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PROGRAM REPORT
COMMUNITY EDUCATION and CONSERVATION PROGRAM (CECP)
JANUARY - DECEMBER 2023

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and
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of
COMMUNITY EDUCATION AND CONSERVATION PROGRAM (CECP)
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I. Executive Summary

This year, there are 4 major programs implemented by SHL, they are sustainable livelihood development, conflict mitigation between the community and wildlife, rehabilitation of forest ecosystem and environmental education program.

The first program, the sustainable livelihood development, includes activities for managing one organic farming demonstration plot, assisting 31 farmers in applying liquid organic fertilizer, field schools and creating organic fertilizer shelters for 12 farmers who have just joined, assisting 111 households in using their home gardens to grow org anic vegetables, mentoring 11 cocoa farmers and 13 pepper farmers, assisting 5 cattle breeders in using livestock manure to be processed into solid organic fertilizer and cultivating odot grass as additional animal feed, assisting 6 farmers in cultivating magot and 9 housewives in cultivating medicinal plants as a friendly alternative business environment.

SHL's demp-plot is located in Buluh Regen Hamlet, Ujung Bandar Village. The dem-plot layout is made every month as a reference for the SHL team in planting plants in the designated plots. Within a year, land cannot be used for planting every month in a row. There are times when better. Sometimes there were also some students who are conducting research on vegetable cultivation using liquid organic fertilizer in the dem-plot. The dem-plot is still managed semi-organically, that is, it still uses chemical fertilizers, but in small quantities. The total number of harvests in the dem-plot in 2023 is 134 kg of long bean, 202 kg of kangkung, 99,12 kg of mustard, 20,75 kg of chili, 133,75 kg of cayenne pepper, 106,5 kg of green eggplant, 11,5 kg of chili (caplak besar) and 1,25 kg of chili (caplak kecil) with side income of IDR 9,326,880. This income is not commensurate with the costs that must be spent every month, most of which are for plant maintenance. In addition, the dem-plot land cannot be fully utilized, considering that this land is also intended for tree seedling houses and for students from University of North Sumatera and Pancabudi to conduct research.

Fertility and soil acidity levels are two of the main obstacles. Soil pH starts from 0 – 14, if when the soil acidity level shows a range of 0 – 7, then the soil is acidic soil. And if the acidity level shows a number between 7 – 14, then the soil is alkaline soil. In October, when we measured the pH of the soil in the demplot using *Lakmus* paper, the soil pH showed 4-5, the soil is acidic. To increase the soil pH to normal (6.5 -7.5), we sprinkle dolomite. Apart from that, plants are also attacked by *botok* pests which cause curly leaves and slow growth. To overcome this, we sprayed pesticides but the results were still not satisfied. To maximize land use and reduce pests, we started sowing 1000 chilies and cayenne pepper seeds and 250 grams of sweet corn seeds in December. We do this based on the reference *https://distanpangan.magelangkab.go.id/home/detail/penerapan-sistem-tumpang-sari-jagung-dan-cabai-rawit/273*

We have tried to compile a simple guide sheet on making 2 models of liquid organic fertilizer. The first guide sheet was obtained from Mr. Erwin, an expert in organic farming who compiled the guide based on his experience in applying it to the farmers he assisted in the Karo area, North Sumatra, after the eruption of Mount Sinabung and this liquid organic fertilizer proved to be effective for horticultural crops. The second guide sheet was obtained from the result of a research from Pancabudi University' students. The research has been finished but we are still waiting for the organic fertilizer test results in the laboratory in the next 2 months. Both of the guide sheets are good but the first guide contains a lot or variety of material while the

second guide does not. It's just that some of the materials from the second guide are a bit difficult to obtain in everyday life in the village. All the ingredients for making liquid organic fertilizer above are not standard, the ingredients can be adapted to what is in the village. What must be understood is that the materials used contain sodium (N), phosphate (P), potassium (K) and also pesticides which are good for plants so that when these materials are broken down by bacteria they will provide benefits similar to those of pesticides and fertilizers. sold on the market. With so this fertilizer is expected to reduce the use of chemical fertilizers as well as being able to reduce production/operational costs of farmers in farming.

In 2023, SHL collaborates with the University of North Sumatra, Pancabudi University and Medan Area University in the MBKM (Merdeka Belajar Kampus Merdeka) Program where students are given the freedom to study outside of campus for 1 semester, and research carried out by students and community service activities carried out by the lecturer. This year there are 6 students doing MBKM and 4 students doing research and 1 lecturer doing training about making liquid organic fertilizer and how to control pests using vegetable pesticides to 24 farmers from Ujung Bandar and Batu Jongjong Village as a form of service to the village community.

SHL assisted 31 farmers from 36 farming locations in making and applying organic fertilizer in Lau Damak Village, Batu Jongjong and Ujung Bandar Village. This is still far from the target of 60 farmers because most farmers who grow vegetables and chilies do not have their private land. They just stay in young or small palm oil plantations belonging to other farmers for free. Currently, the palm oil trees are starting to grow so the farmers we accompany can no longer live on these palm oil plantations. Apart from that, farmers are also less consistent in remaking organic fertilizer regularly. They are also a bit lazy about collecting fertilizer ingredients and find it a hassle to apply it, which has to be more routine than using chemical fertilizers. These 31 farmers manage 36 agricultural land locations where 16 fully implemented organic farming pattern, 12 semi organic and 8 chemical farming pattern. The eight locations are planted with land rice since November 2023. The harvest will be obtained around February 2024. The They have not yet decided whether to use organic fertilizer or not in the following month. They want to see the growth of their plants first. Meanwhile, SHL remains committed to educating farmers one by one every month. Education is carried out by providing knowledge about the benefits of organic farming and assisting farmers who want to make fertilizer independently.

Apart from assisting farmers, SHL also assisted 111 households in using their home gardens to grow organic vegetables in Lau Damak, Batu Jongjong and Ujung Bandar Village. The team tries continuously to provide education about the benefits of growing organically. Apart from being healthy to consume, it can also reduce daily shopping costs. For the new members who have just joined this activity, they have received assistance such as vegetable seeds, polybags and nets. They were also taught to make stacked buckets as containers for making organic fertilizer from kitchen waste. Until the end of December, the average of side income per day is IDR1,780 – IDR2,381.

In September, SHL has also formed 1 new farmer group consisting of 12 residents of Buluh Regen Hamlet, Ujung Bandar Village who join in activities of applying organic fertilizer to their agricultural land. They are divided into 2 groups based on where they live or adjacent farming land. These twelve farmers have also received a field school on organic farming in the form of practice making liquid organic fertilizer as well as receiving facilities for building simple shelters for organic fertilizer containers.

Apart from liquid organic fertilizer from household waste or other natural materials, SHL also tries to use animal waste to make solid organic fertilizer. There are five residents of Tanjung Naman and Tusam Pinter Hamlets in Lau Damak Village who joined in this activity. Three of them have had TPE (Tiger Proof Enclosure), making it easier for owners to collect their

livestock manure. All of them are palm oil farmers. These three farmers were each given facilities in the form of 1 barrel with the capacity of 160 liters, 1 bottle of EM4 and molasses as a bio starter for making fertilizer. After 21 days of processing, the solid organic fertilizer is ready for use. The TDS (Total Dissolved Solids) value is a measure of how much salt, nutrients or other concentrates are in the water. TDS is measured in ppm (parts per million). The TDS measurement value for different plants is different, for palm oil plants with a quality value of 500 to 1000 ppm x 10. While the TDS results obtained from fertilizer made by Mr. Malem Ukur is 645 x 10 ppm and Mr. Bolang Pinem is 585 x 10 ppm. This means that the quality of the fertilizer is quite good.

For the breeders, they have also started cultivating odot grass as additional feed for their livestock. In September, 4000 odot grass seeds have been planted in a dem-plot of 0.3 hectares with a planting distance of 80 x 80 centimeters. SHL also facilitated razor wire for the fence around the dem-plot to avoid livestock disturbance. In November, the odot grass that has been planted is currently 60 days old, 50 cm high, and the stem segments are 7 cm, but the growth of the odot grass is uneven. thought to be due to differences in soil pH. Therefore, we will continue to monitor the development of odot grass to meet the animal feed needs of the 5 breeders involved in this activity.

SHl also still assists 11 cocoa farmers and 13 pepper farmers. Currently, some of the cocoa has already borne fruit in the villages of Lau Damak and Batu Jongjong. Unfortunately, not all farmers care for their cocoa diligently, such as fertilizing and pruning, which affects its growth and fruit. Meanwhile, for pepper cultivation, several farmers have started harvesting for personal/household consumption. The obstacles faced are that farmers still don't understand how to care for pepper, such as providing support so that pepper can spread, and this year's extreme weather has had a big impact (the rainfall is too high or the heat is too hot).

Meanwhile, for environmentally friendly alternative business activities, we accompany the group BSR (Bandar Sri Rezeki) in cultivating magot and the Arih Ersada group in cultivating medicinal plants and producing traditional Karo medicine. In the first round, the BSR group used its small-scale magot harvest to become catfish livestock feed. This group also received training on cultivating maggots and processing them into pellets in November in Medan. Meanwhile, the Arih Ersada group succeeded in selling 739 bottles/packs of medicinal products and generated side income of IDR 22,207,000 this year. Even at the end of 2023, this group has succeeded in sharing profits from business results of IDR 500,000 per person for 9 members.

The second program, the conflict mitigation between communities and wild animals, especially orangutans, tigers and Sumatran elephants, includes monitoring activities at 38 potential conflict locations as well as outreach to 89 residents about conflict mitigation in 8 villages in Bahorok District, distributing posters, installing zinc plates in 5 locations to prevent conflict with orangutans and other primates.

There are 38 location that had the potential for conflict in Lau Damak, Batu Jongjong, Ujung Bandar, Sei Musam, Timbang Jaya, and Sampe Raya Village. There are no conflicts with the key species of the Gunung Leuser National Park. We just had information that 3 orangutans were found in Mr. Sunadi's garden in Batu Jongjong Village, 2 orangutans were found in Mr. Pijar Kaban's garden in Timbang Jaya Village but the land owners said that the orangutans were not dangerous or causing economic loss. Most land owners only complain about beruk and long-tailed monkeys who always come in groups. In this case, there is no significant solution yet.

Although there are no conflicts, we still do the socialization to 89 residents in the villages of Lau Damak, Batu Jongjong, Ujung Bandar, Sei Musam, Timbang Jaya and Sampe Raya about the conflict mitigation. The socialization included locations that have the conflict potential so that

village residents are careful when carrying out activities around these locations. The team will also discuss with the community about efforts that can be made to prevent conflicts, such as building TPE, installing zinc plates, and making firecrackers which can be made from plastic bottles and used milk cans to drive animals back into the forest.

We also distributed posters in the form of calendar with an image of an orangutan which contains information about contact numbers that village residents can contact if there is a conflict or signs of the presence of wild animals, especially key species of the Gunung Leuser National Park. These posters have been distributed to villages in Bahorok District, especially those that have the potential for conflict with wildlife, such as Lau Damak Village, Batu Jongjong, Ujung Bandar, Timbang Lawan, Timbang Jaya, Sampe Raya, Sei Musam and Musam Pembangunan. It is also used as media material for SHL's campaign to mitigate conflicts between the village residents and wild animals, especially orangutans.

One of efforts in minimized the conflict, we have installed zink plates in 5 locations on 36 durian, petai and mangosteen trees in Timbang Jaya and Ujung Bandar Village. But this year not a single TPE (Tiger Proof Enclosure) could be built. The reason given by the village community is that they don't collect wood for the cage poles because they were busy working in the fields. The other reason is because they feel that their livestock is still safe because from the beginning to the end of 2023, no conflicts have occurred. The village residents understand the benefits of TPE but because there has been no conflict this year, the residents are not willing to build TPE at this time because they still feel safe. We also monitored the TPEs that have been built since 2021. Almost all of the TPEs have been damaged, such as the wooden poles rotting and collapsing, so some of the cages are no longer used because they are no longer suitable. SHL has tried to help with cage maintenance costs such as buying oil, replacing barbed wire that can no longer be used, etc. but of course this cannot be done every month. Even the field team sometimes applies the oil to the cage wires so they don't rust. Unfortunately, TPE owners do not pay enough attention to this, only a small number of them care for their TPE with their own awareness.

The third program, the forest ecosystem rehabilitation, includes managing one nursery, sowing the tree seeds, socialization, land survey, tree planting and monitoring activities.

27 residents in Batu Jongjong, Ujung Bandar, Sampe Raya Villages and Pekan Bahorok have received socialization about tree planting. The total land surveyed this year is 25 hectares belonged to 17 village residents. 26.723 seeds consisting of 15 types of plants have been sown in the nursery located in Ujung Bandar Village. The types of seeds are durian, avocado, waru, jengkol, petai, meranti, duku, sirsak, matoa, halaban, damar, mango and ketapang. This year, seedling mortality was quite high, namely around 28 percent or around 7,400 seedlings. Some of the causes are extreme weather (too hot or too high rainfall). Around the end of the third quarter, pests such as fleas also attack the seedlings quite a lot. The planting team has tried to stop it by spraying botanical pesticides but some of the seedlings still die. Until now, the team still regularly sprays plants affected by pests.

This year, we have planted 15.026 trees on 18,2 hectares of land owned by 15 residents in Batu Jongjong and Ujung Bandar Village. The planting involved land owners, village residents, and several Forestry Department students from the University of North Sumatra. We also monitored the 23 planting locations consisting of 20.870 trees that have been planted in an area of 23,4 hectares. The lowest tree survival rate was 68 percent and the highest tree mortality rate was 32 percent but this only occured at 1 planting location. Meanwhile, the average tree survival rate is 75% and the immortality rate is 25%.

The fourth program, the environmental education, includes visits to 6 schools and assistance to 4 conservation learning houses in the villages of Lau Damak, Batu Jongjong and Ujung

Bandar, providing supporting facilities for learning tools and materials as well as study rooms, as well as collaborating with youth communities such as Sahabat Hijau and Kampung Dongeng in making videos of SHL activities as campaign material and events for the 2023 Orangutan Awareness Week.

Environmental and conservation education is conducted once a month to every school in Lau Damak, Batu Jongjong and Ujung Bandar villages covering 4 elementary schools and 2 junior high schools. The schools are SDN 056585 Biak Mampe, SDN 054895 Batu Jongjong, SDN 057735 Batu Katak, MIS Asmaul Husna, MTS Asmaul Husna, and SMP N 6 Satu Atap Bohorok. There are 13 lessons given from January to November and 1 evaluation in December. The total visits to schools were 80 times involving 208 children consisting of 88 boys and 120 girls. Meanwhile, the level of success in conveying lessons as measured by the success of students in answering the questions on the pre-test and post-test sheets, we conclude is very significant. From the pre-test, only about 20-30 percent of students can answer questions while during the post-test, students can answer questions above 90 percent.

SHL also provides learning support materials such as reading books and educational games, as well as learning room support tools such as mats, curtains, fans, MMT screen, bookcase, cleaning tools such as broom, mop, trash bin, and roof repairs. All tools and materials are adapted to each learning house.

In 2023, we still assist children aged 6 to 12 years in 4 conservation learning houses (Harapan Kita in Lau Damak Village, Teladeh Lestari in Batu Jongjong Village, Lantera Hijau and Bunga Simalem in Ujung Bandar Village) is learning about the environment and nature conservation which is carried out twice a month for each learning houses. There were 11 lessons given to children at the conservation learning houses in January to November and 1 evaluation in December. The lesson is divided into two parts, namely the main lesson about the environment and conservation, while additional activities are games that contain educational elements to hone skills, create initiative, build cooperation and cohesiveness. English is also part of additional lessons to increase simple vocabulary. Meanwhile, evaluations at the end of the year are carried out to see the child's progress in absorbing the lessons that have been taught during the previous 11 months. The total assistance was 96 times involving 158 children consisting of 61 boys and 97 girls.

In carrying out environmental education programs, SHL also involves youth communities such as Sahabat Hijau and Kampung Dongeng. In September, Sahabat Hijau produced 1 video about field activities carried out by the SHL team, with the title “Journal of YSHL”. The video can be seen in Sahabat Hijau media social; Sahabathijau_ (Instagram), SahabatHijau (Facebook) and Sahabat Hijau (Youtube). And In 25-26 November, Orangutan Caring Week 2023 was held with the theme "Preserving the Forests, Saving the Orangutans" in Martelu Village, Sibolangit involving 47 people consisting of 33 children and 14 housewives. SHL collaborates with the Sahabat Hijau community and Kampung Dongeng Medan. Activities in this event included socialization about orangutans and their habitat, a story telling with the title "Otan and the Orangutan", coloring competition, treasure search, word composition and face painting competition.

II. Program Summary and Achievement

The program summary and achievements from January to December 2023 are as follows:

1.1. Sustainable Livelihood Development

a. A dem-plot layout is made every month as a reference for the SHL team in planting plants in the designated plots. The total number of harvesting in the dem-plot in 2023 is 134 kg of long bean, 202 kg of kangkung, 99,12 kg of mustard, 20,75 kg of chili, 133,75 kg of cayenne pepper, 106,5 kg of green eggplant, 11,5 kg of chili (caplak besar) and 1,25 kg of chili (caplak kecil) with side income of IDR 9,326,880.
b. There are 2 guide books for making liquid organic fertilizer. The first is from Mr Erwin and the second is from the research results of Pancabudi students.
c. In September, Pancabudi University lecturer, Mrs. Maimunah Siregar, together with 3 of her students visited the SHL dem-plot in Ujung Bandar Village and trained the villagers in making liquid organic fertilizer and pesticide.
d. 31 farmers for 36 farming locations have been assisted in applying the organic fertilizer in Lau Damak and Ujung Bandar Villages
e. 12 residents of Buluh Regen Hamlet, Ujung Bandar Village, are willing to join the organic farmer group. They are divided into 2 groups based on where they live or adjacent land.
f. 12 housewives have received field school about making liquid organic fertilizer in Ujung Bandar Village. We used a method taught by Pancabudi University where the ingredients are less than the fertilizer usually made by SHL.
g. 2 liquid organic fertilizer shelters were built in Buluh Regen Hamlet, Ujung Bandar Village
h. 111 residents in Lau Damak, Batu Jongjong and Ujung Bandar Village are still being assisted in activities to use their home yards to grow vegetables organically. The average additional income per day is IDR1,780 – IDR2,381.
i. 3 out of 5 people who have TPE cages take part in activities to use animal (ox) waste to be processed into solid organic fertilizer. This activity starts from September to December
j. In September, 4000 odot grass seeds have been planted in a dem-plot of 0.3 hectares with a planting distance of 80 x 80 centimeters. SHL also facilitated razor wire for the fence around the dem-plot to avoid livestock disturbance. In November, the odot grass that has been planted is currently 60 days old, 50 cm high, and the stem segments are 7 cm, but the growth of the odot grass is uneven. thought to be due to differences in soil pH.
k. This group succeeded in selling 739 bottles/packs of medicinal products and generated side income of IDR 22,207,000. Even at the end of 2023, the group has succeeded in sharing profits from business results of IDR 500,000 per person for 9 members.
l. 1 group (6 members) named BSR (Bandar Sumber Rezeki) has been formed to cultivate maggots in Ujung Bandar Village
m. In the third quarter, the magot harvest of 7 kilograms was used as catfish feed. In the fourth quarter, the group cultivated magot again and the progress is still quite good for now. In November, the group also received training in magot cultivation and making pellets from magot located in Marelan, Medan.
n. After the group succeeds in cultivating magot with good harvest results, SHL will immediately hold the targeted trainings.
o. Monitoring of cocoa growth was carried out on 11 farmers' lands in Lau Damak and Batu Jongjong villages.
p. Pepper monitoring was carried out in 13 houses and residents' land in Ujung Bandar and Batu Jongjong villages.

1.2. Conflict Mitigation between Human and Wildlife Especially Orangutan

a. Monitoring was carried out at 38 location that had the potential for conflict in Lau Damak, Batu Jongjong, Ujung Bandar, Sei Musam, Timbang Jaya, and Sampe Raya Village. There are no conflicts with key species of the Gunung Leuser National Park. 3 orangutans were found in Batu Jongjong Village, 2 orangutans were found in Timbang Jaya Village but the land owners said that the orangutans were not dangerous or causing economic loss
b. 89 residents in the villages of Lau Damak, Batu Jongjong, Ujung Bandar, Sei Musam, Timbang Jaya and Sampe Raya have received socialization on conflict mitigation. The socialization included locations that have the conflict potential so that village residents are careful when carrying out activities around these locations. The team will also discuss with the community about efforts that can be made to prevent conflicts
c. There have been no conflicts between the community and wildlife, especially the key species of Gunung Leuser National Park. The budget is used to monitor locations where there are indications of the presence of orangutans and the socialization activity. The team will carry out patrols for several days with residents to determine whether the animals will come back or not so that there is no conflict between residents and wild animals, especially orangutans
d. The posters have been distributed to villages in Bahorok District, especially those that have the potential for conflict with wildlife, such as Lau Damak Village, Batu Jongjong, Ujung Bandar, Timbang Lawan, Timbang Jaya, Sampe Raya, Sei Musam and Musam Pembangunan.
e. There are 15 locations that have been surveyed and are suitable for facilitating the installation of zinc plates to protect fruit trees in community gardens from wildlife disturbance.
f. 36 trees consisted of durian and petai trees have been installed with zinc plates. These lands are owned by 5 residents in Batu Jongjong and Ujung Bandar Villages
g. 26 people who received socialization in the villages of Lau Damak, Batu Jongjong, Ujung Bandar, Timbang Jaya, Sampe Raya and Sei Musam.
h. There's no construction. We carried out this activity by monitoring the cages that have been built since 2021. The budget is used for cage maintenance and monitoring

1.3. Forest Ecosystem Rehabilitation

a. 27 residents in Batu Jongjong, Ujung Bandar, Sampe Raya Villages and Pekan Bahorok have received socialization about tree planting. The total land surveyed this year is 25 hectares belonged to 17 village residents.
b. 1 planting plan map is available
c. 13.020 seeds have been sown, consisting of 1 5 types of plants including durian, avocado, jengkol, waru, sirsak, halaban, ketapang, mango, meranti, duku, petai, damar, mango and ketapang
d. Nursery maintenance is not carried out every month but depends on the condition or which parts are damaged, such as in February and July, the team replaces and repairs many wooden or bamboo poles that are rotten and broken
e. 15.026 trees have been planted on 18,2 hectares of land owned by 15 residents in Batu Jongjong and Ujung Bandar Village.
f. 23 locations consisting of 20.870 trees that have been planted in an area of 23,4 hectares have been monitored. The average tree survival rate is 75% and the immortality rate is 25%.

