GUIDANCE C

How To Create A Farm Map

Version 1

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Document Name:		**Document Code:**	**Version:**
Guidance C: How To Create A Farm Map		SA-G-SD-4-V1	1
Date of first publication:	**Date of revision:**	**Valid From:**	**Expires by:**
December 31, 2020	N/A	December 31, 2020	Until further notice
Developed by:		**Approved by:**	
Rainforest Alliance Department Standards and Assurance		Director of Standards and Assurance	
Linked to:			
SA-S-SD-1-V1.1 Rainforest Alliance 2020 Sustainable Agriculture Standard, Farm requirements (1.2.10 and 1.2.11)			
Replaces:			
N/A			
Applicable to:			
Farm Certificate Holders			
Country/Region:			
All			
Crop:		**Type of Certification:**	
All crops in the scope of the Rainforest Alliance certification system; please see Certification Rules.		Farm Certification	

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PURPOSE

This document is a step by step guidance on how to develop maps as indicated in the standard requirements 1.2.10 and 1.2.11 of the Rainforest Alliance 2020 Farm Standard. This guidance document will enable producers, farm managers, and group manager to develop a map of their farm and group of farms. This guidance document will show how to create such a map and enable the reader to do the same. The order of steps on this guidance are a recommendation.

SCOPE

This guidance relates to all commodities that will be certified according to the Rainforest Alliance Farm Standard 2020.

AUDIENCE

This guidance document has been developed for producers, farm managers, and group managers.

IMPORTANCE OF A FARM MAP

A farm map is an essential component for the management of a farm unit or group of farms. The map serves to identify, visualize, and evaluate all the different farm components such as production areas, infrastructures, and natural ecosystems. Based on this, producers, farm managers, and group managers can take decisions on different levels. For example, producers can identify opportunities such as new areas for conservation purposes (riparian buffers, set aside lands, biological corridors); but also challenges and risks and take decisions to mitigate those. For example, if the farm or group members' farms are close to High Conservation Value areas (e.g. protected areas, key biodiversity areas, sites of cultural importance). Mapping production areas also allows to better estimate the yield, which is requested by the Rainforest Alliance Certification Program but also allows farmers to better manage their sales.

REQUIREMENT 1.2.10

Core Requirement

Applicable to: *Large farms part of a group, Group management, Individual certificate holders*

1.2.10 *An up to date map of the farm (large farms) or the farm area (group of small farms) is available, including:*

- *Farms/ farm units / production zones,*
- *Processing facilities,*
- *Human habitation areas,*
- *Schools,*
- *Medical centres/first aid sites,*
- *Natural ecosystems, including water bodies and forests, and other existing native vegetation,*
- *Riparian buffer zones*
- *Agroforestry shade cover,*
- *Protected areas.*

The map also includes risk areas identified in the risk assessment (see 1.3.1). The date of the latest update is displayed on the map.

DETAILS

For large farms and individual certificates

The map requested in the requirement 1.2.10 can be developed using a base-map of the region from an open source satellite (Google Earth), Google My Maps (see *Guidance D: Geolocation data requirements and risk maps*, for additional details on how to use Google My Maps). For large farms and individual certificates, the farm maps must be based on the farm polygon as per requirement 1.2.13. Note that if farm units are located long distances apart, an individual map per farm unit should be provided.

For group management

Group management should develop the map based on the envelope considering the geolocation data of group members as requested in requirement 1.2.12. Progressively, group management should update the maps with the polygons as per requirements 1.2.14 (L1) and 1.2.15 (L2). Group management and farm management can also use Google Earth or Google My Maps (see *Guidance D: Geolocation data requirements and risk maps*, for additional details on how to use Google My Maps) to develop the map.

Considerations

The map must include a short legend of what can be seen in the map and a north arrow to shows the true magnetic north. This map cannot be developed using a sketch. The map should be in a digital format.

REQUIREMENT 1.2.11

Core Requirement

Applicable to: *Small-farms part of a group certification*

1.2.11 A sketch of the farm is available, including:
- The production area of certified crop
- Forests
- Water bodies, and
- Buildings

DETAILS

Small-farms

Small-farms part of a group certificate must present a sketch of their farm. The sketch can be developed by hand drawing. With the support of group management, a small farm could eventually also present a drawing based on a satellite image (as shown below).

Considerations

The sketch must include a short legend of what can be seen in the drawing and a north arrow to show the true magnetic north.

HOW TO DEVELOP A MAP FOR AN INDIVIDUAL FARM CONSIDERING THE DIFFERENT FARM UNITS (1.2.10)

STEP 1: DEFINE FARM BOUNDARIES

First, the farm boundaries are mapped, as is shown in Figure **1**. A satellite image from google earth is used as a base-map to project the area of the farm. This may be done manually using google earth applications. It is also possible to download the polygon of the farm. In the top-center, the title of the map is displayed. In the top right corner of the map, a north arrow shows the magnetic north. In the bottom right of the map, a scale using kilometers shows the scale of the map correctly. In the legend on the right, the farm ID is shown.

