult terrain such as hills and mountains. Under these conditions, collecting data on each household and each production plot is very difficult. Current statistical systems do not include this information. In some localities, statistics for the following year are "often based on the previous year's statistics because [local officials] do not have sufficient conditions to verify the actual situation," according to an official responsible for agriculture and land in a commune in Sơn La.

Second, statistical data are not up to date. At household level, land-use activities can change quickly depending on household decisions. Crop choice, planting time and harvest timing depend on many factors, especially output prices. Local management agencies often cannot update these changes in time. For example, in Sơn La and Điện Biên, when coffee prices rise many households decide to expand coffee areas; commune authorities may not capture these changes, causing statistical data to become outdated. As a result, commune-reported coffee area can differ substantially from actual area. In Nậm Lầu Commune, Sơn La, the coffee area reported by the commune for 2025 was 1,700 ha, while analysis of high-resolution remote-sensing imagery (30 cm x 30 cm) combined with field verification indicated about 5,400 ha.

¹⁰ Information shared by provincial officials at meetings attended by the authors.



In general, the more volatile export prices for agricultural and forestry commodities become, the greater the risk that production area statistics compiled by local technical agencies will be inaccurate.

Third, current statistical data fields do not allow product traceability. Existing production area statistics cover only area, yield and output for some crops by locality. They do not include information on production plots, the legal status of plots, land users (households), planting year, harvest output by plot and household, and other plot-level attributes. Current information therefore does not support traceability to the household level.

3.2 Production area data held by companies

A number of companies in the coffee, timber and rubber sectors have developed sustainable sourcing areas to supply their processing operations. These areas are established through linkages between companies and farming households (see Section 1 for information on sustainable sourcing areas).¹¹ For production areas that have obtained sustainability certification, available information includes the area of each production plot, crop type, planting year, harvest period, plot owner and legal status of the plot. This information is sufficiently complete to enable traceability to each production plot.

All costs of developing sustainable sourcing areas are borne by the companies participating in these linkages, in some cases with financial support from international buyers. Costs include labor for screening suitable areas, activities to connect with farming households, measurement of production plots, household data collection and training for households. Development of sourcing areas often receives support from local authorities, for example by facilitating company-household linkages, reviewing land information and organizing community meetings. Because companies invest their own resources in developing sourcing areas, all production area data for sustainably certified areas are considered company assets and are currently held by those companies. Companies do not share these data with other individuals or organizations, including management agencies. Company production area data are used for internal traceability. They are also updated annually through company focal points working with team leaders, group leaders and cooperative leaders who represent households participating in sustainable sourcing programs linked with the companies.

However, the failure of companies with sustainable sourcing areas to share information with relevant parties, including local management agencies, creates two major risks. First, companies operating sourcing areas in the same locality (for example, the same commune) may have overlapping sourcing areas. Examples include a coffee plot in the former Gia Lai Province that eight companies reported as a source of purchases, and a coffee plot in Sơn La for which four companies reported purchasing products. A household may of course sell products harvested from the same plot to several different companies.

¹¹ Nearly all certified coffee area consists of household coffee plots linked with companies. The same applies to rubber areas certified under FSC. All PEFC-certified rubber area is large-estate rubber, mainly held by companies under the Vietnam Rubber Group. The area of plantation forest holding both FSC and PEFC certification has not yet been determined; according to some experts, the overlap is roughly around 20,000 ha.



However, if every company purchasing from the household declares that it bought the entire output harvested from that plot, the total declared volume would far exceed actual production, indicating misrepresentation of companies' input supply. This could lead import-control authorities in the importing country to reject the shipment.

Second, companies' failure to share production area data with management agencies creates a risk of purchasing products from land that does not comply with legal land-use requirements. This risk is especially relevant to coffee. Some companies do not yet have full access to information on the boundaries of the three forest categories, data managed by local forest-protection authorities. A risk arises when some company-linked production areas overlap forest land. If this occurs, household cultivation violates land-use requirements and products harvested from these areas do not comply with Vietnam's legal land-use provisions.

These risks show that although companies hold production area information sufficient for traceability, the lack of data sharing among companies operating in the same locality and between companies and local management agencies creates risks of misreporting export volumes and violations of land-use requirements at household level.

