



PT Astra Agro Lestari Tbk

PROGRESS REPORT ON SUSTAINABILITY

FOURTH QUARTER
UPDATE 2021



ASTRA AGRO LESTARI FOURTH QUARTER 2021 PROGRESS REPORT

INTRODUCTION

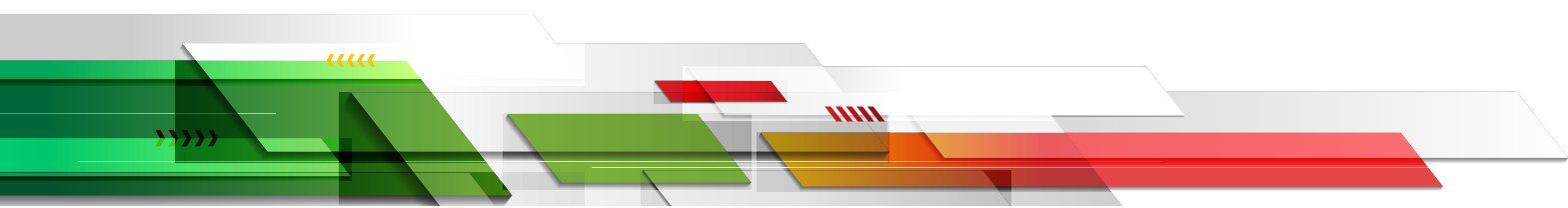
For this fourth quarter, assessment of our 3-Year Action Plan by Daemeter Consulting has reached its final stage seeing as how AAL has accomplished most of the activities, with some of the activities having been delayed and needing improvements. Challenges and obstacles we faced during the implementation of 3-Year Action Plan will be used as lessons learned for the improvement of our 5-Year Action Plan that is being developed in parallel with the evaluation of the implementation of the 3-Year Action Plan. The process of developing the 5-Year Action Plan is indeed longer than what was initially anticipated due to the fact that we planned each activity carefully by considering (1) inputs and recommendations from Daemeter Consulting based on their evaluation of the implementation of our 3-Year Action Plan, what went well and not, and why (2) obstacles and challenges we have learned during the implementation of 3-Year Action Plan, (3) inputs from our key stakeholders, (4) outlook from current and upcoming issues. Through this process, we believe that the action plan will be more comprehensive and is able to accommodate the challenges of sustainability in the coming years.

We expect that 5-Year Action Plan will be completed and come into effect by January 2022. During the process of preparing the 5-Year Action Plan, we continue to carry out all work plans in the field for 2021 as planned accordingly. In this report, we focus on some key issues of sustainability that will be explained in the following chapters.

HCV MANAGEMENT

HCV Reports update

Pertaining to our subsidiaries, based on our evaluation regarding the implementation of re-assessment of HCV, it needed almost a year to complete one subsidiary to have a final report of HCV assessment (including public consultation). Due to this, with the ambitious target to ensure all of our remaining subsidiaries are put through the HCV assessment scheme by the end of 2025, we are in the progress of engaging with additional relevant partners to meet our HCV assessment target on time.



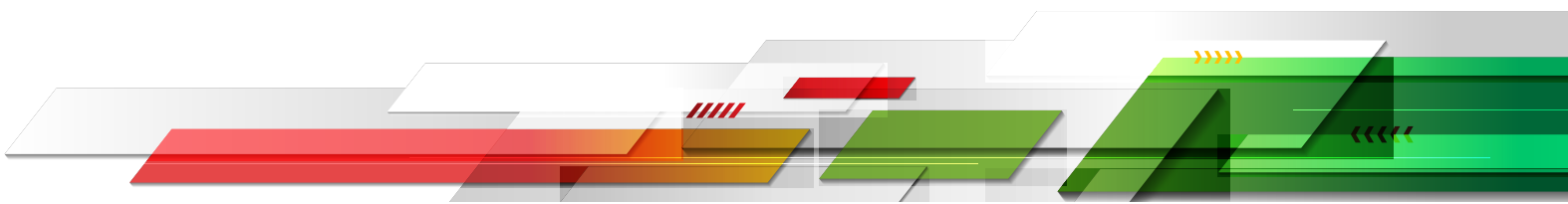
HCV Landscape

Based on previous desk study related to HCV landscape in three different landscapes project including in Siak, Pelalawan, and Singkil Area, we overlayed identified HCV-areas in the landscapes in question with the Government spatial planning of 2021 (including spatial data updates of government regulations such as Spatial and Regional Planning (districts & provinces), the Functions of Forest Areas and Indicative Map of Postponement of Granting of New Licenses. We learned that the existing HCV areas are included as protected areas and smallholder plantations are not committed to potential land clearing risks to the existing HCV. However, this information is based on only desk assessment. Further actions are needed to ensure limited potential risk to the existing HCV.