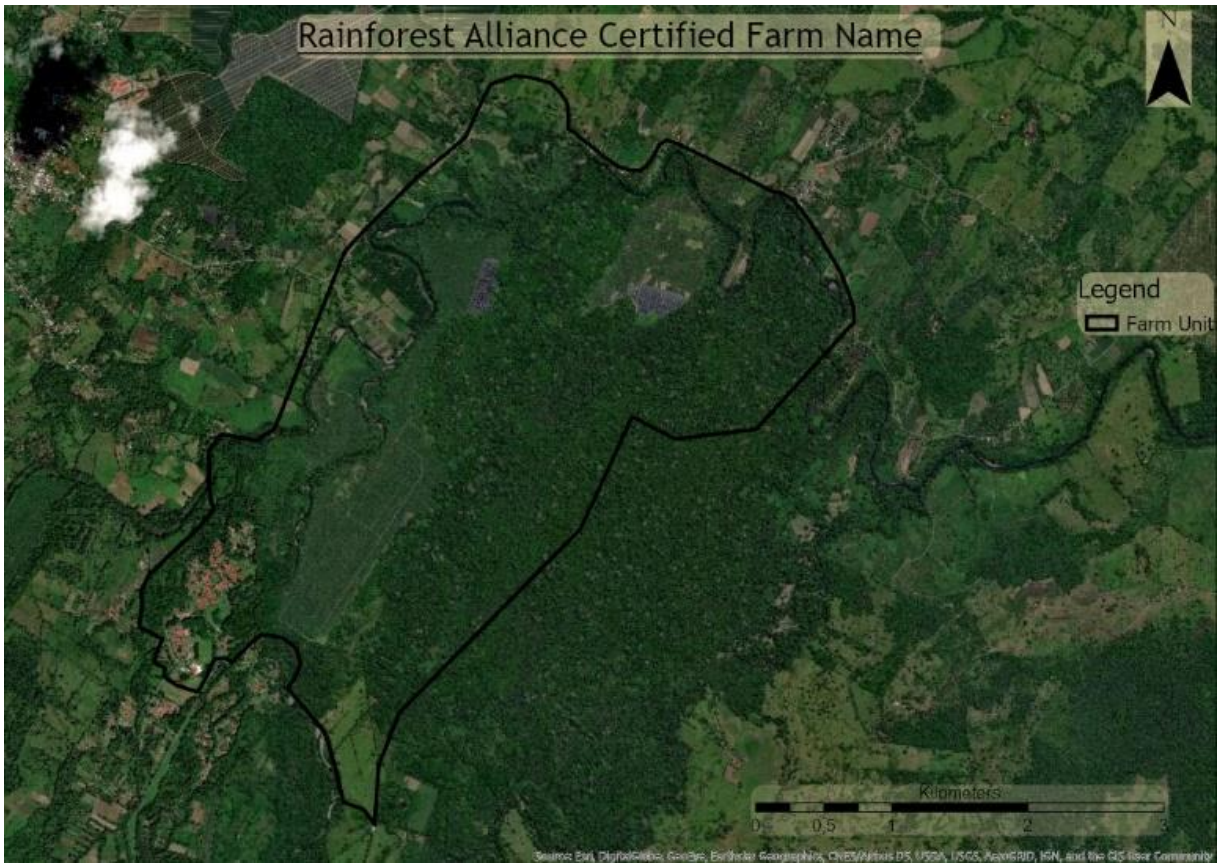

Figure 1. *Farm boundaries*

STEP 2: DEFINE PRODUCTION AREAS

The second step is to identify the production areas (e.g cocoa, coffee, banana, agroforestry systems, other crops) as shown in
Figure **2**. The legend must be updated, to include all types of production areas. Each production area should be drawn inside farm boundaries. In Figure 2 Each type of production area is displayed with a different color to make it easier to identify the different production areas (e.g. cocoa agroforestry is in dark yellow).

