



ISPO introduction program for independent smallholders: Initial steps towards mandatory ISPO 2025

Riantri Barus, Diana Chalil, Rulianda Purnomo Wibowo

Department of Agribusiness, Faculty of Agriculture, Universitas Sumatera Utara
Jl. Prof. Sofyan No. 3 Kampus USU Medan, North Sumatra, 20155, Indonesia

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ABSTRACT

The government, through Peraturan Presiden RI Nomor 44 Tahun 2020, mandates ISPO certification for smallholder farmers within five years of its enactment. However, by December 2022, only 32 farmer groups had achieved ISPO certification. The Gunung Ambat Farmers Group, which has already received funds from the PSR program, is one of the independent farmer groups with the potential to acquire ISPO accreditation. Yet, members' understanding of this certification remains low due to a lack of socialization or training from the government or other entities. This initiative aims to promote the regulation and provide training on the concepts and requirements for ISPO certification. Activities include administering questionnaires to assess knowledge, conducting training sessions, engaging in puzzle games, and practicing the documentation of farming activities. The results indicate significant improvements in farmers' understanding before and after the training. Initially, farmers had no knowledge of ISPO certification; however, post-training, over 70 percent of participants understood the certification, with an average of 35 percent comprehending its principles and criteria. Participants are also encouraged to document their farming progress, enhancing their skills in farming business documentation and administrative tasks.

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1. INTRODUCTION

Indonesia's palm oil sector is growing at a rapid pace. However, this rapid expansion is accompanied by negative sustainability challenges, such as consequences on social and environmental situations. The palm oil industry is blamed for several land conflicts, particularly with local indigenous communities (Herningtyas, 2021; Human Rights Watch, 2019). The palm oil business has also been accused of using underage labor and having a bad impact on environmental circumstances, such as deforestation, which results in the loss of wildlife, including *orangutans*, and destroying peatlands, which causes carbon release, among other things (Meijaard et al., 2020; Rainforest Rescue, 2017).

The Indonesian government has undertaken several efforts to demonstrate that palm oil in Indonesia is produced utilizing sustainable principles, one of which is certification. The Indonesian government requires all palm oil farmers to apply sustainable production techniques guided by the Indonesian Sustainable Palm Oil (ISPO) principles and criteria, as outlined in *Permentan Nomor 19/2011*.

Initially, ISPO certification was only required for major enterprises. However, according to *Peraturan Presiden Republik Indonesia Nomor 44 Tahun 2020*, agricultural producers must also be ISPO certified by 2025.

In Indonesia, oil palm plantations managed by smallholders, account for a significant share of overall oil palm plantation area. By 2022, the share of smallholder has reached 40 percent. In 2020, smallholder oil palm plantations covered 6,090,883 hectares and had 2,685,353 farmers ([Direktorat Jenderal Perkebunan, 2020](#)). As of December 2022, only 32 groups of farmers with a total land area of 22,096.85 ha had been ISPO certified, and two of them did not continue due to financial constraints. This represents only 0.37 percent of total plantation land. Many factors contribute to slow progress in attaining ISPO certification among farmers, including the location of the plantation in the area and farmers' lack of knowledge of ISPO.

Gunung Ambat Farmer Group is an oil palm farmer group based in *Desa Gunung Ambat, Kecamatan Sei Bingai, Kabupaten Langkat, Provinsi Sumatera Utara*. Founded in 1987, this group has 72 registered members in *Sistem Informasi Manajemen Penyuluhan Pertanian (Simluhtan)* and covers 90 acres of land. In 2019, the *Gunung Ambat Farmers Group*, in collaboration with *PT Raya Padang Langkat*, secured some fund from *Peremajaan Sawit Rakyat (PSR)* for 38 farmers. Groups that have received PSR have a high chance of obtaining ISPO because several PSR standards, including land legality, are also found in ISPO. None of the 38 farmers' lands are *Hak Guna Usaha (HGU)* certified or considered as permanent forest estates, despite the fact that the majority of the farmers' holdings are still certified with *Surat Keterangan Tanah (SKT)*, with only a few receiving *Sertifikat Hak Milik (SHM)*.