Rehabilitation Programs

The rehabilitation program is a long-term activity carried out in stages by adjusting the existing plantation landscape conditions. In the year of 2021, we focused our program on nine subsidiaries with different situations. Overall, by the end of 2021, we have rehabilitated an area of ± 82 ha with a total of 25,500 seeds planted across Aceh, Riau and Central Kalimantan regions. Our team has put their efforts to ensure that embedded seeds can grow and flourish to positively impact the surrounding ecosystem, one of which is for the provision of patches (steppingstones) or animal corridors

Continuous efforts are established to encourage biophysical quality and provide habitats for wildlife recolonization gradually. Our previous work (2018 – 2020) secured ± 113 ha of rehabilitated areas covering 31 subsidiaries spread across Aceh, Riau, Kalimantan, and Sulawesi. The field team recorded the presence of several wildlife in the riverbed zone such as the Luwak Ferret (*Paradoxus hermaphroditus*) and Javan Mongoose (*Herpestes javanicus*) various types of birds such as the Cattle Egret (*Bubulcus ibis*), Javan Pond Heron (*Ardeola speciosa*), Olive-backed Sunbird (*Cinnyris jugularis*), Yellow-vented Bulbul (*Pycnonotus goiavier*) and other insect-eating species. Some species have ecological functions serving plantation pest controllers, pollinators, and tree seed spreaders agents.



FIRE PREVENTION

Fire Mitigation

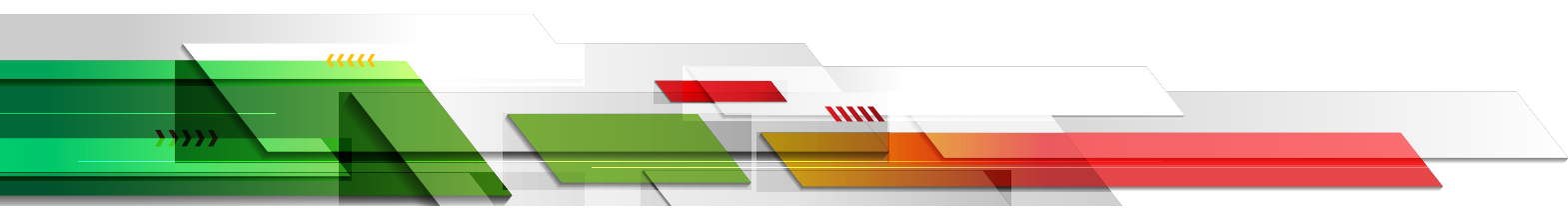
The start of the fourth quarter in October marks the transition from the dry season to the rainy season and based on the data of the Meteorology, Climatology and Geophysics Agency (BMKG), we can see there has been an increase in rainfall in the regions of Aceh, Riau, Jambi, Central Kalimantan, East Kalimantan, West Sulawesi, and Central Sulawesi. However, we note that the intensity of rainfall in South Kalimantan is still low until October. At the beginning of Q4 2021, we recorded five fire incidents outside of our concession, thus we maintained our preparedness level at emergency status for the subsidiaries in South Kalimantan until the end of October.

The Company employs a fire prevention system that is in accordance with existing regulations (Minister of Agriculture Regulation No. 5/2018) and has been implemented in all subsidiaries, which can be viewed here (<https://www.astra-agro.co.id/en/fire-prevantion-system/>).

Community Cares About Fires (MPA)

By the end of 2021, we have succeeded in establishing and fostering additional 14 MPAs at zone one villages around our subsidiaries, this achievement is exceeding our target for this year, which is to form six MPAs, bringing the total MPAs that have been formed to 102 MPAs. This exhibits our commitment to expand our collaborative efforts with the local communities to participate in fire prevention activities so as to effectively mitigate potential fire incidents. The formation of MPAs is documented in various media as follows:

1. <https://www.singkilterkini.net/2021/11/cegah-karhutla-pt-plb-aceh-singkil.html>
2. <https://nomorsatukaltim.com/index-berita/advertorial/ns-20211231/pt-bim-pps-inisiasi-pembentukan-ktpa-di-lima-desa/>
3. <https://nomorsatukaltim.com/index-berita/advertorial/ns-20211217/pt-stn-bentuk-dua-ktpa-di-babulu/>
4. <https://nomorsatukaltim.com/index-berita/advertorial/ns-20211210/ktpa-pertama-di-ppu-inisiasi-pt-wkp/>