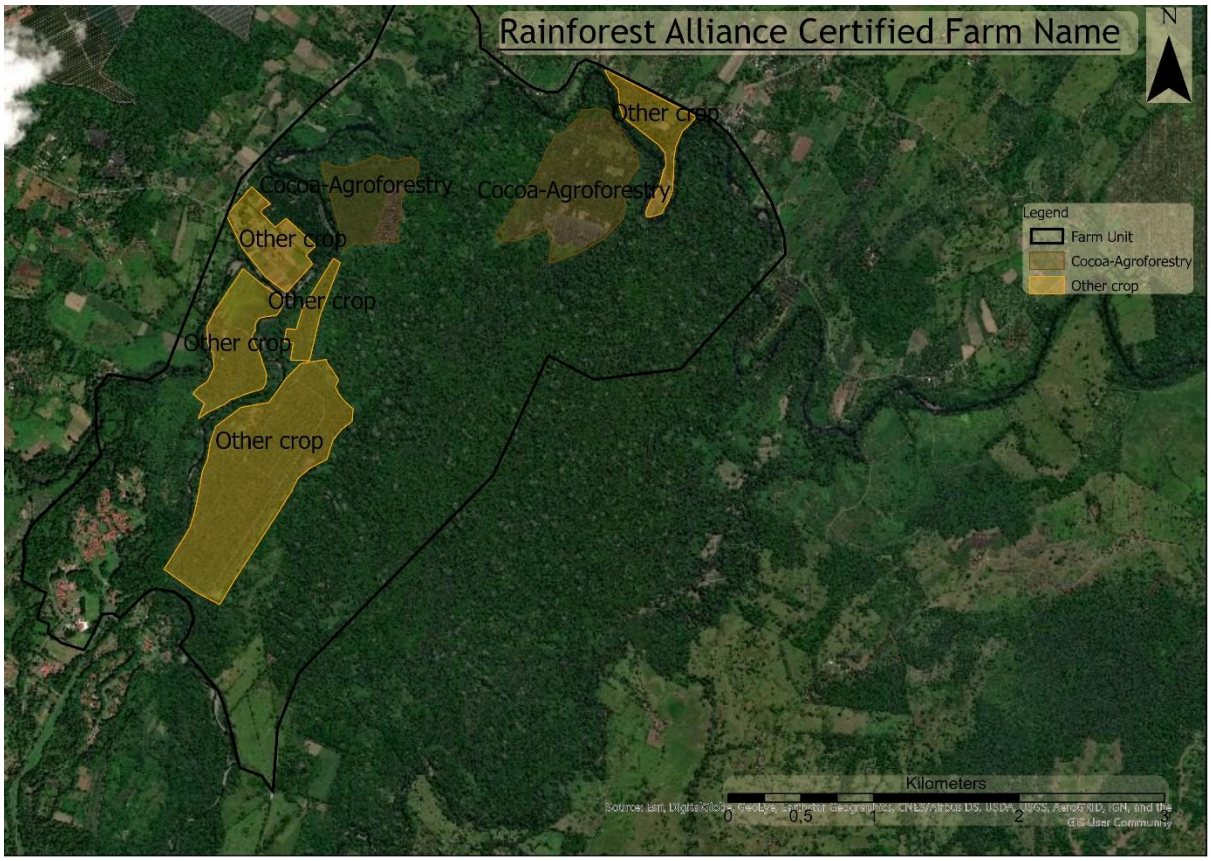

Figure 2. *Production areas (cocoa-Agroforestry and other crops)*

STEP 3: INDICATE HUMAN SETTLEMENTS, MEDICAL CENTRES, SCHOOLS AND PROCESSING FACILITIES

The third step is to map infrastructures such as human settlements, housing, medical centers, processing areas etc. This is shown in Figure 3. Each type of infrastructure should be given a number that can be read from the legend. In this example, the red area with the number "1" (one) represents the housing area, and the small area with the number "4" (four) represents the schooling area.

