HCS-HCV Simplified Smallholder Approach for Indonesia

Requirements and practical guidance for smallholder groups

[Draft for approval]

2022

Acknowledgement

These requirements and practical guidance were developed by SPKS (Serikat Petani Kelapa Sawit - Oil Palm Farmers Union) in collaboration with the HCSA (High Carbon Stock Approach) Secretariat, the SHWG (Smallholder Working Group), and the HCSA Executive Committee.

The Oil Palm Farmers' Union (SPKS, Serikat Petani Kelapa Sawit) carried out field tests of draft versions in West Kalimantan, Indonesia in 2019, 2021 and 2022.

The High Conservation Value Network (HCVN) supported its development as part of the HCSA SHWG and provided recommendations for the development of proxies and adaptations of High Conservation Value (HCV) categories for a smallholder context.

The HCSA Secretariat thanks all concerned for their valuable contributions.

Note on the implementation of this toolkit

This toolkit was developed and tested in the Indonesian context and for smallholder farmers that produce palm oil in mixed production landscapes, i.e., in combination with other commodities including rubber, agroforestry systems, home gardens, and that manage forest areas as part of shifting cultivation regimes or as customary forests. This toolkit has not been tested for pulpwood plantations; thus, its current applicability scope is confined to palm oil and rubber smallholders. This toolkit should only be used in Indonesia where village or community land use decisions are still the dominant form of land / resource governance.'

The toolkit includes references that are specific to the Indonesian context, however, its underlying principles, concepts, and participatory as well as assessment methods will to a large degree be applicable also to other commodities and regions.

The HCSA Secretariat and SHWG understand this version will be adopted as a new module of the HCSA toolkit and is a first step towards the development of a global, cross commodity requirements and practical guidance for smallholders. The work on the development of these requirements will continue, and this toolkit will be reviewed in regular intervals to incorporate feedback and lessons learned.

The toolkit incorporates the assumption that its implementation needs to be supported by other parties such as local government, HCSA members, local NGOs, or technical experts, because smallholder groups may not have the capacities and resources to implement this toolkit on their own. Incentives and benefits are crucial in encouraging uptake of the toolkit and smallholders would probably need support in this regard.

The objective to have a 'lighter' and digitalised version of the toolkit is supported by the HCSA Secretariat and the development of this toolkit will be done towards achieving this objective.

Acronyms

AOI	Area of Interest
DBH	Diameter at Breast Height
DEM	Digital Elevation Model
FPIC	Free, Prior and Informed Consent
HCSA	High Carbon Stock Approach
HCV	High Conservation Value
HCVN	High Conservation Value Network
ICA	Important Community Areas
IFL	Intact Forest Landscape
NGO	Non-government Organisation
RSPO	Roundtable on Sustainable Palm Oil
SHWG	Smallholder Working Group
SPKS	Serikat Petani Kelapa Sawit / Oil Palm Farmers' Union, Indonesia

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PART 1: INTRODUCTION TO THE SIMPLIFIED TOOLKIT

Objectives

Main objectives of the simplified toolkit

To provide requirements and practical guidance for smallholder to implement the toolkit in their administrative areas.

To provide requirements and practical guidance for smallholder groups to ensure fair and equitable inclusion of relevant stakeholders in decision making processes as part of the implementation of the toolkit based on the principle of free, prior, and informed consent (FPIC).

To provide requirements for field verification of maps to determine land cover, land use and conservation areas, including for support organisations or individuals.

The overall aim of this toolkit is to provide requirements and practical guidance for smallholder groups to identify and manage forests and other conservation values in their administrative areas. It is designed to provide simple, clear steps to formulate and implement an initial plan to manage these forests and other conservation values sustainably.

By conserving forests and not turning them into plantation areas, the carbon stock remains stored in the ecosystem[1] and the ecosystem itself is conserved. Moreover, the social and economic significance of forests and other areas to fulfil basic community needs is recognized and can be maintained or improved over time. Identifying and conserving forests with smallholders and local communities is carried out via a participatory and rights-based approach

Smallholder groups can address key risks that occur not only in large-scale but also in small-scale plantation developments. These include:

- Deforestation,
- damage to important biodiversity values that depend on the health of forest and other ecosystems,

[1] Carbon is stored in 5 different parts in the ecosystem: 1) Above-ground biomass, 2) Below-ground biomass, 3) Leaf litter and twigs, 4) Dead wood, and 5) Soil (CIFOR, 2017).

- damage to basic needs of local communities that depend on the health and accessibility of forest and other ecosystems and the services that they provide, e.g., water regulation, food, fibre, medicine, or important spiritual or cultural values.

Application of this toolkit also helps to mitigate national greenhouse gas emissions by conserving forests and other ecosystems, e.g., peatlands. This is important as the land use sector in Indonesia is the highest contributor to national greenhouse gas emissions resulting from land-use change, fire, and new land opening for plantations. The Nationally Determined Contribution (NDC) of the Republic of Indonesia, e.g., states that carbon emissions from the forestry and agriculture sectors are the largest sources of national emissions - 757.5 MTon CO2e – which includes forest and land fires[2].

When identifying and protecting forests, also the High Conservation Values that are found in these forests – e.g., animals, plants, food, rivers, streams, sacred sites – can be maintained or improved over time. Also, High Conservation Values outside of forests – e.g., peatlands, wetlands, rivers, streams – can be identified and maintained within the agreed ICLUP (Integrated Conservation and Land Use Plan) of the smallholder group.

This toolkit includes the identification of 'Important Community Areas', which to a large degree are synonymous with High Conservation Value categories 4 – 6. Accordingly, the concept of 'Important Community Areas' includes important customary forest areas, sacred sites, and critical ecosystem services such as fresh water sources, catchment protection and it recognizes existing livelihoods and basic needs of smallholder communities in mixed production landscapes.

Definition of smallholder groups

This toolkit is primarily intended for **independent smallholder groups** (hereafter referred to as 'smallholder group') in Indonesia, who want to apply the toolkit in their administrative areas. Ideally, the unit of analysis that forms the basis for implementation is the administrative village area but areas under community control may also be included (see chapter 1.3 for details).

Note: For scheme smallholder groups, plantation companies or processing plants should implement the full High Carbon Stock Approach. However, this toolkit may be **applicable for scheme smallholder groups to aid them in participatory and field processes for the identification of HCS forest and HCVs and land use planning at a landscape level, especially if the scheme smallholder group is not supported by producer partners in the implementation of this toolkit.**

Independent smallholder group: Independent smallholder group is defined as a group of farmers who own land or have long term lease or sharecropping arrangements to a certain maximum farm holding size[3], live in villages, use the farm as their main income, are free to manage their land and its production, and the farm is based primarily on their own family labour and capital. The term 'smallholder group'

[2] First Nationally Determined Contribution Republic of Indonesia, November 2016

[3] For Indonesia: 10 hectares. For community pulpwood plantations they may be a maximum of 15 ha according to the Ministry of Forestry Regulation 23/2007 (source: http://www.cifor.org/publications/pdf_files/articles/ AObidzinski1001.pdf Page 341)

includes small-forest producers, local and traditional communities, and Indigenous peoples.

Scheme smallholder group: Scheme smallholder group is defined as a group of farmers who are structurally bound by contract, by a credit agreement or by planning to supply a particular mill or processing facility, thus do not qualify as independent smallholders.
Scheme smallholders[4] are related by structure and fund to estates or oil palm factory as the scheme managers. Scheme smallholders do not have the right to choose which commodity to grow and planting material, technology, and management to be applied as well as institution are directed by the supervising estates or factory (RSPO, 2010).

[4] National Interpretation RSPO Principles & Criteria for Sustainable Palm Oil Production, https://www.rspo.org/library/lib_files/preview/519 (last accessed 26 June 2022)

How can smallholder groups benefit from the application of this toolkit

Climate change is a real threat that will potentially impact smallholders. Among them could include extreme storm events, heat waves, droughts, and floods. The application of this toolkit which includes the conservation and management of forests may help to prevent or mitigate these threats at local and landscape levels.

In addition, smallholder groups may benefit from the maintenance of ecosystem services as they are linked to the existence of healthy forests and ecosystems. These may include water regulation, biodiversity for food, fibre or medicine, carbon storage, and other services. Land utilisation is likely going to be more productive, and in combination with good agricultural practices commodity production may be intensified and diversified. The international market is increasingly demanding for deforestation free commodities and there is a growing literature that shows premiums or preferential access for sustainably grown agricultural commodities. Through the application of this toolkit, smallholder groups can organise themselves and increase their access to these markets. Smallholder groups can produce their commodities 'deforestation-free', while receiving agreed-upon incentives or benefits from public or private sectors.

Figure 1: Basic community need; villagers in West Kalimantan using river for washing, cleaning, and recreation

A core component of the implementation of HCS forest/HCV protection with smallholders and local communities are incentives and benefits. Without these it is difficult to ensure conservation and protection will be achieved as the responsibility for protection does not just lie with the local communities but with external stakeholders including supply chain partners and consumers. SPKS and HCSA are currently trialling approaches to incentives and benefits and will update the toolkit finalised.

PART 2: IMPLEMENTATION OF THE SIMPLIFIED TOOLKIT

Overview of implementation stages

The toolkit consists of six implementation stages (see **Error! Reference source not found.**). Each implementation stage is explained in a separate chapter. Moreover, practical guidance is provided for each of the six implementation stages.

All implementation stages are also 'translated' into an **implementation checklist** that must be filled in during the implementation of this toolkit. The checklist can be found in the supporting document:

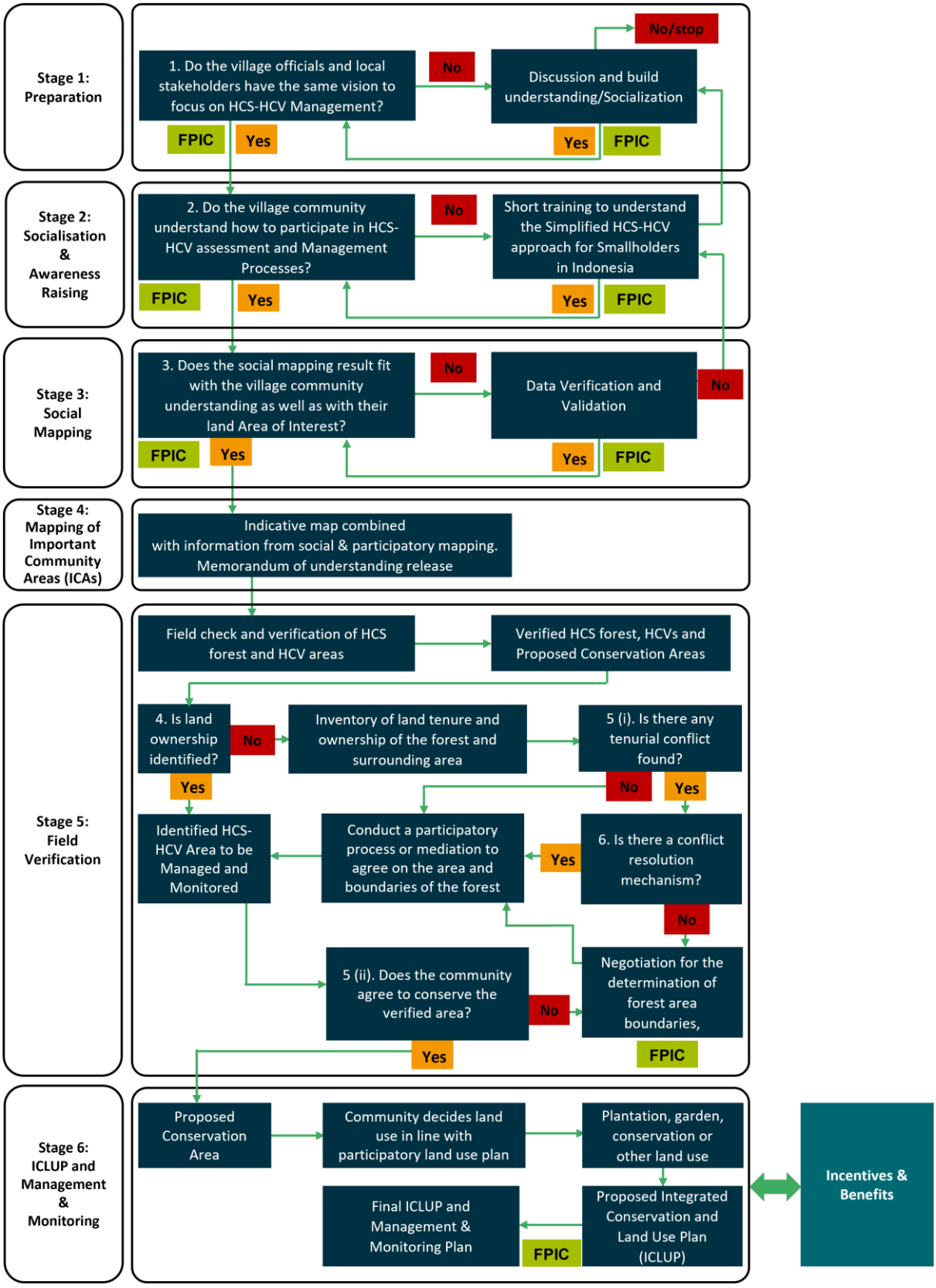
Simplified Toolkit for Indonesia – Templates and checklists for implementation / Implementation checklist (Template 1)

The flow of the implementation stages is a recommendation and can be adapted for the local context. For instance, if the smallholder group and other stakeholders agree, stages 1 and 2 or stages 3 and 4 can be carried out simultaneously. However, it has to be ensured that the quality of the outputs is not compromised.

