

FINAL TECHNICAL REPORT

Implement Vegetable Oil Pressing Skills Training to Farmers and Community-Based Enterprises in North-Western Cambodia



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- The list of participants who are interested in machines:
https://drive.google.com/drive/folders/1JVulsXuQSmvmTv8KLJPk2K9pNVovLdCd?usp=drive_link
- The list of images & videos for ACs of the 4 target provinces:
https://drive.google.com/drive/folders/1TrSK1ruU1Tvy_84oW_dAKrDznSGKGpkB?usp=drive_link

ACRONYMS AND ABBREVIATIONS

AC	Agricultural Cooperative
BMZ	behalf of the German Federal Ministry for Economic Cooperation and Development
GIZ	Germany Agency for International Cooperation
NUBB	National University of Battambang
NVIB	National Vocational Institute of Battambang
Q&A	Question and Answer
PPP	Public-Private Partnership

I. BACKGROUND

By June 2023, training sessions for farmers and private businesses on the "Vegetable Oil Press" initiative were held in Pursat, Battambang, Banteay Meanchey, and Siem Reap. 525 farmers and private businesses, including 328 women, participated in the training as well. On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the German Agency for International Cooperation (GIZ) is funding the initiative, which is being carried out in partnership with Oil Press GmbH & Co.KG, the National University of Battambang (NUBB) and the National Vocational Institute of Battambang (NVIB).

In order to process agricultural products and byproducts in Cambodia in order to produce high quality vegetable oil, the project intends to establish and enhance professional, technological, and economic conditions. Additionally, the program has completed the last phase of implementation before achieving its long-term goals. Products made using vegetable oil that may be connected to many marketing platforms. The identification of these five important stakeholders' raw material suppliers, dealers, Producers, distributors, consumers, and support organizations. In addition, in collaboration with the National University of Battambang (NUBB) and the National Vocational Institute of Battambang (NVIB), the program will continue to provide training on vegetable oil techniques to farmers in target provinces in northwestern Cambodia.

In addition, phase I of the training program also aims to survey and identify farmers and communities that farm biodegradable seeds for oil extraction. In phase II of this training program, farmers have learned about the advantages of nutmeg, a spice that can be processed into oil. And encourage the production and sale of beneficial, high-quality seeds in their neighborhood. The initiative also aims to demonstrate the distinction between ingesting natural oils and consuming fatty meals.

II. TRAINING OBJECTIVE

This study has specific objective is: to implement vegetable oil pressing skills training to farmers and community-based enterprises in North-Western Cambodia by July 2023.

III. TRAINING APPROACH

According to the purpose of the project, it is to train farmers as well as private enterprises. To make training more effective, it is divided into three stages, including:

The first was to organize a workshop on "Promoting Vegetable Oils and By-Products: Challenges and Opportunities in the Northwestern of Cambodia," aimed at exploring the opportunities and benefits of promoting agriculture and by-products in the northwest of Cambodia. In addition, the workshop provided the private sector with an insight into the potential and benefits of Cambodia's agricultural output through vegetable oil refining, a new start-up of agricultural products, especially in the northwestern provinces. Through the gathering of farming communities, food and agribusiness owners, and stakeholders around vegetable oil production, it has been possible to share their challenges and solutions within the supply chain and trends. The current market as well as the general interest in investing in vegetable oil.

This was followed by interviews with farmers/agricultural cooperatives, dealers, oil producers, distributors, consumers, and other stakeholders. The interviews were conducted in order to gain

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in-depth information on the process, from cultivation to the use of vegetable oil and its value chain, as well as the challenges that arise at each stage.

Finally, there was community-based training for farmers and private enterprises on: the project's development, a presentation on the benefits of vegetable oil, the price of crops and the price of vegetable oils, a presentation and practical application on the use of pressing and oil filter machines, group discussion, Q&A, and interviews with participants or relevant authorities.

IV. PARTICIPANTS' PROFILE

The training participants included farmers or members of farming communities from 13 agricultural cooperatives that produced a variety of crops, including rice, peanuts, sacha inchi, sesames, sunflowers, corns, cassavas, and mixed vegetables. Participants in the program included the appropriate authorities. Total number of participants was 525 (males: 197; females: 328).

With 20 to 50 members in agricultural cooperatives, the project was spread among 4 target provinces, 11 districts, and 13 communes (13 agricultural cooperatives) as follows:

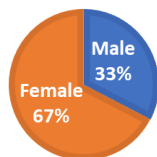
1. Battambang Province

One of the provinces of the Kingdom of Cambodia is Battambang, which has a huge landmass, abundant natural resources, and a wealth of historic cultural artifacts. Agriculture is a priority sector in Battambang Province. The project conducted this training to 5 different agricultural cooperatives in Battambang:

1.1 Buor Samki Meanchey Agricultural Cooperative (Phnom 7 Village, Bour Commune, Phnum Proek District)

There are 512 members (297 males; 215 females) in Buor Samki Meanchey Agricultural Cooperative. Farmers have grown: cassavas, corns, sesames, rice, and others. Farmers have selected to produce each of these crops because they are all easy to grow (had established processes), have a large market (fair price), and thrive in the soil.