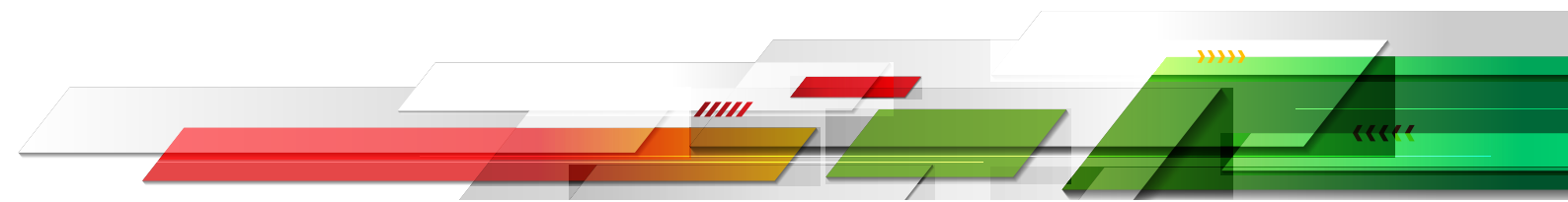




Picture 1. Socialization and dissemination for MPA/KTPA

We also succeeded in developing additional three MPAs into self-sufficient (MPA Mandiri), which also exceeded our target this year, which is to develop two self-sufficient MPAs, bringing the total to 20 MPA Mandiri out of the existing 102 MPAs. We continue to develop the existing MPA Mandiri development program in a sustainable manner with good collaboration from various parties for the prevention of fires. We strengthen and encourage the MPA groups that we have fostered to become MPA Mandiri (Independent). In addition to training the MPA groups, the Company cooperates with the MPA on the development of various entrepreneurial activities from 2018 until now. Details of activities are as follows:

1. Development of fish farming by floating cage, processing of smoked fish, and marketing of products (two villages).
2. Activate community's idle lands into agricultural land by planting them with sago plants (one village).
3. Development of wood vinegar home industry (one village).
4. Equipped the fisherman with proper fishing equipment (two villages).
5. Development of honeybee and laying duck farming (four villages).
6. Development of Gurame fish farming (one village).
7. Activate the community's idle lands into agriculture and horticulture farms (eleven villages).
8. Activate the community's idle lands into agricultural farms by planting crystal Guava (two villages).



GHG EMISSIONS

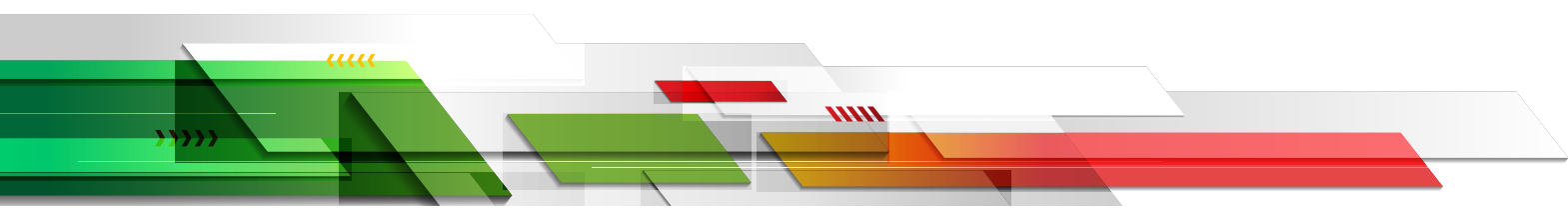
Astra Agro is committed to reducing greenhouse gas emissions in harmony with the national commitment of the Indonesian government. In developing a long-term emission reduction strategy, we develop systematic, comprehensive, and scientific-based steps which will then be used as a reference in setting targets and Astra Agro's reduction programs in the future. The company's seriousness in realizing its GHG reduction commitment begins with the preparation of the proper strategy by consulting with various relevant parties such as the government and experts, among others Ir. Emma Rachmawati, M.Sc. (KLHK), Dr. Joni Jupesta (Lead Author IPCC), Prof. Supiandi Sabiham (Professor of Soil Sciences - IPB University), Prof. Udin Hasanudin (Professor of Agro Industrial Waste Management - University of Lampung, Idung Risdianto, M. Sc (IPB University Lecturer). Consultation with the Ministry of Environment and Forestry is included to synchronize government reduction programs with company programs, and we consult with Experts from various universities to provide entering through the Life Cycle Assessment (LCA) method and inventory activities and quantification of emissions sources and potential for carbon absorption (sequestration) of operational activities in the palm oil industry sector.

At Q4 2021 we also conducted consultative meetings and training with consultants in collaboration with Astra International, including the South Pole and McKinsey related to GHG calculations with the GHG Protocol Standard method and the planning mechanism for the natural base solution program to reduce long-term emissions. We also benchmark into a similar industry with a discussion of meeting related to emissions reduction programs with methane capture, peat restoration that has been done in other companies.

Peatland MANAGEMENT

Sustainable Peatland Management

As per our policy, and as stated in our previous reports, AAL is committed to sustainable peat management by always implementing Best Management Practices in accordance with applicable laws and regulations with assistance of the Ministry of Environment and Forestry (KLHK) and Peat and Mangrove Restoration Agency (BRGM).