However, each implementation stage must be completed based on consensus of all members within the smallholder group and community representatives. For example, even if the stages 3 and 4 are carried out together two separate consensus-based decisions points (one for stage 3 and one for stage 4) must be done and evidence for each decision point must be provided.

The decision tree below summarises the flow of the toolkit implementation process and the decision points along the way towards an Integrated Conservation and Land Use Plan (ICLUP) and management and monitoring.

Figure 2: Decision Tree



Stage 1: Preparation

Method:

Group coordination meetings, village meetings, one-on-one meetings, etc. (meetings are done usually for a few times)

Minutes from meetings and share with participants

Objectives:

Ensure participating smallholder farmers are part of a smallholder group and group members agree to implement the Simplified Toolkit. A leader is appointed for the group and rules for group members are communicated.

Obtain approval from village officials and relevant stakeholders to implement the Simplified Toolkit.

Identify and appoint a support team (if necessary) and ensure agreement with smallholder group.

Define Area of Interest (AOI)

Materials / Documents:

Socialisation Materials

Simplified Toolkit including checklist

Maps (e.g., village administrative boundaries, concession maps under licence, land cover maps, indicative HCS/HCV maps)
Supporting information

Expected Output:

Formation and description of the smallholder group (ideally this can be done in writing and describe the structure and function of the group)
Working map: indicative map overlaid with other maps and information such as boundaries, licensed concession maps, land cover maps, and HCS-HCV threshold.
Team composition (local representative, technical experts, facilitators, etc)
Timeline of activities approved by the village/community/cooperative
Minutes of meetings (the minutes must document discussion points and whether decisions were taken with consent of all participants or were postponed)

Estimated Time:

10 - 14 days (it is important to allow sufficient time to plan and facilitate initial agreement with relevant stakeholders)

1.1. Establish a smallholder group & agree to implement this toolkit

The Simplified Toolkit can be implemented by smallholders who are members of an organisation - e.g., a cooperative or farmer group (*Poktan*), association of farmer groups (*Gapoktan*) - or it can be implemented at the village level (more than one village could be involved). This smallholder group must have an appointed leader, and it must have rules for group members that are communicated to every smallholder that joins the group. All group members must agree to implement the toolkit.

However, many smallholders in Indonesia, especially in the oil palm sector, have yet to join any organisations. Smallholders who are not part of an organisation can join an existing organisation or establish an organisation in their administrative village area.

Also, the smallholder group must gain approval from village officials and community members and groups to implement this toolkit. This is one of the most important objectives of the preparation stage. It is important to have the consent of the village officials and leaders as the successful implementation of this smallholder approach relies entirely on the engagement of all relevant stakeholders.

To gain approval, usually a few group meetings and/or one-on-one meetings are necessary to explain this toolkit and how the smallholder group or village can benefit from its application. Best practice is to write meeting minutes and to always share them with participants.

Approval to implement this toolkit must be gained through a process that qualifies as **free, prior, and informed consent** (FPIC). For the purpose of this toolkit, this means approval must be given by consensus, i.e., without expression of a clear objection. In Indonesia this is the 'Musyawarah Mufakat 'process. Members of the smallholder group or community members and groups may express concerns or criticism, but if these are not as strong as a clear objection, then the implementation process may go ahead. Best practice is to document the concerns and criticism and to speak about them from time-to-time.

In cases where the local officials and leaders are not convinced to implement this toolkit, the cause to the disapproval needs to be identified and recorded by the smallholder group and support team (if available). The support organisation may need to evaluate the situation and decide the suitable actions to rectify issues in order to gain consent of the village officials to implement this toolkit.

1.2. Roles and composition of the support team

It is likely that the smallholder group will need expert support to implement this toolkit. We recommend engaging HCSA members for technical support, and the HCSA Secretariat is happy to facilitate contact with technical support organizations or other membership organizations.

As little support as necessary may be provided by the technical and local expert support team, but we anticipate that capacity building and training, mapping, field data analysis, and development of a village land use plan will need at least some level of technical support.

The expert support team may consist of an actual team of two or more people or may consist of a single person. We recommend filling below roles to ensure a smooth implementation process:

1. **Technical expert(s):** These are preferably local or national experts in mapping and data analysis that have access to necessary software packages, online information, and that can produce digital and hardcopy maps of the AOI. However, appropriate international expertise may be acceptable.

2. **Local expert(s):** This may be regional or local people that understand the local context - e.g., including customary practices, relevant stakeholders, land use dynamics, common production practices – and are interested to provide input during toolkit implementation.

3. **Facilitator(s):** This may be regional or local people that understand the local context and are interested to facilitate meetings, engage with smallholder farmers and relevant stakeholders, and to translate, if possible, from local languages or dialects to Bahasa Indonesia.

   Additional team members from the village or surrounding communities may be invited at each implementation stage to ensure proper representation of women and youth. This may become increasingly important prior to field work and/or village consultations.

   However, **all team members must have consent from the smallholder group and community members and groups** to participate in the toolkit implementation.

Table 1: Possible role descriptions for team members

Technical expert(s)	Identify best possible maps and spatial information for toolkit implementation in the AOI (e.g., HCS indicative map for Indonesia, HCV 1-3 probability map, administrational layers, infrastructure, DEM, satellite imagery) Identify previous studies (HCV or HCS) that have been carried out in landscapes or companies located around the AOI Desk study to identify protected areas and conservation areas based on Law no. 5/1990 for the AOI Desk study to identify background information for the AOI (e.g., stakeholder information, governance and administration, socio-economic context, village administrative area) Desk study to prepare thematic maps for the AOI that can be used for implementation stages 1 – 6 Capacity building and training of team members
Local expert(s)	Explain local context in the AOI (e.g., local community dynamics, local stakeholders, quality of relations between local stakeholders, common production practices, land use history, development plans, land rights, existing tensions, sensitive topics) Explain customary practices related to forests and other natural resources Engage with smallholder farmers, community members and groups and relevant stakeholders on specific topics to identify information or gain clarity Translate from local languages or dialects to Bahasa Indonesia Ideally, local expert(s) are from local NGOs, the village, or surrounding communities

Facilitator(s)	Engage with smallholder farmers and relevant stakeholders to acquire feedback and consent Facilitate meetings and village consultations Translate from local languages or dialects to Bahasa Indonesia Ideally, facilitator(s) are from local NGOs, the village, or surrounding communities
Field team	Support field data collection

The role descriptions are recommendations and can be adjusted during toolkit implementation and as suitable for the specific context.

We anticipate that over time a 'professional community' or pool of local expert(s), facilitator(s), and field teams can be built up in different landscapes or jurisdictions in Indonesia. Ideally, people that were trained and participated in previous toolkit implementations can help other smallholder groups to implement this toolkit.

The HCSA Secretariat strongly encourages the **training and participation of women, youth, and Indigenous Peoples** during toolkit implementation.

1.3. Define the Area of Interest (AOI)

The smallholder group must define an Area of Interest (AOI) for which this toolkit can be implemented. The AOI must be large enough to **enable the development of a meaningful Integrated Conservation and Land Use Plan (ICLUP)** that contains areas for conservation, ICAs, and areas for development. However, the AOI should not be too large and should not include areas that are far beyond the control or influence of the smallholder group.

At minimum the AOI must include the **village administrative area and a wider landscape**. The buffer zone must be included to allow for identification of nearby forests or protected areas that may be utilized or impacted by villagers or the smallholder group. Also, the buffer zone must be included to minimize boundary or edge effects.

It is difficult to set a threshold for the extent of the buffer zone. We recommend a pragmatic approach based on an estimation of the average travel distance of villagers and smallholder group members. As a default, a **wider landscape of 5 km distance around the village administrative** area may be used. We are aware of varying local contexts, however, and smallholder groups may adjust this value.

Note: Field verification must be done for the village administrative area but is optional for the wider landscape.

What can you do when the village administrative area and actual area claimed as their customary lands are different?

In practice, the village administrative area may deviate from the area that is claimed by the community as their customary lands. The area may be smaller, larger, or in some cases may even extend over more than a single village administrative area.

In these cases, all relevant administrative areas and buffer zones should be mapped, but the actual area that is claimed may be delineated during implementation stage 3 (social mapping) and implementation stage 4 (mapping Important Community Areas).

Field verification must be done for both the areas.

Stage 2: Socialisation & awareness raising

Method:

Capacity building and training of expert support team (e.g., 1 – 2 initial trainings, depending on the level of understanding and number of participants)

Group coordination meetings, village meetings, one-on-one meetings, etc. (meetings are done until consensus is reached)

Minutes from meetings and share with participants

Objectives:

Ensure the expert support team understands this toolkit and how they can support the implementation process.

Identify all smallholders, community members and groups, and relevant stakeholders – e.g., heads of households, women, youth, Indigenous Peoples - and understand how village decision-making processes work.

Consult smallholders, community members, groups and their representatives and gain their consent for expert support team and for implementation of this toolkit.

Materials / Documents:

Socialisation Materials

Simplified Toolkit including checklist

Maps (e.g., village administrative boundaries, concession maps under licence, land cover maps, indicative HCS/HCV maps)

Supporting information

Expected Output:

The expert support team understands this toolkit and understands how to support its implementation

All smallholders, community members and groups are consulted and have given their consent to implement this toolkit

Minutes of meetings (the minutes must document discussion points and whether decisions were done with consent from all participants or if they were postponed)

2.1. Train the Expert support team

The technical and local experts (see chapter 1.2) that lead the support team must have experience with working at the village level and with smallholders, as well as with the full HCSA or with this toolkit. The HCSA Secretariat can be contacted to provide or recommend technical experts.

Technical experts may be needed to train the support team through a comprehensive, up-front training of 1 – 2 days, followed by refresher trainings from time-to-time. Or they may train the

support team through targeted trainings prior to the start of an implementation stage. Whichever works best for the local context is fine.

The most important thing is that all support team members are aware of their specific tasks and roles in the team. A collaborative atmosphere must be established, so that especially regional and local team members feel empowered to learn and to engage with smallholder farmers, the community, and relevant stakeholders.

The HCSA Secretariat is working to develop capacity building and training materials for the Indonesian context based on input from consultants. This section will be updated as soon as possible.

2.2. Identify relevant stakeholders and customary decision-making processes

The smallholder group and the support team must offer options to all community members or groups to provide feedback or to withhold consent, e.g., if they do not agree that certain activities take place on their lands. To ensure that all community members and groups are consulted and heard during decision-making processes, it is important to:

1. Identify all relevant stakeholder groups that are located in the AOI or that might be affected by toolkit activities in the AOI.
2. Identify their representatives and how they prefer to be included in decision-making processes.
3. Identify customary decision-making processes and explain how to integrate them into (FPIC) decision-making processes that are used during this toolkit implementation.

It is difficult to define which community members and groups must be included in decision-making processes and how they should be represented. **As a first step**, the smallholder group and the support team must always communicate that everyone is welcome to participate and speak in meetings. In case smallholder farmers or villagers mention groups or institutions that might have an opinion on certain topics, these should be invited to participate and speak in meetings.