Figure 1: The chart of participants from Buor Samki Meanchey Agricultural Cooperative



As we can see the majority of 43 participants that joined the training on oil-pressing skills training from Buor Samki Meanchey Agricultural Cooperative, out of 67% were females and 33% were males.

Figure 2: The trainer did presentation



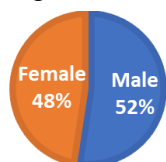
Figure 3: The participants did Q&A



1.2 Ponler Thmey Pechenda Agricultural Cooperative (Samki Village, Pechenda Commune, Phnum Proek District)

There are 148 members (60 males; 88 females) in Ponler Thmey Pechenda Agricultural Cooperative. Farmers have grown: corns, cassavas, moringas, sesames, rice, and others. The reason why farmers decided to grow all these crops is because they have an extensive market (a reasonable price), are easy to grow (existing techniques), and the soil conditions are favorable for all these crops.

Figure 4: The chart of participants from Ponler Thmey Pechenda Agricultural Cooperative



The pie chart has shown out of 42 participants that joined the training on oil-pressing skills training from Ponler Thmey Pechenda Agricultural Cooperative, out of 52% were males and 48% were females.

Figure 5: The trainer did presentation on the pressing & filter machines-based practice



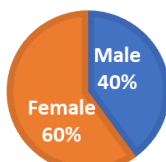
Figure 6: The community producer sharing on the moringa oil press



1.3 Meanchey Ampil Pram Deum Agricultural Cooperative (Ampil Pram Deum Village, Ampil Pram Deum Commune, Bavel District)

There are 339 members (80 males; 259 females) in Meanchey Ampil Pram Deum Agricultural Cooperative. Farmers have grown: rice, sesames, corns, and others. Farmers opt for growing all of these crops because they have plenty of demand (and a fair price), are simple to grow (by applying currently techniques), and are well suited to the land.

Figure 7: The chart of participants from Meanchey Ampil Pram Deum Agricultural Cooperative



As the pie chart has shown out of 35 participants that joined the training on oil-pressing skills training from Meanchey Ampil Pram Deum Agricultural Cooperative, out of 60% were females and 40% were males.

Figure 8: The trainer did presentation



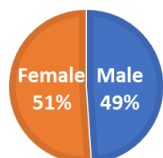
Figure 9: The interview with the head of Agricultural Cooperatives



1.4 Boeng Pram Chamroeun Phal Agricultural Cooperative (Boeung Krola Village, Boeung Pram Commune, Bavel District)

There are 247 members (109 males; 138 females) in Boeng Pram Chamroeun Phal Agricultural Cooperative. Farmers have grown: cassavas, corns, sesames, rice, and others. Farmers have selected to produce each of these crops because they are all easy to grow (had established processes), have a large market (fair price), and thrive in the soil.

Figure 10: The chart of participants from Boeng Pram Chamroeun Phal Agricultural Cooperative



The pie chart has shown out of 47 participants that joined the training on oil-pressing skills training from Boeng Pram Chamroeun Phal Agricultural Cooperative, out of 51% were females and 49% were males.

Figure 11: The participants tasted oil press



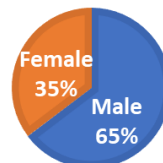
Figure 12: The participants did group discussion



1.5 Serei Meanchey Community (Boeng Trakoun Village, Serei Meanchey Commune, Sampov Lun District)

There are 538 families (246 males; 293 females) in Serei Meanchey Community. Farmers have grown: rice, sesames, soyabeans, corns, and others. Each of these crops has been chosen for production by farmers because it is simple to cultivate (established procedures), has a substantial marketplace (fair price), and does well in the soil.

Figure 13: The chart of participants from Serei Meanchey Community



As we can see the majority of 34 participants that joined the training on oil-pressing skills training from Serei Meanchey Community, out of 65% were males and 35% were females.

Figure 14: The pre-interview with farmers



Figure 15: The trainer showed the oil pressing



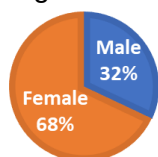
2. Banteay Meanchey Province

The 13th biggest province in Cambodia is Banteay Meanchey Province, which is situated in the country's far northwest. There are some uplands to the north and east, but broad lowlands dominate the most of it. The province's economy mostly depends on agriculture, especially rice paddy.