We continue to strive in improving our sustainable peat management through increasing the skills and knowledge of our peat management team, one of which is by holding relevant training regularly. In Q4, in collaboration with the Ministry of Environment and Forestry, we carried out refreshment training regarding water management, inventory, and the mapping distribution of the characteristics of peat ecosystems.

Analyzing FFB Suppliers Operating on Peatlands

We encourage our suppliers to be in line with Astra Agro's Sustainability Policy, one of which is to manage peat sustainably. We analyze our supplier's spatial database against the official indicative map of peat hydrology issued by the Ministry of Environment and Forestry to ensure which of our suppliers own or fall under peat areas so we can provide the proper support.

As of 2021, we have managed to overlay all smallholders' areas in our supply chain with the result of as much as 8% of $\pm 56,000$ smallholders being at peat areas. Based on these data, further analyses to determine the priority suppliers will be carried out. In determining priority suppliers, we developed a methodology by classifying suppliers based on an analysis of the FFB supply source villages. In the next step, we overlay the village administrative boundaries against environmental indicators (World Database on Protected Areas (WDPA) from IUCN; Forest area from KLHK; Indicative Map of Postponement of Granting of New Licenses (PIPPIB) from KLHK; and Hotspot Data for the last three years. Then, we will identify potential risks followed by field verification.

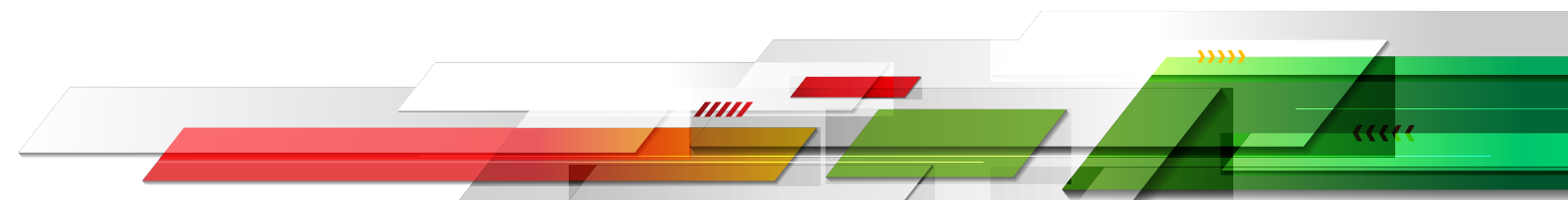
After determining the priority of suppliers and knowing their potential risks, we will design and provide appropriate capacity-building assistance in implementing peat management best practices. The next activity will be monitoring and evaluation.

CPO SOURCING

1. TRACEABILITY

a. Traceability to Mill

In this quarter, 100% traceable CPO sources originating from 44 mills (25



internal and 19 external) have been maintained. Details of the list of external supplier names can be found at <https://www.astra-agro.co.id/sustainability/supplier-list>.

Table 1. CPO Supply Sources for Trading & Refinery in Q4 2021

Mills	DESTINATION				
	Refinery			Trading	Trading & Refinery
	Kreasi Jaya Adhikarya	Tanjung Sarana Lestari	Tanjung Bina Lestari		
Internal	11	7	-	-	7
External	2	-	-	15	2
				Total	44

b. Ensuring source of origin from third party suppliers

i. Improvement Existing traceability template

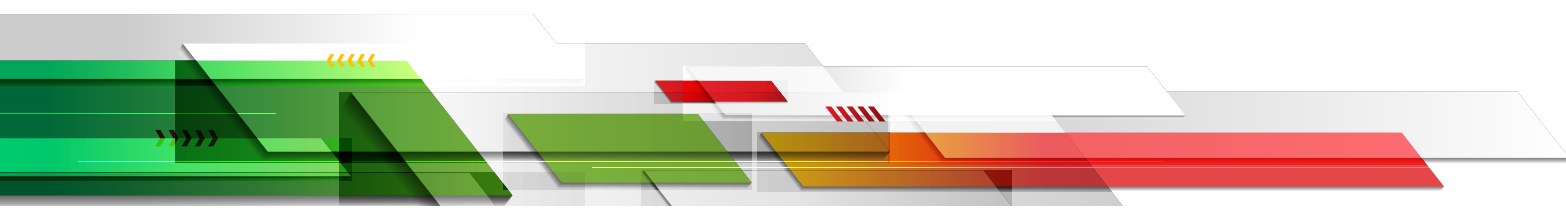
In 2021, we updated the traceability template for CPO suppliers where we integrated existing template with a village-based traceability calculation formula that serve as our source of supply. This updated template enriches our traceability information and also helps supplying companies know their village-based traceability and sourcing volume achievement.

ii. Progress

The data collection process for the origin of FFB has been conducted in stages since 2020 beginning from socialization to data filling and as of now, there are at least nine suppliers who have successfully traced 100% of their FFB supply. By using our updated template, in this quarter, all suppliers have registered the origin of their supplies with an average traceability of 89% which is a significant increase compared to the first-quarter average of 69% and with further development to come, will continue to assist suppliers in periodic data collection.