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Photo 4: People harvesting coffee in Son La. Source: Forest Trends



4. BUILDING PRODUCTION AREA DATA: THE URGENT NEED FOR MANAGEMENT

Building accurate and up-to-date production area data, including information for each household production plot, enables product traceability and is particularly important for central and local management agencies. Such a dataset has the following functions:

First, it helps management agencies develop sector mechanisms and policies that reflect actual conditions. Management and development policies based on accurate and up-to-date data can guide sector development in line with Government objectives and priorities. Conversely, mechanisms and policies based on figures that do not reflect reality may be ineffective in implementation.

Second, accurate and up-to-date production area data help management agencies precisely identify production areas at risk of non-compliance with land-use and forest-protection regulations, as well as safe production areas. Precise identification of these risks is critical for effective production-area management and compliance with export-market requirements. For example, the People's Committees of Sơn La and Điện Biên Provinces are working to identify coffee areas located on forest land and develop plans to remove these overlapping areas from supply chains exporting to the EU. The two provinces are also developing solutions to address land-overlap issues.

Third, accurate and up-to-date production area data are an important tool for guiding and attracting investment, particularly high-quality investment that directly promotes sustainable local economic and production activities. For example, the Northwest coffee sector still has room for development and several companies are exploring opportunities to establish sustainable sourcing areas there. Accurate, up-to-date data, including information on safe sourcing areas, help management agencies attract pioneering companies seeking local investment opportunities and guide investment toward priority areas. A representative of a coffee company exploring investment opportunities in the Northwest stated that the company was "willing to pay for access to this dataset."

For these reasons, accurate and up-to-date production area data are especially important for management agencies. The dataset is both a management tool and a foundation for guiding and attracting high-quality investment.



Photo 5: Intercropped coffee in the Central Highlands. Source: Forest Trends



5. BUILDING PRODUCTION AREA DATA FOR MANAGEMENT

5.1 Challenges in building a production area dataset

Building a production area dataset for management and macro-level administration currently faces two major challenges: limited resources and time pressure.

First, building a production area dataset requires significant human and financial resources. Representatives of several companies that have developed sustainable coffee sourcing areas in parts of the Central Highlands report average company investment of about USD 5-7/ha for production area data collection. This includes reviewing available cadastral information and hiring staff to collect information on production plots, such as plot area, geographic coordinates and crop status. Travel in the Central Highlands is relatively convenient and production land is concentrated. Costs would be higher in regions such as the Northwest because of complex terrain, difficult access and highly dispersed household production land. In addition, production areas in the Central Highlands already have cadastral data previously collected by local land-management agencies, including parcel maps for individual plots, saving companies considerable time and effort. As noted above, however, many localities still lack cadastral data for agricultural and forestry land.

Second, building the production area dataset is under significant time pressure, especially to meet export-market requirements. As noted in Section 1, the EUDR officially applies from 31 December 2026. Production area data for products exported to the EU need to be established before this date. The remaining time is short and pressure to build the dataset is increasing.

5.2 Building production area data under resource constraints: A bottom-up approach

5.2.1 Key management factors

How can a production area dataset be built under limited resources and severe time pressure? Experience from pilot activities to build coffee production area data in Điện Biên and Sơn La, supported by Forest Trends, shows that this is feasible if localities meet the following prerequisites:

First, Party committees and local authorities must engage decisively and direct relevant local agencies. Local authorities, including the DAE and its subordinate agencies, need to clearly recognize the importance and urgency of production area data for management and macro-level administration. Production area data need to be "live" (regularly updated) and "clean" (complete and accurate). Key directions include:

- The provincial People's Committee issues directives to communes with production areas to mobilize commune authorities and technical agencies.
- Based on provincial direction, commune authorities should recognize production area data collection as an important official responsibility. Commune leaders should designate a focal officer, preferably the head or deputy head of the Economic Division (or General Affairs Division, depending on commune structure), together with supporting staff.



- The commune People's Committee sends official letters to all villages with production areas, requiring participation by all village heads in production area data collection. Each village should have at least two participating officials, including the village head and another official, such as a representative of the Youth Union or Women's Union.
- With technical support from specialized agencies under the DAE (for example, the Sub-department of Crop Production and Plant Protection and the Sub-department of Forestry and Forest Protection), commune and village officials take primary responsibility for helping farming households collect information on their production plots.

To ensure consistent implementation across localities, the MAE - as the focal agency for national production area data management - should issue guidance to provincial People's Committees and DAEs. The guidance should clearly state the objectives of building the production area dataset and data-collection methods, including the tools to be used (see below), templates and data fields required to meet traceability requirements.