1.4. Environmental Education

a. Coordinating with the school supervisor for Bahorok District and 6 school principals regarding the Education Calendar for the 2022/2023 Academic Year, regarding effective

study time and holiday time so that adjustments can be made to the visiting schedule set by YSHL and the previous school

b. School visits were carried out once and twice a month to 6 schools spread across the villages of Lau Damak, Batu Jongjong and Ujung Bandar. The total visits were 80 times involving 208 children consisting of 88 boys and 120 girls. There were 13 lessons given to the students from January to November and 1 evaluation in December
c. SHL provides learning support materials such as reading books and educational games, as well as learning room support tools such as mats, curtains, fans, MMT screen, bookcase, cleaning tools such as broom, mop, trash bin, and roof repairs. All tools and materials are adapted to each learning house.
d. The total assistance for 4 learning houses was 96 times involving 158 children consisting of 61 boys and 97 girls. There were 11 lessons given to the students in January to November and 1 evaluation in December
e. SHL Education team and Sahabat Hijau discussed quarterly about the plan of campaign activities using social media
f. In September, Sahabat Hijau produced 1 video about field activities carried out by the SHL team, with the title "Journal of YSHL". The video can be seen in SH media social; Sahabathijau_ (Instagram), SahabatHijau (Facebook) and Sahabat Hijau (Youtube).
g. SHL education team, Sahabat Hijau, and Kampung Dongeng Medan held a meeting regarding the preparation and implementation of the orangutan caring week
h. Orangutan Caring Week 2023 was held for 2 days with the theme "Preserving the Forests, Saving the Orangutans" in Martelu Village, Sibolangit involving 47 people consisting of 33 children and 14 housewives. SHL collaborates with the Sahabat Hijau community and Kampung Dongeng Medan.

b. Planning VS Achievement

Output	Activity	Date of Implementation	Progress	Percentage of Progress	Remarks
COMPONENT 1. SUSTAINABLE LIVELIHOOD DEVELOPMENT					
Output 1.1. Availability of experimental land in the form of DEMPLOTS which are used to see the effectiveness of the use of organic farming systems and can be accessed by the community as a learning tool for organic farming;	K .1.1.1. Management planning and design layout of DEMPLOT	January to November	A dem-plot layout is made every month as a reference for the SHL team in planting plants in the designated plots. The total number of harvesting in the dem-plot in 2023 is 134 kg of long bean, 202 kg of kangkung, 99,12 kg of mustard, 20,75 kg of chili, 133,75 kg of cayenne pepper, 106,5 kg of green eggplant, 11,5 kg of chili (caplak besar) and 1,25 kg of chili (caplak kecil) with side income of IDR 9,326,880.	100%	
	K.1.1.2. Management of Demplot	April	There are 2 guide book for making liquid organic fertilizer. The first is from Mr Erwin and the second is from the research results of Pancabudi students.	100%	
	K 1.1.3. 3 times training on organic agricultural land management by bringing in participants from outside.	3 times in a year	In September, Pancabudi University lecturer, Mrs. Maimunah Siregar, together with 3 of her students visited the SHL dem-plot in Ujung Bandar Village and trained the villagers in making liquid organic fertilizer and pesticide.	50%	2 more trainings will be done next year
Output 1.2. Increasing the capacity of 60 farmers in implementing environmentally friendly farming methods and reducing the use of chemicals by 20% by rehabilitating 10 hectares of land;	K 1.2.1. Intensive assistance to 60 assisted farmers in producing/substituting ingredients and applying POC correctly and effectively by reducing chemical use by 20%	January to December	31 farmers for 36 farming locations have been assisted in applying the organic fertilizer in Lau Damak and Ujung Bandar Villages	100%	
	K.1.2.2. Formation of 2 new	September	12 residents of Buluh Regen Hamlet, Ujung Bandar Village, are willing	50%	1 more group will be formed next year

	community groups (Dusun 1 and Hamlet 3, Ujung Bandar Village) as a form of cooperation in implementing POC;		to join the organic farmer group. They are divided into 2 groups based on where they live or adjacent land.		
	K.1.2.3. Organizing organic farming field schools in 2 new organic farmer groups involving 30 farmers;	September	12 housewives have received field school about making liquid organic fertilizer in Ujung Bandar Village. We used a method taught by Pancabudi University where the ingredients are less than the fertilizer usually made by SHL.	100%	Will be continued next year
	K. 1.2.4. Construction of 2 new POC shelters in 2 hamlets	October	2 liquid organic fertilizer shelters were built in Buluh Regen Hamlet, Ujung Bandar Village	100%	
Output 1.3. Optimization of community land through the use of yards;	K 1.3.1. Intensive assistance to 110 housewives in horticultural cultivation to increase household income.	February to December	111 residents in Lau Damak, Batu Jongjong and Ujung Bandar Village are still being assisted in activities to use their home yards to grow vegetables organically. The average additional income per day is IDR1,780 – IDR2,381.	100%	
Output 1.4 Production of solid organic fertilizer using cow dung in each TPE kennel built;	K.1.4.1. Survey and assistance for potential locations for shelter construction and Processing of cow dung as material for making organic fertilizers;	September	3 out of 5 people who have TPE cages take part in activities to use animal (ox) waste to be processed into solid organic fertilizer. This activity starts from September to December.	100%	
	K.1.4.2. Development of Odot grass cultivation as additional feed	2 times in a year	In September, 4000 odot grass seeds have been planted in a dem-plot of 0.3 hectares with a planting distance of 80 x 80 centimeters. SHL also facilitated razor wire for the fence around the dem-plot to avoid livestock disturbance.	100%	

			In November, the odot grass that has been planted is currently 60 days old, 50 cm high, and the stem segments are 7 cm, but the growth of the odot grass is uneven. thought to be due to differences in soil pH.		
Output 1.5. Compilation of strategic plans and actions in improving the community's economy through the development of environmentally friendly alternative businesses based on multi-stakeholders;	K 1.5.1. Assistance in developing the market value of the medicinal plant group 'arih ersada'	March	This group succeeded in selling 739 bottles/packs of medicinal products and generated side income of IDR 22,207,000. Even at the end of 2023, the group has succeeded in sharing profits from business results of IDR 500,000 per person for 9 members.	100%	
	K 1.5.2. Formation of groups and identification of needs and potential for the development of 2 new groups of multi-stakeholder environmentally friendly alternative businesses;	March	1 group (6 members) named BSR (Bandar Sumber Rezeki) has been formed to cultivate maggots in Ujung Bandar Village	50%	1 more groups will be formed next year
	K 1.5.3. Assistance for 2 alternative business groups	February to December	In the third quarter, the magot harvest of 7 kilograms was used as catfish feed. In the fourth quarter, the group cultivated magot again and the progress is still quite good for now. In November, the group also received training in magot cultivation and making pellets from magot located in Marelan, Medan.	100%	
	K.1.5.4. Training on financial management, marketing, licensing, and the use of product development	June	After the group succeeds in cultivating magot with good harvest results, SHL will immediately hold the targeted trainings.	0%	Will be done next year

	production tools				
Output 1.6. Establishment of an optimal development pattern for agroforestry plant products	K 1.6.1. Assistance for cocoa agroforestry farming groups	February to December	Monitoring of cocoa growth was carried out on 11 farmers' lands in Lau Damak and Batu Jongjong villages.	100%	
	K 1.6.2. Clinical assistance for agroforestry agricultural land	February to December	Pepper monitoring was carried out in 13 houses and residents' land in Ujung Bandar and Batu Jongjong villages.	100%	
	K. 1.6.3. Increasing the capacity of farmers in processing pepper yields to increase the selling value	May	Not done yet.	0%	Will be done next year
COMPONENT 2. MITIGATION OF WILD ANIMAL CONFLICT WITH HUMANS, ESPECIALLY ORANGUTAN					
Output 2.1. Decreasing cases of conflict between humans and wild animals, especially the Sumatran orangutan;	K 2.1.1. Monitoring locations prone to conflicts between wild animals and humans, especially orangutans	January to December	Monitoring was carried out at 38 location that had the potential for conflict in Lau Damak, Batu Jongjong, Ujung Bandar, Sei Musam, Timbang Jaya, and Sampe Raya Village. There are no conflicts with key species of the Gunung Leuser National Park. 3 orangutans were found in Batu Jongjong Village, 2 orangutans were found in Timbang Jaya Village but the land owners said that the orangutans were not dangerous or causing economic loss	100%	
	K. 2.1.2. Dissemination of adaptation to the mitigation of conflicts between wild animals and humans	4 times in a year	89 residents in the villages of Lau Damak, Batu Jongjong, Ujung Bandar, Sei Musam, Timbang Jaya and Sampe Raya have received socialization on conflict mitigation. The socialization included locations that have the conflict potential so that village residents are careful when carrying out activities around these	100%	

			locations. The team will also discuss with the community about efforts that can be made to prevent conflicts		
	K.2.1.3. Adaptive community-based management of human and wildlife conflicts	March to December	There have been no conflicts between the community and wildlife, especially the key species of Gunung Leuser National Park. The budget is used to monitor locations where there are indications of the presence of orangutans and the socialization activity. The team will carry out patrols for several days with residents to determine whether the animals will come back or not so that there is no conflict between residents and wild animals, especially orangutans	0%	
	K.2.1.4. Production and distribution of media campaigns for mitigating wildlife conflicts;	March to April	The posters have been distributed to villages in Bahorok District, especially those that have the potential for conflict with wildlife, such as Lau Damak Village, Batu Jongjong, Ujung Bandar, Timbang Lawan, Timbang Jaya, Sampe Raya, Sei Musam and Musam Pembangunan.	100%	
Output 2.2. The development of an anti-animal attack agricultural model as a solution to minimize the potential for human-animal conflict;	K 2.2.1. Availability of data and information on potential locations as a reference for installing zinc plates and adapting gardens against animal attacks;	January to February	There are 15 locations that have been surveyed and are suitable for facilitating the installation of zinc plates to protect fruit trees in community gardens from wildlife disturbance.	100%	
	K.2.2.2. Installation of zinc plate	April to December	36 trees consisted of durian and petai trees have been installed with zinc plates. These lands are owned by 5 residents in Batu Jongjong and Ujung Bandar Villages	100%	

Output 2.3. Construction of TPE cages as a solution to minimize the potential for human conflict with Sumatran tigers and ensure the availability of livestock manure as a source of raw material for solid organic fertilizer;	K2.3.1. Survey and socialization of potential locations for the construction of TPE	February to November	26 people who received socialization in the villages of Lau Damak, Batu Jongjong, Ujung Bandar, Timbang Jaya, Sampe Raya and Sei Musam.	100%	
	K.2.3.2. Construction of 6 units of TPE cages.	6 times in a year	There's no construction. We carried out this activity by monitoring the cages that have been built since 2021. The budget is used for cage maintenance and monitoring	0%	
COMPONENT 3. FOREST ECOSYSTEM REHABILITATION					
Output 3.1. Availability of data and information on potential locations for planting 15,000 seedlings in the TNGL buffer zone;	K.3.1.1. Socialization and survey of planting land	January to December	27 residents in Batu Jongjong, Ujung Bandar, Sampe Raya Villages and Pekan Bahorok have received socialization about tree planting. The total land surveyed this year is 25 hectares belonged to 17 village residents.	100%	
	K 3.1.2. Making a planting plan map;	January	1 planting plan map is available	100%	
Output 3.2. Availability of supporting facilities for the production of 15,000 seeds;	K.3.2.1. Availability of 15,000 seeds	February to December	13.020 seeds have been sown, consisting of 15 types of plants including durian, avocado, jengkol, waru, sirsak, halaban, ketapang, mango, meranti, duku, petai, damar, mango and ketapang	100%	
	.3.2.2. Availability of nursery facilities and infrastructure.	February	Nursery maintenance is not carried out every month but depends on the condition or which parts are damaged, such as in February and July, the team replaces and repairs many wooden or bamboo poles that are rotten and broken	100%	
Output 3.3. The planting of 15,000 seedlings in the TNGL buffer zone;	K.3.3.1. Planted 15,000 seedlings in the TNGL buffer zone	February to December	15.026 trees have been planted on 18,2 hectares of land owned by 15 residents in Batu Jongjong and Ujung Bandar Village.	100%	
Output 3.4. Availability of	K.3.4.1.	January to December	23 locations consisting of 20.870 trees that have	100%	

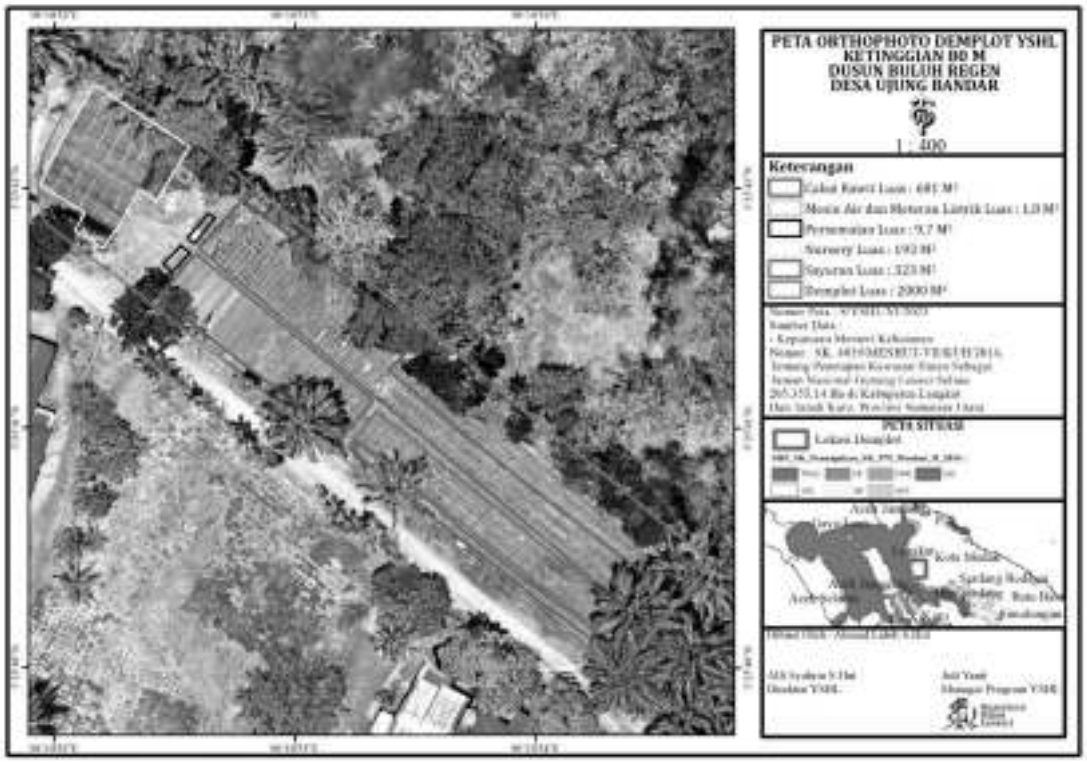
data and information on the growth rate of 25,000 plant seeds in 2022;	Survey and monitoring of plant growth		been planted in an area of 23,4 hectares have been monitored. The average tree survival rate is 75% and the immortality rate is 25%.		
COMPONENTS 4. ENVIRONMENTAL EDUCATION					
Output 4.1. Implementation of 80 visits to 7 schools in 3 villages for 1 year;	K 4.1.1. Meeting with the school to prepare the schedule and visit materials for 1 year;	January	Coordinating with the school supervisor for Bahorok District and 6 school principals regarding the Education Calendar for the 2022/2023 Academic Year, regarding effective study time and holiday time so that adjustments can be made to the visiting schedule set by YSHL and the previous school	100%	
	K 4.1.2. Routine visits to 6 assisted schools in 3 villages	January to December	School visits were carried out once and twice a month to 6 schools spread across the villages of Lau Damak, Batu Jongjong and Ujung Bandar. The total visits were 80 times involving 208 children consisting of 88 boys and 120 girls	100%	There were 13 lessons given to the students from January to November and 1 evaluation in December
Output4.2. Managed 4 conservation learning houses in 3 villages;	K.4.2.1. Identification and purchase of RBK management support needs	4 times in a year	SHL provides learning support materials such as reading books and educational games, as well as learning room support tools such as mats, curtains, fans, MMT screen, bookcase, cleaning tools such as broom, mop, trash bin, and roof repairs	100%	All tools and materials are adapted to each learning house.
	K 4.2.2. Routine visits to 4 RBK.	January to December	The total assistance for 4 learning houses was 96 times involving 158 children consisting of 61 boys and 97 girls	100%	There were 11 lessons given to the students in January to November and 1 evaluation in December
Output 4.3. Implementation of 3 times environmental awareness campaign activities involving the	K.4.3.1. Preparation of environmental care campaign plans;	3 times in a year	SHL Education team and Sahabat Hijau discussed quarterly about the plan of campaign activities using social media	100%	
	K.4.3.2. Implementation of 3 times environmental	3 times in a year	In September, Sahabat Hijau produced 1 video about field activities carried out by the SHL	100%	The video can be seen in SH media social; Sahabathijau_

'green friends' community;	care campaign activities.		team, with the title "Journal of YSHL".		(Instagram), SahabatHijau (Facebook) and Sahabat Hijau (Youtube).
Output 4.4. There is event Orangutan Caring Week	K.4.4.1. Preparation of Orangutan Caring Week activity plans;	November	SHL education team, Sahabat Hijau, and Kampung Dongeng Medan held a meeting regarding the preparation and implementation of the orangutan caring week	100%	
	K.4.4.2. Implementation of Orangutan Caring Week activities.	November	Orangutan Caring Week 2023 was held for 2 days with the theme "Preserving the Forests, Saving the Orangutans" in Martelu Village, Sibolangit involving 47 people consisting of 33 children and 14 housewives. SHL collaborates with the Sahabat Hijau community and Kampung Dongeng Medan.	100%	

c. Activity Description

3.1. Sustainable Livelihood Development

a. Management planning and design layout of DEM-PLOT



Map 1. Organic vegetable demonstration plot in Ujung Bandar Village

A dem-plot layout is made every month as a reference for the SHL team in planting plants in the designated plots. Because in the last half year, not all plots can be used because sometimes there are students who are conducting research on vegetable cultivation using liquid organic fertilizer. This dem-plot is managed directly by YSHL by employing 1 villager and assisted by a community assistance team. The plot layout for each type of plant is made every month, but the map above is the layout as of December.

Figure 1. Planting kangkung in an organic vegetable dem-plot in Ujung Bandar Village

The dem-plot is still managed semi-organically, that is, it still uses chemical fertilizers, but in small quantities. The total number of harvesting in the dem-plot in 2023 is 134 kg of long bean, 202 kg of kangkung, 99,12 kg of mustard, 20,75 kg of chili, 133,75 kg of cayenne pepper, 106,5 kg of green eggplant, 11,5 kg of chili (caplak besar) and 1,25 kg of chili (caplak kecil) with side income of IDR 9,326,880.

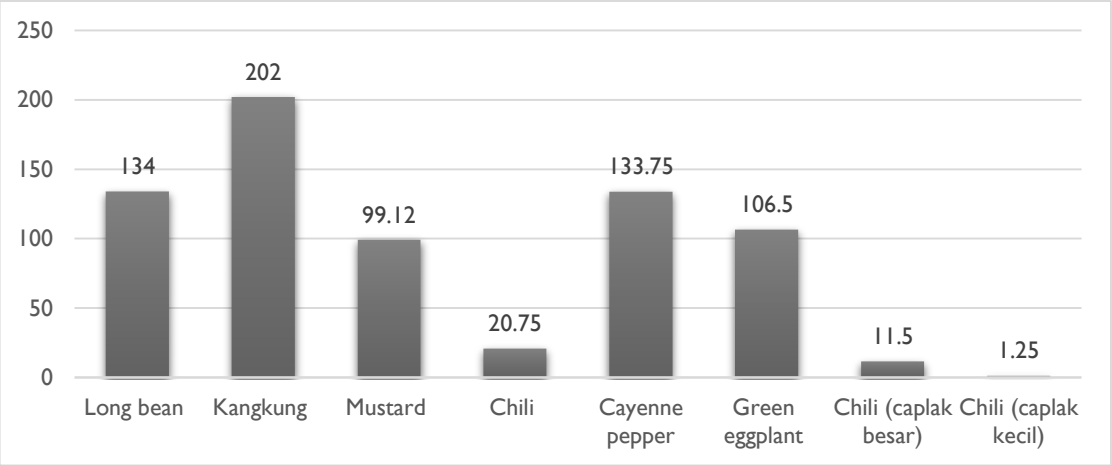


Chart 1. Harvesting in dem-plot from January to December 2023

Note:
- Kangkung and mustard in bunches
- Long bean, chili, eggplant, cayenne pepper in kilogram

Managing the dem-plot organically is a significant challenge for SHL. Starting with the problems of soil fertility, acidic soil pH, pests and diseases that often attack chilies, as well as selling prices that fluctuate in the market, causing the dem-plot to be less successful in generating side income. This can be seen from the fact that the total costs of the dem-plot each month are still much higher than the side income obtained from the harvest. Currently, the dem-plot is still used as a place where village residents, especially farmers and students, study and conduct research on organic farming, especially in terms of making organic fertilizer and its application to several plants such as mustard greens and long beans. The SHL team also always discusses with lecturers from several universities such as the University of North Sumatra and Pancabudi about the obstacles they face, especially in terms of handling plant pests and diseases.

Figure 2. Testing the soil pH in dem-plot by using Lakmus Paper

Fertility and soil acidity levels are also one of the main obstacles. Soil pH starts from 0 – 14, if when the soil acidity level shows a range of 0 – 7, then the soil is acidic soil. And if the acidity level shows a number between 7 – 14, then the soil is alkaline soil. Soil conditions are normal or neutral if the acidity level is at 6 - 8 and ideal conditions are at 6.5 - 7.5. Alkaline soil usually contains very few nutrients and microorganisms so that plant growth is disrupted. Meanwhile, in acidic soil, plants will easily be poisoned by metal elements and nutrient deficiencies. Nutrients and minerals will be easily absorbed by plants when they are in neutral conditions.