2. Due Diligence for Suppliers

Every year, we update the information from our analysis. Whereas in early 2018 our analyses focused solely on mills that were engaging in transactions, in 2019



up to now, we expanded this to the group/parent company level analysis. Companies that are categorized as low risk based on the results of the analysis must state their commitment to our Sustainability Policy first before business transactions can be conducted. As of the end of this year, there are six new suppliers in our supply chain.

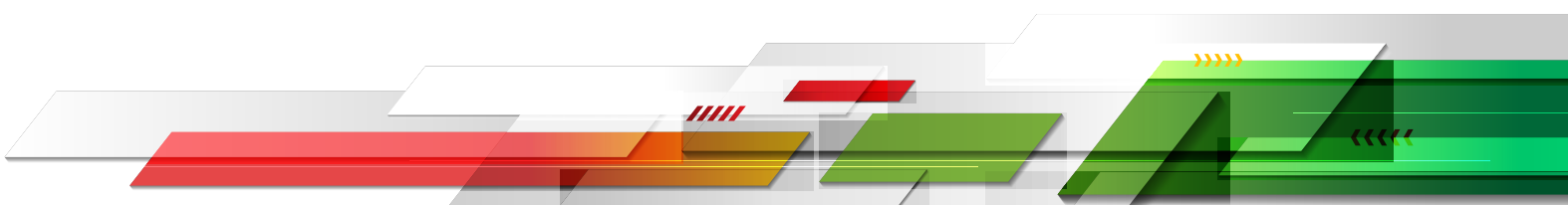
3. Aligning Suppliers with AAL's Sustainability Assessment Mechanism

We continue to encourage our suppliers to be in line with our Sustainability Policy by implementing an assessment mechanism using the Sustainability Assessment Tool (SAT) to ensure the alignment of our suppliers. Our suppliers have been conducting self-assessments for their sustainability performance using the SAT since 2020. From the results of the SAT assessment, we followed up with further analysis to determine the appropriate assistance in filling the assessment gap which is then being monitored regularly. In the previous quarters, we provided technical assistance and webinars twice so this quarter we focused on monitoring the progress of gap fulfillment. As of Q4 2021, the average SAT results of 19 suppliers after they filled the gap rose to 86%, compared to 77% in the previous result.

4. Analysis of Potential Supplier Violations

Based on the findings and verifications carried out in the fourth quarter of 2021, there were no violations committed by direct suppliers in our supply chain or by affiliated subsidiaries in our suppliers' parent groups. For more detail on our list of grievances and how they are handled, please visit:

<https://www.astra-agro.co.id/sustainability/complaint>



FFB SOURCING **SMALLHOLDERS SUPPORT**

Traceability of FFB Supply

Our FFB supply up to the fourth quarter of this year is composed of 42% sourced from owned plantations, 5% sourced from the associated plantations and 53% sourced from third-party/independent suppliers. In accordance with the 5-Year Action Plan targets proclaimed by the Company, as of this period, we have reached 100% of FFB traceability. The total number of smallholders (associated and independent) actively supplying in 2021 and fully traceable totaled ±56,000 smallholders. The dynamics of smallholders who have ceased their transactions with us and are free to sell their FFB to other mills as well as the changing of land ownership between small smallholders serve as indicators and challenges when attempting to renew and maintain 100% consistency in traceability for the following periods.

Support Program for FFB Suppliers

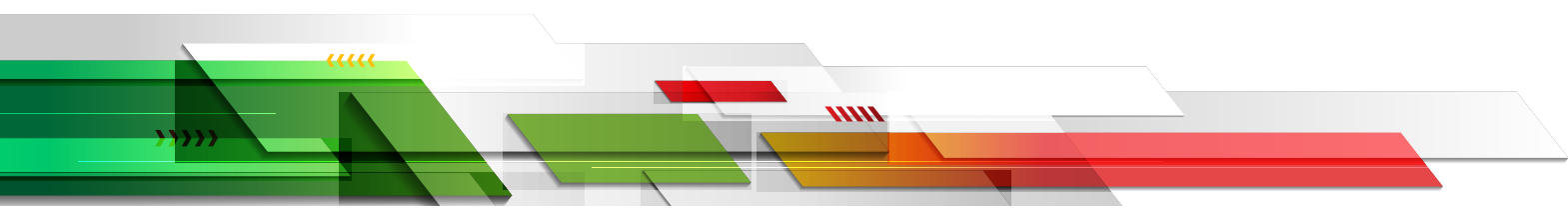
As of this fourth quarter, for all traceable associated and independent smallholders who have been traced, 54% of them are still at the stage of the support programs introduction and needs assessments and the other 46% have decided to join the support program where smallholders are free to choose which specific programs are appropriate for their specific needs.