Second, appropriate tools/software should be selected for data collection. Many tools are currently available, each with strengths and limitations in terms of functionality, ability to customize forms and data fields, data extraction, confidentiality and information security during collection.¹² Ministry guidance to localities should include recommendations on tool selection. Recommended tools should be easy to use and user-friendly, including for farming households with limited technology skills. Experts would use the selected tool to train local staff.

Third, local officials need training in the use of data-collection tools. The MAE and local management agencies should mobilize technical support from experts in using the tool for data collection. Such expertise is relatively widely available and training costs are not high. The Ministry and localities may use existing resources or seek support from other organizations. Expert-led training should ensure that participants can proficiently use the tool to collect data for each household production plot. This requires a field component in which users practice collecting production-plot information.

5.2.2 Training approaches

Within each province, experts should conduct three types of training. The forms share some content but also have important differences.

First, provincial-level training. This training is for provincial technical staff (for example, DAE staff and staff of the Sub-departments of Forestry and Forest Protection and Crop Production and Plant Protection) and commune leaders (for example, the chairperson or vice chairperson and/or head of the Economic Division). Provincial and commune training is a training-of-trainers (TOT) course designed to provide basic information on the importance of production area data, introduce the tool and guide its field use. Some participants become core staff supporting communes and villages in production area data collection.

¹² Forest Trends assessed eight tools that could be used to collect production area data, including the strengths and limitations of each tool.



The DAE and its subordinate agencies should establish a Provincial Core Team. Its role is to support Commune-level Mobile Task Forces (described below) in household-level data collection. Depending on local conditions - such as the crop area requiring data collection, the degree of land fragmentation and the difficulty of reaching household production plots - the Provincial Core Team should include around 3-5 members, primarily technical staff from the Sub-department of Crop Production and Plant Protection and/or local forest-protection officers. The DAE should issue a formal decision establishing the team and clearly assigning responsibilities. Team members are responsible for guiding members of Commune-level Mobile Task Forces in operating the data-collection tool and answering their questions.

Second, commune-level training. This is training for key commune officials and has objectives similar to provincial-level training. It should begin by selecting one or two communes that represent characteristic production-area conditions as pilot training sites, creating a foundation for later expansion to other communes. Pilot communes may represent newly established or planned production areas and/or established production areas. Selection may also consider ethnic composition, representativeness, and the enthusiasm and commitment of commune leaders.

The expert team, together with Provincial Core Team members, is responsible for training in the pilot communes. Participants include leaders and technical staff from selected communes (for example, the chairperson or vice chairperson and heads or deputy heads of the Economic or General Affairs Division). Commune-level training should also include leadership representatives from every village with production areas. Each such village should send the village head and one representative of the Women's Union or Youth Union.

Commune-level training is more complex and requires more time than provincial-level training. The commune is the main focal point coordinating with village officials to collect production area data from households. It is also the focal point for reviewing and cleaning data, adding information, updating data later, and storing production area data for all farming households within its administrative area. Experts and Provincial Core Team members need to emphasize the commune's importance in collecting and storing production area data.

Third, village-level training. Each pilot commune selects two or three villages for village-level training. Content and methods are broadly similar to commune-level training but simpler and focus on using the data-collection tool. This is training for farmers (TOF). Pilot villages should be selected using criteria similar to those for pilot communes - for example ethnic representation, characteristics of production areas (new or established), priorities of commune leaders and commitment of village leaders. Experts, Provincial Core Team members and commune technical focal points conduct the training. Commune leaders should mobilize leaders of all villages with production areas. Training must include hands-on use of the tool at household production plots; field use is the core of village-level training.

Each commune selected for pilot training should establish a Commune-level Mobile Task Force to support all remaining villages in the commune with production areas in collecting household production-area data.



The Mobile Task Force should include 2-3 commune focal officers who have completed provincial- and commune-level training and are proficient with the data-collection tool. It should also include another 5-6 village officials who participated in commune-level training. Village officials selected for the Task Force should be agile, proficient with the tool and willing to support households in their own and neighboring villages. Commune leaders should issue a formal decision establishing the Commune-level Mobile Task Force and specifying members' responsibilities.

With support from experts and the Provincial Core Team when needed, members of the Commune-level Mobile Task Force take primary responsibility for helping farming households collect production area data in their localities. Commune officials, especially village officials, understand household production conditions in their villages best. As local residents, village officials also know the status of household production plots, including location, crops grown and households' legal status in relation to the land. They are therefore well positioned to help households collect information on each production plot.

Provincial management agencies should allocate necessary financial resources and/or seek support from other organizations to operate the Provincial Core Team and, particularly, Commune-level Mobile Task Forces. Production area data collection will only be effective if the commune task forces operate actively and smoothly.