In October, when we measured the pH of the soil in the demplot using *Lakmus* paper, the soil pH showed 4-5, the soil is acidic. To increase the soil pH to normal (6.5 -7.5), we sprinkle dolomite. Apart from that, plants are also attacked by *botok* pests which cause curly leaves and slow growth. To overcome this, we sprayed pesticides but the results were still not satisfied. To maximize land use and reduce pests, in December we started sowing 1000 chilies and cayenne pepper seeds and 250 grams of sweet corn seeds. We do this based on the reference

Figure 3. Applying the dolomit to neutralize the soil ph in dem-plot

https://distanpangan.magelangkab.go.id/home/detail/penerapan-sistem-tumpang-sari-jagung-dan-cabai-rawit/273

b. Management of the organic agriculture learning centre or Dem-plot

The first guide sheet for making liquid organic fertilizer has actually been compiled from the first year the program was run. We obtained this guide from an expert in organic farming, Mr. Erwin, who compiled the guide based on his experience in applying it to the farmers he assisted in the Karo area, North Sumatra, after the eruption of Mount Sinabung and this liquid organic fertilizer proved to be effective for horticultural crops. The second guide comes from research results from students from Pancabudi University and we are still waiting for laboratory test results in the next 3 months.

Figure 4. Juanda Syafridawani, one of the Pancabudi University students conducted research on the effect of liquid organic fertilizer on the growth of green mustard greens in the SHL's dem-plot in Ujung Bandar Village

These two guides are both good but the first guide contains a lot or variety of material while the second guide does not. It's just that some of the materials from the second guide are a bit difficult to obtain in everyday life in the village. The two guide sheets are attached in Annex 1 and 2, Page 53 and 55.

c. Training on organic agricultural land management by bringing in participants from outside

Figure 5. Training of making liquid organic fertilizer and pesticide by lecture and students of Pancabudi Univerisity in Ujung Bandar Village

In September, Pancabudi University lecturer, Mrs. Maimunah Siregar together with 3 of her students visited the SHL demonstration plot in Ujung Bandar Village. On this occasion, she provided knowledge about making liquid organic fertilizer and how to control pests using vegetable pesticides to 24 farmers from Hamlet II, Ujung Bandar Village and Simpang Empat Hamlet, Batu Jongjong Village. Farmers also practice good spraying methods directly on the SHL dem-plot.

Meanwhile, in the fourth quarter, SHL did not bring in outside participants to the demonstration plot. This is because the conditions of the dem-plot during October to November were not good, many plants were attacked by pests and the land was being processed to raise the soil pH. This activity will continue next year.

d. Intensive assistance to 60 assisted farmers in producing/substituting ingredients and applying POC correctly and effectively by reducing chemical use by 20%

Figure 6. Monitoring the availability of organic fertilizer in Lau Damak Village

During this year, SHL assisted 31 farmers from 36 farming locations in making and applying organic fertilizer in Lau Damak Village, Batu Jongjong and Ujung Bandar Village, still far from the target. This is because most farmers who grow vegetables and chilies do not have their private land. They just stay in young or small palm oil plantations belonging to other farmers for free. Currently, the palm oil trees are starting to grow so the farmers we accompany can no longer live on these palm oil plantations. Apart from that, farmers are also less consistent in remaking organic fertilizer regularly. They are also a bit lazy about collecting fertilizer ingredients and find it a hassle to apply it, which has to be more routine than using chemical fertilizers.

In 2021-2022, the price of chemical fertilizers rose and it was difficult to obtain them on the market, causing farmers to diligently make organic fertilizers to reduce the cost of purchasing

chemical fertilizers. In 2023, farmers feel that the price of chemical fertilizers on the market will still be affordable, which will influence their commitment to implementing organic farming.

Figure 7. Monitoring the application of organic fertilizer by farmers in Ujung Bandar Village

Of the 36 farming locations, there were 16 fully implemented organic farming patterns, 12 semi organic and 8 chemical farming pattern. The eight locations are planted with land rice since November 2023. The harvest will be obtained around February 2024. The They have not yet decided whether to use organic fertilizer or not in the following month. They want to see the growth of their plants first. Meanwhile, SHL remains committed to educating farmers one by one every month. Education is carried out by providing knowledge about the benefits of organic farming and assisting farmers who want to make fertilizer independently. The monitoring details are attached in Annex 3, Page 56.

e. Formation of 2 new community groups in Hamlet 1 and Hamlet 3, Ujung Bandar Village as a form of cooperation in implementing organic fertilizer

Figure 8. Formation of organic fertilizer group farmer in Ujung Bandar Village

This activity was supposed to be carried out in the first quarter but after conducting several socializations in Ujung Bandar Village, this new group was only able to be formed in the third quarter, namely in September. This is because the team has to really select farmers who are really serious about implementing organic farming patterns, namely looking for ingredients for making liquid organic fertilizer and making it regularly continuously, not just once. They also have to commit to applying it to their garden plants. There are 12 residents of Buluh Regen Hamlet, Ujung Bandar Village who will be involved, they are divided into 2 groups based on where they live or adjacent land.

f. Organizing organic farming field schools in 2 new organic farmer groups involving 30 farmers

Figure 9. Field school for farmers in Ujung Bandar Village

Because the new organic farmer group was only formed in September, the field school on making liquid organic fertilizer could only be held in September as well, involved 12 housewives in Ujung Bandar Village. We used a method taught by Pancabudi University where the ingredients are less than the fertilizer made by the first SHL team but not all the ingredients can be obtained every day in villages or a little more difficult to find such as egg shells, coconut water, and pace fruit. The team is also discussing with Pancabudi lecturers about replacing ingredients that are difficult to obtain in the village for the next fertilizer production. SHL will not stop this activity but will continue if there are farmers who want to learn to make organic fertilizer.

g. Construction of 2 new POC shelters in 2 hamlets

Figure 10. Construction of organic fertilizer shelter in Ujung Bandar Village

This activity was supposed to be carried out in March but it has just been carried out in October. This is because we have to be sure that the shelters and facilities provided by SHL are truly cared for by farmers. 2 organic fertilizer shelters have been built in Buluh Regen Hamlet, Ujung Bandar Village. Each shelter will be used by 4 rice farmers whose land is close to each other.

Some farmers do not have private land so they borrow land belonging to palm farmers where the palm trees are still young or small. Some farmers do not have private land so they borrow land belonging to palm oil farmers where the palm oil trees are still young or small. The shelter that is built is not permanent because if the palm oil trees on the land has been starting to grow, the farmers who borrow the land will have to move.

h. Intensive assistance to 110 housewives in horticultural cultivation to increase household income

111 residents in Lau Damak, Batu Jongjong and Ujung Bandar Village are still being assisted in activities to use their yards to grow vegetables organically. The team strives continuously to provide education about the benefits of growing organically. Apart from being healthy to consume, it can also reduce daily shopping costs. For the new members who have just joined

this activity, they have received assistance such as vegetable seeds, polybags and nets. They were also taught to make stacked buckets as containers for making organic fertilizer from kitchen waste. Until the end of December, the average of side income per day is IDR1,780 – IDR2,381. The results of monitoring for these 6 months are listed in Annex 4, Page 66.

Figure 11. Monitoring of home yard plants in Ujung Bandar Village

i. Survey and assistance for potential locations for shelter construction and processing of cow dung as material for making organic fertilizers

Figure 12. A cow breeder is collecting his cows dunk to be processed being organic fertilizer in Lau Damak Village

The budget available for this activity is actually only for 1 activity and was completed in April. However, we have just carried it out in September and continued every month.

Socialization about the use of livestock manure to be processed into solid organic fertilizer was carried out to 5 residents of Tanjung Naman and Tusam Pinter Hamlets in Lau Damak Village, 3 of whom already have TPE cages, making it easier for owners to collect their livestock manure. All of them are palm oil farmers. These three farmers were each given facilities in the form of 1 barrel with the capacity of 160 liters, 1 bottle of EM4 and molasses as a bio starter for making fertilizer.

After 21 days of processing, the solid organic fertilizer is ready for use. The TDS (Total Dissolved Solids) value is a measure of how much salt, nutrients or other concentrates are in the water. TDS is measured in ppm (parts per million). The TDS measurement value for different plants is different, for palm oil plants with a quality value of 500 to 1000 ppm x 10. While the TDS results obtained from fertilizer made by Mr. Malem Ukur is 645 x 10 ppm and Mr. Bolang Pinem is 585 x 10 ppm. This means that the quality of the fertilizer is quite good.

Solid organic fertilizer made by the farmers in Lau Damak Village has been applied to 8 years old palm oil plants as additional fertilizer. Fertilizer is given by pouring it onto palm oil plants once every 2 weeks at a dose of 1 liter of solid fertilizer mixed with 20 liters of water. However, of course the availability of fertilizer is not enough for all of their palm oil plants. In October, farmers make fertilizer again. It's just that some of the materials do not match what is in the journal because these materials are not available in the village.

Figure 13. Measurement of TDS (Total Dissolved Solids) value in one of the cow's breeders organic fertilizer in Lau Damak Village

Whether this fertilizer is significantly beneficial to the growth of their palm oil trees cannot yet be measured. This is because the application of fertilizer is not to newly planted palm oil trees but to existing palm oil trees which are already 8 years old so it is quite difficult to see changes or impacts from the use of the fertilizer. Plus, the use of chemical fertilizer is still greater than organic fertilizer which is only an addition.
https://diperta.tulungagung.go.id/index.php/berita/23-pembuatan-pupuk-kompos-dari-kotoran-sapi

j. Development of odot grass cultivation as additional feed

Figure 14. Monitoring of odot grass in Lau Damak Village

This activity was only carried out once in July but SHL continued and monitored this activity every month. Odot grass (*Pennisetum purpureum cv. Mott*) can be harvested after it is around 70 to 80 days old. The characteristic of odot grass that is ready to harvest is that it has stem segments measuring 15 cm. Harvest time in the rainy season is 35-45 days, in the dry season it is 40-50 days. However, the first harvest is recommended after 60 days or more or the stems are around 30 cm to 40 cm long. The way to harvest this grass is by cutting the grass short parallel to the ground.

In September, 4000 odot grass seeds have been planted in a dem-plot of 0.3 hectares with a planting distance of 80 x 80 centimeters. SHL also facilitated razor wire for the fence around the dem-plot to avoid livestock disturbance. In November, the odot grass that has been planted is currently 60 days old, 50 cm high, and the stem segments are 7 cm, but the growth of the odot grass is uneven. thought to be due to differences in soil pH.

k. Assistance in developing the market value of the medicinal plant group 'Arih Ersada'

We will use the funds provided for a month to assist the Arih Ersada women's group in Batu Jongjong Village in cultivating medicinal plants and processing them into traditional Karo medicine throughout 2023. We considered this group is able to be independent. Currently SHL only helps monitor their bookkeeping, promote them and connects them with SHL partners such as universities in terms of research on medicinal plants. In the fourth quarter there was 1 lecturer from Pancabudi University and 2 students from the University of North Sumatra who carried out research activities, namely identification of medicinal plants and cultivation of medicinal plants. And the research results will be submitted to YSHL in January and March 2024.

Figure 15. A lecture from Pancabudi University is collecting medicinal plants to be identified in Batu Jongjong Village

This group succeeded in selling 739 bottles/packs of medicinal products and generated side income of IDR 22,207,000. Even at the end of 2023, the group has succeeded in sharing profits from business results of IDR 500,000 per person for 9 members.

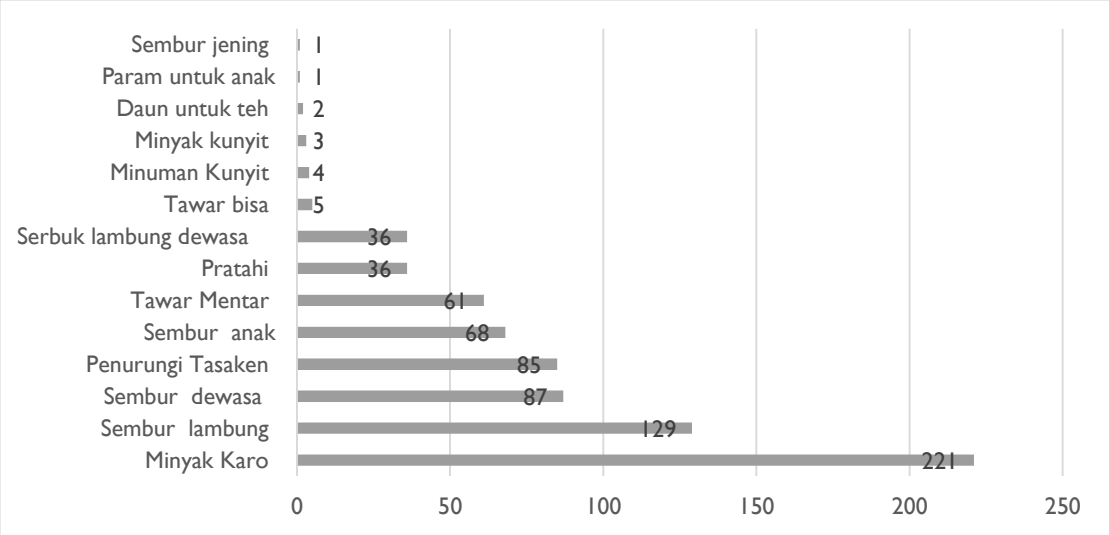


Chart 2. Number of Each Medicinal Product Sold in 2023

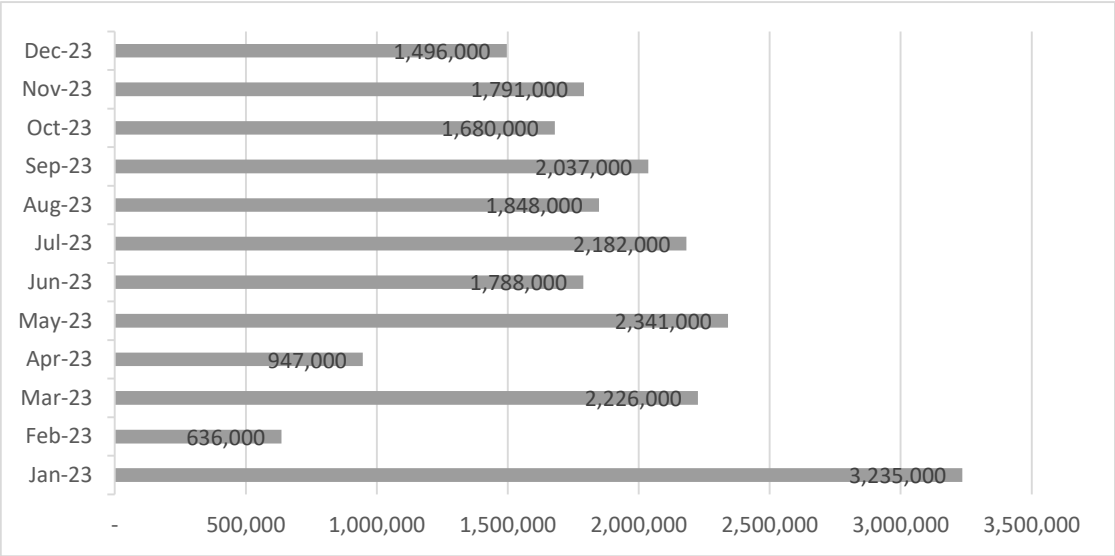


Chart 3. Side income from product sales and guests in 2023

i. Formation of groups and identification of needs and potential for the development of 2 new groups of multi-stakeholder environmentally friendly alternative businesses

1 group (6 members) named BSR (Bandar Sumber Rezeki) has been formed to cultivate maggots in Ujung Bandar Village in March. Meanwhile another 2 groups who interested to be assisted by SHL are still considered. The first group is some housewives in Batu Jongjong Village whose plan is to process glugur acid into syrup. The second is some housewives in Lau Damak Village whose plan is to process jengkol to be made as chips. But these two groups seems not to have high commitment and The raw materials available in the two villages are also uncertain. This made SHL cancel the plans to form one of the two groups until they were truly ready to carry out activities and raw materials were available in the village.

j. Assistance for 2 alternative business groups

Figure 16. BSR group is learning to cultivate the maggot in Ujung Bandar Village

In the third quarter, the BSR group (bandar Sri Rezeki) cultivated 10 grams of magot so that it became 7 kilograms of magot which was used as catfish animal feed. In the fourth quarter, the group cultivated maggots using household waste as food for the second time in October. The age of the maggot during the treatment period, namely pre-pupa, is approximately more than 12 days.

The prepupal stage is the stage when feeding activities are no longer carried out, so there is a tendency when pupa initiation is about to begin, the prepupa's body weight decreases slightly. The white-skinned larval stage lasts approximately 12 days. Next, the larvae begin to change color to brown and get darker a week later. Prepupa begins on the 19th day. The progress of maggot cultivation carried out by the group currently looks quite good. It's just that when entering the 100% pupulation period, group members need cage management training as well as equipment that supports maggot cultivation, such as a place for maggot eggs.

Figure 17. Members of BSR group are following the training of maggot cultivation in Medan

Therefore, the BSR (Bandar Sri Rezeki) group, represented by 3 group members from Ujung Bandar Village together with SHL staff, visited the magot breeder, Mr. Supriyadi, who was in Marelan, Medan in November. The SHL group and staff learned about how to cultivate maggots from the egg phase until they hatch, good feed, containers for growing maggots, separating maggots until harvest time and how to process maggots into pellets so they can be used as animal feed. In December, the results of the group discussion were to move the location outdoors so that the sun shines enough light on the BSF cage so that it produces more eggs, repairing the net cage for BSF flies (black soldier flies) to lay their eggs, paying attention to the container, providing good food and a maggot diet.

j. Training on financial management, marketing, licensing, and the use of product development production tool

This activity has not been implemented because alternative business groups such as the maggot cultivation group are still in the learning stage so the need for training on marketing, permits and so on is not currently needed. After the group succeeds in cultivating magot with good harvest results, SHL will immediately hold the training mentioned above.

k. Assistance for cocoa agroforestry farming groups

Monitoring of cocoa growth was carried out on 11 farmers' lands in Lau Damak and Batu Jongjong villages.

Table 1. The monitoring of cocoa growth in 2023

No	Name of Farmer	Monitoring Result
Lau Damak Village		
1	Puji (sm)	80% of cacao died due to lack of shade so the farmer is planting rice on that land. After harvesting, he will do replanting.
2	Syamsul Efendi (sm)	The cocoa growth is quite good but the farmer does not carry out maintenance so it is feared that it will affect the growth of the ovaries.
3	Sarji (sm)	25 grafted cocoa stems grow well while 46 stems died. This is thought to be due to the influence of hot weather/high rainfall. Currently, farmers have planted lime in between the cocoa plants.

4	Supriono (sm)	The 30 grafted cocoa stems grow well while 20 of them died
5	Sujarko (sm)	The cocoa is growing quite well, already flowering and bearing fruit.
6	Metahsah (ug)	83 grafted cocoa stems grow well and 187 stems died. The farmer planned to do replanting.
7	Bolang Ginting (ug)	Of the 156 cocoa stems grafted, only 22 survived. This is because many of the plants are eaten by livestock.
8	Sadakata (nc)	The cocoa grows quite well, as can be seen from the leaves that grow abundantly, but no maintenance is carried out such as pruning the branches and stems which causes nutrients not to be absorbed by the flowers and fruit.
Batu Jongjong Village		
9	Ngalemi (bk)	The cocoa is growing well and starting to bear fruit but the farmer is not willing to be assisted by YSHL anymore because there is no more operational cost provided for his land.
10	Jumidin (bk)	The cocoa is already bearing fruit but the farmer is not taking care of it so the growth is not productive.
11	Mustar Ginting (bk)	All the cocoa plants died due to monkey attacks.

Figure 18 and 19. Monitoring the cocoa growth in Lau Damak and Batu Jongjong Village

50 percent of the grafted cocoa grows well while the other 50 percent dies due to many factors such as weather (rain or extreme heat), livestock disturbance, and lack of care carried out by the farmers themselves. Several cocoa fields in both villages have started to bear fruit and some farmers plan to replant cocoa.

I. Clinical assistance for agroforestry agricultural land

Pepper monitoring was carried out in 13 houses and residents' land in Ujung Bandar and Batu Jongjong villages. The farmers face many obstacles in cultivating pepper, such as scorching heat or excessive rainfall during the past 3 months. Lack of treatment such as providing enough fertilizer is also a factor to cause the pepper growth is not good. The team continues to provide education regarding this pepper but the results in the field are not yet satisfactory.

Table 2. Monitoring of pepper cultivation in 2023

No	Name of Farmer	Monitoring Result
Ujung Bandar Village		
1	Edi	- The pepper grows quite well - The leaves turn yellow due to lack of fertilizer - Make wooden poles so the pepper can spread
2	Poniman	- The pepper grows well and fruit growth is also good - Plants that already have supporting poles should be tied so they don't fall over
3	Yusuf	- Many peppers died because the farmer didn't take care of them, such as lack of fertilization
4	Suwito	- Some peppers that are still in polybags are growing quite well. However, because farmers are busy planting chilies in other locations, farmers are not paying attention to their peppers at the moment.
5	Paidi	- The pepper grows well
6	Misnar	- The peppers grow well. The farmer carries out maintenance such as providing sufficient fertilizer and cleaning the land regularly.
	Misnan	- The pepper grow well but farmers do not take care of them. It is best to give the pepper a wooden support pole so that the pepper can spread
7	Atengena	Monitoring could not be carried out due to continuous rain so that road access to Bandar Baru Hamlet was cut off due to flooding.
8	Tumiah	
9	Halimah	
10	Suriani	
11	Irma	
12	Endang	
Batu Jongjong Village		
13	Tupon	The pepper grows quite well. Farmers have also installed fencing so that their pepper is disturbed by livestock.


Figure 20 and 21. Monitoring the pepper growth in Batu Jongjong and Ujung Bandar Village

3.2. The Conflict Mitigation between Human and Wildlife Especially Orangutan

a. Monitoring locations prone to conflicts between wild animals and humans, especially orangutans

Figure 22. Monitoring the potential conflict areas in the border of Gunung Leuser National Park and Batu Jongjong Village

Monitoring was carried out at 38 location that had the potential for conflict in Lau Damak, Batu Jongjong, Ujung Bandar, Sei Musam, Timbang Jaya, and Sampe Raya Village. There are no conflicts with key species of the Gunung Leuser National Park. 3 orangutans were found in Mr. Sunadi's garden in Batu Jongjong Village, 2 orangutans were found in Mr. Pijar Kaban's garden in Timbang Jaya Village but the land owners said that the orangutans were not dangerous or causing economic loss. Most land owners only complain about beruk and long-tailed monkeys who always come in groups. In this case, there is no significant solution yet. The monitoring details are attached in Annex 5, Page 88.