2.1 Ta Kong Community (Damnak Thmey Village, Ta Kong Commune, Malai District)

There are 282 families (140 males; 142 females) in Ta Kong Community. Farmers have grown: rice, sesames (600-700 hectares), and others. Farmers have picked each of these crops for production because they are easy to grow (established practices), have a sizable market (fair price), and thrive in the soil.

Figure 16: The chart of participants from Farmers in Ta Kong Community



As we can see the majority of 50 participants that joined the training on oil-pressing skills training from Ta Kong Community, out of 68% were females and 32% were males.

Figure 17: The announcement of participants



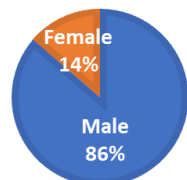
Figure 18: The interview with an authority



2.2 Prasat Banteay Chhmar Agricultural Cooperative (Banteay Chhmar Village, Banteay Chhmar Commune, Thma Puok District)

There are 100 members (75 males; 25 females) in Prasat Banteay Chhmar Agricultural Cooperative. Farmers have grown: rice, watermelons, sweet cucumbers, corns, cassavas, and others. Farmers choose to cultivate each of these crops because they are easy to produce using already-existing procedures from a head of AC, have a large market (and a fair price), and thrive in the soil.

Figure 19: The chart of participants from Prasat Banteay Chhmar Agricultural Cooperative



The pie chart has shown out of 22 participants that joined the training on oil-pressing skills training from Prasat Banteay Chhmar Agricultural Cooperative, out of 86% were males and 14% were females.

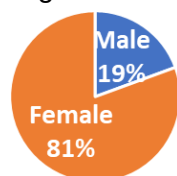
Figure 20: The participants focused the training Figure 21: The interview with farmer



2.3 Samkie Thmorkorl Khum Phkoam Agricultural Cooperative (Svay Sa Village, Phkoam Commune, Svay Check District)

There are 97 members (26 males; 71 females) in Samkie Thmorkorl Khum Phkoam Agricultural Cooperative. Farmers have grown: rice, cassavas, moringas, and others. All of these crops are chosen for cultivation by farmers because they are in high demand (and sell for reasonable prices), easy to grow (with current techniques), and suitable for the soil.

Figure 22: The chart of participants from Samkie Thmorkorl Khum Phkoam Agricultural Cooperative



As the pie chart has shown out of 36 participants that joined the training on oil-pressing skills training from Samkie Thmorkorl Khum Phkoam Agricultural Cooperative, out of 81% were females and 19% were males.

Figure 23: The trainer showed the oil pressing



Figure 24: The interview with the head of agricultural cooperatives



3. Pursat Province

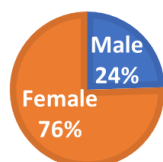
In the western region of Cambodia is Pursat. Pursat is the 14th most populous province in Cambodia while being the fourth largest in terms of land. Pursat's physical landscape includes a variety of bioregions, including the Tonle Sap basin, fertile plains, and mountains that are heavily forested. Exporting rice products, a wide variety of fruit, particularly Krouch Pursat (Pursat oranges), whose delicious flavor is well-known across Cambodia, and stunning cultural tourism destinations that draw over 300,000 visitors each year are the primary economic factors in Pursat.

Implement Vegetable Oil Pressing Skill Training to Farmers and Community-Based Enterprises in North-Western Cambodia

3.1 Phteah Rung Rung Roeurng Agricultural Cooperative (Phteah Rung Village, Phteah Rung Commune, Talou Sen Chey District)

There are 196 members (42 males; 154 females) in Ta Kong Community. Farmers have grown: rice, cashews, peanuts, coconuts, corns, sesames, and others. Each of these crops has been chosen for production by farmers because it is simple to cultivate (follow existing procedures), has a substantial market (fair rate), and does well in the soil.

Figure 25: The chart of participants from Phteah Rung Rung Roeurng Agricultural Cooperative



As we can see the majority of 49 participants that joined the training on oil-pressing skills training from Phteah Rung Rung Roeurng Agricultural Cooperative, out of 76% were females and 24% were males.

Figure 26: The interview with a head of agricultural cooperative



Figure 27: The trainer showed about vegetable oil press machine and techniques



Figure 28: The trainer presented on the benefits of vegetable oil



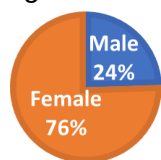
Figure 29: The dealer & producer presented on buying, selling, and producing crops and oil



3.2 Leach Rik Chamroeun Agricultural Cooperative (Ta Nuk Village, Leach Commune, Phnum Kravanh District)

There are 200 members (67 males; 133 females) in Leach Rik Chamroeun Agricultural Cooperative. Farmers have grown: rice, cucumbers, cacaos, corns, and others. Each of these crops has been chosen for production by farmers because it is simple to cultivate them (using well-known techniques), they have a big market (with a reasonable price), and they do well in the

Figure 30: The chart of participants from Leach Rik Chamroeun Agricultural Cooperative



The pie chart has shown out of 49 participants that joined the training on oil-pressing skills training from Leach Rik Chamroeun Agricultural Cooperative, out of 76% were females and 24% were males.