Interviews with group leaders indicate that participants have little awareness of the certification due to lack of socialization and training. The group administrators have limited knowledge of land certification ideas, benefits, and processes. Farmers have also never recorded their farming practices, which is a necessary part of the certification process. Farmers often struggle to obtain certification due to a lack of knowledge, skills, and proper record-keeping ([Hutabarat, 2017](#); [Rietberg & Slingerland, 2016](#)).

[Nurliza et al. \(2021\)](#) explains that farmers' knowledge of ISPO and ability to keep farming records is inadequate. However, the training activities carried out were able to stimulate enhanced knowledge and abilities connected to ISPO, legal document knowledge and completeness, grower organization and plantation management, environmental management and monitoring, and more sustainable business. According to [Bekere & Megersa \(2021\)](#), training has a favorable and significant effect on the likelihood of farmers engaging in certification, with farmers who have received training having a 6 percent higher chance than farmers who have never gotten training.

This community service activity is critical for providing training and basic information on ISPO certification to farmers who are members of the *Gunung Ambat Farmers Group*. This service program aims to: provide independent oil palm farmers with information regarding *Peraturan Presiden Republik Indonesia Nomor 44 Tahun 2020*, which requires: (1) Farmers to be ISPO certified by 2025; (2) Train farmers on the principles and criteria of ISPO certification; and (3) Train farmers on farming records as part of certification. Farmers' engagement in ISPO certification is expected to rise as their awareness of the process grows.

2. METHODS

This service activity is carried out through multiple phases, including: (1) Pre-survey; (2) First phase of the community service; and (3) Second phase of the community service.

Pre-Survey

Pre-survey activities were conducted prior to the training activities, which took place on August 20, 2023. At this point, an interview was held with the head of the Gunung Ambat Farmers Group. Interviews were performed to undertake preliminary assessments of the conditions of farmer group members who might participate. During this pre-survey, visits were also made to the farmland of farmer group members.

First Phase of the Community Service

The first phase was completed on September 18, 2023. The activities included filling out surveys, attending lectures and conversations, and playing puzzle games. This program was conducted among 30 members of *Gunung Ambat* Farmers Group. This initiative also included *Sei Bingai Region Balai Penyuluh Pertanian (BPP)* and farmer group partner companies. There are things the group did, such: (1) Filling out Questionnaire. The questionnaire was completed at the start of the training activity, prior to the lecture. Participants were asked to fill out a questionnaire to determine how much they had heard and understood about ISPO certification. The questionnaire answers were then evaluated descriptively, with a focus on the percentage of farmers that properly answered ISPO principles and criteria questions; (2) Education and Discussion. Lectures and discussions are offered to provide information and increase farmers' understanding. Lectures were delivered not only by the service implementation team, but also by company partners and government authorities (*BPP Kecamatan Sei Bingai*); (3) Puzzle games. Puzzle games are used to assess how well the farmers understand the material delivered in the lecture activity. Puzzle games are completed at the end of the exercise. This puzzle game requires various pieces of equipment, including a laptop, flipchart paper, colored cardboard, folio size HVS paper, and a handycam.

These are steps to implement puzzle games: (1) The activity starts with the spokesperson presenting materials. The spokesperson explains the principles and criteria for ISPO certification; (2) Participants are separated into three groups; (3) The team distributed flipchart paper and one set of packaged paper with words about ISPO certification principles and criteria. Each group will receive 5 plano papers, one for each of the five ISPO certification principles; (4) The facilitator will read the criteria at random, and the participants will put the selected words on one of the flipcharts based on their knowledge; (5) The puzzle game results were then assessed descriptively, with a focus on the percentage of farmers who successfully answered ISPO principles and criterion questions; (6) After participants have stuck all of the words on the flipchart, the facilitator will give out the correct answers, and participants will check to see if they have placed the words on the correct principle.

Second Phase of the Community Service

Phase 2 service activities will be place on December 12, 2023. In this activity, Farmers are taught how to record farming actions. All participants were handed printed agricultural notebooks, which the facilitator and the farmers filled up.

3. RESULTS AND DISCUSSION

Initial Identification of Participant Conditions

Before initiating the training activities, the team paid an initial visit to the farmer group and interacted with their administrators, including the head of the group. The results of the initial debate

revealed that the term certification was only understood by a few group administrators who had just been socialized by the government. However, none of the farmer group members are familiar with certification. There are also no farmers who have documented their work. Identification is also done by visiting participant fields that have undergone the PSR program.