89 residents in the villages of Lau Damak, Batu Jongjong, Ujung Bandar, Sei Musam, Timbang Jaya and Sampe Raya have received socialization on conflict mitigation. The socialization included locations that have the conflict potential so that village residents are careful when carrying out activities around these locations. The team will also discuss with the community about efforts that can be made to prevent conflicts, such as building TPE, installing zinc plates, and making firecrackers which can be made from plastic bottles and used milk cans to drive animals back into the forest.

Figure 23. Socialization about conflict mitigation in Ujung Bandar Village

b. Adaptive community-based management of human and wildlife conflicts

There have been no conflicts between the community and wildlife, especially the key species of Gunung Leuser National Park during this year. The community, especially farm owners, only complain about the presence of long-tailed monkeys and macaques which come in groups and disturb the fruit crops, which causes them to experience economic losses. There is no significant solution for this.

Figure 24. Monitor locations where there are indications of the presence of orangutans and the socialization activity in Lau Damak Village

The information obtained was that 3 orangutan were found in Mr. Sunadi's garden in Batu Katak Hamlet, Batu Jongjong Village in September. According to the land owner, the orangutan was drinking in the Sikelam River. This encounter was considered something of a coincidence, considering that there had never been any reports of orangutan visits to the land before. It is estimated that the orangutan only passed through the area to look for food because the fruit season is starting. And in October, 2 orangutans were found in Mr. Pijar Kaban's garden in hamlet 4, Timbang Jaya Village. The land owners said that the orangutans were not dangerous or causing economic loss.

Therefore, much of the budget that should be used for conflict management is used to monitor locations where there are indications of the presence of orangutans and the socialization activity. The team will carry out patrols for several days with residents to determine whether the animals will come back or not so that there is no conflict between residents and wild animals, especially orangutans.

c. Production and distribution of media campaigns for mitigating wildlife conflict

Figure 25. Distributing the conflict mitigation poster to the residents in Ujung Bandar Village

This poster is a calendar with an image of an orangutan which contains information about contact numbers that village residents can contact if there is a conflict or signs of the presence of wild animals, especially key species of the Gunung Leuser National Park. It is also used as media material for SHL's campaign to mitigate conflicts between the village residents and wild animals, especially orangutans. These posters have been distributed to villages in Bahorok District, especially those that have the potential for conflict with wildlife, such as Lau Damak Village, Batu Jongjong, Ujung Bandar, Timbang Lawan, Timbang Jaya, Sampe Raya, Sei Musam and Musam Pembangunan.

d. Availability of data and information on potential locations as a reference for installing zinc plates and adapting gardens against animal attacks

There are 15 locations that have been surveyed and are suitable for facilitating the installation of zinc plates to protect fruit trees in community gardens from wildlife disturbance. However, access to the gardens is often difficult, especially during the rainy season, it is very difficult to carry zinc plates by motorbike on slippery and muddy road conditions. Meanwhile, cars cannot because access is only a footpath. Apart from that, not all land owners are willing to rent a sinso machine to thin the tree branches (if the distance between the trees is too close) for the reason that they don't have the money. The village residents whose land is eligible to be facilitated are as follows:

e. Installation of zinc plate

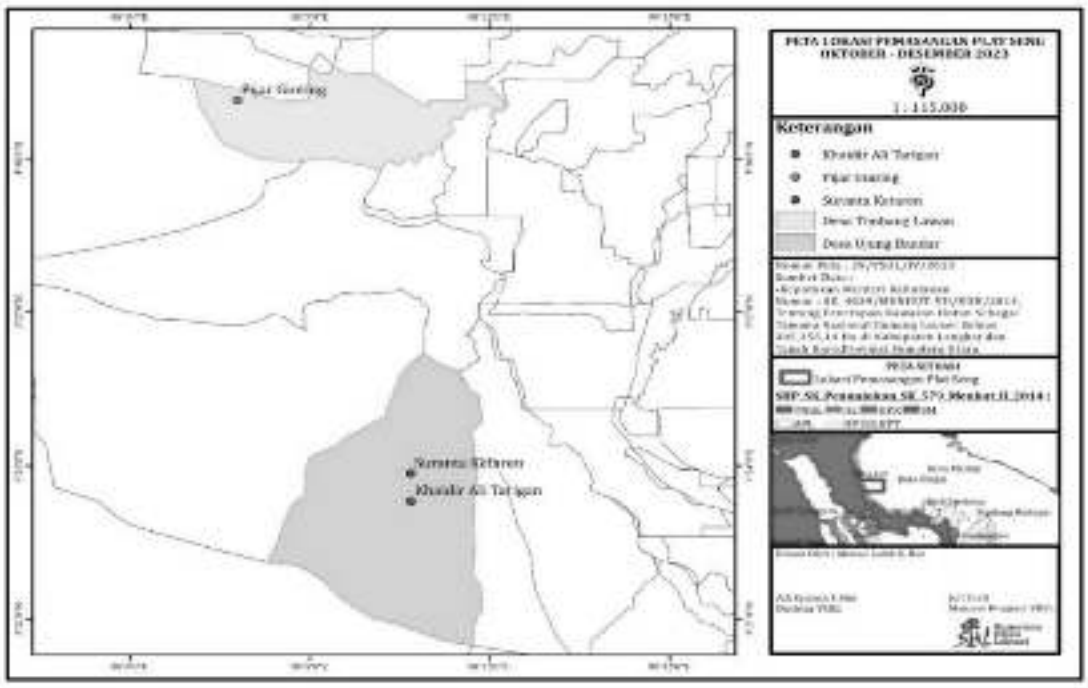
Zink plate installation is carried to prevent conflicts between land owners and wild animals especially primates, such as orangutans and monkeys. Sometimes the team also has to cut the branches of the surrounding trees if necessary. This is done so that the primate cannot jump from one tree branch to another.

Figure 26 and 27. Installation of zink plates at Mr. Khaidir Ali and Pijar Kaban's gardens in Ujung Bandar Village

5 land owners have installed zinc plates on 36 durian, petai and mangosteen trees in Timbang Jaya and Ujung Bandar Villages.

Table 3. The list of land owners who install the zink plates in 2023

No.	Month of Construction	Name of Owner	Location	Coordinate Point	Number of Trees
1	Jan-23	Ijul	Batu Jongjong Village	N 03 25 21.1 E 098 09 19.5	4 3 durian trees
					1 mangosteen trees
2	May-23	Harun	Ujung Bandar Village	N 03 25 21.1 E 098 09 19.5	6 durian
3	Oct-23	Pijar Kaban	Timbang Jaya Village	N 03 42 39 E 098 17 63.9	9 durian trees
					1 petai trees
4	Nov-23	Khaidir Ali Tarigan	Ujung Bandar Village	N 03 88 64.1 E 098 17 78.0	6 durian trees
					4 petai trees
5	Dec-23	Suranta Ketaren	Ujung Bandar Village	N 03 39 75.2 E 098 17 79.8	5 durian trees



Map 2. The location of 5 zink plate installation in 2023

f. Survey and socialization of potential locations for the construction of TPE

The team carried out socialization about the construction of TPE cages by finding out who owned the livestock in the village and then meet them directly. Socialization is sometimes carried out at their home, food stalls and even directly in their gardens where the livestock are released into the wild to find food. Of the 26 people who received socialization in the villages of Lau Damak, Batu Jongjong, Ujung Bandar, Timbang Jaya, Sampe Raya and Sei Musam, only 5 people said they were willing to build TPE since July.

Table 4. List of land owners who are interested in building the TPE

No	Land Owner	Location	Coordinate Point	Number of Livestock
1	Sitepu	Ujung Bandar Village	N 03 40 93.8 E 098 18 98.5	5 cows
2	Bantu Tarigan	Ujung Bandar Village	N 03 39 59.8 E 098 17 70.9	4 cows
3	Malem Pagi PA	Lau Damak Village	N 03 46 65.1 E 098 15 66.1	4 cows
4	Pinem	Lau Damak Village	N 03 48 17.9 E 098 15 97.1	10 cows
5	Pendi	Batu Jongjong Village	N 03 45 67.9 E 908 15 79.0	10 goats

Figure 28. Survey and socialization of potential locations for the construction of TPE in Batu Jongjong Village

But unfortunately, none of the livestock owners collected wood for the cage poles because they were busy working in the fields. The other reason is because they feel that their livestock is still safe because from the beginning to the end of 2023, no conflicts have occurred. The village residents understand the benefits of TPE but because there has been no conflict this year, the residents are not willing to build TPE at this time because they still feel safe.

Apart from that, SHL also wants to slowly raise awareness among village residents that they must try to build TPE independently, meaning they don't expect all the costs to be borne by the accompanying organization. For example, this year, there were residents who wanted to build a cage but because they didn't have time to look for wood to use for the cage poles. This happens because they do not feel in danger because there is no conflict.

g. Construction of 6 units of TPE

There was no TPE built during the fourth quarter with the problems mentioned in activity point e. We carried out this activity by monitoring the cages that have been built since 2021. Almost all of the TPE cages have been damaged, such as the wooden poles rotting and collapsing, so some of the cages are no longer used because they are no longer suitable. SHL has tried to help with cage maintenance costs such as buying oil, replacing barbed wire that can no longer be used, etc. but of course this cannot be done every month. Even the field team sometimes applies the oil to the cage wires so they don't rust. Unfortunately, TPE owners do not pay enough attention to this, only a small number of them care for their TPE with their own awareness.

Figure 29. Monitoring Mr. Bono's TPE condition in Sei Musam Village

Table 5. Monitoring the TPE condition

No.	Month of Construction	Name of Owner	Location	Coordinate Point	TPE Size	TPE Capacity	Dec-23
1	20-Sep-21	Benteng Sitepu	Selayang Hamlet, Lau Damak Village	N 03 49 85.4 E 098 16 02.8	72 m2	6 cows	The cage has collapsed and is no longer used
2	21-Nov-21	Pengertin PA	Tusam Pinter Hamlet, Lau Damak Village	N 03 46 91.0 E 098 15 92.4	154 m2	6 cows	some of the wood has fallen, the wire is damaged, it is rarely used
3	08-Feb-22	Sunar	Batu Katak Hamlet, Batu Jongjong Village	N 03 44 39.4 E 098 16 50.7	168 m2	8 cows	The cage has collapsed and is no longer used
4	19-Apr-22	Malem Ukur PA	Tusam Pinter Hamlet, Lau Damak Village	N 03 46 65.9 E 098 15 67.1	270 m2	9 cows	the wire is damaged and loose, the cage is still in use
5	18-Aug-22	Ayani	Tanjung Subur Hamlet, Sei Musam Village	N 03 61 29.9 E 098 11 54.0	96 m2	5 cows	The cage has collapsed, no longer used
6	23-Sep-22	M. Harun	Simpang Empat Hamlet, Batu Jongjong Village	N 03 42 27.3 E 098 15 50.1	168 m2	9 cows	some of the wood has fallen, the wire is damaged, the cage is still in use
7	24-Oct-22	Hendrik Sembiring	Tanjung Naman Hamlet , Lau Damak Village	N 03 47 39.5 E 098 15 58.8	14x15 m	13 cows	Good
8	21-Dec-22	Wiradi	Tualang Gepang Hamlet, Sampe Raya Village	N 03 36 06.8 E 09 07 37.8	96 m2	5 cows	some of the wood has fallen, the wire is damaged, and it is rarely used

3.3. The Forest Ecosystem Rehabilitation

a. Socialization and survey of planting land

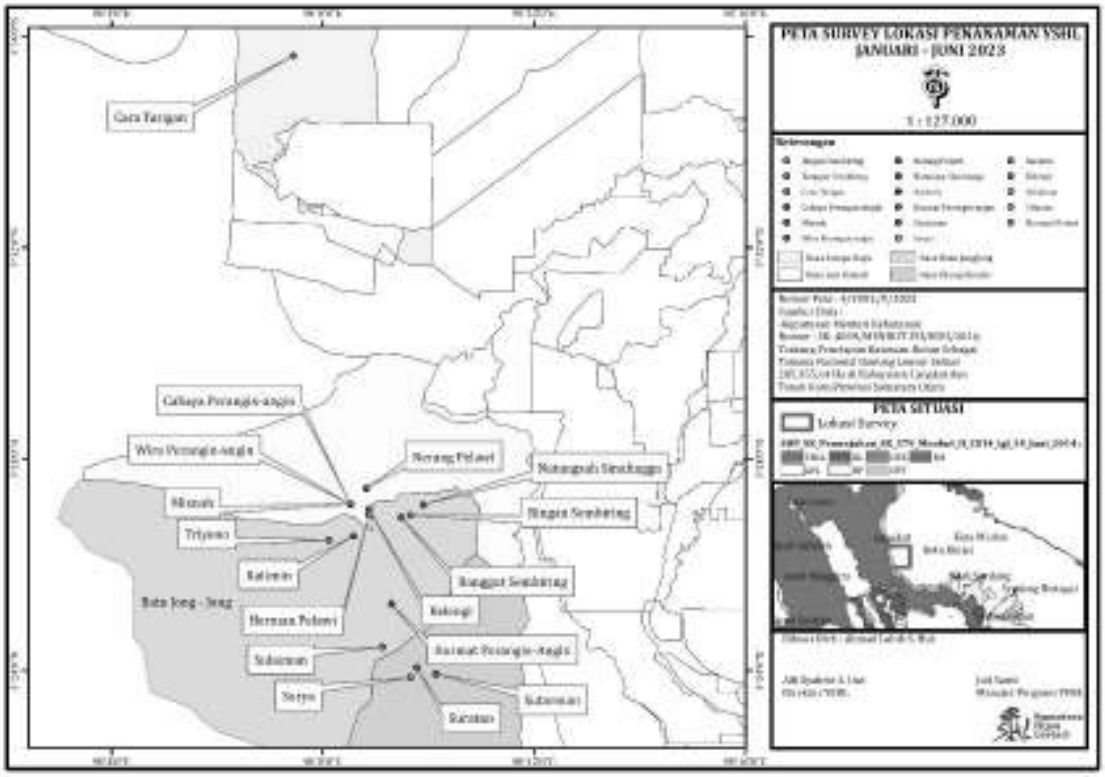

Figure 30 and 31. Socialization about tree planting and land survey by using drone in Batu Jongjong Village

27 residents in Batu Jongjong, Ujung Bandar, Sampe Raya Villages and Pekan Bahorok have received socialization about tree planting. The total land surveyed this year is 25 hectares belonged to 17 village residents.

Table 6. List of lands that have been surveyed in 2023

No.	Month of Survey	Name of Village	Name of Villager	Area (Ha)	Coordinate Point
1	Jan-23	Batu Jongjong	Ringan Sembiring	0,7	N 03 44 89.7 E 098 16 13.3
2		Batu Jongjong	Ranggut Sembiring	2,2	N 03 44 82.8 E 098 15 75.5
3	Feb-24	Sampe Raya	Cara Tarigan	1,6	N 03 59 37.8 E 098 12 44.4
4		Batu Jongjong	Cahaya Perangin angin	2,3	N 03 45 24.6 E 098 14 24.3
5		Batu Jongjong	Misnah	1,3	N 03 45 23.9 E 098 14 21.0
6		Batu Jongjong	Wira Perangin angin	2,1	N 03 45 24.4 E 098 14 22.8
7		Batu Jongjong	Dedi Candra		
8		Pekan Bahorok	Faisal Amri		
9		Pekan Bahorok	Sabaruddin		
10	Mar-23	Batu Jongjong	Nerang pelawi	1,7	N 03 45 73.9 E 098 14 71.6
11		Batu Jongjong	Natangsa Sinulingga	0,6	N 03 45 22.2 E 098 16 51.1
12		Batu Jongjong	Katimin	1,9	N 03 44 23.5 E 098 14 32.7
13	Apr-23	Batu Jongjong	Feri		
14		Batu Jongjong	Sunardi		
15		Batu Jongjong	Evi Br Karo-karo		

16	May-23	Batu Jongjong	Hormat Perangin-angin	1,1	N 03 42 08.5 E 098 15 49.7
17	Jun-23	Batu Jongjong	Sukirno		
18		Batu Jongjong	Suwito		
19	Jul-23	Batu Jongjong	Sutarman	1,4	N 03 39 88 E 098 16 88
20	Aug-23	Batu Jongjong	Surya	1,6	N 03 39 78.1 E 098 16 11
21		Batu Jongjong	Suratno	1,3	N 03 40 09.2 E 098 16 28
22	Sep-23	Batu Jongjong	Legian		
23		Batu Jongjong	Ngasop		
24	Oct-23	Batu Jongjong	Kelengi	1	
25		Batu Jongjong	Sulaiman	1,9	
26	Nov-23	Ujung Bandar	Triyono	1,2	
27	Dec-23	Batu Jongjong	Herman Pelawi	1,1	N 03 44 99.2 E 098 14 83.3



Map 3. Location of land surveyed in 2023

b. Availability of 15,000 seeds (January – December)

26.723 seeds consisting of 15 types of plants have been sown in the nursery located in Ujung Bandar Village. The types of seeds are durian, avocado, waru, jengkol, petai, meranti, duku, sirsak, matoa, halaban, damar, mango and ketapang. This year, seedling mortality was quite high, namely around 28 percent or around 7,400 seedlings. Some of the causes are extreme weather (too hot or too high rainfall). Around the end of the third quarter, pests such as fleas also attack the seedlings quite a lot. The planting team has tried to stop it by spraying botanical

pesticides but some of the seedlings still die. Until now, the team still regularly sprays plants affected by pests.

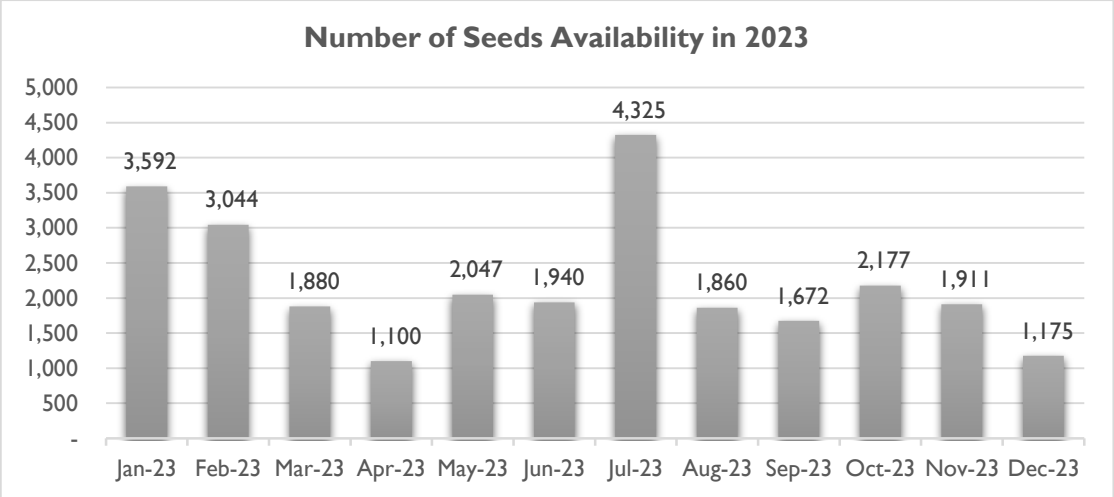


Chart 4. Number of seeds sown per month in 2023

Figure 32 and 33. Nursery in Ujung Bandar Village

c. Availability of nursery facilities and infrastructure

Nursery maintenance is not carried out every month but depends on the condition or which parts are damaged, such as in February and July, the team replaces and repairs many wooden or bamboo poles that are rotten and broken.

Figure 34. Nursery maintenance in Ujung Bandar Village

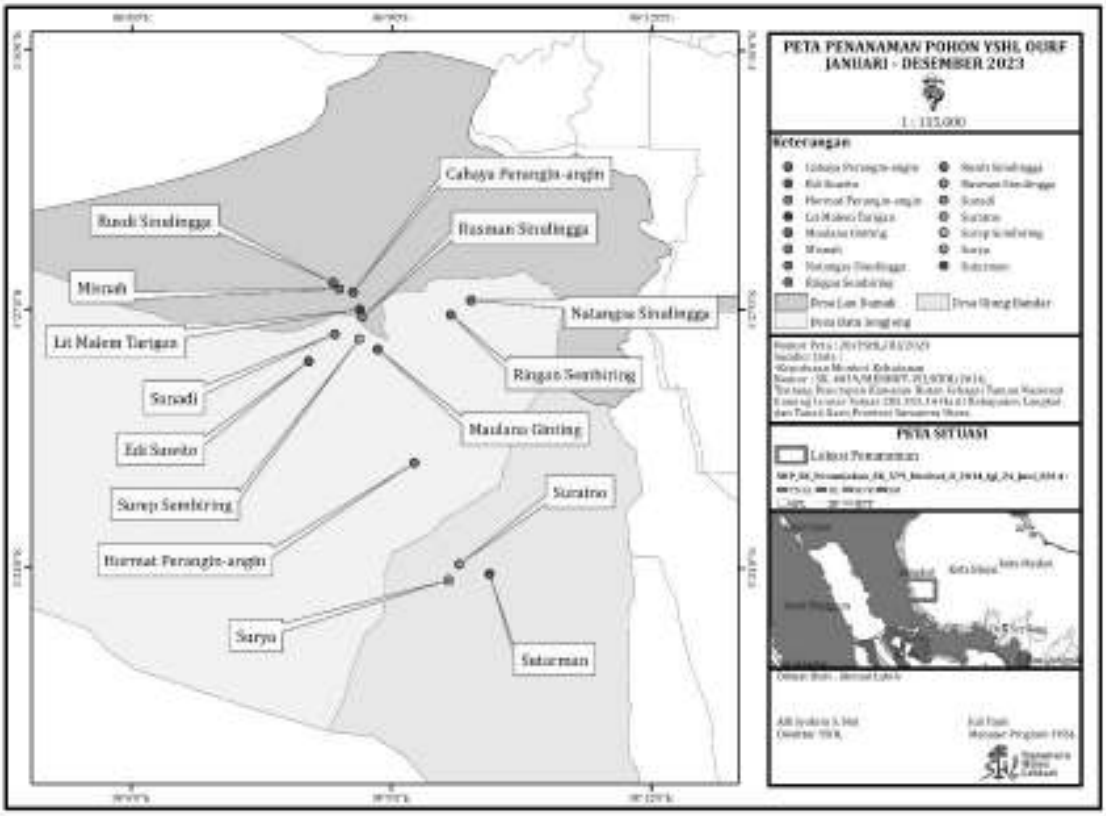
d. Planted 15,000 seedlings in the TNGL buffer zone

Figure 35. Tree planting activities in Mr. Suratno's land in Batu Jongjong Village

15.026 trees have been planted on 18,2 hectares of land owned by 15 residents in Batu Jongjong and Ujung Bandar Village. The planting involved land owners, village residents, and several Forestry Department students from the University of North Sumatra.