Figure 31: The trainer & producer presented on the pressing machine base practice



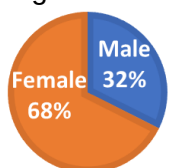
Figure 32: The interview with the head of agricultural cooperatives and farmers



3.3 Anlong Thnort Rung Roeurng Agricultural Cooperative (Khleang Moeung Village, Anlong Tnaot Commune, Krakor District)

There are 125 members (37 males; 88 females) in Anlong Thnort Rung Roeurng Agricultural Cooperative. Farmers have grown: rice, coconuts, cashews, cucumbers, and others. Farmers have picked each of these crops for production because they are easy to grow (using tried-and-true methods), have a large market (with a competitive price), and thrive in the soil.

Figure 33: The chart of participants from Anlong Thnort Rung Roeurng Agricultural Cooperative



As the pie chart has shown out of 34 participants that joined the training on oil-pressing skills training from Anlong Thnort Rung Roeurng Agricultural Cooperative, out of 68% were females and 32% were males.

Figure 34: The interview with an authority



Figure 35: The interview with a farmer



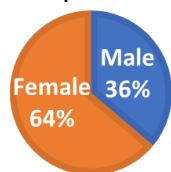
4. Siem Reap Province

The tenth largest province in Cambodia is Siem Reap. As of 2019, it had a million residents, making it the fourth most populous province in the country. Small farmers in the province of Siem Reap are finding it difficult to adjust their output to the demand, which is rising quickly, as well as to current market trends driving up demand for healthy, natural products.

4.1 Sampoan Kaksekor Khmer Angkor Agricultural Cooperative (Bampenh Reach Village, Leang Dai Commune, Nokor Thum District)

There are 50 families (30 males; 20 females) in Sampoan Kaksekor Khmer Angkor Agricultural Cooperative. Farmers have grown: rice, cassavas, cashews, sunflowers, and others. Farmers have picked each of these crops for production because they are easy to grow (follow established techniques), have a sizable market (fair price), and grow in the soil.

Figure 36: The chart of participants from Sampoan Kaksekor Khmer Angkor Agricultural Cooperative



As the pie chart has shown out of 36 participants that joined the training on oil-pressing skills training from Sampoan Kaksekor Khmer Angkor Agricultural Cooperative, out of 64% were females and 36% were males.

Figure 37: The trainer & producer presented on the pressing machine base practice



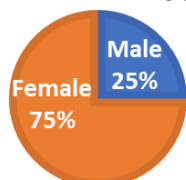
Figure 38: The farmers were happy when they received sunflower oil and seeds



4.2 Kantreang Balang Raksmei Satrei Samaky Agricultural Cooperative (Sret Khang Kaet Village, Kantreang Commune, Prasat Bakong District)

There are 315 families (20 males; 295 females) in Kantreang Balang Raksmei Satrei Samaky Agricultural Cooperative. Farmers have grown: rice, mixed vegetables, and others. Each of these crops was chosen for production by farmers because it is simple to cultivate them (follow existing procedures), they have a substantial market (fair price), and they grow in the soil.

Figure 39: The chart of participants from Kantreang Balang Raksmei Satrei Samaky Agricultural Cooperative



As the pie chart has shown out of 48 participants that joined the training on oil-pressing skills training from Kantreang Balang Raksmei Satrei Samaky Agricultural Cooperative, out of 75% were females and 25% were males.

Figure 40: The trainer & producer presented on the pressing machine



Figure 41: The farmers joined the sunflower oil pressing activities, tasting and bring home



V. RESOURCE PERSONS' PROFILE

The training was successful because NUBB and NVIB, two significant partners in collaboration, worked well together. Oil presses and filters are offered by NUBB. Two technical trainers from NVIB are present at every training event in the province. Two private enterprises also took part in the panel discussion to exchange knowledge on the buying and selling of seeds, the extraction and production of vegetable oils, and the advantages of each.