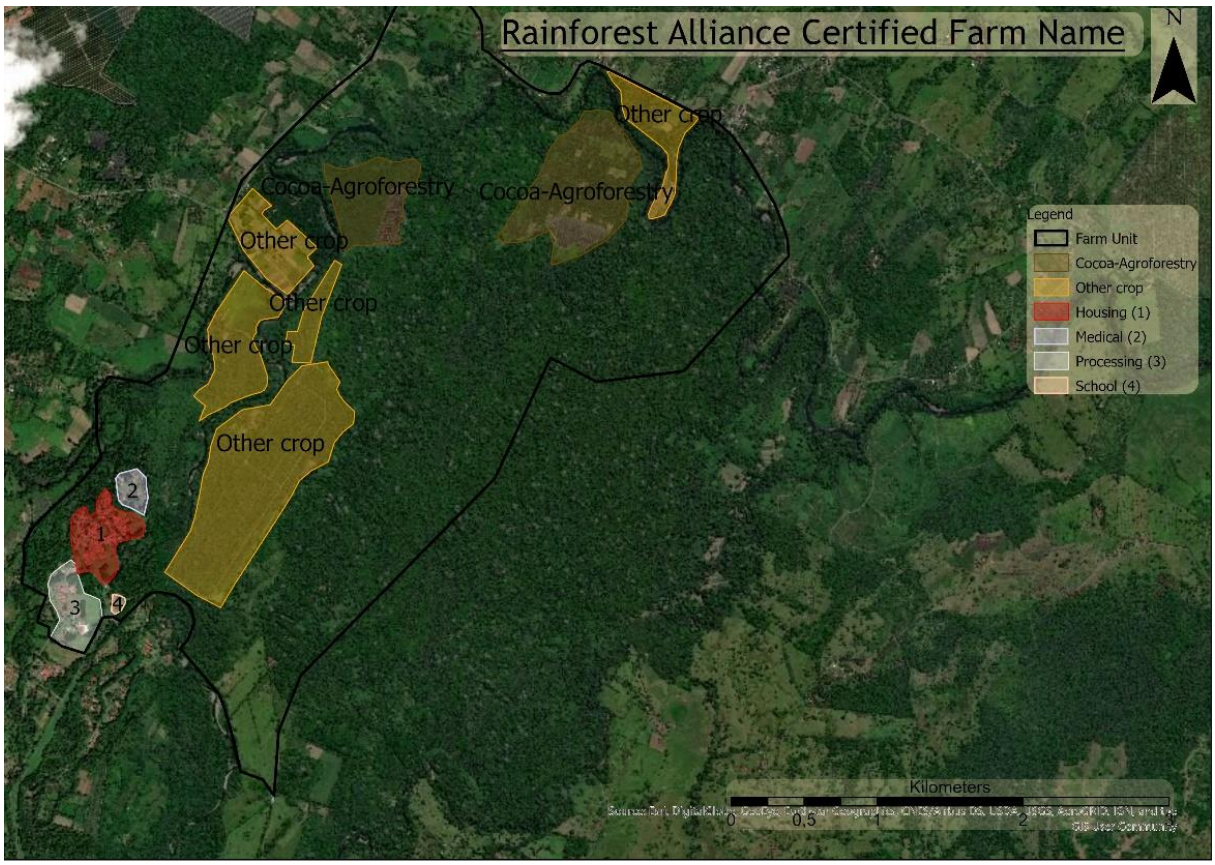

Figure 3. *Facilities located in the South-West of the farm boundaries*

STEP 4: MAPPING NATURAL ECOSYSTEMS IN AND OUT OF FARM BOUNDARIES

The next step is to map all-natural ecosystems in and out of the farm boundaries, such as natural forests, riparian buffer zones, aquatic ecosystems, among others. In this example (Figure 4) primary forest, river, and forest patch and the riparian buffer zone are mapped. The legend again must be updated with the right color to give information on what is shown on the map. Please refer to the 2020 Rainforest Standard glossary for clarity on the definition above.

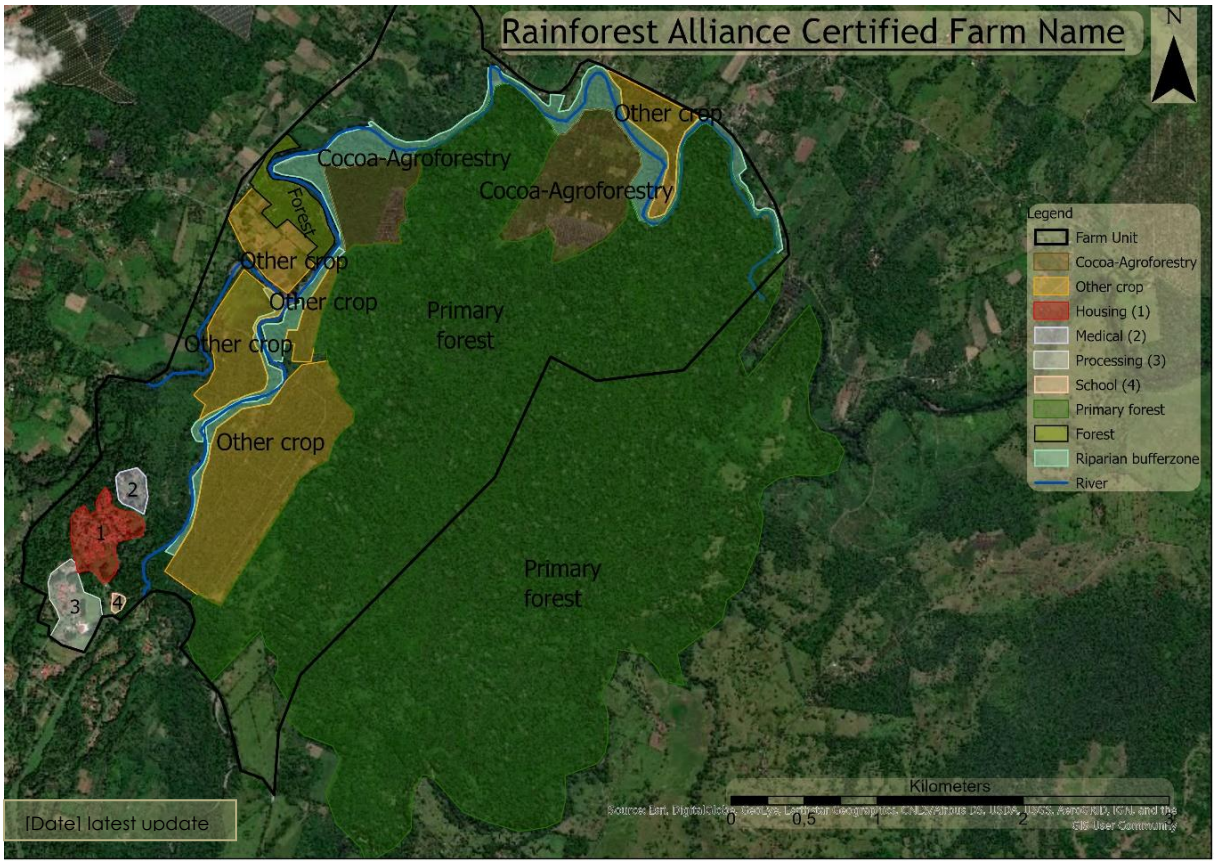

Figure 4. *Map including Natural ecosystems as; 1) Forest, 2) Waterbodies, 3) riparian buffer zones*

STEP 5: MAP OUTCOME OF RISK ASSESSMENT (HCV AREAS)

The next step is to map the outcome of the risk assessment regarding HCV areas. In this example, the farm is located inside a Key Biodiversity Areas (KBA) and near a UNESCO world heritage sites (UNESCO Site). These two outcomes are added and shown in Figure **5**.