Secondly, different demographic groups should be represented in decision-making processes. This might include, e.g., village leaders, village elders, heads of households, women, youth, and Indigenous peoples. Each of these demographic groups may choose how they want to be represented, e.g., by an elected group of people, by a single person of their choosing, by an NGO or other organisation. Whichever way they choose must be respected and supported.

Also, different types of organisations and stakeholders should be consulted during decision-making processes for their opinions or interests. This might include, e.g., local government representatives, buyers, plantation companies, NGOs, or village government officials of village owned-enterprises (Badan usaha milik desa - BUMDES).

Thirdly, customary decision-making processes must be identified and evaluated. In case they are inclusive to all community members and groups, they may be followed without any improvements necessary. In case they do not allow all groups to participate, speak and to represent them as they want, then they must be improved into an **FPIC decision-making process**.

We anticipate that the majority of customary decision-making processes such as the Indonesian 'Musyawarah Mufakat 'process are going to qualify as FPIC decision-making processes. This section will be updated based on lessons learned from applications of this toolkit.

2.3. Village consultation (first consultation)

It is important to have the **consent of all smallholder farmers and community representatives to implement this toolkit**, and a means to gain their consent is a village consultation. The village consultation must be organised by the smallholder group and support team. In case a regular village meeting takes place[5], the toolkit implementation may be added as an agenda item.

It is difficult to define how many participants should attend the consultation meeting to define a quorum. We anticipate that **15% of households should be represented at the consultation meeting** to be confident that constructive feedback, concerns, or objections to certain activities would be picked up. In case there is no objection during the consultation meeting, this may be interpreted as a proxy for consent in the village to go ahead with the toolkit implementation.

In any case, the default threshold of 15% of households must include all groups as described in chapter 2.2. The village consultation may be done in a single meeting, or several meetings as suitable for the local context. Virtual meetings via mobile phones or other electronic media are eligible as they allow for greater flexibility and help to reduce costs.

One of the decision points during the first village consultation must be **agreement on the members and composition of the support team**. Should there be any reservations or concerns against the team composition or any of its members, then the support team must be changed.

The meeting minutes including a description of feedback, concerns and decision points must be documented and shared with all participants upon request.

[5] That fulfils FPIC requirements as explained in chapter 2.2

Stage 3: Social mapping

Method:

Facilitated group meetings with the smallholder group and community members and groups

Update thematic maps of the AOI with information from group meetings

Minutes from meetings and share with participants

Objectives:

Understand land use history in the AOI and where possible map customary areas that have been protected for a long time, e.g., traditional agroforestry systems that have been maintained for generations, sacred forest patches, and others.

Understand land use conflicts between actors and where possible map conflict areas.

Understand ICAs, e.g., areas that are used for shifting cultivation or other important resources, and where possible map these areas.

Understand threats and opportunities for conservation and where possible map corresponding areas.

Materials / Documents:

Simplified Toolkit including checklist

Maps of the AOI (digital and hardcopy)

Supporting information

Paper, pens, stones, or pebbles

Expected Output:

Support team better understands land use context in the AOI.

Map (digital and hardcopy) that contains ICAs, customary conservation areas, conflict areas, or areas with opportunities for conservation

Minutes of meetings (the minutes must document discussion points and whether decisions were done with consent from all participants or if they were postponed)

3.1. Preparation for social mapping

Social mapping is a part of the participatory mapping process. Please see *ANNEX 1 – Glossary of terms* for an explanation of how the term participatory mapping is used in this document.

In preparation for social mapping, relevant thematic maps must be identified and clipped[6] to the AOI. This can be done by combining HCS forest indicative maps, HCV probability maps, satellite images, administrative layers, and other relevant information layers.

Usually, this step will be done by the technical support team, or it might have been done already by another support organization. In case there are any questions about which information sources to use, you can send an email to the HCSA Secretariat info@highcarbonstock.org. Links to existing indicative HCS maps will be provided by the HCSA Secretariat upon request.

The **AOI thematic maps should be available as digital and hardcopy versions**. Ideally, the hardcopy versions consist of a couple of large prints in poster format, which can be pinned to a wall or can be laid out on the floor. Also, smaller prints should be prepared so that participants can have individual prints in hand during meetings.

Ideally, the AOI thematic maps include:

- Simplified HCS vegetation strata – 'good forest', 'bad forest', scrub and open land, and plantation areas (please see *ANNEX 2 – Simplified HCS vegetation stratification* for details),
- simplified HCV categories 1 - 4 (if possible, please see *ANNEX 3 – Simplified HCV categories*),
- any other supporting information that is helpful for the mapping process.

It might be challenging to prepare thematic maps for the **simplified HCV categories 1 – 4**. Efforts should be reasonable, and thematic maps can be updated with feedback from meetings and also later on with data from field verification. Mapping proxies for simplified HCV categories 1 – 4 may include HCV probability maps, distance to protected areas, digital elevation models and slope analysis, watershed analysis, location of surface waters.

It is important to motivate villagers and smallholder farmers to participate in the meetings. Ideally, the meetings can be prepared and announced well in advance. Also, the meetings should be scheduled on days and at times that compete as little as possible with other duties or responsibilities. In case funds are available, villagers and smallholder farmers may be compensated for their efforts.

In addition, reasonable efforts must be undertaken to include women, youth, ethnic minorities, or indigenous peoples in meetings, as these are **key demographics or stakeholder groups**, and their voices should be heard during the mapping process.

3.2. Social mapping process

The social mapping process should be organized as a group meeting or as a series of group meetings, depending on the local context. Ideally, the meetings can be organized in a **workshop format** in which participants are briefed, are encouraged to actively update the thematic AOI maps, and to share their experience and knowledge.

[6] Clipping is a common GIS overlay technique. For instance, a layer with vegetation cover can be clipped with a layer that contains boundaries of the AOI. The output is a 'new' layer with vegetation cover in the AOI.

All participatory mapping processes - including social mapping – should follow **best practice designs and methods**. In case, specific participatory mapping processes have been designed for the local context or are commonly used, these may be applied during the social mapping process. The Annex … includes a social mapping checklist that can be used as a basis.

The social mapping process may be done separately or in combination with *Stage 4: Mapping of Important Community Areas (ICA)*, depending on the local context. In comparison with ICA mapping, the social mapping process focuses on:

- An understanding of the local context, land use history, and future development priorities of the community.
- An understanding of local land tenure, which is particularly important if customary land tenure arrangements are the norm. As far as possible, this should include the mapping of contested areas within the AOI.
- It is important to overlay the forest area map and concession maps.
- An understanding of local livelihoods including incentives and benefits for conservation if they exist, e.g., communal ownership of customary forests.
- An understanding of the challenges and opportunities of potentially marginalised groups, e.g., women, youth, ethnic minorities, or indigenous communities whose rights and needs might be commonly overlooked.

These focus areas should be translated into simple questions that can be asked to group members with the help of facilitators and local experts. The answers to the questions can be recorded on the maps and in the meeting minutes. The Annex … includes an ICA checklist that can be used as a basis.

The main outputs from the social mapping process such as thematic maps, notes, photos, and meeting minutes should be compiled as part of the results. A consensus decision by the group members may confirm if the social mapping process is satisfactory. In case consensus cannot be reached, a 2nd meeting should be done later to complete the mapping process.

The technical team should digitize the main outputs from the social mapping process and make them available for sub-sequent implementation stages.

Stage 4: Mapping of Important Community Areas (ICA)

Method:
Facilitated group meetings with the smallholder group and community members and groups
Update thematic maps of the AOI with information from group meetings
Minutes from meetings and share with participants

Frequency:
1-2 times in 1-2 days.

Objectives:
Understand ICAs in the AOI and where possible map these areas. ICAs include High Conservation Values 4 – 6 inside and outside of forests and also include ICAs.
Note: If these areas have been mapped already in stage 3, there is no need to repeat the process again in stage 4. Stages 3 and 4 are both participatory mapping processes. Stage 3 focuses more on overall land use and identification of contested areas, while stage 4 focuses more on the identification of areas that fulfil basic needs and livelihoods of villagers.

Materials / Documents:
Simplified Toolkit including checklist
Thematic maps of the AOI (digital and hardcopy)
Meta-plan to help create resource tables, and/or sketches
Maps that can be marked by the participants to identify ICAs
Supporting information
Stationery stones, or pebbles

Expected Output:
Technical support team better understands which areas fulfil basic needs and livelihoods in the AOI.
Thematic map (digital and hardcopy) that contains ICAs, customary conservation areas, conflict areas, or areas with opportunities for conservation
Minutes of Meeting (MoM) in line with the FPIC processes, outlining the community/smallholders' agreement on the ICAs, and the identification of the initial plan for the ICLUP, as well as management and monitoring (the minutes must document discussion points and whether decisions were done with consent from all participants or if they were postponed).
The result will be used to complete the social mapping result, as part of the participatory mapping process, to be verified. Better understanding of the ICAs will be achieved in the process, other issues such as overlapping areas between company concessions and customary forests might be identified.

4.1. Preparation for ICA mapping

ICA mapping is a part of the participatory mapping process. Please see *ANNEX 1 – Glossary of terms* for an explanation of how the term participatory mapping is used in this document.

The preparation is similar to social mapping (see chapter 3.1) with the only addition that the social map or main outputs from the social mapping (see *Stage 3: Social mapping*) should be considered also as inputs for this mapping process.

4.2. ICA mapping process

The ICA mapping process is similar to the social mapping process (see chapter 3.2). In addition, the social map, or main outputs from the social mapping (see *Stage 3: Social mapping*) should be considered also as inputs for this mapping process.

The ICA mapping process may be done separately or in combination with *Stage 3: Social mapping*, depending on the local context. In comparison with social mapping, the ICA mapping process focuses on:

- An understanding of the areas that are under the actual control of villagers or the smallholder group as these areas might deviate from the village administrative area (see chapter 1.3 for details)
- An understanding of **important natural resources** that are used by villagers or the smallholder group to fulfil basic needs and to sustain livelihoods, e.g., water, fibre, food, medicine.
- An understanding of the areas from which natural resources are harvested or collected and that are essential to sustain natural resources. This can be forest areas but also areas outside of forests including, e.g., vegetation along surface water, wetlands, peatlands, grasslands.
- An understanding of animal and plant species with importance for the community. The community members may choose which species to include in a list of **focal species** that should be managed to ensure their continuous presence. If possible, areas with concentrations of focal species can be mapped but more important is the development of the list itself.
- An understanding of **ICAs**, i.e., forest areas that include woody vegetation, which may appear as forest, but are part of shifting cultivation regimes, agroforestry, home gardens, etc.

An example of information required under Important Natural Resources:

Location						
List of Important Natural Resources				Current Management / Improvement Required		
Important Nat. Resources	Type	Function	Threat	Activity	KPI	PIC and stakeholders involved
E.g. HCVs, HCS forests, other livelihood sources	E.g., Wood / Non Wood Products	E.g., honey production	E.g., fires	E.g. Current: Village regulation on forest conservation Improvement req: Funding support	E, g,: Signs, allowable cut	E.g.: Villagers and smallholders

Important Community Areas (ICA) have a strong overlap with **HCV categories 4 – 6**. Surface water and other water resources that fulfil basic needs like drinking, cooking, washing, recreation corresponds with **HCV category 5**. Also, natural resources that fulfil basic needs like for fibre, food, medicine - and the areas that they occur in – correspond with HCV category 5.

Forest areas and areas outside of forests that have important cultural or spiritual meaning to villagers, or the smallholder group corresponds with **HCV category 6**. These might include, e.g., places of worship, burial grounds, places for gatherings, certain species.

Forest areas and areas outside of forests that are critical for the livelihoods or safety of villagers, or the smallholder group correspond with **HCV category 4**. These might include, e.g., vegetation in watershed areas, vegetation on steep slopes, vegetation on cliffs close to settlements.

It is also important to identify **ICAs** during the ICA mapping process. These are areas that may appear as forest or non-forest at the time of the assessment, e.g., on satellite images, but are in fact a 'snapshot' of **continuous production regimes**, e.g., are part of shifting cultivation regimes, agroforestry, home gardens. It is essential to identify these areas as a separate vegetation or land use category to avoid biased outcomes of the assessment.

The above focus areas should be translated into simple questions that can be asked to group members with the help of facilitators and local experts. The answers to the questions can be recorded on the maps and in the meeting minutes.