Table 1: The technical trainers and private enterprises

Nº	Name	Position/Organization	Session Title
1	Sou Sopha	Trainer, NVIB	1. Welcome Address and setting the stage 2. Present on benefits of vegetable oil 3. Present on oil presses and filters machines base practice 4. Q&A 5. Arrange discussion activity
2	Chin Dimorng	Trainer, NVIB	1. Welcome Address and setting the stage 2. Present on benefits of vegetable oil 3. Present on oil presses and filters machines base practice 4. Q&A 5. Arrange discussion activity
3	Mao Chandara	Owner, Dara Food Handicraft	1. Welcome Address and setting the stage 2. Present on the business 3. Present on the buying and selling of seeds 4. Expectation

4	Hou Sopheap	Owner, Healthy Kh Oil Handicraft	1. Welcome Address and setting the stage 2. Present on the business 3. Present on the buying and selling of seeds 4. Expectation
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VI. TIME, DATE AND VENUE

Base on the training objective: To facilitate and provide oil press skills training to 500 farmers and private enterprises in four target provinces, including Pursat, Battambang, Banteay Meanchey, and Siem Reap. This training was conducted according to the specific time, date, and place specified.

Table 2: The list of time, date, and venue

Nº	Time (AM)	Date	Venue
1	07:30 – 11:30	May 16, 2023	Wat Phnom Prampi
2	07:30 – 11:30	May 17, 2023	Wat Chumpouvann Ang Em
3	07:30 – 11:30	May 18, 2023	Wat Ampil Pram Deum
4	07:30 – 11:30	May 19, 2023	Wat Boeung Pram
5	07:30 – 11:30	May 23, 2023	Boeng Trakoun Village Office
6	07:30 – 11:30	May 24, 2023	Damnak Thmey Primary School
7	07:30 – 11:30	May 25, 2023	Prasat Banteay Chhmar Agricultural Cooperative Office
8	07:30 – 11:30	May 26, 2023	Svay Sar Village Community Kindergarten
9	07:30 – 11:30	May 30, 2023	Phteah Rung Rung Roeung Agricultural Cooperative Office
10	07:30 – 11:30	May 31, 2023	Leach Rik Chamroeun Agricultural Cooperative Office
11	07:30 – 11:30	June 01, 2023	Khleang Moeung Village Office
12	07:30 – 11:30	June 05, 2023	Bampenh Reach Village Office
13	07:30 – 11:30	June 06, 2023	Kantreang Balang Raksmei Satrey Samaky Agricultural Cooperative Office

VII. TRAINING METHODOLOGY

The training program's stated goal is "Coordinating and providing training on oil press skills to 500 farmers and private enterprises in four target provinces in northwestern Cambodia." Because it is practical, hands-on learning or training is preferred. Almost all training events involve participants, dealers, oil producers, and trainers working together.

Almost majority of the participants in this program are farmers who have experience growing oilseeds and other crops, as was already indicated above. Local authorities also took part in the training and worked effectively with it.

The program works with technical trainers with years of expertise and experience from NVIB and NUBB to accomplish the objectives and make the project a success. This course employs a variety of methods, including motivation, inspiration, group and intimately explanations, practical application, oil tasting, Q&A, slide presentations, stationery, and training tools. Additionally, this program enables dealers as well as vegetable oil producers to share their expertise, experience,

Implement Vegetable Oil Pressing Skill Training to Farmers and Community-Based Enterprises in North-Western Cambodia and other advantages of vegetable oil. Additionally, traders and oil producers have committed to purchasing oilseeds and other agricultural commodities from farmers. Trainers, dealers, and oil producers took part in the conversations and maintained an open forum for comments, inquiries, and suggestions.

The program also created handouts for the attendees and completed other crucial tasks, including distributing natural oil for sampling at the training location and storing it for personal use. An oral interview with the farmer or the appropriate authorities will be conducted after each training session to obtain more detailed information about the program's advantages. Following exercise and weight lifting, oil-producing crop cultivation is also advised.

VIII. PROCEEDINGS

1. Introduction to Workshop and Objectives

The training started with the introduction of the technical trainer, the workplace, and the promotion of the unit's services. The owner of the private enterprise then introduced himself, introducing the enterprise and the services that it offers. Followed by instructions from local authorities or heads of agricultural communities about the products and services they have in the community. Conversely, technical trainers seek the objective of training. The technical trainers also provided the agenda and precisely laid out the training criteria. The technical trainer also requested that the participants express their hopes and worries about the course. The participants were also given a few questions by the technical trainer as part of a pre-training evaluation test, and the quality of instruction was established with their approval. These were as follows:

- Presentation on the "develoPPP-Oil Press" project's development
- Presentation of the benefits of using vegetable oil press
- A presentation of a pressing and filter machines for vegetable oil press
- Q&A
- Presentation on the price of seeds and the price of vegetable oil press
- Applied to oil pressing and refining
- Group discussion and oil tasting (participants' feedback and suggestions)
- Interviews with participants or local authorities.

2. Participatory Development and Its Importance

Participants in this course gained knowledge about the evolution of the develoPPP-Oil Press, learned information and skills about the worth of plant seeds, the cost of vegetable oil, the advantages of utilizing it, a pressing and filter machine, how to apply a pressing for vegetable oil, as well as refine and taste oil right away via their involvement. Participants must also talk about the fundamental ideas of development, the production of fundamental crops, secondary crops, and a few more crops that can be utilized to make oil.