Table 7. List of tree planting sites in 2023

No	Month	Land Owner	Location (Village Name)	Area (Ha)	Number of Trees Planted	Coordinate Point	
1	Jan-23	Lit Malem Tarigan	Batu Jongjong	0,5	343	N 03 44 96.9	E 098 14 34.7
2	Jan-23	Surep Sembiring	Batu Jongjong	0,9	857	N 03 44 52.5	E 098 14 41.5
3	Feb-23	Maulana Ginting	Batu Jongjong	2,7	2.230	N 03 44 22.7	E 098 14 67.5
4	Mar-23	Rusdi Sinulingga	Batu Jongjong	0,6	517	N 03 45 55.6	E 098 13 87.5
5	Mar-23	Ringan Sembiring	Batu Jongjong	0,7	525	N 03 44 89.7	E 098 16 13.3
6	May-23	Natangsa Sinulingga	Batu Jongjong	0,6	515	N 03 45 22.2	E 098 16 51.1
7	Jun-23	Cahaya Perangin-angin	Batu Jongjong	2,3	1.881	N 03 45 24.6	E 098 14 24.3
8	Jun-23	Rusman Sinulingga	Batu Jongjong	0,5	640	N 03 44 84.4	E 098 14 42.1
9	Jul-23	Hormat Perangin angin	Batu Jongjong	1,1	910	N 03 42 08.5	E 098 15 49.7
10	Jul-23	Misnah	Batu Jongjong	1,3	1.120	N 03 45 23.9	E 098 14 21.0
11	Aug-23	Sunadi	Batu Jongjong	1,5	1.105	N 03 44 52.5	E 098 13 90.5
12	Sep-23	Suratno	Batu Jongjong	1,3	1.017	N 03 40 09.2	E 098 16 28
13	Oct-23	Sutratman	Ujung Bandar	1,4	1.024	N 03 39 88.0	E 098 16 88
14	Nov-23	Surya	Batu Jongjong	1,6	1.315	N 03 39 78.1	E 098 16 11
15	Dec-23	Edi Suwito	Batu Jongjong	1,2	1.027	N 03 43 99.8	E 098 13 42.1
				18,2	15.026		



Map 4. Tree planting sites in 2023

e. Survey and monitoring of plant growth

We used 2 methods in monitoring, namely the Census and the Intensity Sampling (IS). Monitoring using the census method is carried out on land with an area of 1 hectare, the number of plants is not too much and the topography is quite sloping. The census was carried out as a whole to check the condition of the seeds. Our reference is Hadinoto, Suhesti E, Suwarno E. 2018. Kesesuaian Jenis Pohon Di Hutan Kota Pekanbaru. Jurnal Kehutanan Wahana Foresta 13 (2) : 118-131.

Figure 36. Monitoring the tree growth by measuring the height in Batu Jongjong VIllage

Meanwhile, monitoring using the Sampling Intensity method is carried out on an area of 1 hectare or with steep topographic conditions so that it can take a long time if monitoring is carried out by means of a census. Monitoring is done by making several sample plots with a plot size of 20x20 m for each plot and in determining the number of plots it is calculated with a sampling intensity of 10%. Our references is Setiawan B, Firdaus R, Idris M H. 2020. Evaluasi Kegiatan Rehabilitasi Hutan Dan Lahan Konvensional Pasca Bencana Di Balai Kesatuan Pengelolaan Hutan Maria Donggomasa Kabupaten Bima. Jurnal Sangkareang Mataram 6 (1) : 22-28.

23 locations consisting of 20.870 trees that have been planted in an area of 23,4 hectares have been monitored. The lowest tree survival rate was 68 percent and the highest tree mortality rate was 32 percent but this only occured at 1 planting location. Meanwhile, the average tree survival rate is 75% and the immortality rate is 25%. The details of monitoring results area written in Annex 00, Page 00.

Figure 37. Monitoring the tree growth by measuring the tree diameter in Batu Jongjong VIllage

3.4. The Environmental Education

a. Meeting with the school to prepare the schedule and visit materials for 1 year (January)

Coordinating with the school supervisor for Bahorok District and 6 school principals regarding the Education Calendar for the 2022/2023 Academic Year, regarding the effective study and holiday time so that YSHL can adjust the schedule with the schools' academic calender.

b. Routine visits to 6 assisted schools in 3 villages

Environmental and conservation education is conducted once a month to every school in Lau Damak, Batu Jongjong and Ujung Bandar villages covering 4 elementary schools and 2 junior high schools. The schools are SDN 056585 Biak Mampe, SDN 054895 Batu Jongjong, SDN 057735 Batu Katak, MIS Asmaul Husna, MTS Asmaul Husna, and SMP N 6 Satu Atap Bohorok.

Figure 38. Visit to elementary school SDN Batu Jongjong in batu Jongjong Village

There are 13 lessons given from January to November and 1 evaluation in December.

Table 8. List of lessons per month in 2023

Month of Visit	Lesson	Description
January	1. Rhino and its habitat	The students can know the important role of rhinos in the forest, types of rhinos based on physical characteristics and understand threats to their sustainability, especially the Javan and Sumatran rhinos, as well as efforts that can be made to preserve rhinos and their habitat.

February	2. Gunung Leuser National Park and its biodiversity	The students know that within the Gunung Leuser National Park area there are animals and plants that are endemic and protected because of their endangered status. Students can also understand the important role of Gunung Leuser National Park for the survival of living things.
March	3. The importance of trees for life	The students know the importance of trees for human life and other living things. For example how a tree can provide oxygen for 2-3 people. Besides that, trees also absorb carbon dioxide and emit oxygen, a source of food and so on
April	4. The forest and its function for living things	The students understand the function and important role of a forest, just as important as a tree for the survival of all living things
May	5. Sources of oxygen on earth (forest and phytoplankton)	The students know the function and important role of a forest as important as a tree for the survival of all living things. Students also know that apart from trees/forests (producing oxygen from the land) there are also other sources of oxygen, which come from the ocean, namely phytoplankton which is the largest producer/contributor of oxygen for the earth.
June	6. Habitat	Students can identify animals and plants according to their habitat
July	7. Food chain	The students can identify several different types of relationships (symbiosis) and "eat and be eaten" relationships between living things. Students can name 1 food chain process correctly.
August	8. Natural resources	The students can know and understand the function and important role of natural resources, their types, and how to use natural resources well and wisely.
September	9. Human activities that can disrupt nature conservation	The students can find out the impact that occurs on environmental sustainability as a result of human activities that do not pay attention to the environment and the efforts that can be made to ensure that natural balance and natural sustainability are maintained.
October (2 classes)	10. Creating a harmonious life side by side with wild animals. 11. Tigers and their habitat	The students can find out the causes of conflict between humans and wild animals such as tigers, elephants, orangutans, etc., as well as preventive measures that can be taken to avoid conflicts between humans and wild animals. The students know about types of tigers, their roles and functions in forest ecosystems, physical characteristics, food, threats and efforts that can be made to conserve tigers and their habitat.
November (2 classes)	12. Waste and its management.	The students can differentiate types of waste, impacts and methods of processing waste based on type so that it can produce economic value.

	13. The elephants and their habitat	The students know about types of elephants, their roles and functions in forest ecosystems, food, threats and efforts that can be made to conserve elephants and their habitat.
December	Evaluation	The students were asked 50 questions related to the material that had been presented during the 11 months of meetings. They can answer it well and correctly.

The total visits to schools were 80 times involving 208 children consisting of 88 boys and 120 girls. The attendance figures of students involved in activities every month are recorded as below.

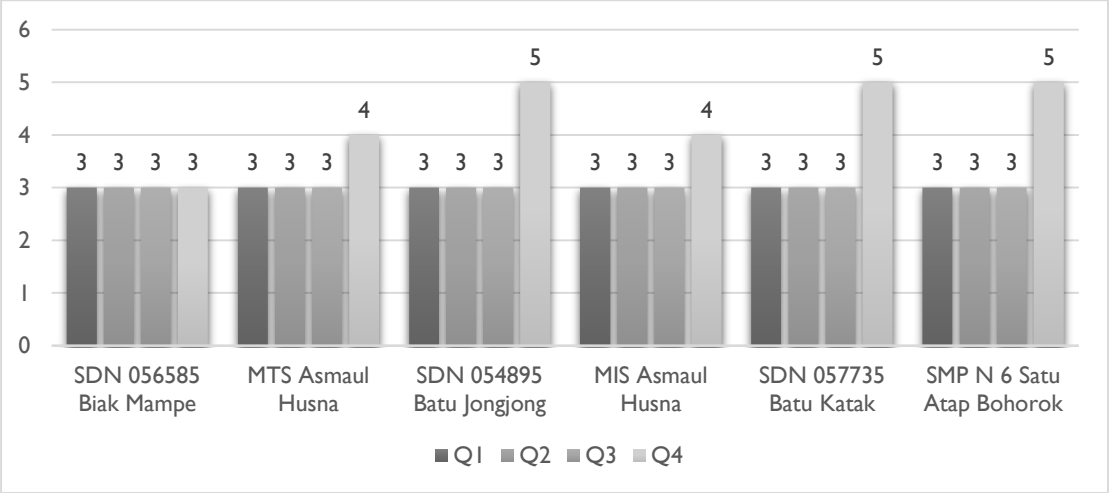


Chart 5. Number of visits per school per quarter in 2023

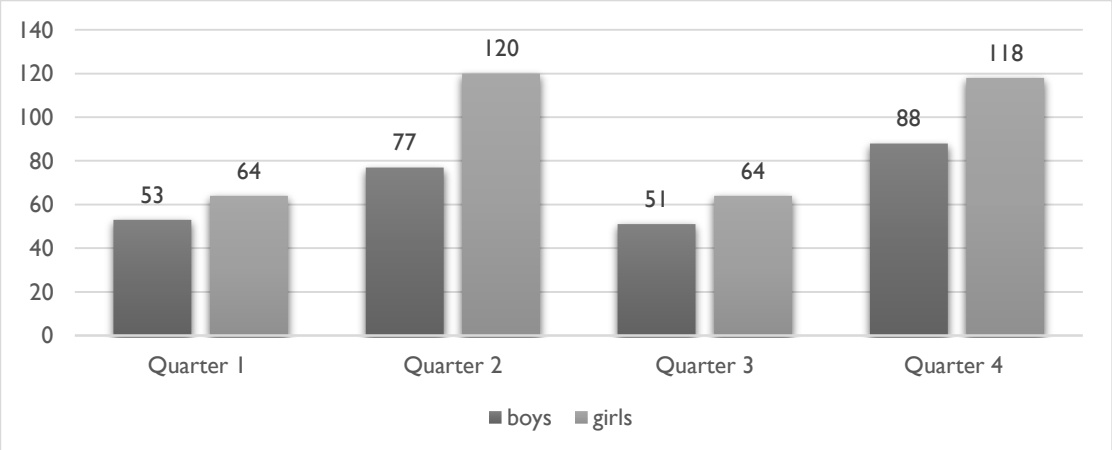


Chart 6. Number of students' attendance per 6 schools per quarter in 2023

Meanwhile, the level of success in conveying lessons as measured by the success of students in answering the questions on the pre-test and post-test sheets, we conclude is very significant.

From the chart above, it can be seen that during the pre-test, only about 20-30 percent of students can answer questions while during the post-test, students can answer questions above 70-80 percent.

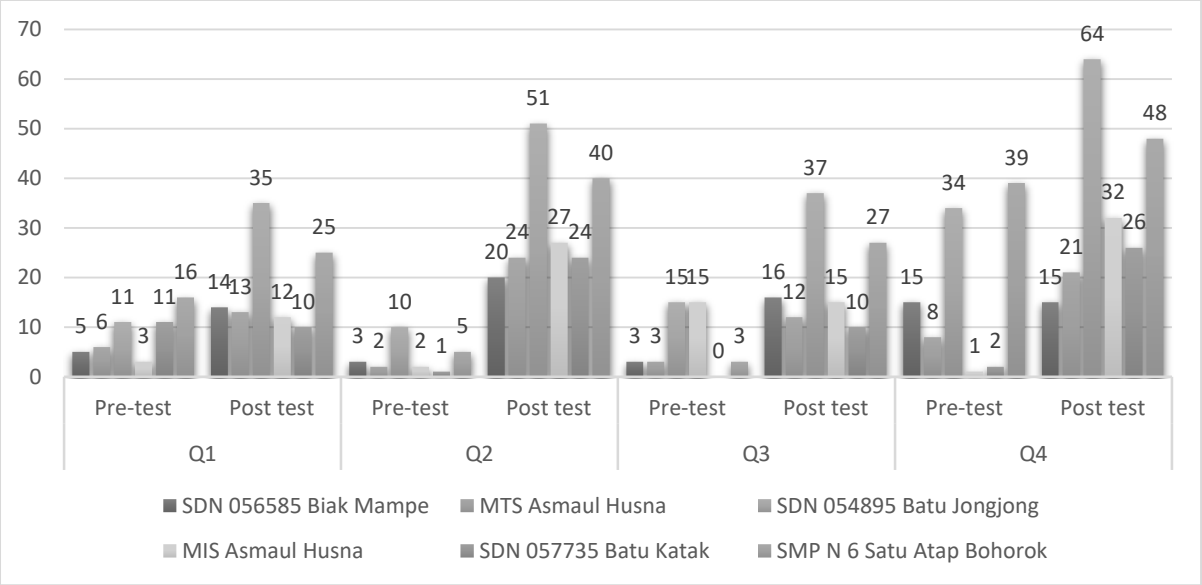


Chart 7. Number of students who can pass the pre and post test per school per quarter in 2023

c. Identification and purchase of RBK management support needs

To support the implementation of the teaching and learning process in 4 conservation learning houses located in Lau Damak, Batu Jongjong and Ujung Bandar villages, SHL provides learning support materials such as reading books and educational games, as well as learning room support tools such as mats, curtains, fans, MMT screen, bookcase, cleaning tools such as broom, mop, trash bin, and roof repairs. All tools and materials are adapted to each learning house.

d. Routine visits to 4 RBK

Figure 39. The children in learning house Lentera Hijau In Ujung Bandar Village

Assistance for children aged 6 to 12 years in 4 conservation learning houses (Harapan Kita in Lau Damak Village, Teladeh Lestari in Batu Jongjong Village, Lantera Hijau and Bunga Simalem in Ujung Bandar Village) is carried out twice a month for each learning house.

There were 11 lessons given to children at the conservation learning houses in January to November and 1 evaluation in December. The lesson is divided into two parts, namely the main lesson about the environment and conservation, while additional activities are games that contain educational elements to hone skills, create initiative, build cooperation and cohesiveness. English is also part of additional lessons to increase simple vocabulary. Meanwhile, evaluations at the end of the year are carried out to see the child's progress in absorbing the lessons that have been taught during the previous 11 months.

Figure 40. The children in learning house Lentera Hijau is making kolase to make a picture of animal in Ujung Bandar Village

Table 9. List of lesson per month for the conservation learning houses in 2023

Month of Visit	Lesson	Description
January	1. Main lesson: Orangutan and the habitat	The children know the difference between orangutans and monkeys and other types of great apes. Children also know the types of orangutans and their important role in nature.
	Additional lesson: Making toys from cardboard (soccer board) and creating origami	The children are able to develop ideas to make a creative toy by processing unused items found around the environment, for example making a soccer board
February	2. Main lesson: Gunung Leuser National Park and its biodiversity	The children know the important role and function of Gunung Leuser National Park, namely as a life support for living things, such as the availability of oxygen and water which are the main needs of life. Students can also find out that GLNP is a habitat for animals and plants in it, starting from various plant species (large woody tree species and rare plant species) as well as various animal species such as the 4 key species and other protected species in the GLNP area.

	Additional lesson: Make an elephant's horn out of origami paper	The children are able to express ideas with creativity to produce an interesting work based on their own creations.
March	3. Main lesson: Hornbill Additional lesson: Games (Guess the picture and the word chain message)	The children know that the hornbill is a large bird species and also has an important role in regenerating forests, as a good dispersal of tree seeds, because of its ability to fly up to 100 kilometers. However, the hornbill also poses a high threat to its sustainability due to hunting for its exotic crown/horn and beak. The children's thinking abilities by listening to instructions properly and carrying out orders / cues given. Children can also practice concentration and solve a problem from the games they play.
April	4. The main lesson: The forest and its function for living things. Additional lesson: Make photo frames from ice cream sticks and bottle caps	The children understand the function and important role of a forest, just as important as a tree for the survival of all living things. The children are able to express an idea in a craft made from ice cream sticks and bottle caps.
May	5. Main lesson: Flora in the forest of Gunung Leuser National Park Additional lesson: Crafting with ice stick (photo frame, hero stick, animal shape)	The children know the diversity of plant species found in the Gunung Leuser National Park area. Children can also identify plant species including rare or non-rare categories. The children are able to express an idea in a craft made from ice cream sticks into various shapes, such as superheroes, photo frames, animals and others, which can be used as toys or room decorations
June	6. Main lesson: *Rafflesia arnoldii* Additional lesson: Drawing using colorful leaves	Children know one of the rare flowers found in Indonesia, namely the Raflesia flower. Children know how the rafflesia flower grows without roots, leaves and stems, the early history of the discovery of rafflesia flowers and various types of rafflesia flowers in Indonesia. Children also know that Raflesia is a protected puspa species. Children are able to express their creativity through pictures of leaves that are traced and then some parts of the leaves are cut by the child using colored pencils.
July	7. Main lesson: *Amorphophallus titanium*	The children learn about plant biodiversity, especially the rare/endemic puspa species found in the forests of Sumatra, namely the Carrion Flower. Children can know the difference between *Amorphophallus titanium*

		which is included in the taro category and can grow on its own tubers, while *Rafflesia arnoldii* requires other plants to grow or is a parasite.
	Additional lesson: Creativity	The children are able to express their creativity by making a collage picture from nature, such as dry or wet leaves, twigs, fruit and bark arranged on paper or cardboard to form a picture.
August	8. Main lesson: The pangolin	The children can learn about the distribution of pangolins in Indonesia and in the world, which are scaly mammals, their food, threats, status and conservation efforts.
	Additional activity: Games competition; Sangkut Ceting, Balap Kardus, Balap Karung, Estafet Sedotan	The competition is in commemoration of the Independence Day of the Republic of Indonesia
September	9. Main lesson: The porcupine	The children can learn about one of the protected animals, namely the porcupine. The children also know about the types of porcupine in Indonesia and in the world, their food, threats, status and the conservation efforts.
	Additional activity: Learning English with the theme "self introduction"	The children are able to introduce themselves simply in English
October	10. Main lesson: Bears and their habitat	The children know the types of bears in Indonesia and in the world, their food, threats and current status.
	Additional lesson: Make a collage from leaves	The children are able to express their creativity through a collage of leaves arranged on paper and forming a picture.
November	11. Main lesson: Repeating lesson about orangutans and their habitat	To increase the children's knowledge so they can differentiate orangutans from monkeys and other types of great apes. Children also know the types of orangutans and the important role of orangutans in the forest.
	Additional lesson: Games: guess the style of wildlife	The children are able to develop ideas to answer questions in the game and practice solidarity in working together.
December	Evaluation Repeating the lessons	The children can recall and understand the lessons that have been given during the 11 months of meetings so that they can answer the questions given properly and correctly.

The total assistance was 96 times involving 158 children consisting of 61 boys and 97 girls with details of child attendance each month as below.