Participants' Understanding After Completing the Questionnaire

Participants' initial knowledge was determined by filling out a questionnaire that inquired whether or not they had heard of ISPO and issues linked to ISPO principles and criteria. The results of the questionnaire revealed that 50 percent of participants had never heard of ISPO and had no idea what it stood for. Participants were likewise unaware of the ideas and criteria governing ISPO certification. Participants who properly answered ISPO principles and criteria had an average accuracy of 36 percent. However, after participants became aware of these errors, they began to learn about and grasp ISPO certification system, as well as ISPO principles and requirements.

The lowest knowledge of the first principle (principle 1) of legislative compliance is related to *Surat Tanda Daftar Budidaya (STDB)* (22 percent), followed by *Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan Hidup (SPPL)* (26 percent). Participants claimed they had never heard of STDB or SPPL. On the other hand, Participants had a relatively good comprehension of land deeds and location permit (57 percent each).

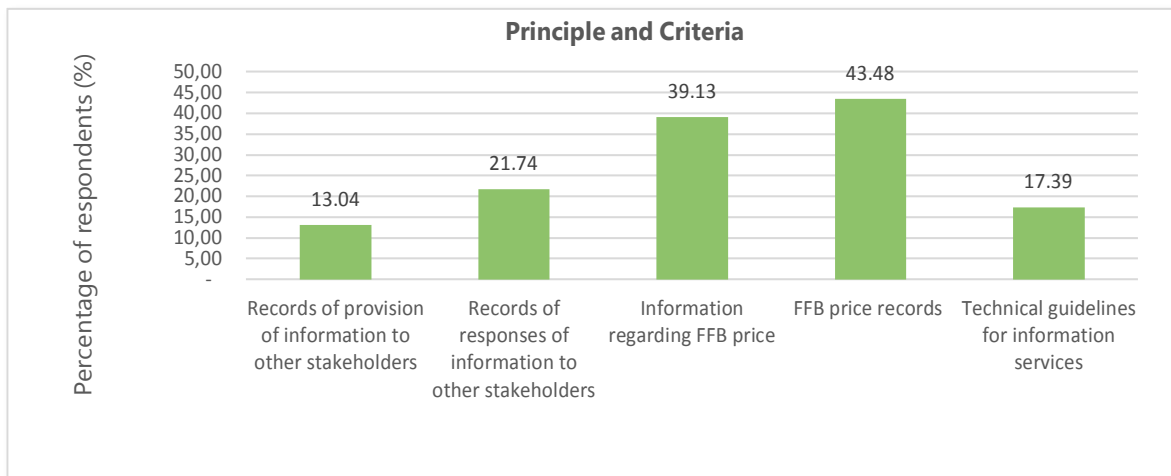


Figure 1. Principle 1: Compliance with rules and regulations

The most basic characteristics of understanding the second principle (principle 2) associated with the application of sustainable plantation practices include knowledge of pests (9 percent), certified seeds (13 percent), and program plan document (13 percent). Group activities are still underreported (17 percent). Only about 27 percent participants managed to understand and answer correctly regarding harvest report, but the correct response for fertilization record is fairly high, hovering around 52 percent. the third principle (Principle 3) is well understood, particularly in terms of animal and plant criteria. Sixty-one percent of participants correctly identified these criteria as part of the environmental management principles. Participants understand that uncommon animals and plants must be safeguarded.

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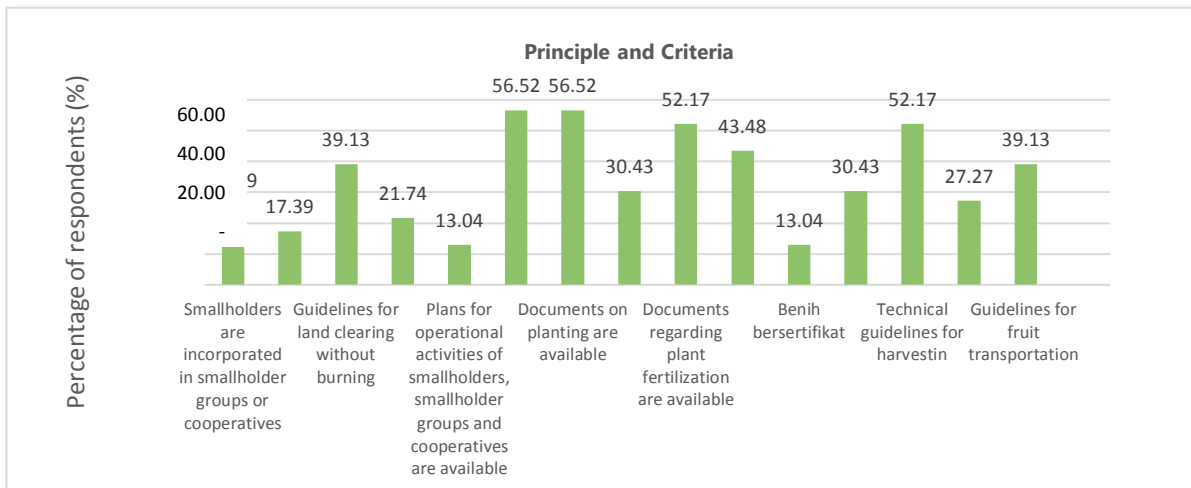