The map must be updated to represent the reality of the situation in the field and must indicate the date when it was updated last.

[Date] latest update

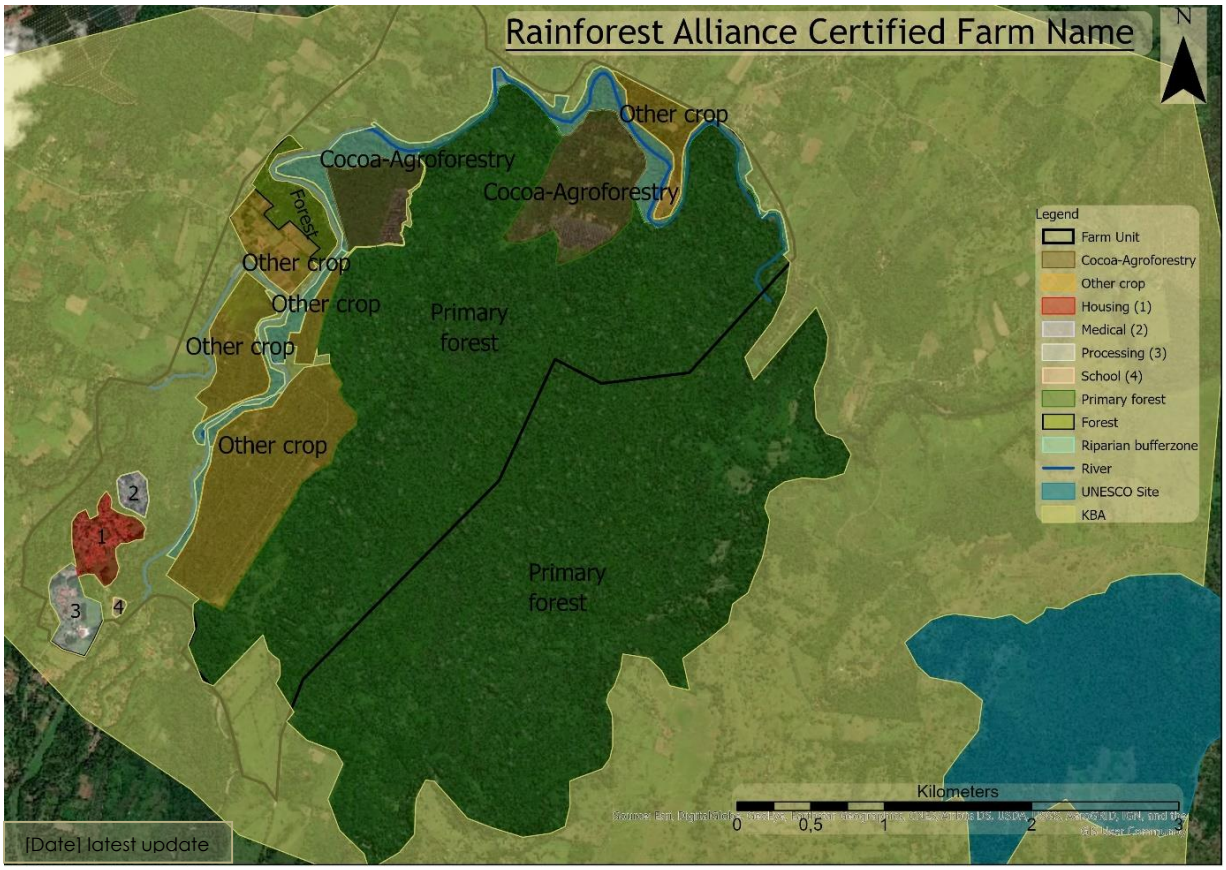

Figure 5. *Outcomes of the risk assessment (Key Biodiversity Area and UNESCO World Heritage site) are added to the map*

HOW TO DEVELOP A MAP FOR A GROUP OF FARMS WITHIN AN ENVELOP (GROUP CERTIFICATE) (1.2.10)

STEP 1: DEFINE THE BOUNDARIES OF THE GROUP ENVELOP

The first step is to define the group envelop, meaning the area managed by one Group Management, also defined as *geographical scope*. As in Figure 6, group managers must map the group members' farm locations. This map includes the title showing the member ID in the top center of the map, a north arrow, a scale bar in the bottom, and a legend. Satellite imagery is used as a base-map.