Fourth, replicate the production area data-collection model across localities in the province. Village leaders who have received training work with farming households, with direct technical support from the Commune-level Mobile Task Force, to collect data on household cultivated areas within their villages. This process requires commitment and mutual assistance from village officials, timely support from commune task-force members and close direction from provincial and commune authorities, the DAE and its technical agencies. Commitment and mutual assistance from village officials and technical support from the commune task force are necessary conditions; sufficient conditions for province-wide scaling are full awareness and prioritization by village leaders, commune task forces, and Party committees and authorities at commune and provincial levels. Without these factors, expansion to other localities may face difficulties, especially under the current two-tier local-government system in which commune administrations already carry many responsibilities.

Establishing a Mobile Task Force in each commune with sourcing areas can create an important network for connection and information sharing among households within a village, among villages in a commune and among communes. The "peer mutual-support" model supported by several coffee-sector projects in the Central Highlands is one example of community-based organization for sharing information and promoting sustainable coffee production. Shared information includes sustainable cultivation practices, identification and control of pests and diseases, and market-price information. Networks linking households within and across villages and communes have similar potential. Detailed operation of these models and networks is beyond the scope of this report.



5.3 Connecting companies' production area data with management agencies' product traceability systems

As discussed in Section 3.2, some companies in the coffee, timber and rubber sectors hold production area data that enable product traceability to each household plot linked with the company. These data are company assets and are not shared with other parties. This creates risks of overlapping sourcing areas among companies operating in the same locality. Companies' failure to share information with management agencies also creates risks of overlap between production land and forest land.

Company sharing of existing production area data with management agencies would provide several important benefits. First, access to company information would help agencies identify overlap risks among companies' sourcing areas and between production land and forest land and take appropriate action. Specifically, data shared by companies allow agencies to identify overlapping areas and inform the affected companies so the issue can be addressed. In parallel, based on company data and locally managed forest-land boundary data, management agencies can identify overlap between production land and forest land, notify companies of these areas and take appropriate measures.

Sharing company production area data with management agencies would also save resources in production area data collection. Section 5.3 above describes an approach to collecting production area data under resource constraints and time pressure. When companies share existing data, management agencies can significantly reduce the time and cost of mobilizing local staff to collect the same information independently. Data sharing also creates an important basis for stronger connections between the private sector and management agencies and for future cooperation.

Management agencies should use both mandatory measures ("sticks") and incentives ("carrots") to require and/or encourage companies to share their production area data. Government Decree 37 establishes the legal framework for product and goods traceability and makes traceability mandatory for products listed as high-risk. It also provides requirements for coordination and information/data sharing for traceability. Circular 31 of the Ministry of Industry and Trade guides implementation of Decree 37 for products and goods under the Ministry's management. Under the Circular, high-risk products are subject to mandatory traceability, and companies producing or trading these products have a legal responsibility to provide product information as the basis for traceability. For products not subject to mandatory requirements, companies are encouraged to trace through support mechanisms such as product promotion and technical assistance for developing traceability systems. For agricultural and forestry commodities, MAE Decision 25 sets out the Ministry's traceability implementation plan. Although the Ministry has not yet issued a list of products subject to mandatory traceability, its Plan provides a specific roadmap for agricultural and forestry commodities.

Under the EUDR, Vietnam's rubber, timber and coffee exported to the EU must be traceable to each production plot. The MAE directly manages these three commodity sectors. Given the current state of statistical data for these sectors (see Section 3 of this report), meeting the EUDR's traceability requirements and eliminating risks of non-compliance with its legality and deforestation-free requirements will require further measures.



To meet these requirements, the Ministry should use both "sticks" and "carrots" to require and encourage companies in these sectors to share production area data with management agencies. Local management agencies can also pilot mechanisms requiring companies operating in their areas to share production area data. Lessons from such pilots should be consolidated to develop national sector mechanisms and policies. Specific measures could include:

- The Ministry issues a list of products and goods under its management that are subject to mandatory traceability. The list should include all products for which importing markets require traceability, such as those exported to the EU.
- Traceability requirements should follow a roadmap, beginning with large companies (for example, by export revenue) and high-risk products (for example, environmental, social or market risks).
- Design traceability systems for priority commodity sectors, including technology platforms to collect, connect and share information, including production area data shared by companies.
- For companies whose products are subject to mandatory traceability, require sharing of production area data with the local focal management agency, the DAE. Establish strict penalties for non-compliance.
- Encourage companies not on the mandatory traceability list to share their production area data. Establish specific mechanisms to promote and support pioneering companies.