Specifically directed toward independent smallholders, the continuation of support programs that support the operational needs of our suppliers are explained below.

a. Training and Capacity Building

We continue online training and capacity building programs for partners and smallholders which focus on operational and sustainability aspects. In Q4, we conducted six training (11 materials) with the number of smallholders participating as many as 492 smallholders. Overall, for 2021, as many as 1,175 smallholders have joined our capacity training and development program.

In addition to the training above, we also supported the technical assistance for the replanting process to 11 partners (1,816 smallholders) covering an area of 3,665.6 ha



spread across the provinces of Aceh, Riau, Jambi, and West Sulawesi. The technical assistance conducted covered the process of felling, chopping, land preparation, cover crops planting, and nursery to field planting.

b. Facilitating Partnership Support Programs

1. Financing and Procurement of Oil Palm Seeds Support Programs

In this period, we facilitate seven networking partners in Jambi, West Sulawesi, and Central Sulawesi in procuring $\pm 23,700$ oil palm seeds for 16 supplying smallholders. Our competent field staffs consistently provide technical assistance related to land preparation and the nursery process. In total, in 2021 we have facilitated 14 partners in terms of procuring $\pm 64,300$ oil palm seeds from the Astra Agro Lestari's research center which will be used by 61 supplying smallholders, both for replanting and replacement of defective oil palm trees.

2. Financing and Procurement of Fertilizer Support Programs

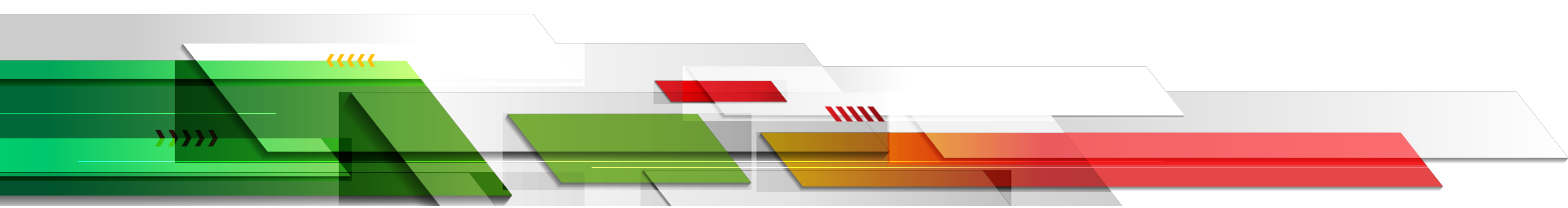
In the period Q4 2021, there were no additional new smallholders participating in this program. Progress during the 2021 period can be seen in the previous Q3 report.

3. Financing and Procurement of FFB Transportation Units Support Program

In this Q4, we recorded that there were 174 new smallholders participating in this program, bringing the total participants for 2021 to 681 smallholders (under 132 network partners) facilitated in terms of financing, arrangement, and providing transportation units for the evacuation of FFB from the collection site to the mills. Networking partners who participated in this program are spread across the Province of Riau, Jambi, Central Kalimantan, and West Sulawesi with a total transport volume of 59,879 tons.

4. Support for Operational Infrastructure

This support program continues the activities from previous years to facilitate the maintenance and repair of roads and other supporting infrastructure in FFB suppliers' plantations. For this fourth quarter period, the program has been carried out in Riau (one networking partner with a number of 456 smallholders) and Jambi (two networking partners with 285 smallholders) with a total of 51 km worth of "main road" having been repaired.



Program development to Reduce Sustainability Related Risks

Partnership support programs that have been running then we developed with program intervention to reduce the risk of sustainability aspects at the village level as the Base of the Supply Source of FFB. The stages carried out include: 1). Village classification based on environmental indicators, 2). Prioritize partners and targeted smallholders from programs, 3). Identify potential risks in the field using Tools Assessment, 4). Implement programs to reduce potential risks.