The main outputs from the ICA mapping process such as thematic maps, notes, photos, and meeting minutes should be compiled as part of the results. A consensus decision by the group members may confirm if the ICA mapping process is satisfactory. In case consensus cannot be reached, a 2nd meeting should be done later to complete the mapping process.

The technical team should digitize the main outputs from the ICA mapping process and make them available for sub-sequent implementation stages.

4.3. Village consultation (second consultation)

The main outputs from social mapping and ICA mapping processes must be presented to the community and smallholders. This is essential because at this point thematic maps should be advanced enough, so that the community can get an initial idea of the **distribution of potential land use zones**.

It is important to have the **consent of the smallholders and community members and groups to proceed with the assessment**, and a means to gain their consent is a village consultation. The village consultation must be organised by the smallholder group and the support team. In case a regular village meeting takes place[7], the toolkit implementation may be added as an agenda item.

It is difficult to define how many participants should attend the consultation meeting to define a quorum. We anticipate that **15% of households should be represented at the consultation meeting**

[7] That fulfils FPIC requirements as explained in chapter 2.2

to be confident that constructive feedback, concerns, or objections to certain activities would be picked up. In case there is no objection during the consultation meeting, this may be interpreted as a proxy for consent in the village to go ahead with the toolkit implementation.

In any case, the default threshold of 15% of households must include all community members and groups as described in chapter 2.2. The village consultation may be done in a single meeting, or several meetings as suitable for the local context. Virtual meetings via mobile phones or other electronic media are eligible as they allow for greater flexibility and help to reduce costs.

One of the decision points during the first village consultation must be **agreement to proceed with the assessment and to start field verification activities**. Should there be any reservations or concerns against the field team composition or any of its members, then the field teams must be changed.

The meeting minutes including a description of feedback, concerns and decision points must be documented and shared with all participants upon request.

Stage 5: Field verification

Method:

Training of field teams (e.g., 1-2 days training on what and how to verify field parameters, how to fill in checklists, how to read maps, how to work as a team)

Sampling and field checks of forest patches and open lands

Field checks are based on visual assessments of vegetation structure at specified geo locations. This includes the taking of 360 photographs (N, E, W, S) at specified geolocations and filling in the field check form for each geolocation.
Update maps of the AOI with information from field checks

Meetings with field teams and smallholder group

Objectives:

Delineate and map land cover and land use zones, e.g., including 'good' forest, 'bad' forest, ICAs, conservation areas outside of forests, and plantations, as well as identify any HCVs.

Create a map (digital and hardcopy) with verified land cover and land use zones that can be discussed during development of an Integrated Land Use and Management and Monitoring Plan.

Estimated Length of Time Needed:

5 – 7 days (depending on accessibility)

Materials / Documents:

Simplified Toolkit including checklist and field check form

Maps of the AOI (digital and hardcopy) including location of sampling points

GPS, mobile phone, camera (if not using phone camera), clip board measurement and recording tools

Field equipment

Optional: Drones

Expected Output:

Registry or excel file with field check data
Revised map (digital and hardcopy) that contains all relevant land cover and land use zones

5.1. Preparation for field verification

Field verification is carried out by field teams that should be trained and properly equipped to collect field data. **First priority for field verification** is that each team member stays safe during data collection.

If field points are located in inaccessible areas, the field team may mark the field check form as inaccessible and write down the reason. The use of drones to verify such areas should be considered.

Also, **maps of the AOI** (digital and hardcopy) must be prepared. These maps should have basic thematic layers like indicative vegetation cover (see *ANNEX 2 – Simplified HCS vegetation stratification*), ICAs if known from social mapping, elevation, water ways, settlement areas, infrastructure like bridges, roads and paths, and the field checkpoint locations.

A **best practice or scientific sampling design** (e.g., a stratified random sampling design) should be used if possible to identify the location of verification points and how to distribute them over the **village administrative area and customary land that is claimed by the community** (see chapter 1.3). Please keep in mind that thematic maps must be prepared for the AOI, but that field verification may be focused on forest areas and areas with HCVs, particularly customary forest, as these are the most important areas to visit, complete a field check and confirm the boundaries of. In complex mixed-use landscapes, categorising and verifying the very dynamic (changes from one use to another frequently) community use areas and Important Community Areas may be very time consuming and unnecessary. Other verification methods may be more suited such as checking against high resolution imagery or using a drone.

How many field points should be assessed during field verification?

The number of field checkpoints needed to verify land cover and land use will depend on:

The number, size, and degree of vegetation homogeneity of forest patches and outside of forest patches.
Whether the boundary of a forest area is already clear and demarcated/mapped and the quality of data gathered during from the social mapping.
The number of '**focus areas'**, e.g., in Important Community Areas (ICA), 'good forest' patches, HCV areas, and also in transition areas between forest and scrub or open land. The area or proportion of ICAs, e.g., for shifting cultivation, agroforestry systems, or home garden or plantation and settlement area. Field checkpoints may not be necessary for these areas, unless required to delineate the boundary with 'focus areas'.

The technical team must decide on **the number of field checkpoints necessary, in combination with what other field verification methods are used such as drone data, other maps, and other high resolution remote sensing data.**. Particular attention should be placed on the border or, transition areas between forest and scrub, and forest and ICAs in order to accurately map these areas.

At the level of the village administrative area, a total number of 50 field points might be a common scenario.

The preparation process for carrying out field checks may take several days depending on the size and accessibility of the area, number of field points required, and training necessary of team community members in the checkpoint process. We recommend including as many community members as possible (members with experience and knowledge with the forests within the AOI or forests guards if they already exist), who can then be divided into different **field teams**. A schedule should be developed for each of the field teams encompassing field checkpoints and estimated days for completion. Each group may need a team leader, a map reader, a data recorder, someone to clear the path, etc. However, team composition may be assigned based on experience and depending on the local context.

Once the field teams have been assigned, the tools and materials for field verification must be prepared. These include:

- GPS tracking device (can be a mobile phone),
- camera (can be a mobile phone),
- drones (if available),
- maps of the AOI with locations of field points (soft copy on mobile phone is ok),
- Field check forms (at least 1 form for each field point),
- stationery, notepad, clipboard, plastic sleeves, and zip-lock bags.
- tools to clear the bush and first aid kits.

The means of transportation to reach field points should also be determined and prepared before the start of field verification activities.

5.2. Field verification process

The main objective of the field verification process is to verify land cover and delineate vegetation and land use zones. This is necessary because the actual, **on-the-ground land cover or land use zones** may be different from the ones shown on the previous thematic maps or other data[8].

After the field verification process and field data analysis the initial maps should be corrected, as much as possible. The corrected maps can then be called **verified land cover and land use maps**.

The data collection process at each of the selected field checkpoints (see chapter 5.1) is straightforward and should not take more than 10 – 15 minutes. An **easy to use field form** has been developed for this purpose, which must be filled in for each field point. The field form can be found in the supporting document:

Simplified Toolkit for Indonesia – Templates and checklists for implementation / Field form (Template 2)

Each of the field checkpoints is a visual checkpoint to assess the composition and **structure of forest patches and other vegetation**, and to **record other features** that can be observed within sight of the field team, e.g., animal tracks or nesting features of focal species, cultural artefacts, farming, human, or natural disturbances.

5 photos must be taken at every field point in a forest patch. That is one picture of the canopy and four pictures of the stand structure (north, south, east, west). The photos should illustrate the basic structure and density of the vegetation at each field point. Include a team member in the photo to

[8] These maps are usually created from indicative HCS maps, HCV probability maps, and other large-scale maps that might be slightly outdated or not 100% accurate with actual vegetation or land use zones in the AOI.

show scale if needed e.g., size of trees. At field points outside of forest patches only 4 photos must be taken (north, south, east, west). The **photos must be geo-referenced**.

The delineation of vegetation strata and land use zones can be a time consuming process. This set of requirements acknowledges that and provides below options to optimize efforts:

- *ICAs:* the land cover in ICAs, e.g., areas for shifting cultivation, agroforestry, or home gardens, may be combined into one class, and thus unless it is necessary to demarcate forest areas located within them, it is acceptable to just map the boundaries of these areas but identify any specific HCVs within them if possible.
- *Tree clusters < 0.5 ha:* These areas do not have to be mapped unless they contain HCVs or are important areas for the community.. They may be assigned to the adjacent vegetation class or land use zone, e.g., a cluster of trees in an oil palm plantation may be mapped as plantation only.
- *Individual plots of land:* The boundaries of individual plots of land do not have to be mapped, e.g., individual farmlands may be combined in the land use zone plantation, unless the smallholder wants to complete.

In addition, it can be difficult to map boundaries between adjacent vegetation or land use zones, e.g., for vegetation between 'bad' forest and scrub or open land or for land use between customary forest and ICAs. In these **gradual transitions**, best practice and common sense solutions for delineation may be applied. These may include, e.g., delineation with an accuracy of ± 30 m or delineation using prominent features.

We encourage the **use of drones, high resolution satellite images or social and participatory mapping data in combination with field verification** to speed the verification and delineation process. However, depending on access drone usage may not be as cost efficient compared to field checks and tracking using a GPS

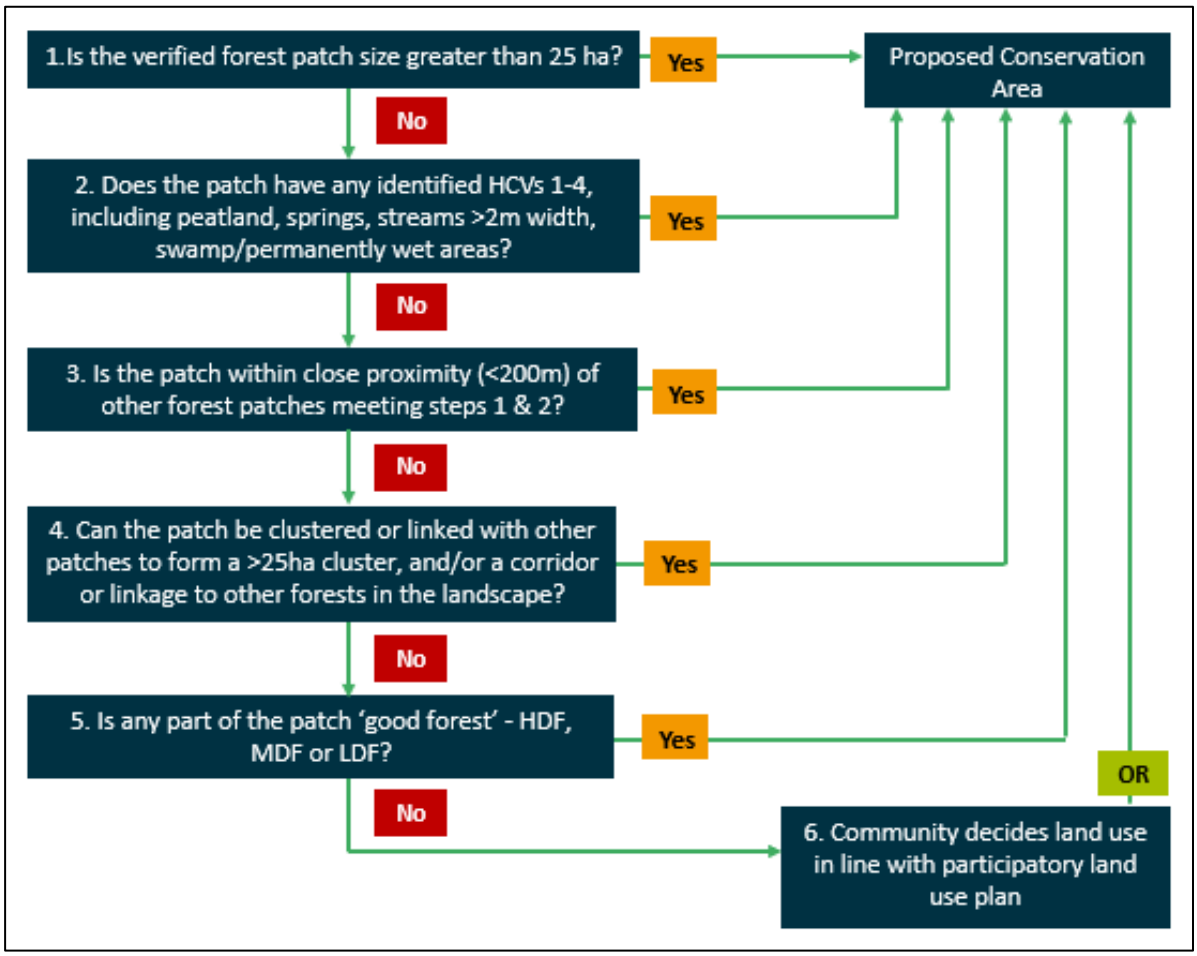
5.3. Verification data analysis

The technical and local expert team should take a lead on this phase, and work in close collaboration with community representatives.