Participants took part in group activities in which they were separated into four groups and given the task of studying the case studies related to the aforementioned project. Additionally, the teams were given certain case-related questions, and they were instructed to submit their findings and responses in a presentation. Successful presentations from the participants were followed by a thorough discussion to clarify the subject. It is shown via this interactive session and collaborative effort that participatory methodologies are successful when individuals are actively engaged in the process.

3. Project Cycle

Presentations are used to illustrate the project cycle, with the trainer concentrating on the project's final stages and its three current cycle phases. All of the participants' questions were addressed during thorough discussions that were specifically focused on the third phase, including the usage of machinery and enthusiasm in the project. A brief discussion of the participants' expectations for the future and cultivation plans was also included in the training for those who desire to make vegetable oil.

4. Participants' Planning

An overview of participation expectations, the value of involvement, and future planning was given at the start of the session. Presentations on marketing strategies, financial planning, and planting plans were also made by participants. At the conclusion of the program, participants also undertook in-depth interviews pertaining to project interests, training, upcoming goals, and proposals.

5. Authority and Participant Interview

One of the most engaging is demonstrating to farmers and nearby enterprises how to use an oil press and oilseeds. In order to learn more about the interests connected to upcoming initiatives and expectations leading to the development of products and services, interviews with local authorities and participants were held.

6. Monitoring of Development Schemes

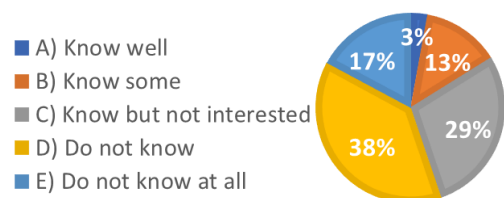
Participants are informed about what is being monitored and how it is implemented because project monitoring is essential for successful implementation. The value of inspections and the repercussions of improper execution have been a source of controversy. Additionally, the participants were informed about the monitoring procedure in depth as well as certain monitoring tasks and guidelines and don'ts. All participants receive pertinent documents, knowledge about and skills to use with the project they want to work on in the future at the end of the day.

IX. TRAINING EVALUATION

Participants showed an increase in their understanding of proficiency on this topic of training.

1. Pre-training Assessment of the Participants

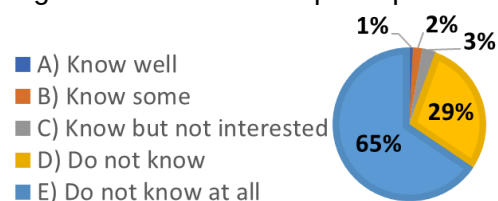
Figure 42: The chart of participants' knowledge on vegetable oil press before training



As we can see the majority of 525 participants that joined the training workshop on oil-pressing skills training. The pie chart of participants' knowledge on vegetable oil press before training, out of 38% did not know about on vegetable oil press, while 29% knew about vegetable oil press, follow by 17% did not at all about vegetable oil

press, then 13% were known some about vegetable oil press and only 3% were known well about vegetable oil press.

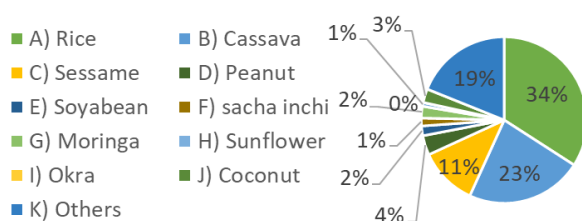
Figure 43: The chart of participants' knowledge on pressing & filter machines before training



As the pie chart has shown out of 525 participants that joined the training workshop on oil-pressing skills training. The pie chart of participants' knowledge on pressing & filter machines before training, out of 65% did not know at all about pressing & filter machines, follow by 29% did not know about pressing & filter machines, while only 3% knew about pressing & filter machines but were not interested, then 2% were known some information about pressing & filter machines and only 1% were known well about pressing & filter machines.

knew about pressing & filter machines but were not interested, then 2% were known some information about pressing & filter machines and only 1% were known well about pressing & filter machines.