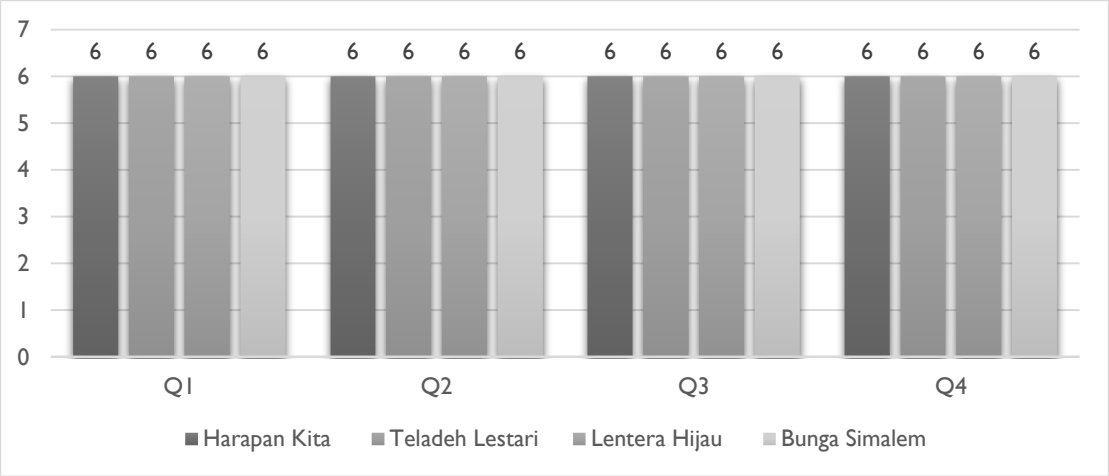


Chart 8. Number of visits to each learning houses per quarter in 2023

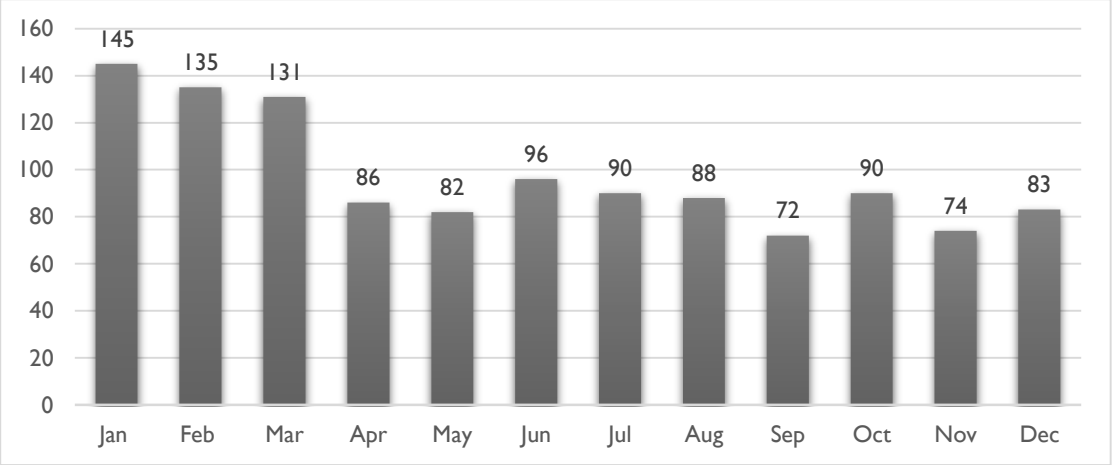


Chart 9. Number of children's attendance in 4 learning houses per month in 2023

From the table above it can be seen that the attendance of children in the 4 learning homes is decreasing. This is not because children's interest is decreasing, but most of the children are over 12 years old or have entered junior high school, while the age limit for children accompanied by SHL is 6 to 12 years. Most children who are already in junior high school but are still in grade 7 still take part in activities but their attendance is no longer counted.

f. Preparation of environmental care campaign plans and orangutan caring week

SHL together with the Sahabat Hijau youth community hold quarterly discussions to discuss plans for making videos of SHL activities in order to promote SHL and campaign for the environment and nature conservation. In November, SHL involved the Kampung Dongeng Medan to hold a meeting regarding the preparation and implementation of the orangutan caring week.

g. Implementation of 3 times environmental care campaign activities

Some of Sahabat Hijau members are students and some are working. This makes it difficult to find time to discuss and implement the activity plans that have been prepared. Moreover, to

make a video, they have to go to the SHL work area to take photos and videos. But they are still committed to continuing this activity in the next year. In September, Sahabat Hijau produced 1 video about field activities carried out by the SHL team, with the title "Journal of YSHL". The video can be seen in Sahabat Hijau media social; Sahabathijau_ (Instagram), SahabatHijau (Facebook) and Sahabat Hijau (Youtube).

h. Implementation of Orangutan Caring Week activities

Figure 41. Socialization about orangutan to 14 housewives in Sibolangit, Karo Distrcit

In 25-26 November, Orangutan Caring Week 2023 was held with the theme "Preserving the Forests, Saving the Orangutans" in Martelu Village, Sibolangit involving 47 people consisting of 33 children and 14 housewives. SHL collaborates with the Sahabat Hijau community and Kampung Dongeng Medan. Activities in this event included socialization about orangutans and their habitat, a story telling with the title "Otan and the Orangutan", coloring competition, treasure search, word composition and face painting competition.

Figure 42. Orangutan Caring Week 2023 was held in Sibolangit, Karo District

5. Closing

In implementing the CECP 4 program in 2023, we faced several obstacles so that several activity targets have not been achieved and will be implemented in the following year as a form of our responsibility as program implementers. Obstacles such as the lack of capacity building for both SHL staff and the community in several fields, the mindset of the village community which is quite difficult to change even if slowly, the lack of real support from the village, the lack of discipline of staff in the field in using time and strategies efficiently and effectively, are becoming one of the factors in not achieving several activity targets. However, we are still trying to find the best solution so that activities can run smoothly.

We must admit that this report still has many shortcomings and weaknesses so that many parties need to provide constructive criticism and suggestions. We hope that this report can serve as an example for anyone so that it can be applied in other areas. Thank you to all parties who cooperate and support the third Community Development and Conservation Program (CECP) in 2023.

Yours sincerely,

Juli Yanti
Manager Program of SHL

Annex 1. Guidelines for making liquid organic fertilizer duplicated from Mr. Erwin

a. Ingredients preparation:

No.	Indonesian Name	Local Name	Substance Content	Sum	Description
1	Kecubung	Terong pungar	Pes	4 trees	Pesticide
2	Akar tuba	Tuba jenu	Pes	5 trees	Pesticide
3	Brotowali	Akar ali ali	Pes	1 gunny size 10 kg	Pesticide
4	Kembang sepatu	Bunga raya	K	1 gunny size 10 kg	Kalium
5	Daun Gamal	Gliricidia sepium	N	1 gunny size 10 kg	Nitrogen
6	Babadotan	Talu dagang	N dan K	1 gunny size 10 kg	Nitrogen + Kalium
7	Daun mahoni	Mahoni	Pes, N	1 gunny size 10 kg	Pesticide + Nitrogen
8	Kenikir/ gendong anak	Seraprap	Pes, N	5 kilograms	Pesticide + Nitrogen
9	Pinang muda	Pinang kacat	Pes	5 kilograms	Pesticide
10	Pacar air/ bunga pacar	Bunga kacar	N	1 gunny size 10 kg	Nitrogen
11	Bayam duri	Bayam duri	N	1 gunny size 10 kg	Nitrogen
12	Akar bambu	Akar bambu	Mikroorganisme	3 kilograms	Micro organism
13	Rebung	Tubis	K dan ZPT	3 kilograms	Kalium + Growth regulator
14	Daun bambu	Daun bambu	K	1 gunny size 30 kg	Kalium
15	Batang pisang	Batang pisang	P	1 stick x 2 meters	Fosfor
16	Dedak halus	Kedep	P, kar	5 kilograms	Fosfor + Carbohydrate
17	Daun sirsak	Daun durian belanda	Pes	1 gunny size 10 kg	Pesticide
18	Air kelapa	Air kelapa	K dan ZPT	30 liters	Kalium + Growth regulator
19	Air cucian beras	Air cucian beras	Kar, P	30 liters	Carbohydrate + Fosfor
20	Simpur	Simpur	K	1 gunny size 10 kg	Kalium
21	Kotoran kambing		N dan K	1 gunny size 10 kg	Nitrogen + Kalium
22	Labu matang	Cucurbita moschata	K	5 kilograms	Kalium
23	Cabe rawit	Capsicum annuum	Pes	2 kilograms	Pesticide
24	Jahe merah	Zingiber officinale	Pes	2 kilograms	Pesticide
25	Starter/ MOL	Mikroorganisme	Mikroorganisme	2 bottles	Mikroorganisme
26	Gula merah cair			2 liters	Bio activator
27	Bawang merah			3 kilograms	Growth regulator
28	Abu bakaran			10 grams	

b. Equipment preparation
   - Blue barrel
   - Water faucet
   - Masking tape
   - Drill
   - Hose
   - Plastic bottles
   - Tarpaulin
   - Machete

c. How to make liquid organic fertilizer:
   - After the tools and materials are available, then all the materials are enumerated.
   - The enumeration of materials is carried out on a tarpaulin.
   - After finishing the counting, the ingredients are then mixed together in a tarpaulin, while mixing ingredients such as rice husk and burnt ash while stirring.
   - Then the blue barrel is drilled at the top and bottom to install the faucet.
   - Use the lower faucet to circulate liquid organic fertilizer while the upper faucet circulates air/gas.
   - Next, the mixed ingredients are put into 50 kg jute and put into a blue barrel - Then mix the rice washing water and coconut water into the barrel until it covers the burlap surface or about 10 cm below the exhaust gas valve which is located above (the faucet is positioned closed).

- Mix the brown sugar and the biostarter into the vat
- For the first 5 days, the blue barrel is shaken while the gas valve is opened. After that, let it stand for 21 days while the gas exhaust valve is opened.
- After 21 days liquid organic fertilizer can be used to fertilize

All the ingredients for making liquid organic fertilizer above are not standard, the ingredients can be adapted to what is in the village. What must be understood is that the materials used contain sodium (N), phosphate (P), potassium (K) and also pesticides which are good for plants so that when these materials are broken down by bacteria they will provide benefits similar to those of pesticides and fertilizers. sold on the market. With so this fertilizer is expected to reduce the use of chemical fertilizers as well as being able to reduce production/operational costs of farmers in farming.

An important point to pay attention to is the materials used, if you want to produce a lot of good fruit, what you have to multiply is the composition of the fruit or the skin of the fruit. If you want to produce thick and healthy leaves, the composition of the leaves is increased when making organic fertilizer. The optimal composition in one barrel of fertilizer so that plant growth is balanced between fruit, leaves and flowers is 30% (fruit - element K) : 30% (leaf - element N) : 30% (flowers - element P) : 10% (Pesticides). In the manufacture of liquid organic fertilizer, rice washing water, coconut water and brown sugar are added. The addition of these liquid ingredients is done to help the biostarter in cooking which aims to maximize the yield of each plant.

Annex 2. Guide to make the liquid organic fertilizer by Panca Budi University students

a. Ingredients preparation:

No	Material name	Sum of Material
1.	Lamtoro leaf	2 kilograms
2.	Moringa leaf	2 kilograms
3.	Raw pace fruits	2 kilograms
4.	Coconut water	20 litres
5.	Rice water	10 litres
6.	Banana peel	3 kilograms
7.	Egg shell	2 kilograms
8.	Molasses	1,5 litres
9.	EM4	1 bottle

b. Equipment preparation:
   - Bucket
   - 50 liter barrel
   - Small hose
   - Aqua bottle
   - Wooden stirrer
   - Blender/ fertilizer material grinding machine

c. How to make liquid organic fertilizer:
   - Refining liquid organic fertilizer ingredients (lamtoro leaves, moringa leaves, pace fruit and banana peels)
   - Mix 1.5 liters of molasses with 1 liter of EM4 into a container and let it sit for about 6 hours to activate the bacteria
   - Put coconut water and rice water into a 50 liters barrel
   - Enter the bio activator that has been left for 6 hours into the vat that already contains coconut water and rice washing water
   - Enter the liquid organic fertilizer ingredients that have been mashed into the barrel
   - Close the barrel tightly
   - Give a hose on the lid of the barrel and given an aqua bottle filled with water

   Note: Fermentation is carried out for approximately 1 month

Annex 3. Monitoring the Application of Liquid Organic Fertilizer to Agricultural Crops in Lau Damak, Batu Jongjong and Ujung Bandar Village in 2023

No	Land Owner	Location	Month	Description
RICE				
1	Riadi	Lau Damak	March	status: harvest 360 kg
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 230 ml fertilizer : 15 l water
				application: once every 2 weeks
				This number was reduced from the previous harvest due to the large number of monkeys destroying the rice
			December	status: replanting
				Area: 5 rante
				Age of rice: 2 months
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
2	Puji	Lau Damak	March	status: harvest 35 kg
				doze: 230 ml fertilizer : 15 l water
				application: once a week
			December	status: replanting
				Area: 10 rante
				Age of rice: 2 months
				farming pattern: semi organic (chemical mix organic fertilizer)
				chemical fertilizer: 50 kg ponska
3	Sunardi	Batu Jongjong	February	status: harvest 122 kg
				area: 1,5 rante
				farming pattern: semi organic (chemical mix organic fertilizer)

				doze: 230 ml fertilizer : 16 l water
				application: once a week
				chemical fertilizer: 35 kg
			December	status: replanting
				area: 11 rante
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska
				note: not decided yet whether using organic fertilizer or not in next step
4	Ramita	Batu Jongjong	February	status: harvest in 600 kg
				area: 1,5 rante
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 230 ml fertilizer : 16 l water
				application: once a week
5	Sukirno	Batu Jongjong	March	status: harvest in 780 kg
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 230 ml fertilizer : 16 l water
				application: once a week
6	Budi	Ujung Bandar	December	status: replanting
				area: 5 rante
				age of rice: 2 months
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
7	Siti	Ujung Bandar	December	status: replanting

				area: 5 rante
				age of rice: 2 months
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
8	Mirna	Ujung Bandar	December	status: replanting
				area: 5 rante
				age of rice: 2 months
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
9	Juli Kamsi	Ujung Bandar	December	status: replanting
				area: 5 rante
				age of rice: 2 months
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
10	Supardi	Ujung Bandar	December	status: replanting
				area: 5 rante
				age of rice: 2 months
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
11	Gitok	Ujung Bandar	December	status: replanting

				area: 5 rante
				age of rice: 2 months
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
12	Supriono	Lau Damak	December	status: replanting
				area: 20 rante
				age of rice: 2 months
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
				chemical fertilizer: 50 kg ponska
13	Edi	Lau Damak	December	status: replanting
				area: 5 rante
				age of rice: 2 months
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska, 3 kg urea
				note: not decided yet whether using organic fertilizer or not in next step
14	Suwito	Lau Damak	December	status: replanting
				area: 5 rante
				age of rice: 2 months
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska, 3 kg urea
				note: not decided yet whether using organic fertilizer or not in next step

15	Paidi	Lau Damak	December	status: replanting
				area: 5 rante
				age of rice: 2 months
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska, 3 kg urea
				note: not decided yet whether using organic fertilizer or not in next step
16	Yusuf	Lau Damak	December	status: replanting
				area: 5 rante
				age of rice: 2 months
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska, 3 kg urea
				note: not decided yet whether using organic fertilizer or not in next step
17	Sunarseh	Batu Jongjong	December	status: replanting
				area: 4 rante
				age of rice: 2 months
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska
				note: not decided yet whether using organic fertilizer or not in next step
18	Fadli	Batu Jongjong	December	status: replanting
				area: 4 rante
				age of rice: 2 months
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska
				note: not decided yet whether using organic fertilizer or not in next step

19	Sutarman	Batu Jongjong	December	status: replanting
				area: 4 rante
				age of rice: 2 months
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska
				note: not decided yet whether using organic fertilizer or not in next step
20	Sunadi	Batu Jongjong	December	status: replanting
				area: 11 rante
				age of rice: 2 months
				farming pattern: full chemical
				chemical fertilizer: 50 kg ponska
				note: not decided yet whether using organic fertilizer or not in next step
CHILI				
	Supriono	Lau Damak	March	status: harvest 680 kg in 1,5 months
				area: 10 rante
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 6 l fertilizer : 200 l water
				application: once a week
			Desember	status: replanting
				area: 4 rante
				age of rice: 2 months
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 20 l organic fertilizer, 20 kg compost
				chemical fertilizer: will be used next step
21		Lau Damak	March	status: harvest 3 kg / week

	Usaha Ginting			farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 300 ml fertilizer : 16 l water
				application: once a week
	Ramita	Lau Damak	March	status: harvest 2 kg / week
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
EGGPLANT				
	Sukirno	Batu Jongjong	March	status: harvest 30 kg / week
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 200 ml fertilizer : 15 l water
				application: once every 2 weeks
22	Nurlela	Batu Jongjong	May	status: harvest 18 kg / week
				farming pattern: 100 % organic
				doze: 200 ml fertilizer : 15 l water
				application: once a week
			November	status: harvest 14 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
22	Sri Anita	Lau Damak	May	status: harvest 15 kg / week
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 230 ml fertilizer : 15 l water
				application: once every 2 weeks

23	Ernawati	Lau Damak	May	status: harvest 20 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
			November	status: harvest 17 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
24	Bangkungena	Lau Damak	May	status: harvest 16 kg / week
				farming pattern: semi organic (chemical mix organic fertilizer)
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
24	Nampaken	Lau Damak	May	status: harvest 24 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
			November	status: harvest 25 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
25	Naomi	Lau Damak	May	status: harvest 27 kg / week
				farming pattern: 100 % organic

				doze: 440 ml fertilizer : 15 l water
				application: once every 2 weeks
			November	status: harvest 25 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
LONG BEAN				
26	Rusli	Lau Damak	June	status: harvest 35 kg / week
				farming pattern: 100 % organic
				doze: 230 ml fertilizer : 15 l water
				application: once every 2 weeks
27	Sarmi	Lau Damak	June	status: harvest 25 kg / week
				farming pattern: 100 % organic
				doze: 230 ml fertilizer : 15 l water
				application: once every 2 weeks
			November	status: harvest 23 kg / week
				farming pattern: 100 % organic
				doze: 230 ml fertilizer : 15 l water
				application: once every 2 weeks
28	Evi	Lau Damak	June	status: harvest 10 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks

			November	status: harvest 9 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
29	Jul Apriani	Lau Damak	June	status: harvest 9 kg / week
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
KANGKUNG				
30	Butet Kembaren		June	status: harvest 20 kg in 30 days
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks
KEMANGI				
31	Nampati	Lau Damak	June	status: harvest 83 bunches
				farming pattern: 100 % organic
				doze: 220 ml fertilizer : 15 l water
				application: once every 2 weeks

Annex 4. Monitoring home garden plants in Lau Damak, Batu Jongjong and Ujung Bandar Village in 2023

No	Name of Residents	Type of Plants	Harvest		Total Number of Harvest	Sold Price (Rp)	Side Income (Rp)	Total of Side Income (Rp)	Side Income per Day (Rp)
			1st Semester	2nd Semester					
1	Maritim	long bean	6,3	5,2	11,5	10.000	115.000	736.300	2.045
		eggplant	6,6	8,9	15,5	10.000	155.000		
		kangkung	8,2	8,05	16,25	10.000	162.500		
		mustard	5,75	7,1	12,85	8.000	102.800		
		cayenne pepper	2,85	3,85	6,7	30.000	201.000		
2	Endamalem	long bean	6,1	4,6	10,7	10.000	107.000	701.200	1.948
		eggplant	9	9,5	18,5	10.000	185.000		
		kangkung	6,25	8	14,25	10.000	142.500		
		mustard	6,3	8,1	14,4	8.000	115.200		
		cayenne pepper	2,45	2,6	5,05	30.000	151.500		
3	Malam ukur	long bean	6,1	6,8	12,9	10.000	129.000	689.700	1.916
		eggplant	8,8	6,7	15,5	10.000	155.000		
		kangkung	4,4	7,3	11,7	10.000	117.000		
		mustard	6	8,9	14,9	8.000	119.200		
		cayenne pepper	3,1	2,55	5,65	30.000	169.500		
4	Susilawati	long bean	5,5	5,8	11,3	10.000	113.000	741.500	2.060
		eggplant	7,25	7	14,25	10.000	142.500		
		kangkung	7,6	8,2	15,8	10.000	158.000		
		mustard	6,2	4,8	11	8.000	88.000		
		cayenne pepper	2,9	5,1	8	30.000	240.000		
5	Setiana	long bean	3,95	8,2	12,15	10.000	121.500	726.000	2.017
		eggplant	8,55	7,1	15,65	10.000	156.500		
		kangkung	5,1	7,35	12,45	10.000	124.500		
		mustard	8,55	9,2	17,75	8.000	142.000		
		cayenne pepper	3,05	3	6,05	30.000	181.500		

6	Sri Ulina	long bean	5,55	10	15,55	10.000	155.500	730.600	2.029
		eggplant	8	7,3	15,3	10.000	153.000		
		kangkung	8,5	9,7	18,2	10.000	182.000		
		mustard	6,2	4,5	10,7	8.000	85.600		
		cayenne pepper	2,85	2,3	5,15	30.000	154.500		
7	Rohani	long bean	6,55	8,45	15	10.000	150.000	707.300	1.965
		eggplant	6,8	8,4	15,2	10.000	152.000		
		kangkung	8,1	8,9	17	10.000	170.000		
		mustard	7,6	4	11,6	8.000	92.800		
		cayenne pepper	2,4	2,35	4,75	30.000	142.500		
8	Pengertin	long bean	5	8,2	13,2	10.000	132.000	793.750	2.205
		tomato	10,5		10,5	8.000	84.000		
		mustard	8,2	8,3	16,5	8.000	132.000		
		spinach	5,75		5,75	8.000	46.000		
		cucumber	2,85		2,85	5.000	14.250		
		cayenne pepper	4,2	2,15	6,35	30.000	190.500		
		eggplant		10,1	10,1	10.000	101.000		
		kangkung		9,4	9,4	10.000	94.000		
9	Surip	long bean	6,9	6,3	13,2	10.000	132.000	719.500	1.999
		eggplant	7,1	9	16,1	10.000	161.000		
		kangkung	5,9	6,8	12,7	10.000	127.000		
		mustard	6,3	7,7	14	8.000	112.000		
		cayenne pepper	3,45	2,8	6,25	30.000	187.500		
10	Dahlia	long bean	4,5	7,4	11,9	10.000	119.000	716.200	1.989
		tomato	3,3		3,3	8.000	26.400		
		mustard	4,2	7,4	11,6	8.000	92.800		
		spinach	5		5	8.000	40.000		
		cucumber	10,5		10,5	5.000	52.500		
		cayenne pepper	5,2	2,45	7,65	30.000	229.500		

		eggplant		8,2	8,2	10.000	82.000		
		kangkung		7,4	7,4	10.000	74.000		
11	Supriono	long bean	4,55		4,55	10.000	45.500	339.800	1.888
		eggplant	7,4		7,4	10.000	74.000		
		kangkung	6,4		6,4	10.000	64.000		
		mustard	6,6		6,6	8.000	52.800		
		cayenne pepper	3,45		3,45	30.000	103.500		
12	Sehat	long bean	5,8		5,8	10.000	58.000	330.100	1.834
		tomato	2,9		2,9	8.000	23.200		
		mustard	5,4		5,4	8.000	43.200		
		spinach	3,9		3,9	8.000	31.200		
		cucumber	5,2		5,2	5.000	26.000		
		cayenne pepper	4,95		4,95	30.000	148.500		
14	Sri	long bean	4,2		4,2	10.000	42.000	337.650	1.876
		tomato	5,5		5,5	8.000	44.000		
		mustard	5,1		5,1	8.000	40.800		
		spinach	6,2		6,2	8.000	49.600		
		cucumber	5,25		5,25	5.000	26.250		
		cayenne pepper	4,5		4,5	30.000	135.000		
15	Fitri Sitepu	long bean	4,75		4,75	10.000	47.500	327.650	1.820
		tomato	2,75		2,75	8.000	22.000		
		mustard	7,3		7,3	8.000	58.400		
		spinach	1,75		1,75	8.000	14.000		
		cucumber	11,95		11,95	5.000	59.750		
		cayenne pepper	4,2		4,2	30.000	126.000		
16	Naomi	long bean	6,1		6,1	10.000	61.000	344.100	1.912
		tomato	3,4		3,4	8.000	27.200		
		mustard	4,7		4,7	8.000	37.600		
		spinach	2,6		2,6	8.000	20.800		