The expected output from field verification and field data analysis is a **verified land cover and land use map for the village administrative area or the customary land areas claimed by the community**. This map should include the vegetation and land use zones listed below:

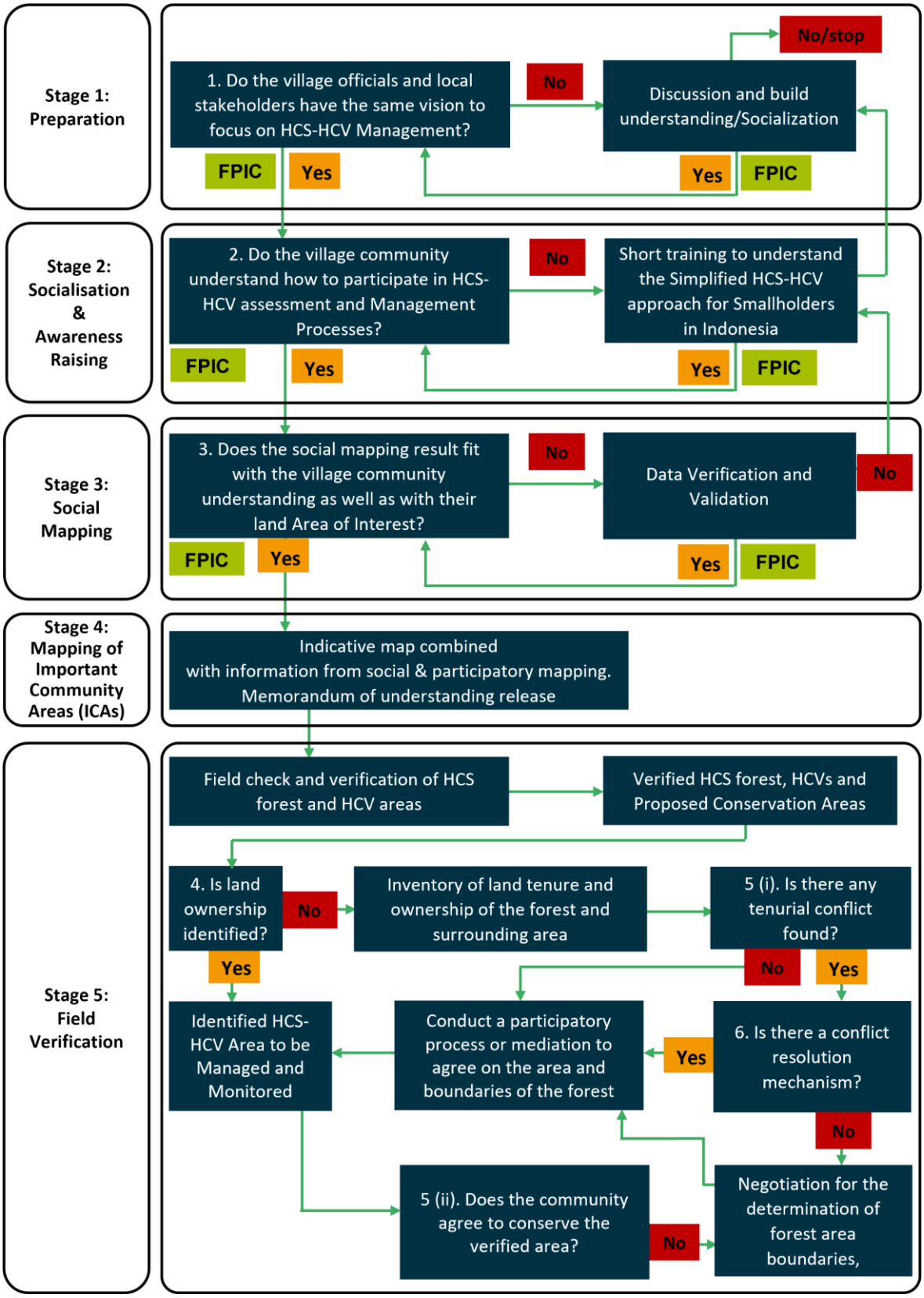
- Forest areas (that may be separated into 'good' forest and 'bad' forest)
- Customary forest or any community protected forest
- Important Community Areas (ICA) including HCVs 4 - 6
- ICAs for shifting cultivation, agroforestry, or home gardens
- HCVs 1 – 3 in and outside forest areas (if possible)
- Scrub and open land
- Plantation and farmland
- Other areas including settlements and other infrastructure (may be separated as suitable for the local context)

This verified land cover and land use map as well as the participatory land use map can then be analysed by the technical team using spatial analysis GIS tools following the decision tree X below to determine 'Proposed Conservation Areas'.



In addition to indicative HCS forest/HCV maps, HCV probability maps (refer to app) may be used to back up claims of 'no HCVs' being present.

Below is a summary decision tree of Stages 1 -5 and all the decisions and FPIC points with the smallholders and community. The output is a land cover and land use map produced from the participatory mapping process and verified HCS forest areas and areas with HCVs.



Stage 6: ICLUP and Management & Monitoring

Method:

Spatial analysis and implementation of the decision tree
Facilitated group meetings with the smallholder group and community members and groups

Update land use zone map (digital and hardcopy) with input from group meetings

Minutes from meetings and share with participants

Objectives:

Finalize land use zones, e.g., customary forest areas, ICAs, conservation areas outside of forests, and plantations.

Create a final map (digital and hardcopy) with verified land use zones, e.g., including conservation areas, ICAs, and development areas.
Boundaries of the planned conservation areas
Develop and agree on an Integrated Conservation and Land Use Plan.

Draft Management and Monitoring Plan

Materials / Documents:

Simplified Toolkit including checklist

Thematic maps of the AOI (digital and hardcopy)
Supporting information

Workshop materials (paper, pen, etc.)

Expected Output:

Integrated Conservation Land Use Plan
Minutes of meetings
Draft Management and Monitoring Plan

6.1. Integrated Conservation and Land Use Plan (ICLUP)

The aim of the ICLUP is come to an agreed plan of how village and community land will be used and managed. An 'initial', 'proposed' and 'final' integrated conservation and land use plan will be developed by the community and agreed in **consensus with the community**.

Broad management objectives will be agreed for the different land use zones that were delineated during the community participatory mapping and planning *and from Stage 5: Field verification*. It is important to identify those areas that are to be **set aside for conservation purposes**, and to distinguish these areas from areas that are **available for other land uses**. A Management and Monitoring plan will be agreed and put in place.

This initial ICLUP can be used to identify incentives and benefits for the management of conservation areas. The HCSA Secretariat, SHWG, and SPKS are doing further field trials to identify relevant

incentives and benefits in Indonesia, and how to link them with appropriate management and monitoring activities. This section will be updated once these field trials are finalized.

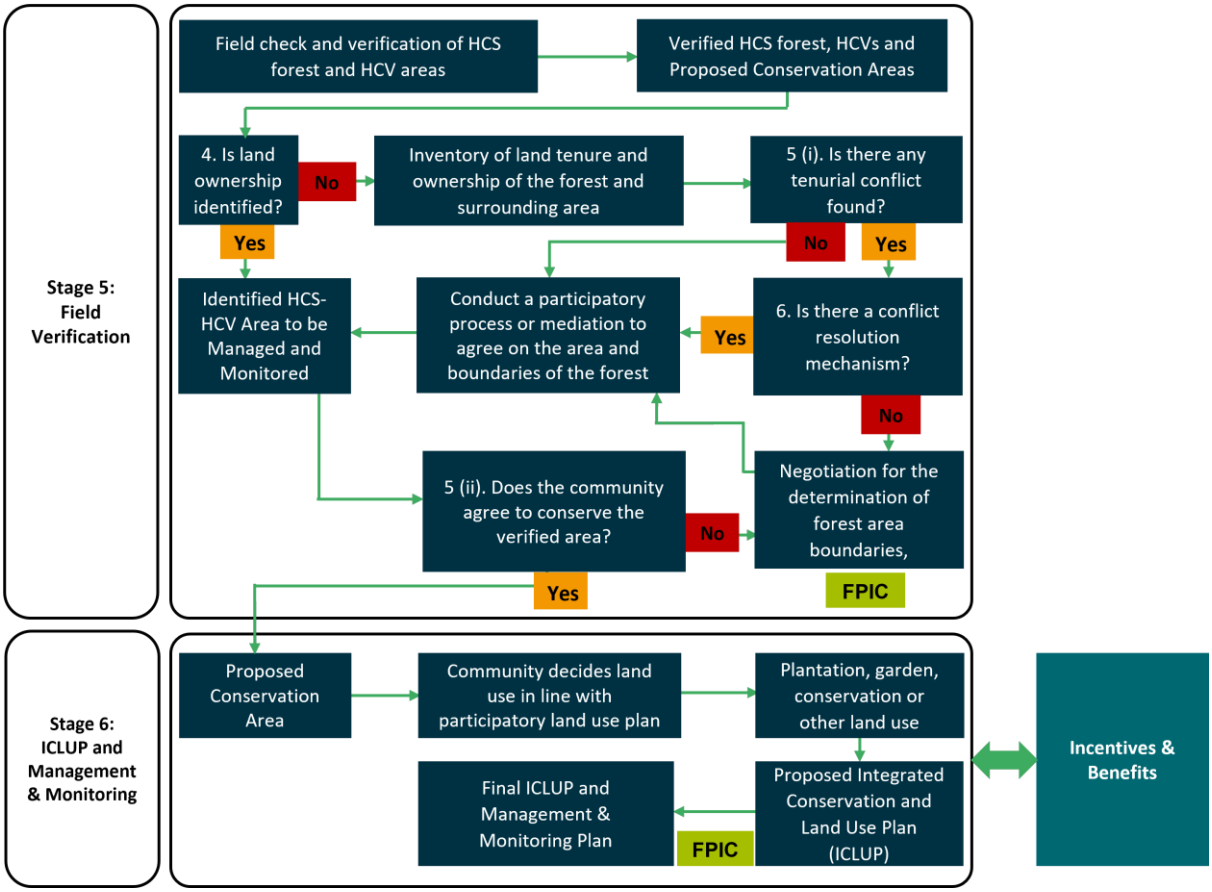
6.1.1 Integrated Conservation and Land use plan development process

The expert team should support this phase with community members who are leaders and representatives for the land involved. The customary landowners of the verified HCS forest, HCV areas and proposed conservation areas (Stage 5 output) need to be identified and their FPIC achieved for verified areas and proposed conservation areas. Once this is achieved these forms a 'Initial' ICLUP. If the land ownership or boundaries are not clear then steps are taken to clarify these via participatory processes and if necessary negotiation and mediation. If conflict remains, this must be resolved through a separate conflict resolution process.

A third village consultation on the Initial ICLUP is then carried out (see 6.1.2 below), incorporating a participatory process with the community to further consider land use decisions.

Reasonable efforts and common sense should be applied when deciding on how to treat forest patches that are considered 'bad forest', that do not have HCVs 1 – 3 and exist outside of ICAs. We recommend that the default option should be conservation, but it may be more important for community members to develop these areas into more productive land uses, particularly if they are very small patches e.g., less than 2 ha.

Other areas including settlements, infrastructure, and other forms of land use, may be classified as **other areas**. The community is free to choose corresponding names and how many different land use zones it wishes to create in the local context.



In well-established, mixed agricultural production landscapes it is unlikely that ICAs have HCVs 1 and 2 due to their relatively high disturbance rates. ICAs may have HCV 3. Important Community Areas (ICA) have a strong overlap with HCVs 4 – 6. The community may choose to classify an ICA as a conservation area or leave it categorised as an area for community use. Similar objectives apply for both land use zones. Communities may utilize these land use zones in ways that do not diminish environmental and social values. ICAs are used for production of food and other crops. Therefore, these areas have an important socio-economic function. Also, these areas may appear as regenerating forest at the time of the assessment, but in reality are forest fallows in a shifting cultivation regime or are part of a multi-layered agricultural system.