Figure 2. Principle 2: Implementation of good plantation practices

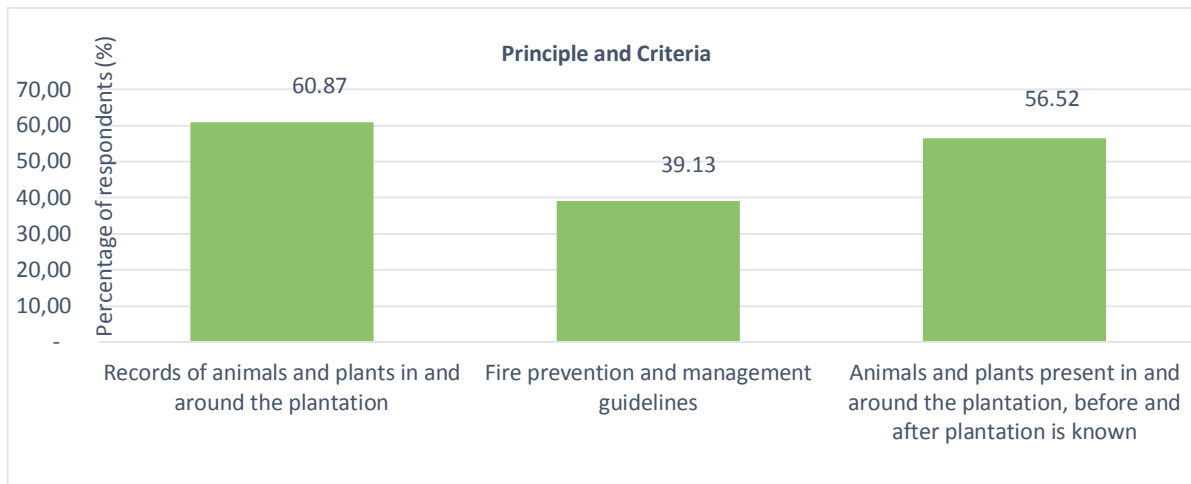


Figure 3. Principle 3: Management of the environment, natural resources and biodiversity

Participants' grasp of transparency principles remains rather low, particularly when it comes to distributing documents containing information to stakeholders. This is understandable given that participants have never recorded anything, therefore they have no data or information preserved. This is the foundation for this service activity, which will also include training in recording and distributing farming record books.

Participants also had a limited comprehension of the fifth principle (principle 5). Participants merely manage farm in short term and have little understanding of long-term business improvements. Farming records are one type of document that can help with long-term business improvement. None of the participants had any prior experience in recording farming progress.

Following the completion of the questionnaire, the material is delivered. The community service team, which includes the institution, government, and partner enterprises, is in charge of delivering the materials. In order to increase participant interest and facilitate their understanding of ISPO, as well as

the principles and requirements that must be fulfilled in order to acquire ISPO certification, the material includes interactive YouTube video screenings.

The partner company claimed that they were ready to support the farmers because they had collaborated with the company in executing *Peremajaan Sawit Rakyat (PSR)* program. In terms of legality, some of the ISPO certification standards are identical to those of the PSR program. This is an added benefit for participating growers.