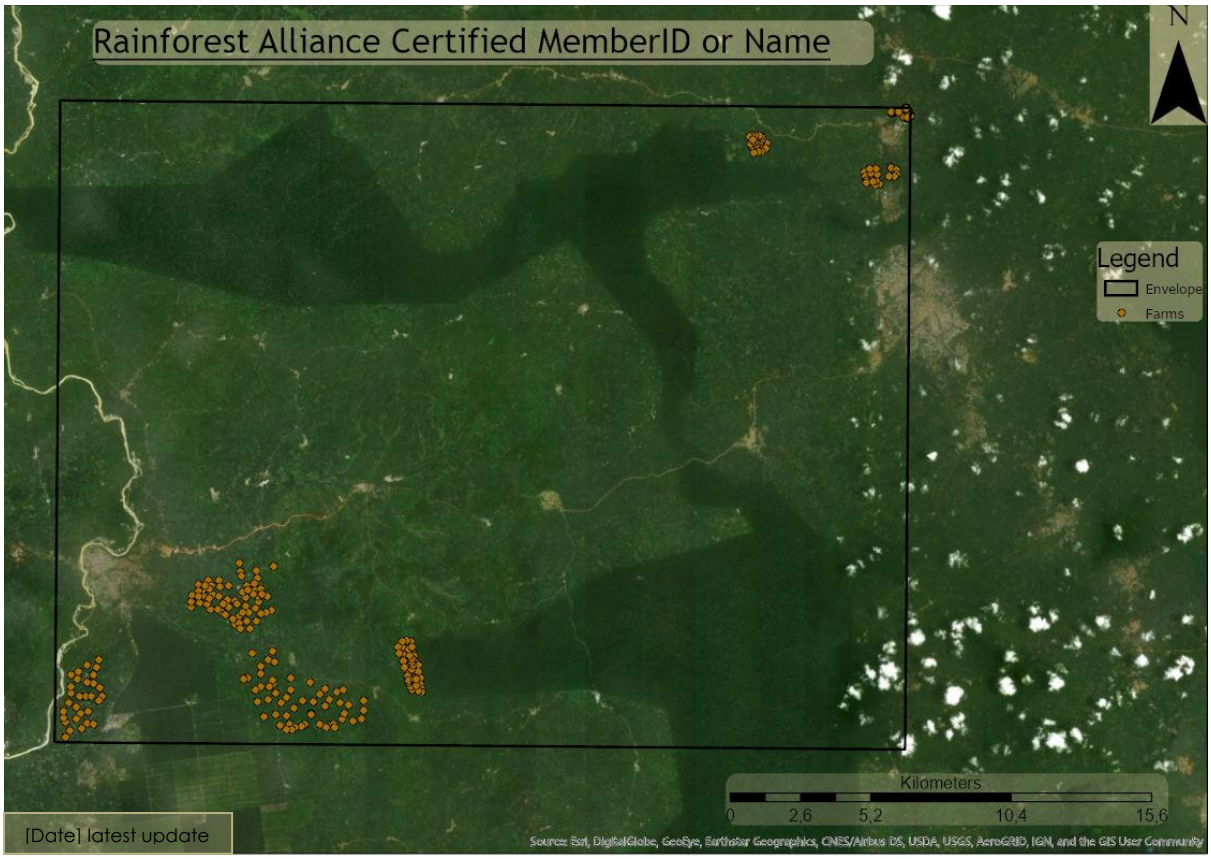

Figure 6. *Envelope of production area, indicating current group members*

STEP 2: DETERMINE THE LOCATION OF NATURAL ECOSYSTEMS WITHIN THE GROUP ENVELOP.

The group manager must identify the location of natural ecosystems within the group envelope. In figure 7, a protected area and a river were identified. Group managers should also map the outcomes of the High Conservation Value areas in risk assessment)if the farm is located close to a Key Biodiversity Area, an Intact Forest Landscape, a UNESCO World Heritage site, or a Ramsar Site.