For those areas outside of the verified HCS forest, HCV areas and proposed conservation areas, scrub or open land, plantations or farmland, areas with a low probability of HCV presence the community may decide how to use the area. However, if the area is intended to be used for shifting cultivation, agroforestry systems, or home gardens, then it should be considered an **ICA**.

6.1.2 Village consultation (third consultation)

The initial Integrated Conservation and Land Use Plan must be consulted with the smallholders and community members and groups. It is important to have the **consent of the community on the plan of land use zones and broad management objectives**, and a means to gain their consent is a village

consultation or in Indonesia the 'Musyawarah Mufakat 'process. The village consultation is organised by the smallholder group and the support team. In case a regular village meeting takes place[9], the toolkit implementation may be added as an agenda item.

It is difficult to define how many participants should attend the consultation meeting to define a quorum. We anticipate that **15% of households should be represented at the consultation meeting** to be confident that constructive feedback, concerns, or objections to certain activities would be picked up. In case there is no objection during the consultation meeting, this may be interpreted as a proxy for consent in the village to go ahead with the toolkit implementation.

In any case, the default threshold of 15% of households must include all community members and groups (or their representatives) as described in chapter 2.2. The village consultation may be done in a single meeting, or several meetings as suitable for the local context. Virtual meetings via mobile phones or other electronic media are eligible as they allow for greater flexibility and help to reduce costs.

One of the decision points during the third village consultation must be **agreement on the initial and then Proposed ICLUP[10]**. Should there be any reservations or concerns against the ICLUP, then further discussions or meetings should be facilitated until an agreement can be reached.

The meeting minutes including a description of feedback, concerns and decision points must be documented and shared with all participants upon request.

6.2 Management and Monitoring Plans

6.2.1 Define the Management Area

The first step with creating a Management and Monitoring Plan is to define the area needed to manage the HCS forest and HCV areas to ensure that those areas are maintained and enhanced.

Thus the following steps are completed:

- Establish boundaries of the Management Area based on the proposed ICLUP from step 6.1.2,
- Prepare a map of Management Area including, the different categories of protected areas,
- Provide a description and location of the HCS forest areas and HCVs, and
- Establish a baseline of the current condition on each value (HCS forest and each HCV): this is the starting point for the Monitoring Plan.

Defining the Management Area will be based on the agreed proposed ICLUP, field data gathered during the assessment process and participatory processes with the community. It may require

[9] That fulfils FPIC requirements as explained in chapter 2.2

[10] The ICLUP is the final output of the assessment stages and is the culmination of the all the stages of the Simplified Toolkit prior to the development of the Management and Monitoring Plan, incentives and benefits.

consultation and negotiation with adjacent communities and villages to ensure the Management Area boundaries are clear and agreed.

6.2.2 Threat Assessment

The threat assessment is a critical next step to be carried out as through identifying the major threats, the management actions can be formulated to protect and restore the HCS forest, and maintain and enhance the HCV values. The threats are identified based on information from the local community during the consultation phases, any local research or studies, the current practices of the natural forest management by communities, NGOs, other stakeholders including experts, and field trial observations by the field team.

It is important to:

- Identify all threats for the different areas
- Identify where or from whom are the threats coming from, whether internal within the community or village, or external (outsiders), as well as are they direct threats or indirect ones
- How often do the threats occur – what is the frequency of them
- What is the impact of the threats to the forest or HCVs in the different areas.

This Threat Assessment Table is used:

Values	**Brief description**	**Threats (including source - internal and external)**	**Level of threat (V.High,High/Medium/Low)**
HCS		*Current:* *Potential:*	
HCV1		*Current* *Potential*	
HCV4		*Current:* *Potential:*	
HCV5		Current and potential:	
HCV6		*Current and Potential:*	

6.2.3 Develop the Management Plan

Following the Threat Assessment the community or village then needs to develop the Management Plan for conservation and protected areas, including HCS forest and HCV areas. The Management Plan will need to have two types of activities: one for activities within the defined management areas and the second type for interventions to respond to threats coming from outside the management areas. The management plan is required to have the following components:

- Define general management objectives (for example, to maintain the forest category as natural forest for future generations)
- Define specific objectives of the management (for example, to maintain populations of endangered species found as HCV1 to be the same as the baseline and/or improvement or increase of such species)
- Define management strategies (for example, conservation of the whole management area)
- Identify the management activities, including to address the identified threats and an Incentive and Benefits (I&B) program (for example, preparing inventory of such population; preparing regulations agreed by the whole communities to not hunt or utilize such species)
- Establish a team or a Unit that will implement this management plan and the I&B program
- Establish a budget and timeframe for the implementation
- Establish an Incentives and Benefits program to support the management
- Establish a reporting system to monitor this implementation

This simple table is used for the Management Plan:

Name of forest or HCV area	**General Objective**	**Specific objectives**	**Management Strategies**	
			Areas	Prescription
		•		•
		•		

In most situations the areas identified as HCS forest will also be the areas for maintaining identified HCVs. Thus there will be multiple objectives and management activities over the same Management Area, with the focus on protecting and restoring the different categories of forests and maintaining and enhancing the HCVs.

The Management Plan will need to determine rules for land use by the local community, in line with customary practices and any local regulations. For example, conservation areas are not able to be converted to plantation or farmland but may be used by the community to sustain livelihoods or basic needs. However, community activities should not threaten environmental or social values of conservation areas. Hunting and fishing in forest patches and watershed areas is ok as long as it does not diminish species populations. However, hunting or collecting species with commercial motives for wildlife trade is not consistent with management objectives for conservation areas.

The development of areas outside of HCS forest, HCV areas, proposed conservation areas and ICAs, should not be detrimental to the environment or the community. However, the development of

these areas may strengthen the community in socio-economic terms, and, as such, may be very important for sustainable development also for the wider landscape.

To achieve the protection of forests and HCVs it is essential that smallholders, communities and villages are supported through incentives and benefits (I&B). These I&B effectively share the burden of protection with a wider group of stakeholders, reaching as far as the global community, and help resource the costs of conservation and protection. The I&B identify the needs of the community and via an I&B mechanism channel this essential support to them. It is imperative that the I&B program is generated from among others, the resources to implement the management plan activities, including interventions to protect and restore HCS forest and maintain and enhance HCV areas.

Consultation and participatory processes with the community and village include:

i. Jointly discussing the proposed Management Plan activities for HCS forests and HCV areas protection, management, and monitoring
ii. Discussing alternatives for smallholders' and the community's activities that may be detrimental to the protection of HCS forests and HCV areas (e.g. by looking for alternative resources in non HCS forests such as Shrub and Open land areas)
iii. Management activities in the Management Plan need be agreed by the community or village with evidence of their willingness and consent accordingly.
iv. Establish Management Team or Unit within the village or group of villages to oversee the Management and Monitoring Plans. The mechanism for appointing the Management Team or Unit can be conducted according to local custom. The management unit formation should consider the following:
    - Whether the group is an "association" or group of smallholders.
    - The functional entity of operation that the community is working within, in terms of utilisation of the resources/plantation.
    - What type of group is the community most comfortable with, and that has the authority and the same goals.
    - Who is holding the land ownership rights.

The duties of this Management Team or Unit includes:

i. Manage the agreed HCS forests and -HCV areas and monitor the implementation of its Management and Monitoring Plans.
ii. Organise coordination and partnership among smallholders and community members in terms of management and monitoring of HCS forests and-HCV areas in the village.
iii. Conduct meetings to determine the mechanism for incentive and benefit distribution.
iv. Receive and manage grievance raised from the community related to the village's HCS forests and HCV areas.
v. Report to the village leadership on progress and outcomes.

6.2.4 Develop the Monitoring Plan

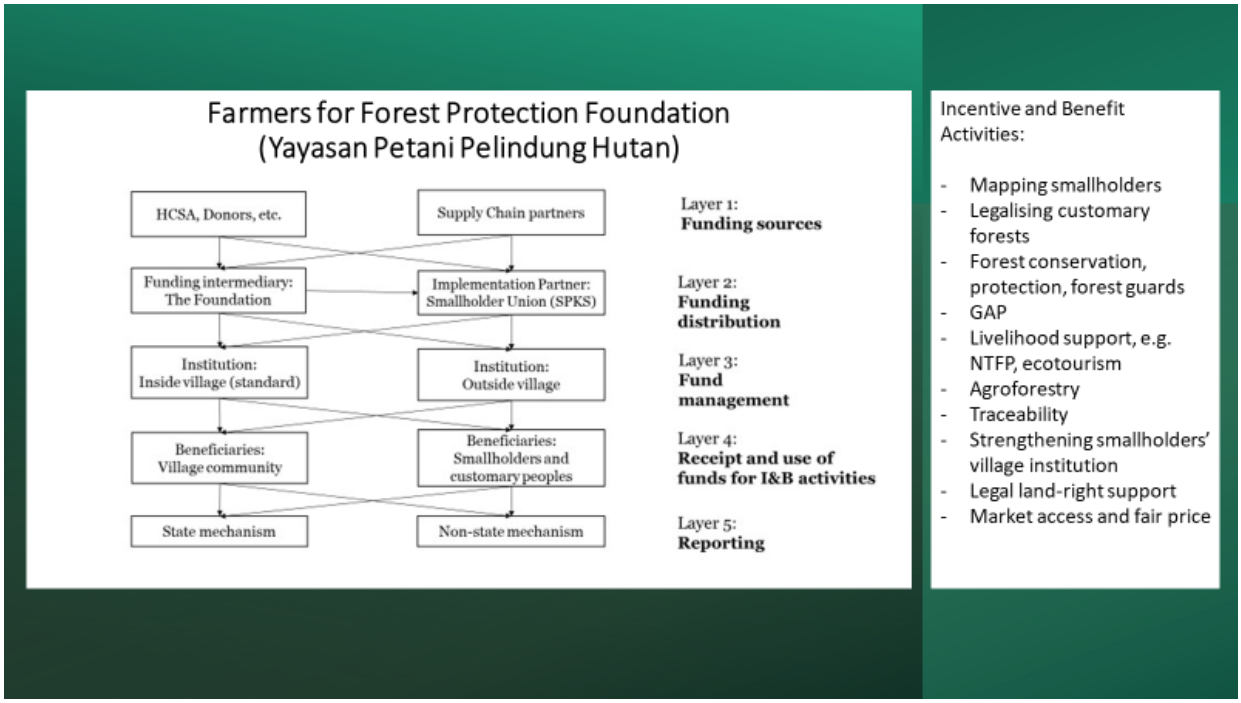
A critical purpose of monitoring is to find out if the HCS-HCV management strategies are implemented and if the management objectives are being met e.g. whether the area of the forests remains the same or is reduced, and are the HCVs being maintained and enhanced. The monitoring should be designed to differentiate the effects of internal activities from the effects of activities undertaken by the others (outsiders), as well as those unrelated to direct and local human activities such flooding from upstream, or droughts induced by climate change.

The monitoring should start when the baseline information is established. Indicators need to be established and agreed on what will be monitored. Important questions to be asked during the monitoring process include:

- Have changes taken place in the HCS-HCV area. If so, what has caused them;
- Have the risks and threats facing HCS-HCV changed;
- How effective are the management strategies.

Monitoring results should provide up-to-date information on the status of the HCS-HCV management area and function as a basis for management interventions or adjustment. Based on type, monitoring activities can be classified into operational monitoring, strategic monitoring and threat monitoring. The monitoring results need to be analysed in order to adjust the Management Plan if necessary

Monitoring of Incentives and Benefits (I&B) mechanism implementation and activities is integrated with monitoring of management activities and outcomes, where the flow of funds and support is conditional on monitoring showing positive outcomes. Below is an example of a schematic for an I&B mechanism, the 'Farmers for Forest Protection Foundation' fund (4F) to show the role of monitoring and reporting in layer 5.