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Photo 6: Hands-on production area data collection in Điện Biên. Source: Forest Trends



6. GOVERNANCE OF PRODUCTION AREA DATABASE INFORMATION

Production area data collected by management agencies and/or shared by companies require effective governance. Effective governance depends on "live" and "clean" input data, secure information systems and appropriate mechanisms for data use and sharing.

6.1 "Live" and "clean" input data

Decree 37 provides that sectoral ministries are responsible for updating information and data on medium- and high-risk products and goods. They are also responsible for updating data quarterly or on an ad hoc basis when required.

Section 5.2 of this report describes a bottom-up approach to production area data collection through local officials, especially Commune-level Mobile Task Forces. "Live" production area data require task-force members to update production area data in their localities annually. They must also ensure that collected data are "clean" and accurate to support synchronization among localities and management levels. Similarly, production area data shared by companies must be "live" and "clean". Achieving this requires management agencies to use both the "stick" and "carrot" mechanisms described in Section 5.3. Without mechanisms that ensure live and clean data, there is a high risk that the dataset will become "dead" after a short period.

6.2 Secure and confidential information systems

Decree 37 contains specific provisions on storage, sharing and confidentiality of information related to products and goods for traceability. It requires organizations operating product-data systems to ensure information security and data confidentiality in accordance with laws on cybersecurity and personal-data protection. It also specifies that data collected for traceability may be used only for management, inspection and supervision by management agencies.

Production area data collected using the method described in Section 5.2 are public assets serving management and macro-level administration, as described in Section 4. Production area information contains personal-data elements and must be strictly protected. Agencies holding the data must ensure secure and confidential storage systems and prevent data leakage or misuse that could create unfair competition among companies operating in the same locality.

6.3 Access to and sharing of information

Decree 37 specifies that data collection, processing and sharing must follow the principles of transparency, defined purpose, appropriate scope and accuracy, and data may be used only for management. For production area data developed by management agencies and/or shared by companies, businesses whose products and goods are subject to mandatory traceability should be granted access to the management agency's traceability system. Using the available data, the system can help a company determine whether its sourcing areas face risks of overlap with other companies operating in the same locality and/or overlap between production land and forest land.



Similarly, companies that are not required to conduct traceability but voluntarily share production area information with management agencies through the agencies' traceability system should be able to access the same type of information as companies subject to mandatory traceability. To encourage voluntary sharing, the system should award these companies a "green check". Management agencies should also develop appropriate policy mechanisms that directly support such companies in promoting their image and brand and in developing traceability systems.



Photo 7: Residents of Chiềng Sinh Commune, Điện Biên Province, participate in training on the production area data-collection tool. Source: Forest Trends



7. BUILDING A "LIVE" AND "CLEAN" PRODUCTION AREA DATASET FOR MANAGEMENT AND TRACEABILITY: AN INEVITABLE PATH FOR THE FUTURE

Traceability of agricultural and forestry commodities is becoming a trend and a requirement in many countries, including Vietnam. An accurate and updated production area dataset not only helps supply-chain actors meet traceability requirements but also provides an important information foundation for developing sector mechanisms and policies aligned with the priorities of the Government of Vietnam. Existing production area data held by management agencies do not yet support traceability and therefore cannot meet the requirements of several key export markets or Vietnam's own requirements.

Building an accurate and updated production area dataset is vital for commodity sectors, especially export-oriented sectors, and is an inevitable direction for the future. Vietnamese management agencies can build such datasets using their own internal resources through a bottom-up approach. This requires decisive engagement by Party committees and authorities at all levels; specific support and guidance from central management agencies to localities; and capacity building for local technical staff, including commune and village officials, to use technology for data collection. In particular, commune and village officials need to recognize household-level production area data collection as one of their official responsibilities.

Building local capacity to collect data for traceability creates a foundation for information exchange among villages in the same commune, among communes in the same province and among provinces. This improves operational efficiency and accelerates data collection. Government needs appropriate mechanisms and policies to require and encourage companies to share their existing production area data with management agencies. Company data sharing not only avoids duplication of data-collection resources but also helps identify risks of overlapping sourcing areas among companies and overlap between production land and forest land. Maintaining a "live", "clean" and secure production area dataset that complies with cybersecurity and information-confidentiality requirements is not only an effective tool for management and macro-level administration but also an important asset for companies, enabling traceability and compliance with requirements in Vietnam and export markets.



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