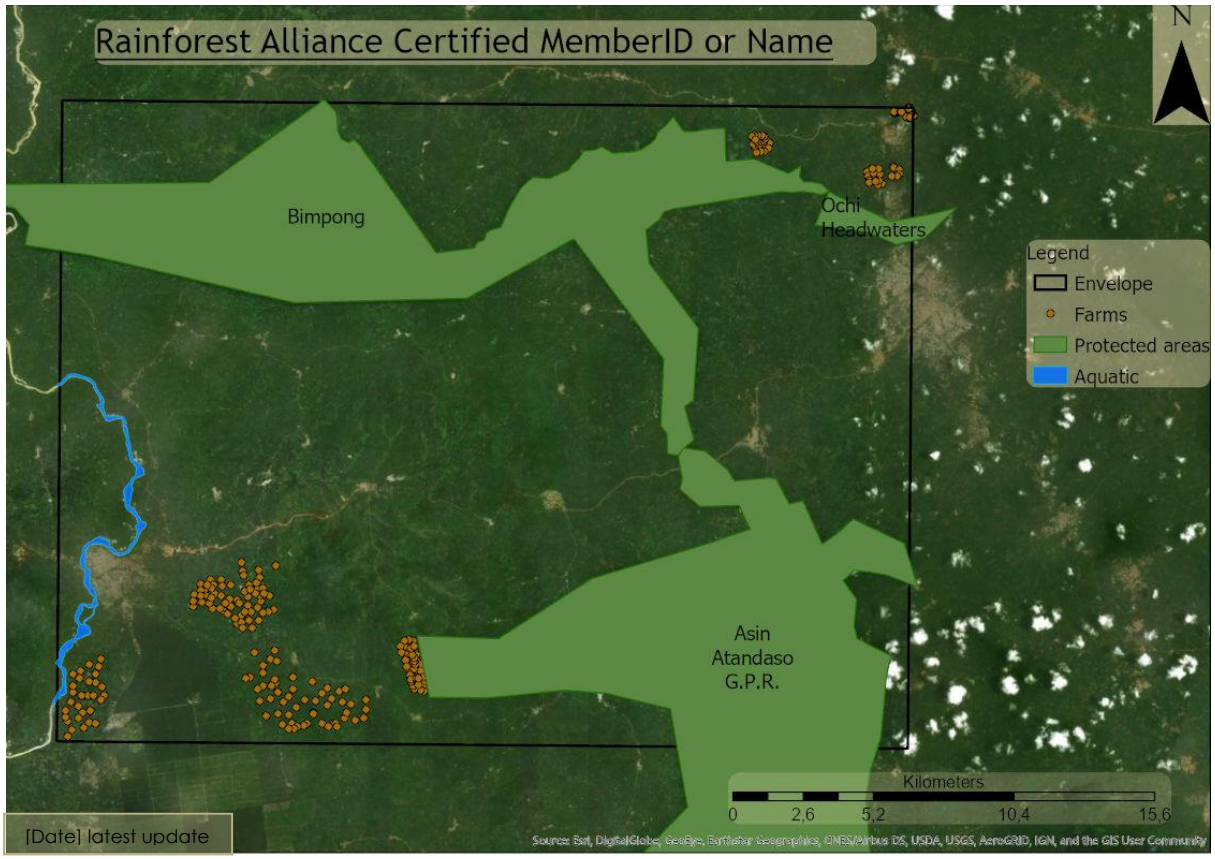

Figure 7. *Production envelop including natural ecosystems*

STEP 3: INCLUDE INFRASTRUCTURE, BUILDINGS, HEALTH AND EDUCATION CENTRES

The following step is to include the infrastructures such as roads, human settlements, processing facilities, schools, and medical centers, among others, as displayed in Figure 8. The map must be updated to represent the reality of the situation in the field and must indicate the date when it was updated last.