In this period, we have classified the village supply source of FFB by carrying out village administration boundaries with environmental indicators. The results of the analysis we classify to high-risk status (37%), low risk (28%), and no risk (35%). The risk status of the village will be analyzed further with other indicators, such as volume, frequency of FFB supply, and partner categories to determine the mentoring priority partners & smallholders

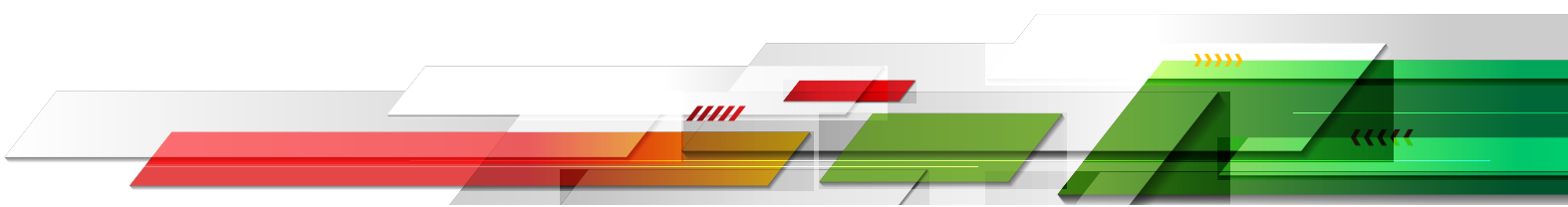
ORANG RIMBA PROGRAMS

DISTRIBUTION OF FOOD

The distribution of foodstuffs is still routinely carried out in the fourth quarter of 2021. As of the end of 2021, the total number of foodstuffs that have been provided for the Orang Rimba includes 44 tons of rice and 3,756 packages of food ingredients for 313 family heads. For this fourth-quarter period, the company added dish soap based on recommendations from local health centers to assist in the program's goal of increasing awareness of Clean and Healthy Living Behavior (CHLB). The Company cooperates with village-owned enterprises in the village of Pematang Kabau through the provision of fragrant lemongrass washing soap.

FORMAL EDUCATION SERVICES

The Company continues to encourage Orang Rimba residents to pursue the highest possible education so that educational service programs continue to be carried out regularly, both formal and informal. As of Q4, 391 children out of a total target of 521 children have received education at various levels facilitated by the Company.



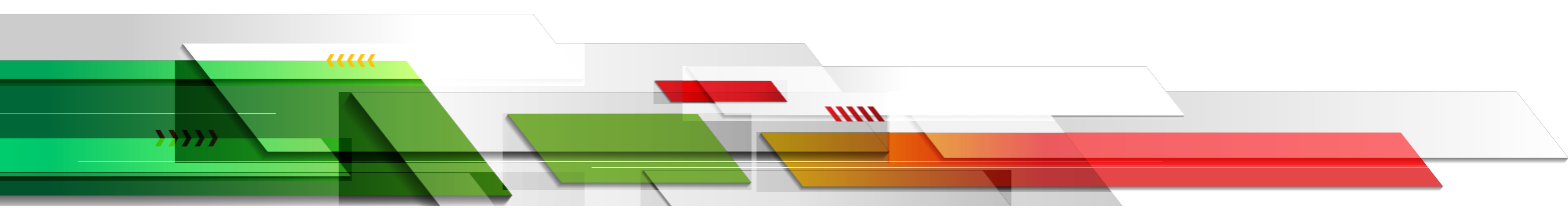
MULTISTAKEHOLDER COLLABORATION

Collaboration with Jambi University

The collaboration with the Jambi University through the Matching Fund program which also involves other parties such as the Village Government, Sub-district Government, the National Park Office, Jenang, Babinsa, and the Company has been in effect since 2021.

As of Q4, the progress of this collaboration as described below:

- Training on medicinal plants processing which includes an inventory of medicinal plants with economic value and technical capabilities from processing medicinal plants to product packaging, so that they have the potential to be marketed and have economic value. The training was attended by representatives of Orang Rimba and groups of women in the village by presenting trainers from the Sarolangun District Health Office.
- Field practice to build nursery and plant cultivation. This activity was held on October 9th, 2021, aiming to raise awareness of the Orang Rimba community to cultivate forestry and endemic plants that have economic value and are sustainable. This activity involved six students from the Forestry Faculty, Jambi University, as a means for them to learn closely to practice seed breeding, as well as being a facilitator who accompanied Orang Rimba.
- Establishment of nursery and forestry plants demonstration plot at the land owned by one of the Orang Rimba Tenggana, namely H. Jailani, covering an area of ± 2 ha with rubber and areca nut commodities. From the development of this demonstration plot, a breeding group has also been formed, with members being those who show their sincerity in cultivating plantation crops.
- In collaboration with the Education Office of Sarolangun District developing a learning curriculum with an approach to the daily lives of Orang Rimba children. This curriculum was piloted in four Orang Rimba schools located in 3 villages, namely Pematang Kabau Village, Lubuk Jering Village, and Bukit Suban Village, in Air Hitam Sub-District. The curriculum pilot activities involved six students from Jambi University as teaching staff as part of their teaching practice activities from 8 October to 30 November 2021.