		cucumber	4,7		4,7	5.000	23.500		
		cayenne pepper	5,8		5,8	30.000	174.000		
17	Usaha Ginting	long bean	4,8		4,8	10.000	48.000	334.900	1.861
		tomato	3,9		3,9	8.000	31.200		
		mustard	6,65		6,65	8.000	53.200		
		spinach	4,5		4,5	8.000	36.000		
		cucumber	5,7		5,7	5.000	28.500		
		cayenne pepper	4,6		4,6	30.000	138.000		
18	Norlela	long bean	5,2		5,2	10.000	52.000	325.200	1.807
		tomato	7,1		7,1	8.000	56.800		
		mustard	2,55		2,55	8.000	20.400		
		spinach	4,5		4,5	8.000	36.000		
		cucumber	6,8		6,8	5.000	34.000		
		cayenne pepper	4,2		4,2	30.000	126.000		
19	Fitri	long bean	5,7	5,5	11,2	10.000	112.000	762.000	2.117
		tomato	7,5	5,2	12,7	8.000	101.600		
		mustard	6,05	6,2	12,25	8.000	98.000		
		spinach	6,1	8,7	14,8	8.000	118.400		
		cucumber	10	7	17	10.000	170.000		
		cayenne pepper	2,5	2,9	5,4	30.000	162.000		
20	Rinem Fransiska	long bean	5,5	8,5	14	10.000	140.000	767.900	2.133
		tomato	6,85	8,7	15,55	8.000	124.400		
		mustard	6,4	4,8	11,2	8.000	89.600		
		spinach	5,9	4,65	10,55	8.000	84.400		
		cucumber	8,1	7,3	15,4	10.000	154.000		
		cayenne pepper	2,55	3,3	5,85	30.000	175.500		
21	Tuminem	long bean	4,6	6	10,6	10.000	106.000	816.200	2.267
		tomato	9,5	9,1	18,6	8.000	148.800		
		mustard	5,7	7,8	13,5	8.000	108.000		

		spinach	6,1	5,2	11,3	8.000	90.400		
		cucumber	9,5	8,5	18	10.000	180.000		
		cayenne pepper	2,95	3,15	6,1	30.000	183.000		
22	Wagirah	long bean	6	6,3	12,3	10.000	123.000	871.800	2.422
		tomato	2,2	8	10,2	8.000	81.600		
		mustard	2	8,7	10,7	8.000	85.600		
		spinach	2	6,2	8,2	8.000	65.600		
		cucumber	1,3	9,5	10,8	10.000	108.000		
		cayenne pepper	10,6	3	13,6	30.000	408.000		
23	Legia	long bean	6,3	8,5	14,8	10.000	148.000	742.200	2.062
		tomato	3,6	8,2	11,8	8.000	94.400		
		mustard	1,2	8,9	10,1	8.000	80.800		
		spinach	2	4	6	8.000	48.000		
		cucumber	2	9,6	11,6	10.000	116.000		
		cayenne pepper	6,6	1,9	8,5	30.000	255.000		
24	Sumiyani	long bean	6	8,6	14,6	10.000	146.000	692.800	1.924
		tomato	3,2	5,9	9,1	8.000	72.800		
		mustard	4	7	11	8.000	88.000		
		spinach	2,7	7,3	10	8.000	80.000		
		cucumber	0,7	5	5,7	10.000	57.000		
		cayenne pepper	6,2	2,1	8,3	30.000	249.000		
25	Sunarseh	long bean	3	7,6	10,6	10.000	106.000	753.100	2.092
		tomato	2,7	9,5	12,2	8.000	97.600		
		mustard	2,8	6,2	9	8.000	72.000		
		spinach	1	3,5	4,5	8.000	36.000		
		cucumber	5	6	11	10.000	110.000		
		cayenne pepper	7,5	3,55	11,05	30.000	331.500		
26	Ratna	long bean	7	8,4	15,4	10.000	154.000	754.600	2.096
		tomato	6,9	9,6	16,5	8.000	132.000		

		mustard	3,2	3,6	6,8	8.000	54.400		
		spinach	2,1	6,3	8,4	8.000	67.200		
		cucumber	6	7,1	13,1	10.000	131.000		
		cayenne pepper	5,1	2,1	7,2	30.000	216.000		
27	Murni	long bean	6,55	8,4	14,95	10.000	149.500	725.700	2.016
		tomato	6,8	7,2	14	8.000	112.000		
		mustard	8,1	6,7	14,8	8.000	118.400		
		spinach	7,6	6	13,6	8.000	108.800		
		cucumber	2,4	5,7	8,1	10.000	81.000		
		cayenne pepper	2,9	2,3	5,2	30.000	156.000		
28	Murni 2	long bean	4,8	8,3	13,1	10.000	131.000	808.400	2.246
		tomato	2,9	6,5	9,4	8.000	75.200		
		mustard	5,4	9,1	14,5	8.000	116.000		
		spinach	3,9	8	11,9	8.000	95.200		
		cucumber	3,2	7,1	10,3	10.000	103.000		
		cayenne pepper	6	3,6	9,6	30.000	288.000		
29	Junita	long bean	2,5	6,75	9,25	10.000	92.500	848.700	2.358
		tomato	6,5	2,6	9,1	8.000	72.800		
		mustard	9	7,6	16,6	8.000	132.800		
		spinach	7,8	4,9	12,7	8.000	101.600		
		cucumber	6,4	7,3	13,7	10.000	137.000		
		cayenne pepper	6,7	3,7	10,4	30.000	312.000		
30	Marimalem	long bean	3	8,1	11,1	10.000	111.000	830.800	2.308
		tomato	6,2	5,8	12	8.000	96.000		
		mustard	2,85	7,9	10,75	8.000	86.000		
		spinach	6,55	4,3	10,85	8.000	86.800		
		cucumber	6,8	5,9	12,7	10.000	127.000		
		cayenne pepper	8,1	2,7	10,8	30.000	324.000		
31	Tarmiseh	long bean	7,6	6,95	14,55	10.000	145.500	747.000	2.075

		tomato	2,4	3,4	5,8	8.000	46.400		
		mustard	8,2	7,5	15,7	8.000	125.600		
		spinach	5,75	8,75	14,5	8.000	116.000		
		cucumber	2,85	7,2	10,05	10.000	100.500		
		cayenne pepper	4,5	2,6	7,1	30.000	213.000		
32	Desi	long bean	8,1	8,4	16,5	10.000	165.000	738.800	2.052
		tomato	7,6	6,5	14,1	8.000	112.800		
		mustard	2,4	8,65	11,05	8.000	88.400		
		spinach	2,9	6,05	8,95	8.000	71.600		
		cucumber	2,8	6,6	9,4	10.000	94.000		
		cayenne pepper	4,7	2,2	6,9	30.000	207.000		
33	Mastariah	long bean	7,1	7,8	14,9	10.000	149.000	729.500	2.026
		tomato	2,55	3,2	5,75	8.000	46.000		
		mustard	4,5	7,9	12,4	8.000	99.200		
		spinach	3,3	8,3	11,6	8.000	92.800		
		cucumber	4,2	8,3	12,5	10.000	125.000		
		cayenne pepper	5	2,25	7,25	30.000	217.500		
34	Riah	long bean	10,5	7,8	18,3	10.000	183.000	771.400	2.143
		tomato	8,2	5,7	13,9	8.000	111.200		
		mustard	5,75	7,3	13,05	8.000	104.400		
		spinach	2,85	6	8,85	8.000	70.800		
		cucumber	6,1	8,2	14,3	10.000	143.000		
		cayenne pepper	2,7	2,6	5,3	30.000	159.000		
35	Julapriani	long bean	4,9	9,1	14	10.000	140.000	754.000	2.094
		tomato	7,25	4,25	11,5	8.000	92.000		
		mustard	8	7,8	15,8	8.000	126.400		
		spinach	3,45	6	9,45	8.000	75.600		
		cucumber	3,1	6,25	9,35	10.000	93.500		
		cayenne pepper	4,5	3,05	7,55	30.000	226.500		

36	Bangkuseh	long bean	5,5	7,9	13,4	10.000	134.000	763.400	2.121
		tomato	5	6,2	11,2	8.000	89.600		
		mustard	4,3	8,55	12,85	8.000	102.800		
		spinach	6	3	9	8.000	72.000		
		cucumber	5,6	9	14,6	10.000	146.000		
		cayenne pepper	4,5	2,8	7,3	30.000	219.000		
37	Suranta	long bean	6,9	8,3	15,2	10.000	152.000	713.100	1.981
		tomato	4,9	2,9	7,8	8.000	62.400		
		mustard	5,7	6,9	12,6	8.000	100.800		
		spinach	3,5	7,3	10,8	8.000	86.400		
		cucumber	4,4	6,2	10,6	10.000	106.000		
		cayenne pepper	4,15	2,7	6,85	30.000	205.500		
38	Sunarti	long bean	10,6	6,3	16,9	10.000	169.000	827.400	2.298
		tomato	8,5	4,4	12,9	8.000	103.200		
		mustard	3,1	9,5	12,6	8.000	100.800		
		spinach	7	9,05	16,05	8.000	128.400		
		cucumber	6,8	7,5	14,3	10.000	143.000		
		cayenne pepper	4,1	2	6,1	30.000	183.000		
39	Misi	long bean	7,6	8,1	15,7	10.000	157.000	799.200	2.220
		tomato	2,4	2,9	5,3	8.000	42.400		
		mustard	2,9	7,9	10,8	8.000	86.400		
		spinach	3,05	8,5	11,55	8.000	92.400		
		cucumber	5,55	6,1	11,65	10.000	116.500		
		cayenne pepper	8	2,15	10,15	30.000	304.500		
40	Amalia	long bean	7,55	7,7	15,25	10.000	152.500	749.200	2.081
		tomato	6,2	3,6	9,8	8.000	78.400		
		mustard	3,35	10,3	13,65	8.000	109.200		
		spinach	6,95	9	15,95	8.000	127.600		
		cucumber	6,35	6,5	12,85	10.000	128.500		

		cayenne pepper	3,5	1,6	5,1	30.000	153.000		
41	Yanti	long bean	6,5	7	13,5	10.000	135.000	838.100	2.328
		tomato	9	7,7	16,7	8.000	133.600		
		mustard	7,8	6,1	13,9	8.000	111.200		
		spinach	6,4	5,95	12,35	8.000	98.800		
		cucumber	6,5	7,25	13,75	10.000	137.500		
		cayenne pepper	5,2	2,2	7,4	30.000	222.000		
42	Herniati	long bean	4,3	8,4	12,7	10.000	127.000	776.100	2.156
		tomato	2,8	9,9	12,7	8.000	101.600		
		mustard	4,9	5	9,9	8.000	79.200		
		spinach	5	3,8	8,8	8.000	70.400		
		cucumber	6,99	7,9	14,89	10.000	148.900		
		cayenne pepper	5,7	2,6	8,3	30.000	249.000		
43	Pergainta	long bean	7,8	7,9	15,7	10.000	157.000	747.000	2.075
		tomato	6,4	5,3	11,7	8.000	93.600		
		mustard	6,5	9,3	15,8	8.000	126.400		
		spinach	5,2	4,3	9,5	8.000	76.000		
		cucumber	3,5	8,8	12,3	10.000	123.000		
		cayenne pepper	2,85	2,85	5,7	30.000	171.000		
44	Ingan malem	long bean	6,4	7,65	14,05	10.000	140.500	742.900	2.064
		tomato	8,7	5,5	14,2	8.000	113.600		
		mustard	3	8,1	11,1	8.000	88.800		
		spinach	5,5	4,75	10,25	8.000	82.000		
		cucumber	8,7	6	14,7	10.000	147.000		
		cayenne pepper	3	2,7	5,7	30.000	171.000		
45	Banci	long bean	5,5	7,65	13,15	10.000	131.500	740.800	2.058
		tomato	6,85	4,4	11,25	8.000	90.000		
		mustard	6,4	4,1	10,5	8.000	84.000		
		spinach	5,9	7,2	13,1	8.000	104.800		

		cucumber	8,1	8	16,1	10.000	161.000		
		cayenne pepper	2,55	3,1	5,65	30.000	169.500		
46	Evi	long bean	4,6	8,25	12,85	10.000	128.500	746.900	2.075
		tomato	7,6	5,75	13,35	8.000	106.800		
		mustard	2,4	8,3	10,7	8.000	85.600		
		spinach	2,9	5,1	8	8.000	64.000		
		cucumber	4,6	7,6	12,2	10.000	122.000		
		cayenne pepper	5,3	2,7	8	30.000	240.000		
47	Siti khadijah	long bean	7,1	7,5	14,6	10.000	146.000	742.200	2.062
		tomato	3,2	7,1	10,3	8.000	82.400		
		mustard	7,3	7,7	15	8.000	120.000		
		spinach	6,3	4,3	10,6	8.000	84.800		
		cucumber	6,3	8,7	15	10.000	150.000		
		cayenne pepper	2,95	2,35	5,3	30.000	159.000		
48	Novi	long bean	7,4	5,75	13,15	10.000	131.500	747.400	2.076
		cucumber	5,6	2,85	8,45	8.000	67.600		
		mustard	3,9	6,1	10	8.000	80.000		
		kangkung	9,1	9	18,1	8.000	144.800		
		cucumber	7,2	6,25	13,45	10.000	134.500		
		cayenne pepper	2,2	4,1	6,3	30.000	189.000		
49	Surianta Kembaren	long bean	8,75		8,75	10.000	87.500	347.500	1.931
		tomato	7,8		7,8	8.000	62.400		
		kangkung	7,5		7,5	8.000	60.000		
		spinach	4,7		4,7	8.000	37.600		
		cucumber	4		4	10.000	40.000		
		cayenne pepper	2		2	30.000	60.000		
50	Suprapti	long bean	15,2		15,2	10.000	152.000	428.500	2.381
		tomato	5,4		5,4	8.000	43.200		
		mustard	8,35		8,35	8.000	66.800		

		spinach	3,5		3,5	8.000	28.000		
		cucumber	8,3		8,3	10.000	83.000		
		cayenne pepper	1,85		1,85	30.000	55.500		
44	Nuraseh	long bean	5,9		5,9	10.000	59.000	345.200	1.918
		tomato	3,4		3,4	8.000	27.200		
		mustard	4,4		4,4	8.000	35.200		
		spinach	7,1		7,1	8.000	56.800		
		cucumber	2,3		2,3	10.000	23.000		
		cayenne pepper	4,8		4,8	30.000	144.000		
45	Ramita	long bean	4,2		4,2	10.000	42.000	414.000	2.300
		tomato	4,9		4,9	8.000	39.200		
		mustard	11,7		11,7	8.000	93.600		
		spinach	4,9		4,9	8.000	39.200		
		cucumber	6,8		6,8	10.000	68.000		
		cayenne pepper	4,4		4,4	30.000	132.000		
46	Yanita	long bean	3,3		3,3	10.000	33.000	373.000	2.072
		tomato	8,6		8,6	8.000	68.800		
		mustard	5,8		5,8	8.000	46.400		
		spinach	6,1		6,1	8.000	48.800		
		cucumber	4,7		4,7	10.000	47.000		
		cayenne pepper	4,3		4,3	30.000	129.000		
47	Fiti	long bean	6,6		6,6	10.000	66.000	363.600	2.020
		tomato	6		6	8.000	48.000		
		mustard	3,2		3,2	8.000	25.600		
		spinach	4		4	8.000	32.000		
		cucumber	7,2		7,2	10.000	72.000		
		cayenne pepper	4		4	30.000	120.000		
51	Ingan	long bean	3,95		3,95	10.000	39.500	359.300	1.996
		tomato	6,55		6,55	8.000	52.400		

		mustard	6		6	8.000	48.000		
		spinach	3,8		3,8	8.000	30.400		
		cucumber	6,9		6,9	10.000	69.000		
		cayenne pepper	4		4	30.000	120.000		
52	Windasari	long bean	2,45		2,45	10.000	24.500	366.700	2.037
		tomato	6,1		6,1	8.000	48.800		
		mustard	8,8		8,8	8.000	70.400		
		spinach	5,5		5,5	8.000	44.000		
		cucumber	5		5	10.000	50.000		
		cayenne pepper	4,3		4,3	30.000	129.000		
53	Ros	long bean		6	6	10.000	60.000	418.800	2.327
		tomato		5,6	5,6	8.000	44.800		
		mustard		5,5	5,5	8.000	44.000		
		spinach		4	4	8.000	32.000		
		cucumber		1	1	10.000	10.000		
		cayenne pepper		7,6	7,6	30.000	228.000		
54	Tati	long bean		6,8	6,8	10.000	68.000	358.400	1.991
		tomato		4,4	4,4	8.000	35.200		
		mustard		3,3	3,3	8.000	26.400		
		spinach		8,6	8,6	8.000	68.800		
		cucumber		5,8	5,8	10.000	58.000		
		cayenne pepper		3,4	3,4	30.000	102.000		
55	Rini	long bean		6,1	6,1	10.000	61.000	355.600	1.976
		tomato		8,8	8,8	8.000	70.400		
		mustard		4,4	4,4	8.000	35.200		
		spinach		6	6	8.000	48.000		
		cucumber		4,8	4,8	10.000	48.000		
		cayenne pepper		3,1	3,1	30.000	93.000		
56	Tarmiseh	long bean		7	7	10.000	70.000	405.600	2.253

		gambas		8,4	8,4	8.000	67.200		
		mustard		5	5	8.000	40.000		
		spinach		4,55	4,55	8.000	36.400		
		cucumber		10,5	10,5	10.000	105.000		
		cayenne pepper		2,9	2,9	30.000	87.000		
57	Wak Gito	long bean	6,55	6,8	13,35	10.000	133.500	679.500	1.888
		eggplant	6,8	8,1	14,9	10.000	149.000		
		kangkung	8,1		8,1	8.000	64.800		
		mustard	7,6	7,8	15,4	8.000	123.200		
		cayenne pepper	2,4	1,9	4,3	30.000	129.000		
		cucumber		8	8	10.000	80.000		
58	Juli Kamsi	long bean	7,4	8,6	16	10.000	160.000	700.200	1.945
		eggplant	6,6	8,5	15,1	10.000	151.000		
		kangkung	7,7	5	12,7	8.000	101.600		
		mustard	7,1	7,1	14,2	8.000	113.600		
		cayenne pepper	3,25	2,55	5,8	30.000	174.000		
59	Mirna	long bean	7,1	8,65	15,75	10.000	157.500	704.600	1.957
		eggplant	8,1	7,45	15,55	10.000	155.500		
		kangkung	6,5	7	13,5	8.000	108.000		
		mustard	7,7	9	16,7	8.000	133.600		
		cayenne pepper	2	3	5	30.000	150.000		
60	Yanti	long bean	4,5	8,8	13,3	10.000	133.000	728.200	2.023
		eggplant	5	8	13	10.000	130.000		
		kangkung	10,6	6,3	16,9	8.000	135.200		
		mustard	8,5	8	16,5	8.000	132.000		
		cayenne pepper	3,1	3,5	6,6	30.000	198.000		
61	Ngatemi	long bean	7	8,3	15,3	10.000	153.000	690.100	1.917
		eggplant	4,9	7,1	12	10.000	120.000		
		kangkung	7,25	7,45	14,7	8.000	117.600		

		mustard	8	4,5	12,5	8.000	100.000		
		cayenne pepper	3,45	3,2	6,65	30.000	199.500		
62	Atik	long bean	2,8	7,8	10,6	10.000	106.000	684.000	1.900
		eggplant	6,6	5,4	12	10.000	120.000		
		kangkung	6,1	8,3	14,4	8.000	115.200		
		mustard	5,3	6,8	12,1	8.000	96.800		
		cayenne pepper	5,3	2,9	8,2	30.000	246.000		
63	Widya	long bean	4,3	6,35	10,65	10.000	106.500	695.200	1.931
		eggplant	2,8	7,8	10,6	10.000	106.000		
		kangkung	4,9	7,7	12,6	8.000	100.800		
		mustard	5	7,9	12,9	8.000	103.200		
		cayenne pepper	6,99	2,3	9,29	30.000	278.700		
64	Mujayana	long bean	5,1	8,5	13,6	10.000	136.000	668.200	1.856
		eggplant	4	7,9	11,9	10.000	119.000		
		kangkung	2	8,1	10,1	8.000	80.800		
		mustard	4,1	6,7	10,8	8.000	86.400		
		cayenne pepper	6,3	1,9	8,2	30.000	246.000		
65	Siti	long bean	6,8	7	13,8	10.000	138.000	659.600	1.832
		eggplant	4,7	7,6	12,3	10.000	123.000		
		kangkung	6,3	7,8	14,1	8.000	112.800		
		mustard	5,5	6,6	12,1	8.000	96.800		
		cayenne pepper	3,9	2,4	6,3	30.000	189.000		
66	Yus	long bean	7,8	7	14,8	10.000	148.000	660.600	1.835
		eggplant	4,3	8,8	13,1	10.000	131.000		
		kangkung	3,8	6,2	10	8.000	80.000		
		mustard	7,8	7,4	15,2	8.000	121.600		
		cayenne pepper	3,9	2,1	6	30.000	180.000		
67	Listia	long bean	4,5	6,7	11,2	10.000	112.000	678.400	1.884
		eggplant	5,5	8,5	14	10.000	140.000		

		kangkung	5	5,45	10,45	8.000	83.600		
		mustard	4,3	7,8	12,1	8.000	96.800		
		cayenne pepper	6	2,2	8,2	30.000	246.000		
68	Misri	long bean	5,6	8,6	14,2	10.000	142.000	704.800	1.958
		eggplant	5,5	7,2	12,7	10.000	127.000		
		kangkung	4	5,1	9,1	8.000	72.800		
		mustard	1	6,5	7,5	8.000	60.000		
		cayenne pepper	7,6	2,5	10,1	30.000	303.000		
69	Nek Tutur	long bean	5,2	6,8	12	10.000	120.000	677.400	1.882
		eggplant	3,5	8,2	11,7	10.000	117.000		
		kangkung	2,1	4,7	6,8	8.000	54.400		
		mustard	4,4	8,6	13	8.000	104.000		
		cayenne pepper	7,1	2,3	9,4	30.000	282.000		
70	Nek Temu	long bean	5,1	9,5	14,6	10.000	146.000	687.700	1.910
		eggplant	5,1	6,7	11,8	10.000	118.000		
		kangkung	2,5	2,5	5	8.000	40.000		
		mustard	5,2	7,7	12,9	8.000	103.200		
		cayenne pepper	6,5	2,85	9,35	30.000	280.500		
71	Susi	long bean	2,3	8,1	10,4	10.000	104.000	654.900	1.819
		eggplant	3,2	7,75	10,95	10.000	109.500		
		kangkung	4,2	6,7	10,9	8.000	87.200		
		mustard	4,1	6,8	10,9	8.000	87.200		
		cayenne pepper	7	1,9	8,9	30.000	267.000		
72	Misnani	long bean	8,4	7,55	15,95	10.000	159.500	706.000	1.961
		eggplant	4,3	7,65	11,95	10.000	119.500		
		kangkung	6,1	4,1	10,2	8.000	81.600		
		mustard	6,1	9,7	15,8	8.000	126.400		
		cayenne pepper	4,9	2,4	7,3	30.000	219.000		
73	Evi	long bean	4,8	7,6	12,4	10.000	124.000	761.000	2.114

		eggplant	7,1	8,6	15,7	10.000	157.000		
		kangkung	6	7,5	13,5	8.000	108.000		
		mustard	6,6	6,9	13,5	8.000	108.000		
		cayenne pepper	6,6	2,2	8,8	30.000	264.000		
74	Muliyati	long bean	6,9	6,8	13,7	10.000	137.000	704.000	1.956
		eggplant	6,1	7	13,1	10.000	131.000		
		kangkung	6,5	7,05	13,55	8.000	108.400		
		mustard	5,6	9,1	14,7	8.000	117.600		
		cayenne pepper	4,4	2,6	7	30.000	210.000		
75	Sarinten	long bean	6	6,75	12,75	10.000	127.500	734.300	2.040
		eggplant	9,8	9	18,8	10.000	188.000		
		kangkung	7,8	6,5	14,3	8.000	114.400		
		mustard	3,9	6,4	10,3	8.000	82.400		
		cayenne pepper	5,4	2	7,4	30.000	222.000		
76	Amelia	long bean	6,2	6,6	12,8	10.000	128.000	697.700	1.938
		eggplant	7,5	8,95	16,45	10.000	164.500		
		kangkung	5,8	6,8	12,6	8.000	100.800		
		mustard	5	8,3	13,3	8.000	106.400		
		cayenne pepper	4,3	2,3	6,6	30.000	198.000		
77	Inten	long bean	6	7,7	13,7	10.000	137.000	705.100	1.959
		eggplant	7,2	7,4	14,6	10.000	146.000		
		kangkung	5,5	4,25	9,75	8.000	78.000		
		mustard	4	6,2	10,2	8.000	81.600		
		cayenne pepper	5,6	3,15	8,75	30.000	262.500		
78	Siti	long bean	4,9	10,3	15,2	10.000	152.000	680.600	1.891
		eggplant	4,5	8,9	13,4	10.000	134.000		
		kangkung	8,1	4	12,1	8.000	96.800		
		mustard	6,6	5,5	12,1	8.000	96.800		
		cayenne pepper	4,6	2,1	6,7	30.000	201.000		