[Date] latest update

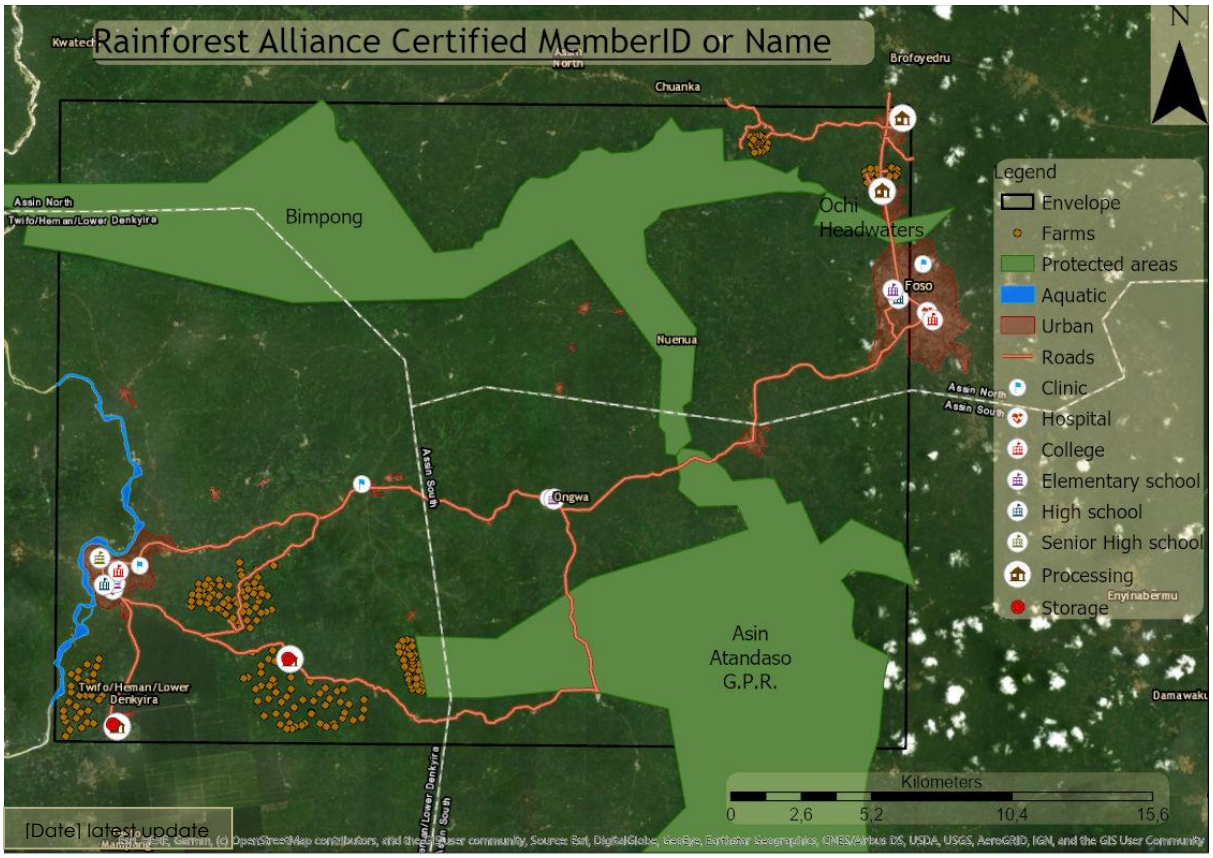

Figure 8. *Final map including infrastructure, waterbodies, protected areas, and forests*

HOW TO DEVELOP A MAP/SKETCH FOR A SMALL-HOLDER FARM PART OF A GROUP CERTIFICATE (1.2.11)

The first step is to define the farm boundaries. The second step is to identify production areas. In the example below, these are identified as certified crops and non-certified crops. The producer should also indicate the location of natural ecosystems such as forests, natural vegetation, or aquatic ecosystems. Finally, the producer must indicate the location of infrastructures, such as housing. The map must be updated to represent the reality of the situation in the field and must indicate the date when it was updated last.

[Date] latest update

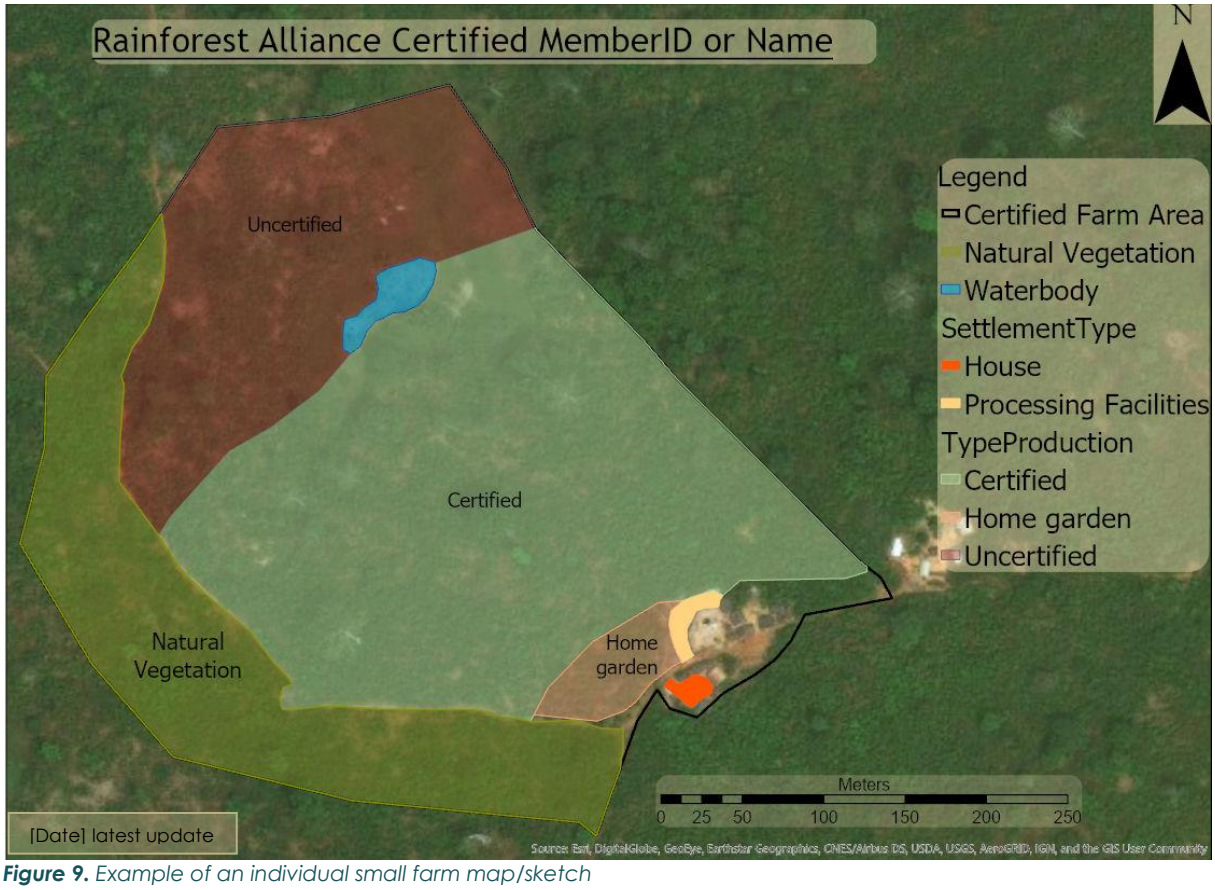

Figure 9. *Example of an individual small farm map/sketch*