- Facilitating Orang Rimba community to be integrated with the local village community through preparation of PERDES (village rules) is through action-based research, by conducting FGD with the Temenggung. The results of the FGD were then presented and discussed together by the relevant village elements involving the village apparatus and the Village Development Agency. As a result, the village agreed with the proposal, accommodating the formation of a neighborhood administrative (RT) in the Orang Rimba community with Temenggung as the head of the RT and the involvement of the Mangku as part of traditional institutions at the village and sub-district levels. This concept is stated in the form of a draft of PERDES.

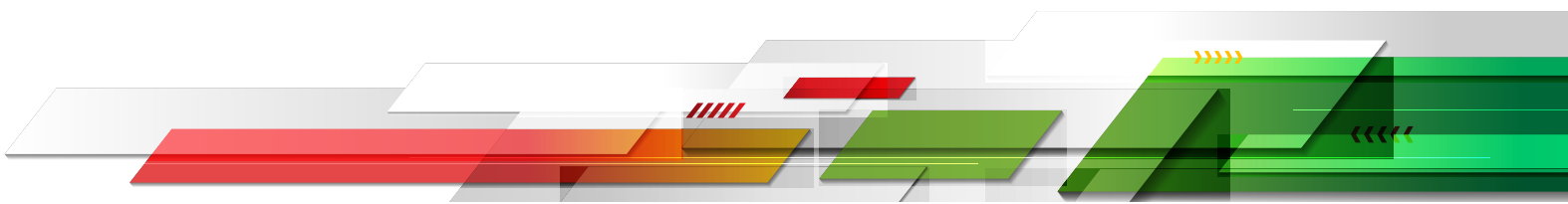
As a follow-up, several trainings were carried out such as training on Village Government Organization Management, Village Administration and Finance Administration, Population Registration System, and Orang Rimba Legal Awareness Workshop. These activities were held at the Pematang Kabau Village Hall, Air Hitam Sub-district, Sarolangun District on November 30th, 2021, aiming to help harmonize the Orang Rimba customary law with the integrated and sustainable customary law of the Malay community. The Population and Civil Registry Service of Sarolangun District has attended this activity as a speaker.

Collaboration through the Orang Rimba Social Development Partnership Forum (FKPS-SAD)

At a meeting on November 8th, 2021, the FKPS-SAD members agreed to assist Orang Rimba residents in managing their family zones as a living space and source of livelihood based on the zoning provisions that were ratified in 2019. The meeting was attended by parties who are members of FKPS-SAD, including the Head of the Bukit Duabelas National Park Office (TNBD), Head of the Office of Food Crops and Horticulture and Plantation of Sarolangun District, Prakarsa Madani Foundation, Babinsa, Head of Bukit Suban Village, PT Sari Aditya Loka (PT SAL), Temenggung and Tengganaai along with representatives of the Orang Rimba community.

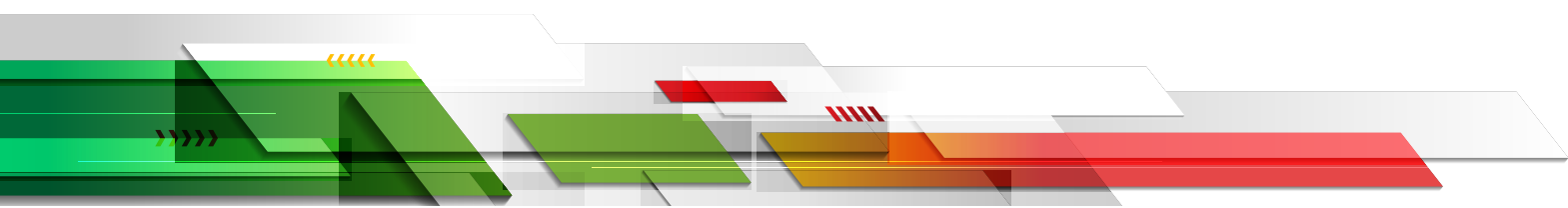
This meeting has reached several agreements including:

- All FKPS-SAD members agreed to facilitate Orang Rimba residents who are willing to manage family zones to develop a source of livelihood by planting high



economic value crops on arable land in accordance with customary rules and regulations of the National Park. All forum members will be involved in the mentoring process.

- Bukit Dua Belas National Park and the parties have designated seven Family Heads (Temenggung Nggrip Group) through participatory meetings to be Pilot Project for family zones management.
- Seven Orang Rimba residents have expressed their willingness to manage the family zones provided by the National Park.





Prosper with the Nation

PT **Astra Agro** Lestari Tbk

Jakarta Head Office

**Jln. Puloayang Raya Blok OR I
Kawasan Industri Pulogadung
Jakarta 13930 - Indonesia**



(+62-21) 4616 555



(+62-21) 4616 682 / 4616 689



sustainability@astra-agro.co.id



www.astra-agro.co.id