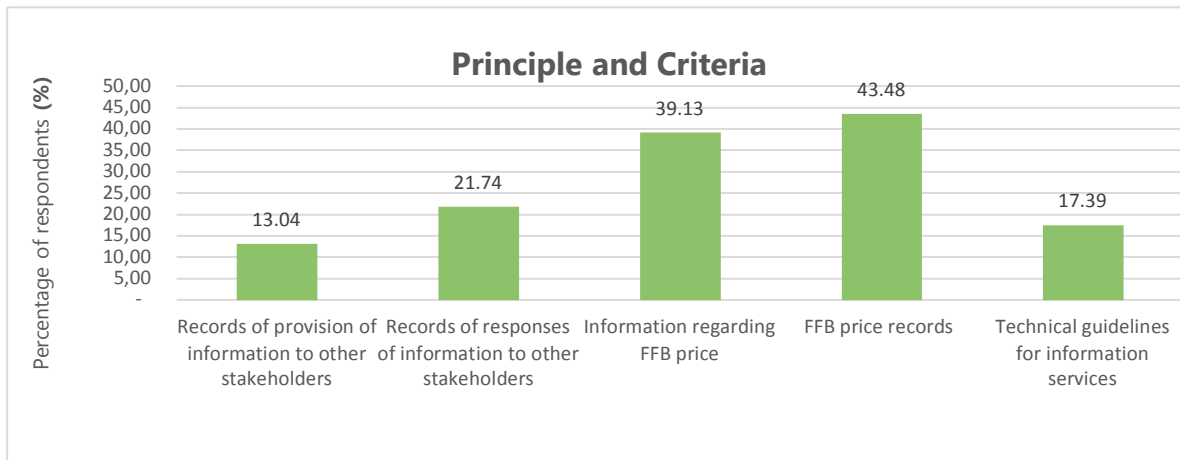


Figure 4. Principle 4: Implementation of transparency

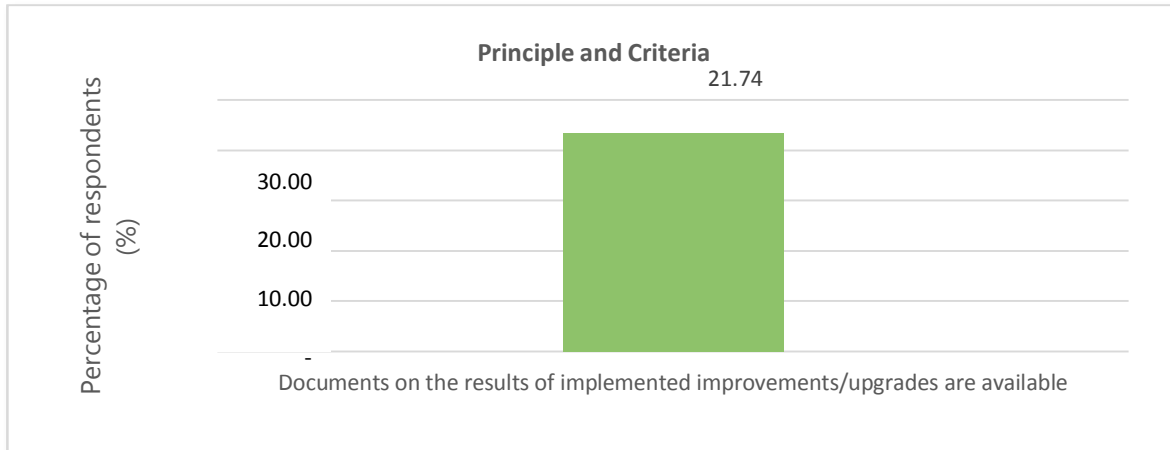


Figure 5. Continuous business improvement

Games Puzzle

Puzzle games were played in groups to assess the increase in participants' knowledge and understanding following the material's distribution. The outcomes of the puzzle games show an increase in participants' grasp of ISPO certification. This is seen by the number of right responses provided by participants. Even though not all of the ideas and criteria are familiar to the participants, the number of incorrect answers is reducing. Figure 6 illustrates that the percentage of right responses in the three groups can be 100 percent with a minimum score of 47 percent. Participants have gained

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an understanding of what ISPO certification entails, as well as the concepts and criteria that must be followed in order to get it.