High quality deforestation-free programs require more than one tool to monitor and report progress. Therefore, additional to the monitoring and reporting in relation to the Management Plan at the village level, the I&B mechanism will monitor and report progress and impacts including:

- State Reporting:
  - Government program monitoring and reporting
  - Peraturan Desa (Village Regulation), Peraturan Adat (Customary Regulation)
- Non-state Reporting
  - Smallholders' declaration
  - High Carbon Stock Approach monitoring
  - Deforestation-Free Landscape monitoring
  - Global Forest Watch
  - Independent Verification (including ISPO/RSPO/Carbon if applicable)

This is an example of a the Monitoring Plan summary table:

Location	**Operational Monitoring**	**Strategic Monitoring**	**Threat monitoring**
[name of forest or HCV area]	e.g. patrols to prevent felling of trees	e.g. annual survey of a species population	e.g. Observe and record any incursions by outsiders to utilize the forest.
		•	•

In addition to this monitoring, one important element to be monitored is the efforts of community in conserving and protecting their forests and any external verification or acknowledgement of this. It is expected that over time, given the community's commitment to protection and conservation of their forests and HCVs, there will be acknowledgement or recognition from other parties. The legal recognition will be important to secure the communities' right over the forests that they have conserved and protected, which will then involve some level of monitoring by the local government. The recognition and monitoring by supply chain partners of community forest protection can boost the community's motivation to continue their protection, especially if linked to market premiums or fair pricing that supports their sustainable livelihoods.

ADAPTIVE MANAGEMENT

After the management and I&B activities have been implemented and the monitoring completed, the community will then have to review the results of monitoring to assess the progress in meeting the management objectives. If the objectives are not met, there should be development of management strategy alternatives. The management plan should be open to include new information coming from monitoring results. Management activities can be modified over time based on the lessons learned from the monitoring. An adaptive Management Plan should be

responsive to any changes in the HCS-HCV management areas. Finally, applying the precautionary approach and continuous improvement is expected to support the forest protection management objective.

ANNEX 1 – Glossary of terms

Consensus:	An agreement that is reached without sustained objection from any community groups or members. In Indonesia via the 'Musyawarah Mufakat 'process
Conservation area:	An area with the main purpose to conserve environmental and social values. Communities may use this area to sustain livelihoods and to fulfil basic needs without diminishing environmental and social values.
FPIC:	Free, Prior, and Informed Consent. An agreement that is reached without sustained objection from any community groups or members. All relevant community groups and members must be given the opportunity to participate in decision-making processes and to express their views and opinions.
Important Community Area (ICA):	Areas that sustain livelihoods or fulfil basic needs of community groups and members. ICAs have a strong overlap with HCVs 4 – 6, including sacred places of worship linked to ancestors and traditional practices under HCV6. Areas with woody vegetation, which may appear as forest, including customary forest but also areas that are part of shifting cultivation regimes, agroforestry, or home gardens. These areas can be used for traditional or commercial agricultural production. However, the existing tree cover and multi-layered agricultural system should not be converted to plantations or farmlands.
Participatory mapping:	Participatory mapping is a general term used to define a set of approaches and techniques that combines the tools of modern cartography with participatory methods to record and represent the spatial knowledge of local communities.

ANNEX 2 – Simplified HCS vegetation stratification

Below you can find a comparison of the regular HCS vegetation stratification vs. the simplified HCS vegetation stratification for smallholders. **Further details about the simplified stratification** are given in:

Simplified Toolkit for Indonesia – Templates and checklists for implementation / Vegetation and land cover classes (Template 3)

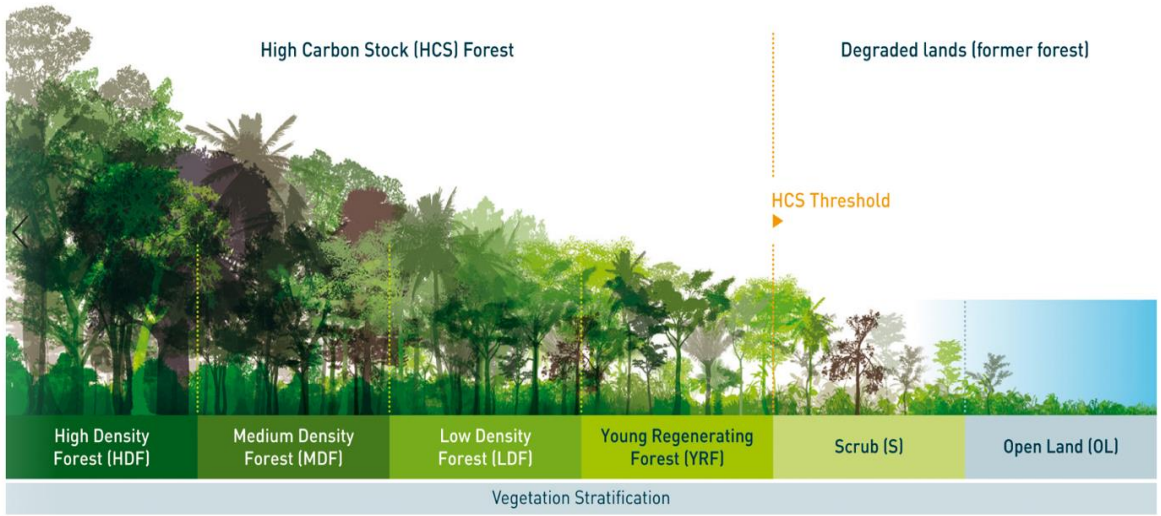


Figure 2: Regular classification of vegetation density for determining HCS area (source: HCSA Toolkit)

Table 3: Simplified HCS Vegetation and Stratification

Vegetation Stratum	Land use class	Conservation status	Description and Characteristics
Good Forest	High-density, medium-density, and low-density forest (HDF, MDF and LDF)	**Conservation**	Natural forest with closed or patchy canopy. Usually dominated by trees with a diameter of > 30 cm. No recent commercial logging activity in the area. Often the village community consider it as protected forest as it is a sacred area, a source for medicinal plants/ herbs, or for hunting.

			The good forest is a forest that provides sources of livelihood to the village community which includes: 1. Non-Timber Forest Products (NTFPs), 2. Food, 3. Medicinal herbs, 4. Environmental services such as water catchment and swamp forest, 5. Sacred values, 6. Building materials including timber.
Bad Forest	Low-density and young regenerating forest (LDF and YRF)	May be conserved or developed after confirmed through initial land use plan	A highly disturbed forest or former forest area in a regeneration stage towards its original structure. Traces of previous logging activities or from past clearance are visible in the area. For YRF, (young) trees are usually between 10 – 30 cm in diameter and are more than 10 years old. May or may not have a closed canopy. This land cover class is not far from road access and usually can be found next to plantation areas. Bad forest can also be a source of livelihood for the village community which includes: 1. Non-Timber Forest Products (NTFPs), 2. Food, 3. Medicinal herbs, 4. Environmental services such as water catchment and swamp forest, 5. Sacred values, 6. Building materials including timber. Bad forest is commonly a part of **Community Use Areas** for shifting cultivation, where it may function as forest fallow. It can also appear as part of agroforestry systems or home gardens. Mixed forest with rubber or other neglected plantation of less than 50% of the basal area is included into YRF or LDF category. Identification can be done in the field by estimating without having to measure the diameters.
-	Natural ecosystems	Conservation	For instance, peatlands, wetlands, natural grasslands, vegetation in watersheds or on steep slopes.
-	Scrub and Open Land (S & OL)	May be developed	Recently cleared or heavily degraded land with mostly shrubs, grass or vegetation, a few woody plants and some young trees. Scrub in Indonesia is usually less than 8-

			10 years old after land clearing or fire.
-	Plantation and farmland	May be developed	Forest plantation, agriculture estates, smallholder agriculture and use
-	Other areas	May be developed	For instance, mining, settlements, roads.

ANNEX 3 – Simplified HCV categories

The HCV Approach is a methodology to identify, manage, and monitor important environmental and social values in production landscapes – across any ecosystem or habitat type. There are six categories of HCVs covering biodiversity, large landscapes, rare ecosystems, ecosystem services, and natural resources that provide livelihoods and cultural values.

Table 2: Overview of simplified HCV categories for smallholders

HCV category	Description	Proxy
1	Concentrations or rare, threatened, and endangered species, concentrations of endemic species, and seasonal concentrations of species Concentrations of protected species	It would be challenging for smallholders to identify all HCV 1 species that may occur on their farms, and recognising these constraints, the Focal Species approach is less about species inventories and monitoring, and more about outreach, capacity-building, and attitudes. A limited set of focal species are selected to be relevant in the local context, with an associated set of recommended *precautionary practices*, designed to support and where possible maintain these species and their habitats where they occur, and provide a means for smallholders to take concrete beneficial actions, individually or collectively. Existing guidance can be drawn upon by project managers to compile a list of Focal species and develop outreach materials[8] for the smallholder landscape. Where there are conflicts with wildlife this needs to be treated with care, and the project managers should be well prepared to support smallholder communities in addressing conflicts. Smallholder communities may also add native species they consider to be locally important to the Focal Species materials, to encourage buy-in on a conservation agenda. There are range of threats to Focal Species beyond loss of habitat, and therefore associated mitigation measures. Within natural ecosystems threats can include hunting or poaching, collecting for trade, loss of critical habitat needs such as nesting or feeding trees. More widely with the landscape, threats may include preventing the movement of roaming animals across the landscape.
2	Intact Forest Landscapes (IFL) Intact Forest Landscapes (IFLs) are large areas of forest and forest mosaics, minimally influenced by human activity and are considered areas of High Conservation Value	While existing smallholder production landscapes are unlikely to be located within IFLs, they may be found nearby or adjacent. In such cases, farmers need to be aware of activities that may degrade IFLs, such as opening new access routes, timber harvesting, expanding subsistence home gardens, and constructing temporary settlements. Generic precautionary practices: discuss with communities on the range of activities that may degrade the IFL edge,

		such as timber felling, burning of vegetation, cattle-grazing, and hunting/collection, and based on this list, discuss how to stop or if feasible redirect these activities.
3	Remaining natural ecosystems	**HCS forest patches** qualify as a proxy for some HCVs, depending on the landscape context, as using a precautionary approach they can be considered rare, threatened, and endangered ecosystems (HCV 3). Generic precautionary practices include: Cultivation is not expanded into HCS forests. Off-farm practices do not degrade the ecological condition and functioning the HCS forests. **Peatlands:** Generic precautionary practices include[7]: No clearing into forested peatlands, which will also likely qualify as HCS forest. Good agricultural practices on peatlands already under cultivation Practices to minimize draining, e.g., blocking drainage channels. **Other non-forested natural ecosystems** These will typically be identified on a case-by-case basis, and can include as an example wetlands, or in rarer cases in Indonesia but certainly elsewhere, natural grasslands. These can be identified during preparation phases (see also sub-section 7 below), as well as in dialogue with the smallholder communities. Generic precautionary practices: Cultivation is not expanded into the ecosystem. Where there is already cultivation nearby, use good agricultural practices to minimize impacts Others to be identified on a case-by-case basis
4	Forest patches or other vegetation on steep slopes, water	Forest patches or other vegetation at the bottom of steep slopes or close to drainage gullies, forest, or other vegetation close to rivers or

	catchments, and close to rivers or streams	streams. **Peatlands:** Generic precautionary practices include[7]: No clearing into forested peatlands, which will also likely qualify as HCS forest. Good agricultural practices on peatlands already under cultivation Practices to minimize draining, e.g., blocking drainage channels. **<u>Farmlands on steep slopes is a proxy for risks to HCV 4, due to the potential for soil erosion</u>** Steep slopes are prone to erosion, particularly during or after heavy rains. Landslides may be catastrophic and endanger human lives. Erosion may also be more gradual, increasing sediment loads in water bodies and irrigation channels with negative downstream impacts, while also causing loss of topsoil, reducing land productivity and drought resistance. Precautionary practices can include: Erosion on very steep slopes is difficult to mitigate, and farming in such areas should be avoided, particularly where mudslides may threaten lives or livelihoods Farming on moderately steep slopes requires mitigation of erosion risks, either by constructing or maintaining existing terraces, or through agroforestry that minimises exposure of soil without vegetation cover and where roots of trees or bushes help to stabilise the ground, preferably in combination with channelling running water away from the area. **<u>Farmland close to (e.g. <50m) water bodies (rivers, streams, wells and dams) is a proxy for risks to HCV 4</u>** Good quality water is necessary to sustain life, to reduce risks of water borne diseases and to meet requirements for cooking and personal hygiene. It may be compromised by leakage from waste, pesticides or fertilisers used on nearby fields, animal dung or by runoff soil particles from fields and fallows. Such pollution may make the water unfit for human consumption, forcing people to bring water from further away, and increasing personal exposure.