Figure 44: The chart of participants' current planted crops

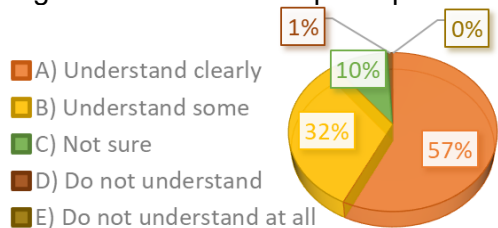


As we can see the majority of 525 participants that joined the training workshop on oil-pressing skills training. The pie chart of participants current planted crops, out of 34% have been planting rice, follow by 23% have been planting cassava, then 19% have been planting other crops, while 11% have been planting sesame, however 4% have been planting peanut, moreover 3% have been planting coconut, last but not least 2% have been planting soyabean and moringa, and only 1% have been planting sacha inchi and sunflower.

however 4% have been planting peanut, moreover 3% have been planting coconut, last but not least 2% have been planting soyabean and moringa, and only 1% have been planting sacha inchi and sunflower.

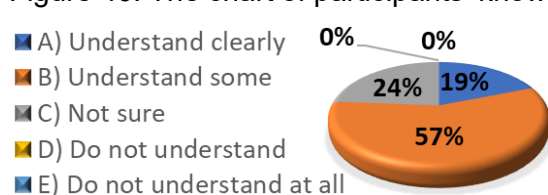
2. Post-training Assessment of the Participants

Figure 45: The chart of participants' knowledge on vegetable oil press after training



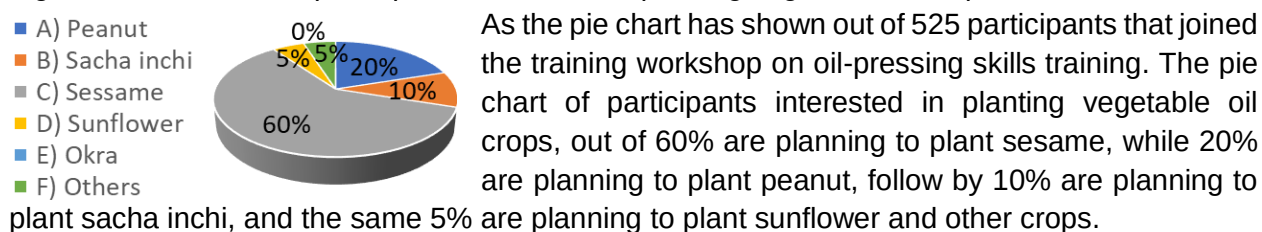
As the pie chart has shown out of 525 participants that joined the training workshop on oil-pressing skills training. The pie chart of participants' knowledge on vegetable oil press after training, out of 57% have understood clearly about vegetable oil press, follow by 32% have understood some about vegetable oil press, while 10% were not sure about vegetable oil press, and only 1% did not understand about vegetable oil press.

Figure 46: The chart of participants' knowledge on pressing & filter machines after training



As we can see the majority of 525 participants that joined the training workshop on oil-pressing skills training. The pie chart of participants' knowledge on pressing & filter machines after training, out of 57% have understood some about pressing & filter machines, follow by 24% were not sure about pressing & filter machines and 19% have understood clearly about pressing & filter machines.

Figure 47: The chart of participants interested in planting vegetable oil crops



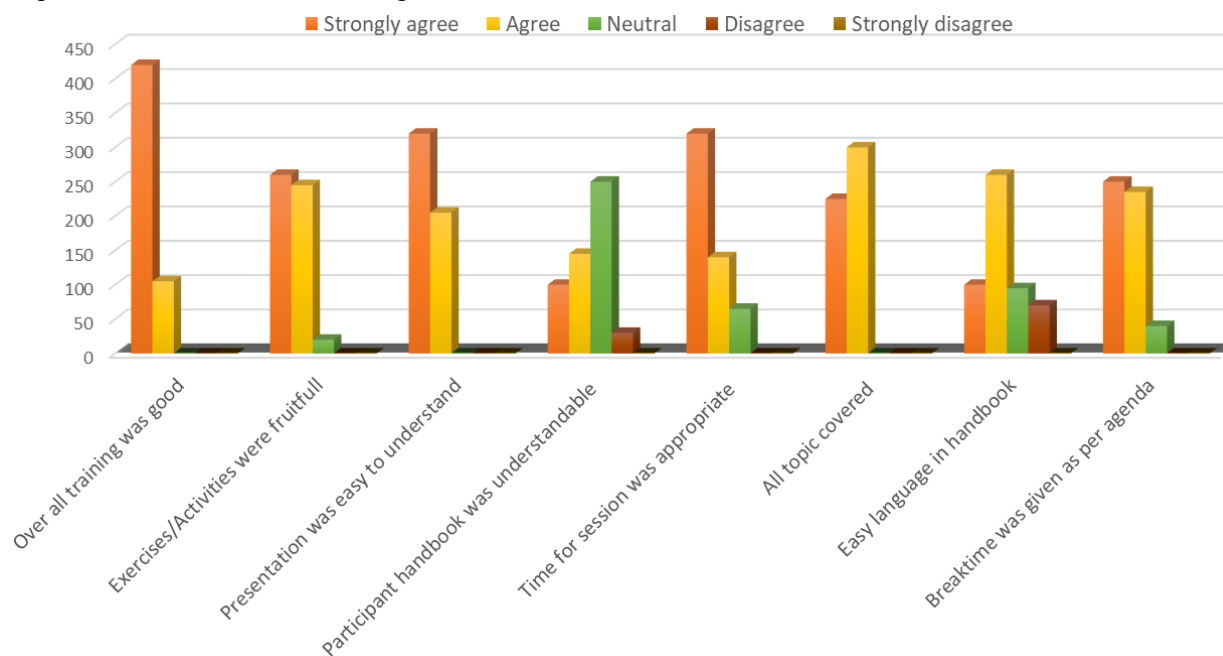
3. End of Workshop Evaluation by Participants