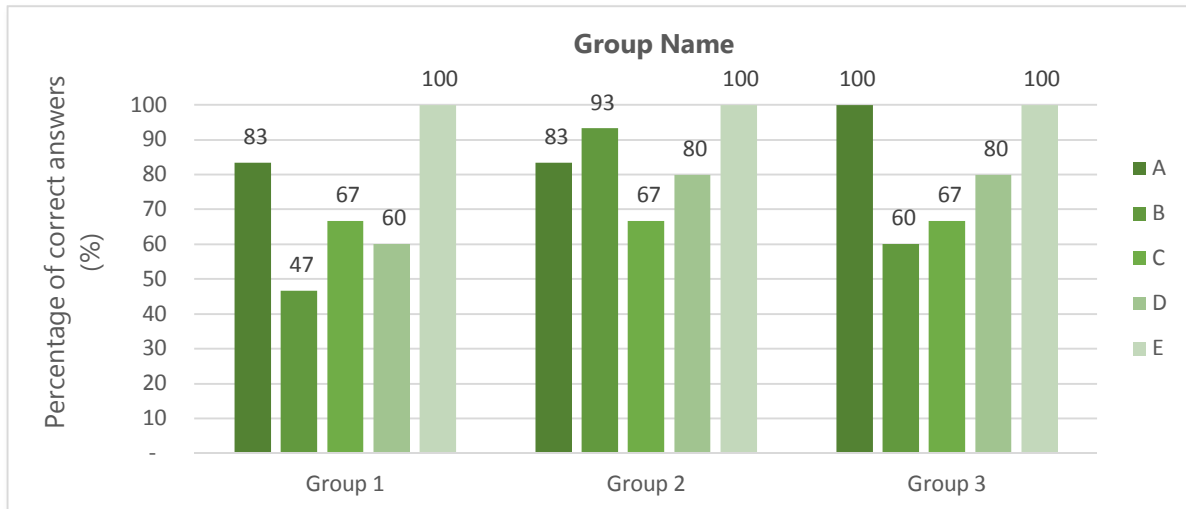


Figure 6. Puzzle game result (Legend: A = Principle 1: Compliance with rules and regulations; B = Implementation of good plantation practices; C = Management of the environment, natural resources and biodiversity; D = Implementation of transparency; E = Continuous business improvement)



Figure 7. Documentation during puzzle games implementation

After comprehending the ISPO principles and standards, farmers are expected to begin preparing certification paperwork, such as farming records. The next step in this activity is to give each participant

a farming notebook and teach them how to properly write the record. Record keeping is critical for ensuring business continuity. Notes as a foundation for conducting evaluations, particularly since oil palm is an annual plant. In addition to notebooks, farmers are given boots as part of the work safety standards. Farmers can wear these boots around their oil palm farms to prevent injury from sharp objects.



Figure 8. Handover of farming notebooks and boots

Overall, participants responded positively to this activity. This is demonstrated by 73 percent of participants fully completing the questionnaire. Participants have also agreed to start to document their farming progress in the given notebooks. This commitment begins with the development of a group that serves as a venue for communication. The main benefit of this program is that participants learn more about ISPO certification. At the start of the activity, only 50 percent of participants had heard of ISPO; however, after receiving socialization and training, 100 percent of participants knew about ISPO certification and were aware that farmers were also required for acquiring it. The training also succeeded in increasing participants' knowledge. At the initial stage of filling out the questionnaire, an average of 36 percent of participants answered correctly about ISPO principles and criteria, however, after receiving the material, in puzzle games, the average correct answer increased to 79 percent (Arsad et al., 2022; Damascena et al., 2023; Mardiansyah et al., 2023; Rasanjali et al., 2021; Xue et al., 2022). Participants have also agreed to record their farming efforts in the books that have been supplied, and to invite two other farmers to participate in the same program.

4. CONCLUSION AND RECOMMENDATIONS

This community service activity promotes participants' understanding of ISPO certification. At the start of the activity, only 50 percent of participants had heard of ISPO; however, after receiving socialization and training, 100 percent of participants were aware of ISPO certification and the duties of growers to obtain it. The results of questionnaires, lectures, and puzzle games show that participants' understanding differs before and after training. At the start of the questionnaire, only 36 percent of participants correctly answered questions concerning the ISPO principles and criteria, but after getting the information and playing puzzle games, the average correct answer jumped to 79 percent.

This can be the first step in getting farmers ready to earn an ISPO certificate. Farmers are also aware of the need of maintaining records in farming. However, certification still involves numerous phases that must be completed in groups, therefore monthly meetings are necessary to keep the motivation that has been established. This community service is still limited to introducing ISPO certification and its principles and criteria. In the future, it is hoped that activities can continue with training in collecting documents from each member, preparing documents, and even registering with a certification body.