		Precautionary practices can include: Maintain, restore, or re-establish buffer strips of permanent vegetation (native plants, agroforestry or perennial crops), 10 m wide or more, between fields and water bodies Not using pesticides or fertilisers in the buffer strips Minimise disturbance of strip vegetation cover and bare ground to patches necessary for establishing and renewing individual specimens of trees, bushes, and other perennial plants Add another, outside 20 m buffer zone where no pesticides or fertilisers are applied or stored.
5	Important Community Area (ICA) for fulfilment of basic needs and to secure livelihoods	Forest patches and other vegetation important for water regulation, biodiversity, food, fibre, or medicine
6	Important Community Area (ICA) for fulfilment of cultural and spiritual values	Places or species of worship, burial grounds, connection with ancestors, spirits

ANNEX 4 – Management and Monitoring Checklist for Simplified HCS-HCV Assessment for Smallholders

Now HCS forest and HCVs areas have been identified along with the categories of forest for protection, as a community you will want to make sure that these areas are maintained and enhanced. For this you will need to develop a management and monitoring plan to guarantee that your objectives and goals are achieved. Then what do you need to do? Here's a list of steps towards the development of a management and monitoring plan. Please always remember to do village and stakeholder consultation in every phase and activity of the management and monitoring plan.

Table 1. Steps and activities for the Management and Monitoring Plans

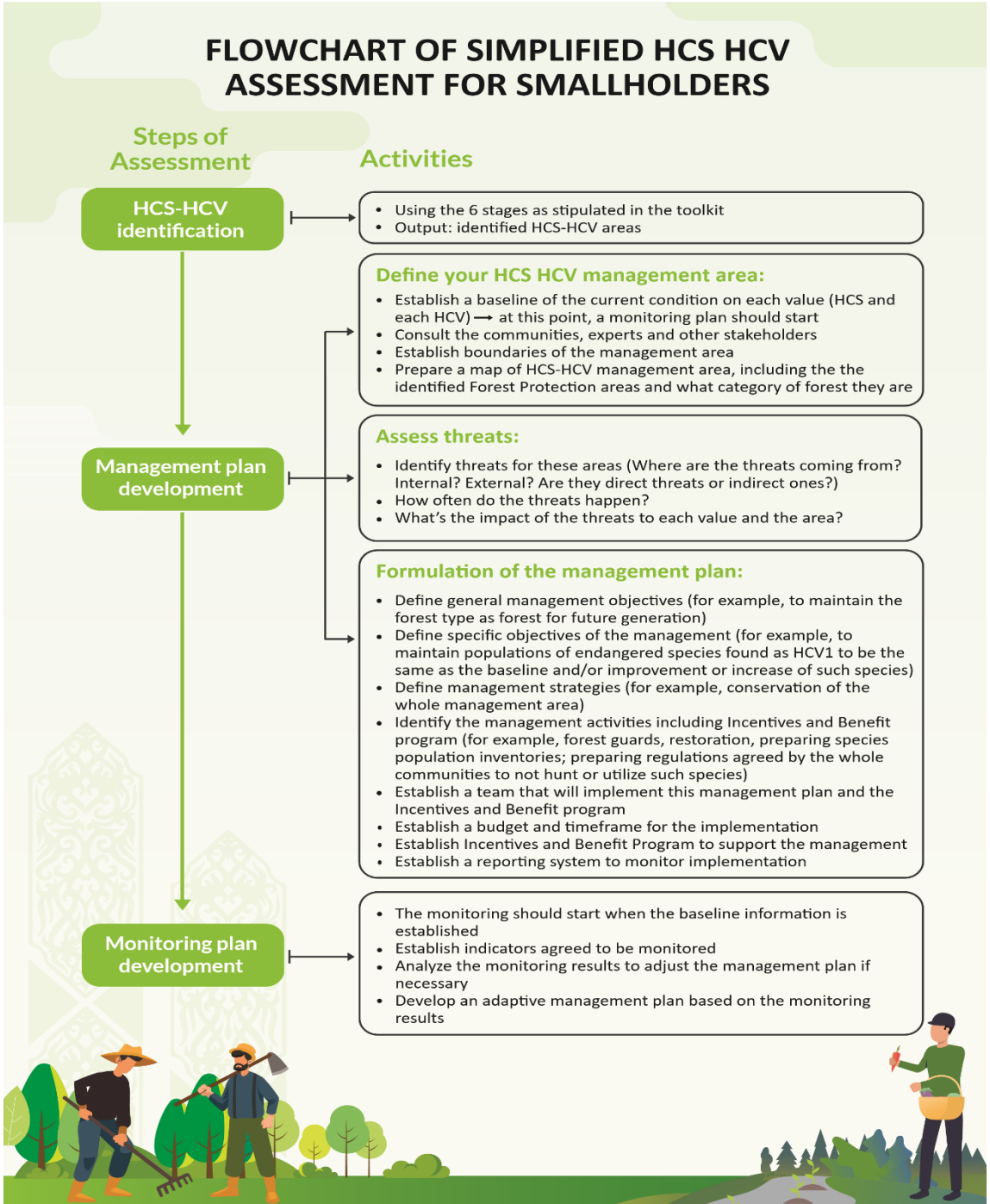
Steps	Activities
1. Define your management area (HCS and HCV management area is an area needed for managing them to ensure that those areas area maintained and enhanced.	• Establish a baseline of the current condition on each value (HCS forest and each HCV) → at this point, a monitoring plan should start • Consult the communities, expert and other stakeholders • Establish boundaries of the management area • Prepare a map of HCS HCV management area including the identified Forest Protection areas and what category of forest they are.
2. Assess threats	• Identify threats for these areas (Where are the threats coming from? Internal? External? Are they direct threats or indirect ones?) • How often do the threats happen? • What's the impact of the threats to each value and the area?
3. Develop the management plan	• Define general management objectives (for example, to maintain the forest category as natural forest for future generations) • Define specific objectives of the management (for

	example, to maintain populations of endangered species found as HCV1 to be the same as the baseline and/or improvement or increase of such species) • Define management strategies (for example, conservation of the whole management area) • Identify the management activities, including to address the identified threats and an Incentive and Benefits (I&B) program (for example, preparing inventory of such population; preparing regulations agreed by the whole communities to not hunt or utilize such species) • Establish a team that will implement this management plan and the I&B program • Establish a budget and timeframe for the implementation • Establish an Incentives and Benefits program to support the management • Establish a reporting system to monitor this implementation
4. Develop the monitoring plan	• The monitoring should start when the baseline information is established (see Step 1) • Establish indicators agreed to be monitored • Analyze the monitoring results to adjust the management plan if necessary • Develop an adaptive management plan based on the monitoring results

Table 2. General conditions of HCS and each value of HCVs that needs to be managed and monitored to ensure their maintenance and enhancement

Attributes	Key focus	What to monitor
HCS	Natural forest cover	• Carbon stock • Natural forest cover • Land use change
HCV1	Species concentration	• Habitat size and quality • Number of species that is endangered • Utilization of these species
HCV2	Large landscape and ecosystem value	• Is the HCS and HCV management area surrounded by protected area or forests in the landscape scale? • Are they connected? • Any fragmentation happened over time?
HCV3	RTE ecosystems	• Peat, heath and karst forests quality • Fire especially on the peatland
HCV4	Ecosystem services	• Quality of streams and rivers • Controlling any agrochemical in these streams, rivers and other water bodies • Controlling erosion, flood and other damaging activities
HCV5	Community basic needs	• Quality of communal area for meeting basic needs • Level of utilization of timber or non-timber forest products to ensure their sustainability • Participation of communities in making decision for their communal areas
HCV6	Cultural needs	• Conservation and protection of such area • Boundary marking

ANNEX 5:

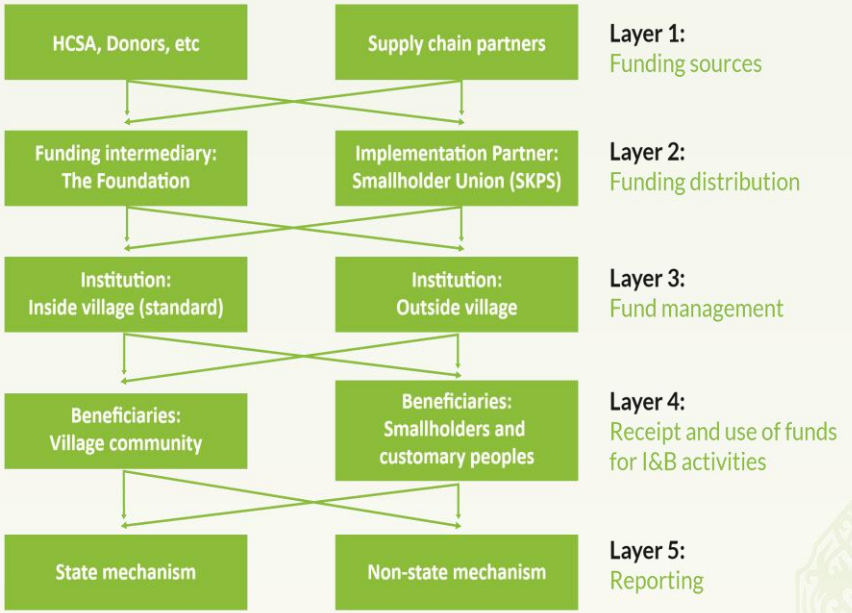

FLOWCHART OF SIMPLIFIED HCS HCV ASSESSMENT FOR SMALLHOLDERS
Steps of Assessment
Activities
HCS-HCV identification
Using the 6 stages as stipulated in the toolkit
Output: identified HCS-HCV areas
Management plan development
Define your HCS HCV management area:
Establish a baseline of the current condition on each value (HCS and each HCV) ⟶ at this point, a monitoring plan should start
Consult the communities, experts and other stakeholders
Establish boundaries of the management area
Prepare a map of HCS-HCV management area, including the the identified Forest Protection areas and what category of forest they are
Assess threats:
Identify threats for these areas (Where are the threats coming from? Internal? External? Are they direct threats or indirect ones?)
How often do the threats happen?
What's the impact of the threats to each value and the area?
Formulation of the management plan:
Define general management objectives (for example, to maintain the forest type as forest for future generation)
Define specific objectives of the management (for example, to maintain populations of endangered species found as HCV1 to be the same as the baseline and/or improvement or increase of such species)
Define management strategies (for example, conservation of the whole management area)
Identify the management activities including Incentives and Benefit program (for example, forest guards, restoration, preparing species population inventories; preparing regulations agreed by the whole communities to not hunt or utilize such species)
Establish a team that will implement this management plan and the Incentives and Benefit program
Establish a budget and timeframe for the implementation
Establish Incentives and Benefit Program to support the management
Establish a reporting system to monitor implementation
Monitoring plan development
The monitoring should start when the baseline information is established
Establish indicators agreed to be monitored
Analyze the monitoring results to adjust the management plan if necessary
Develop an adaptive management plan based on the monitoring results

MONITORING PLAN

A critical purpose of the monitoring is to find out if the HCS-HCV management strategies are implemented and the management objectives are being met (whether the size of the remaining forests are still there or reduced, and are the HCVs being maintained and enhanced). The monitoring should be designed to differentiate the effects of internal activities and the effects of activities undertaken by the others, as well as those unrelated to direct and local human activities such climate change. Important questions to be asked during the monitoring process may include if the changes have taken place in the HCS-HCV area, what caused them; if the risks and threats facing HCS-HCV changed; how effective the management strategies are.

Monitoring results should provide up-to-date information on the status of the HCS-HCV management area and function as a basis for management interventions or adjustment. Monitoring will be integrated with the Incentives and Benefits (I&B) mechanism implementation where the flow of funds and support is conditional on monitoring showing positive outcomes. Below is a schematic of the I&B mechanism structure to show the role of monitoring and reporting in layer 5.

Farmers for Forest Fund (4F) Scheme



High quality deforestation-free programs require more than one tool to monitor and report progress. Therefore, additional to the monitoring and reporting in relation to the Management Plan at village level, the I&B mechanism (via the mechanism's Foundation), will monitor and report progress and impacts including:

State mechanisms:

- Government program monitoring and reporting
- Peraturan Desa (Village Regulation), Peraturan Adat (Customary Regulation)