79	Irma	long bean	6,9	7,1	14	10.000	140.000	765.300	2.126
		eggplant	6,6	8,3	14,9	10.000	149.000		
		kangkung	9,9	6,4	16,3	8.000	130.400		
		mustard	6,8	7	13,8	8.000	110.400		
		cayenne pepper	5,5	2,35	7,85	30.000	235.500		
80	Putri	long bean	5,3	9,7	15	10.000	150.000	683.200	1.898
		eggplant	4,9	7,5	12,4	10.000	124.000		
		kangkung	6,9	6	12,9	8.000	103.200		
		mustard	6,6	5,4	12	8.000	96.000		
		cayenne pepper	4,9	2,1	7	30.000	210.000		
81	Fitriana	long bean	11,7	9	20,7	10.000	207.000	709.800	1.972
		eggplant	4,9	7,9	12,8	10.000	128.000		
		kangkung	6,8	8,05	14,85	8.000	118.800		
		mustard	4,4	6,6	11	8.000	88.000		
		cayenne pepper	3,3	2,3	5,6	30.000	168.000		
82	Paini	long bean	8,6	8,55	17,15	10.000	171.500	683.300	1.898
		eggplant	5,8	9,2	15	10.000	150.000		
		kangkung	6,1	5,9	12	8.000	96.000		
		mustard	4,7	7,9	12,6	8.000	100.800		
		cayenne pepper	3,3	2,2	5,5	30.000	165.000		
83	Windasari	long bean	5	6,3	11,3	10.000	113.000	690.600	1.918
		eggplant	4,3	7,5	11,8	10.000	118.000		
		kangkung	6	5,6	11,6	8.000	92.800		
		mustard	7,2	9,4	16,6	8.000	132.800		
		cayenne pepper	5,5	2,3	7,8	30.000	234.000		
84	Lastri	long bean	5,5	9,6	15,1	10.000	151.000	706.800	1.963
		eggplant	5,6	8,9	14,5	10.000	145.000		
		kangkung	4,9	6,9	11,8	8.000	94.400		
		mustard	4,9	6,9	11,8	8.000	94.400		

		cayenne pepper	5,4	2	7,4	30.000	222.000		
85	Suriyani	long bean	5,8	7,9	13,7	10.000	137.000	681.100	1.892
		eggplant	4,9	8,05	12,95	10.000	129.500		
		kangkung	4,6	5,95	10,55	8.000	84.400		
		mustard	6,6	8,8	15,4	8.000	123.200		
		cayenne pepper	4,4	2,5	6,9	30.000	207.000		
86	Nuraseh	long bean		7,4	7,4	10.000	74.000	367.400	2.041
		eggplant		7,4	7,4	10.000	74.000		
		kangkung		7,5	7,5	8.000	60.000		
		mustard		8,3	8,3	8.000	66.400		
		cayenne pepper		3,1	3,1	30.000	93.000		
87	Legiem	long bean		8,4	8,4	10.000	84.000	337.700	1.876
		eggplant		6	6	10.000	60.000		
		gambas		8,8	8,8	8.000	70.400		
		mustard		6,6	6,6	8.000	52.800		
		cayenne pepper		2,35	2,35	30.000	70.500		
88	Jumirah	long bean		7,9	7,9	10.000	79.000	368.000	2.044
		eggplant		7	7	10.000	70.000		
		kangkung		5	5	8.000	40.000		
		mustard		8,5	8,5	8.000	68.000		
		cayenne pepper		3,7	3,7	30.000	111.000		
89	Misi	long bean		7,8	7,8	10.000	78.000	352.400	1.958
		eggplant		7,9	7,9	10.000	79.000		
		kangkung		7,1	7,1	8.000	56.800		
		mustard		8,7	8,7	8.000	69.600		
		cayenne pepper		2,3	2,3	30.000	69.000		
90	Sri	long bean		6,5	6,5	10.000	65.000	320.400	1.780
		eggplant		8,6	8,6	10.000	86.000		
		kangkung		6,3	6,3	8.000	50.400		

		mustard		8,5	8,5	8.000	68.000		
		cayenne pepper		1,7	1,7	30.000	51.000		
91	Surya	long bean		7,5	7,5	10.000	75.000	365.100	2.028
		eggplant		8,9	8,9	10.000	89.000		
		kangkung		7	7	8.000	56.000		
		mustard		8,2	8,2	8.000	65.600		
		cayenne pepper		2,65	2,65	30.000	79.500		
92	Desi	long bean		11,2	11,2	10.000	112.000	370.000	2.056
		eggplant		8,5	8,5	10.000	85.000		
		kangkung		9	9	8.000	72.000		
		mustard		4	4	8.000	32.000		
		cayenne pepper		2,3	2,3	30.000	69.000		
93	Sugiarni	long bean		9,4	9,4	10.000	94.000	346.000	1.922
		eggplant		5,3	5,3	10.000	53.000		
		kangkung		12	12	8.000	96.000		
		mustard		5	5	8.000	40.000		
		cayenne pepper		2,1	2,1	30.000	63.000		
94	Tini	long bean		8,3	8,3	10.000	83.000	343.200	1.907
		eggplant		5,5	5,5	10.000	55.000		
		kangkung		12	12	8.000	96.000		
		mustard		6,9	6,9	8.000	55.200		
		cayenne pepper		1,8	1,8	30.000	54.000		
95	Juliani	long bean		10	10	10.000	100.000	349.700	1.943
		eggplant		6,7	6,7	10.000	67.000		
		kangkung		10,8	10,8	8.000	86.400		
		mustard		3,6	3,6	8.000	28.800		
		cayenne pepper		2,25	2,25	30.000	67.500		
96	Suwanti	long bean		6,3	6,3	10.000	63.000	359.600	1.998
		eggplant		10,5	10,5	10.000	105.000		

		kangkung		6,7	6,7	8.000	53.600		
		tomato		9	9	8.000	72.000		
		cayenne pepper		2,2	2,2	30.000	66.000		
97	Rubi	long bean		7,6	7,6	10.000	76.000	356.400	1.980
		eggplant		10,9	10,9	10.000	109.000		
		kangkung		5,6	5,6	8.000	44.800		
		mustard		7,95	7,95	8.000	63.600		
		cayenne pepper		2,1	2,1	30.000	63.000		
98	Sugirani	long bean		7,3	7,3	10.000	73.000	345.700	1.921
		eggplant		8,5	8,5	10.000	85.000		
		kangkung		4	4	8.000	32.000		
		mustard		6,9	6,9	8.000	55.200		
		cayenne pepper		3,35	3,35	30.000	100.500		
99	Mirna	long bean		6,5	6,5	10.000	65.000	355.600	1.976
		eggplant		9	9	10.000	90.000		
		kangkung		6,3	6,3	8.000	50.400		
		mustard		7,9	7,9	8.000	63.200		
		cayenne pepper		2,9	2,9	30.000	87.000		
100	Kemina	long bean		8	8	10.000	80.000	332.600	1.848
		eggplant		8,7	8,7	10.000	87.000		
		kangkung		5,4	5,4	8.000	43.200		
		mustard		4,8	4,8	8.000	38.400		
		cayenne pepper		2,8	2,8	30.000	84.000		
101	Sumi	long bean		6,1	6,1	10.000	61.000	338.600	1.881
		eggplant		8,2	8,2	10.000	82.000		
		kangkung		4,4	4,4	8.000	35.200		
		mustard		10,3	10,3	8.000	82.400		
		cayenne pepper		2,6	2,6	30.000	78.000		
102	Runta	long bean		6,3	6,3	10.000	63.000	333.000	1.850

		eggplant		6,8	6,8	10.000	68.000		
		kangkung		7,35	7,35	8.000	58.800		
		mustard		7,4	7,4	8.000	59.200		
		cayenne pepper		2,8	2,8	30.000	84.000		
103	Ana	long bean		9	9	10.000	90.000	346.600	1.926
		eggplant		7,95	7,95	10.000	79.500		
		kangkung		4,6	4,6	8.000	36.800		
		mustard		7,6	7,6	8.000	60.800		
		cayenne pepper		2,65	2,65	30.000	79.500		
104	Sarjumi	long bean		9,5	9,5	10.000	95.000	331.200	1.840
		eggplant		9,1	9,1	10.000	91.000		
		kangkung		3,2	3,2	8.000	25.600		
		mustard		5,2	5,2	8.000	41.600		
		cayenne pepper		2,6	2,6	30.000	78.000		
105	Sukini	long bean		7,7	7,7	10.000	77.000	338.900	1.883
		eggplant		8,5	8,5	10.000	85.000		
		kangkung		6,1	6,1	8.000	48.800		
		mustard		5,7	5,7	8.000	45.600		
		cayenne pepper		2,75	2,75	30.000	82.500		
106	Mariani	long bean		8,3	8,3	10.000	83.000	347.100	1.928
		eggplant		7,3	7,3	10.000	73.000		
		kangkung		6,1	6,1	8.000	48.800		
		mustard		8,6	8,6	8.000	68.800		
		cayenne pepper		2,45	2,45	30.000	73.500		
107	Kija	long bean		7,9	7,9	10.000	79.000	327.300	1.818
		eggplant		7,9	7,9	10.000	79.000		
		kangkung		4,6	4,6	8.000	36.800		
		mustard		7	7	8.000	56.000		
		cayenne pepper		2,55	2,55	30.000	76.500		

108	Gianti	long bean		8,6	8,6	10.000	86.000	347.200	1.929
		eggplant		7,5	7,5	10.000	75.000		
		kangkung		5,8	5,8	8.000	46.400		
		mustard		8,1	8,1	8.000	64.800		
		cayenne pepper		2,5	2,5	30.000	75.000		
109	Gina	long bean		8	8	10.000	80.000	343.400	1.908
		eggplant		7,7	7,7	10.000	77.000		
		kangkung		5,1	5,1	8.000	40.800		
		mustard		10,7	10,7	8.000	85.600		
		cayenne pepper		2	2	30.000	60.000		
110	Erna	long bean		7,1	7,1	10.000	71.000	338.400	1.880
		eggplant		7,9	7,9	10.000	79.000		
		kangkung		5,9	5,9	8.000	47.200		
		mustard		7,9	7,9	8.000	63.200		
		cayenne pepper		2,6	2,6	30.000	78.000		
111	Nek Giem	long bean		7	7	10.000	70.000	330.800	1.838
		eggplant		10,3	10,3	10.000	103.000		
		kangkung		6,6	6,6	8.000	52.800		
		mustard		6	6	8.000	48.000		
		cayenne pepper		1,9	1,9	30.000	57.000		

Annex 5. Monitoring potential conflict area in 2023

No	Nama Warga	Lokasi	Titik Koordinat	Jenis Tanaman di Kebun	Bulan Monitoring Area Potensi Konflik									
					Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
A	**Desa Lau Damak**													
1	Pengertin PA	Dusun Tusam Pinter	N 03 46 32.0 E 098 15 78.1	durian, pinang, kelapa, sawit										
2	Heriyanto	Dusun Tusam Pinter		durian, pinang, kelapa, sawit										
3	Usaha Ginting	Dusun Tusam Pinter	N 03 46 91.5 E 098 15 93.1	memakan pohon kelapa										
4	Enda Malem br Ginting	Dusun Tusam Pinter	N 03 46 32.0 E 098 15 78.1	pinang, durian dan sawit.										
5	Rendi	Dusun Selayang	N 03 50 29.2 E 098 13 82.0	pinang, sawit dan karet										
6	Yogi			pinang, sawit dan karet										
7	Udin			pinang, sawit dan karet										
8	Minta PA	Dusun Tanjung Naman	N 03 46 65.1 E 098 15 66.1											
9	Sada Ukur PA	Dusun Tusam Pinter	N 03 46 44.6 E 098 15 96.3										Beruk, bear, long tailed monkey	
10	Nangeti Sitepu	Dusun Selayang	N 03 50 10.9 E 098 14 17.0											

11	Rosmina Br Depari	Dusun Selayang	N 03 49 14.6 E 098 15 34.1										beruk, Beruk, bear, long tailed monkey	
B	**Desa Batu Jongjong**														
12	Klengi Sitepu	Dusun Batu Katak	N 03 43 89.7 E 098 14 74.4	durian, pinang, pisang dan kopi	Beruk, bear										
13			N 03 46 32.0 E 098 15 78.1	pinang, durian, dan sawit											
14	Anto	Dusun Batu Katak	N 03 44 33.4 E 098 15 14.5	karet, kopi, pisang, durian dan manggis.	Beruk, bear										
15	Ijul	Dusun Tegapen	N 03 43 31.4 E 098 14 46.7		orangutan in the land border										
16	Jatmiko	Dusun Simpang Empat	N 03 42 22.2 E 098 16 98.5	sawit dan karet.											
17	Toni	Dusun Simpang Empat	N 03 42 22.2 E 098 16 98.5	sawit dan karet.											
18	Harun Kembaren	Dusun Simpang Empat	N 03 25 21.1 E 098 09 19.5	kacang panjang, durian, sawit											
19	Zefri	Dusun Kampung Baru		sawit, karet, durian											
20	Rudi	Dusun Kampung Baru		sawit, karet, durian											

21	Sunardi	Dusun Simpang Empat									3 orangutan (adult female, male and baby) are making a nest			
22	Yakin Sembiring	Dusun Simpang Empat	N 03 41 51.8 E 098 15 25.2										Long tail monkey	
23	Susilo	Dusun Simpang Empat	N 03 42 11.1 E 098 15 52.1											
24	Triyono	Dusun Batu Katak	N 03 44 28.9 E 098 13 60.0											
25	Sutarman	Dusun Simpang Empat	N 03 39 88.4 E 098 16 87.2											Long tail monkey
C	**Desa Ujung Bandar**													
26	Asmawanta	Dusun Bandar Baru	N 03 39 10.8 E 098 18 07.4	durian, pinang, coklat, dan pisang	Beruk, bear, long tailed monkey		Tiger's footprint							
27	Bantu Tarigan	Dusun Bandar Baru		durian, pinang, dan sawit	orangutan		Tiger's footprint							
28	Nemani Tarigan	Dusun Bandar Baru	N 03 39 70.2 E 098 18 03.4										Beruk, bear, long tailed monkey	
29	Semangat Sitepu	Dusun Bungara	N 03 40 93.8 E 098 18 98.5						kedih, beruk					
30	Bersih Tarigan			sawit, durian					kedih, beruk	kedih, long tail monkey				

31	Sugeng	Dusun Bandar Baru												
32	Andes	Dusun Bandar Baru	N 03 42 39.4 E 098 17 63.9										long tail monkey	
33	Gitok	Dusun Bulu Regen	N 03 39 88.5 E 098 16 86.6									long tail monkey, beruk		
D	**Desa Sei Musam**													
34	Mariyono	Dusun Tanjung Subur	N 03 43 89.7 E 098 14 74.4	cabe, pinang, pisang dan sawit			Had an information a tiger in glugur area							
35	Bono	Dusun Tanjung Subur	N 03 44 33.4 E 098 15 14.5	pisang, pinang, kelapa, dan sawit			long tail monkey, beruk							
E	**Desa Timbang Jaya**													
36	Pijar kaban	Dusun IV	N 03 42 39.4 E 098 17 63.9									2 orangutans		
E	**Desa Sampe Raya**													
37	Ramidi	Dusun Tualang Gepang	N 03 60 11.9 E 098 12 64.1									long tail monkey		
38	Wiradi Sembiring	Dusun Tualang Gepang	N 03 60 18.1 E 098 12 71.9											

Annex 6. Monitoring of Tree Growth in 2023

No	Month of Planting	Land Owner	Location	Area (Hectare)	Trees Have Been Planted	Month of Monitoring	Sampling Intensity	SI (m2)	Plot Area (m2)	Number of Plot
1	Sep-22	Suwito	Teladeh	0,5	535	Jan-23	0,05	500	400	1,25
2	Sep-22	Yusuf	Teladeh	1,4	1.425	Jan-23	0,14	1400	400	3,5
3	Sep-22	Rezeki Sinuraya	Tegapen	0,8	843	Jan-23	0,08	800	400	2
4	Oct-22	Parno	Gersih, Musam Pembangunan	0,5	495	Feb-23	0,05	500	400	1,25
5	Oct-22	Paidi	Teladeh	1,7	1.655	Feb-23	0,17	1700	400	4,25
6	Nov-22	Sakban Efendi	Pekan Bahorok	0,3	280	Mar-23	0,03	300	400	0,75
7	Nov-22	Sampit S	Simpang Empat	1,6	1.503	Mar-23	0,16	1600	400	4
8	Nov-22	Kartina Tarigan	Batu Katak	0,5	400	Mar-23	0,05	500	400	1,25
9	Dec-23	Ananta Sinuraya 1	Batu Katak	0,5	547	May-23	0,05	500	400	1,25
10	Dec-23	Ananta Sinuraya 2	Batu Katak	0,5	548	May-23	0,05	500	400	1,25
11	Dec-23	Herwin Bangun	Batu Katak	1,0	1.075	May-23	1	1000	400	2,5
12	Jan-23	Lit Malem Tarigan	Batu Jongjong	0,5	343	Jun-23	0,05	500	400	1,25
13	Jan-23	Surep Sembiring	Batu Jongjong	0,9	857	Jun-23	0,09	900	400	2,25
14	Feb-23	Maulana Ginting	Batu Jongjong	2,7	2.230	Jun-23	0,27	2700	400	6,75
15	Mar-23	Rusdi Sinulingga	Batu Jongjong	0,6	517	Jun-23	0,06	600	400	1,5
16	Mar-23	Ringan Sembiring	Batu Jongjong	0,7	525	Jun-23	0,07	700	400	1,75
17	May-23	Natangsa Sinulingga	Batu Jongjong	0,6	515	Jul-23	0,06	600	400	1,5
18	Jun-23	Rusman Sinulingga	Batu Jongjong	0,5	640	Sep-23	0,05	500	400	1,25
19	Jun-23	Cahaya PA	Batu Jongjong	2,3	1.881	Sep-23	0,23	2300	400	5,75
20	Aug-23	Sunadi	Batu Jongjong	1,5	1.105	Oct-23	0,15	1500	400	3,75
21	Oct-23	Sutratman	Ujung Bandar	1,4	1.024	Oct-23	0,14	1400	400	3,5
22	Jul-23	Hormat PA	Batu Jongjong	1,1	910	Nov-23	0,11	1100	400	2,75
23	Sep-23	Suratno	Batu Jongjong	1,3	1.017	Dec-23	0,13	1300	400	3,25

Plot 1	Plot 2	Plot 3	Plot 4	Plot 5	Plot 6	Plot 7	Number of All Plots	Number of Live Seeds	Survival Percentage (%)	Number of Live Seeds	Immortality Percentage (%)
23	22						45	421	79	114	21
30	27	28	25				110	1.081	76	344	24
32	35						67	636	75	207	25
19	19						38	384	78	111	22
25	26	26	27	26			130	1.335	81	320	19
20							20	214	77	66	23
22	26	26	22				96	1.022	68	481	32
13	11						24	300	75	100	25
21	23						44	402	74	145	26
19	21						40	438	80	110	20
26	27	29					82	381	78	694	22
16	17						33	372	84	71	16
23	20	22					65	683	80	174	20
20	19	21	19	22	22	23	146	1768	79	462	21
19	17						36	418	81	99	19
16	17						33	440	84	85	16
18	17						35	408	79	107	21
29	31						60	469	73	171	27
23	25	22	26	19			115	1406	75	475	25
15	17	16	19				67	910	82	195	18
18	20	17	21				76	809	79	215	21
21	19	19					59	713	78	197	22
20	22	19	22				83	947	72	368	28