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REFERENCES

- Arsad, S., Musa, M., Lusiana, E. D., Mahmudi, M., Nurhotipah, S., Zsalsabil, N. A. N., & Ramadiansyah, R. W. (2022). Microalgae culture training as an effort to improve natural feed quality for shrimp seed cultivation of Benur Barokah Group. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, 7(3), 451-459. <https://doi.org/10.26905/abdimas.v7i3.6919>
- Bekere, Y. B., & Megersa, G. R. (2021). Coffee certification participation and its impact on smallholder farmers' income in Jimma Zone, Southwestern Ethiopia. *Agricultural Social Economic Journal*, 21(2), 87-102. <https://doi.org/10.21776/ub.agrise.2021.021.2.2>
- Damascena, A., Kusumaningrum, D., Widiyanti, E., Fitriana, I., Mukti, L., Bagyo, P. M., Fairuz, R., Fajrin, S., & Suryowidhi, S. (2023). Training on making biopesticides as effort to strengthen organic agriculture by Taruna Tani Lestari. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, 8(4), 559-571. <https://doi.org/10.26905/abdimas.v8i4.11307>
- Direktorat Jenderal Perkebunan. (2020). *Tree crop estate statistics of Indonesia 2018-2020*. Sekretariat Direktorat Jenderal Perkebunan Kementerian Pertanian.
- Herningtyas, W. (2021). Conflict of palm oil companies with indigenous people and forest surrounding society. *BHUMI: Jurnal Agraria dan Pertanahan*, 7(2), 199-209. <https://doi.org/10.31292/bhumi.v7i2.504>
- Human Rights Watch. (2019, September 12). *Indonesia: Indigenous peoples losing their forests*. Human Rights Watch. Retrieved from: <https://www.hrw.org/news/2019/09/22/indonesia-indigenous-peoples-losing-their-forests>
- Hutabarat, S. (2017). ISPO certification and Indonesian oil palm competitiveness in global market: Smallholder challenges toward ISPO certification. *Agro Ekonomi*, 28(2), 170-188. <https://doi.org/10.22146/jae.27789>
- Mardiansyah, Y., Ilmi, N., Caniogo, D. P., Masril, M. A., Fahrudini, R. E., & Sumardi, H. (2023). Application of smart indoor hydroponic technology to support food security. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, 8(4), 572-582. <https://doi.org/10.26905/abdimas.v8i4.11275>
- Meijaard, E., Brooks, T. M., Carlson, K. M., Slade, E. M., Garcia-Ulloa, J., Gaveau, D. L., ... & Sheil, D. (2020). The environmental impacts of palm oil in context. *Nature plants*, 6(12), 1418-1426. <https://doi.org/10.1038/s41477-020-00813-w>
- Nurliza, N., Hutajulu, J. P., Oktoriana, S., Suharyani, A., Nugraha, A., Permatasari, N., & Sawerah, S. (2021). Pelatihan pembuatan catatan usaha berkelanjutan bagi petani sawit swadaya. *Jurnal Pengabdian KITA*, 4(01), 15-21.
- Rainforest Rescue. (2017). *Palm oil – Deforestation for everyday products*. Rainforest Rescue. Retrieved from: <https://www.rainforest-rescue.org/topics/palm-oil>
- Rasanjali, W. M. C., Wimalachandra, R. D. M. K. K., Sivashankar, P., & Malkanthi, S. H. P. (2021). Impact of agricultural training on farmers' technological knowledge and crop production in Bandarawela agricultural zone. *Applied Economics & Business*, 5(1), 37-50. <https://doi.org/10.4038/aeb.v5i1.27>

Rietberg, P., & Slingerland, M. (2016). *Barriers to smallholder RSPO certification*. SEnSOR project. Retrieved from: http://www.sensorproject.net/wp-content/uploads/2017/04/Barriers-to-smallholder-RSPO-certification-Sep16_FINAL.pdf

Xue, Z., Li, J., & Cao, G. (2022). Training and self-learning: How to improve farmers' willingness to adopt farmland conservation technology? Evidence from Jiangsu Province of China. *Land*, 11(12), 2230. <https://doi.org/10.3390/land11122230>