At the end of the training, feedback from participants was collected regarding training contents and trainer's evaluation. 525 participants provided feedback by using two forms, i.e. trainer's evaluation form and training evaluation form. A rating scale comprising of five scales (Strongly agree, Agree, Neutral, Disagree and Strongly disagree) was used to evaluate various aspects of training and trainer.

3.1 Training Evaluation

With regards to training, participants shared that training was very helpful and the content and exercises used in training helped them understand the topic and its significance. Participants found the training material to be very helpful and shared that presentations were very easy to understand because simple and easy terminologies were used in the material. Other factors such as time division and topics covered in during the training were well-received by the participants.

Figure 48: The chart of training evaluation

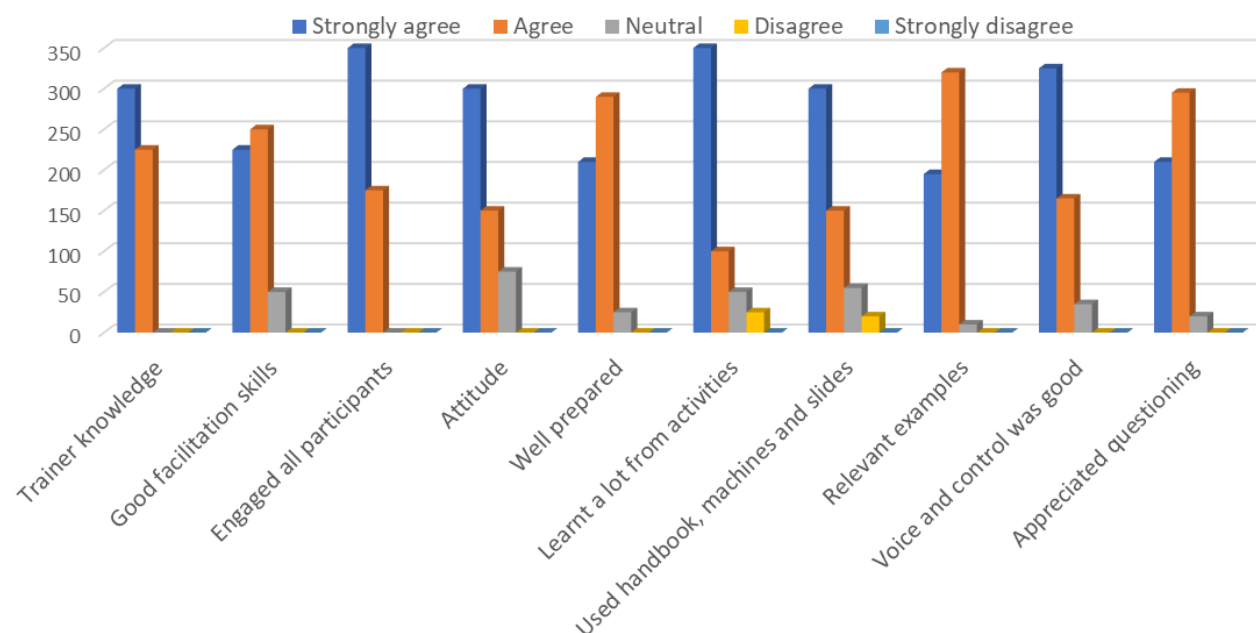


3.2 Trainers' Evaluation

The general feedback of participants about trainer was very positive as majority of the participants fully agreed and were appreciative of trainer's level of knowledge, style and presentation, preparation and research about the topics and the efficient use of training material. Moreover, participants also admired that trainer engaged participants in discussions and encouraged them to raise questions and not only this, his/her overall behavior towards participants was also good

Implement Vegetable Oil Pressing Skill Training to Farmers and Community-Based Enterprises in North-Western Cambodia which made it easy for them to learn and understand. While sharing their opinion, participants said that all the sessions were informative and relevant to their area of interest; some participants also shared suggestions to improve such as more time and flexibility to be given to participants during Q&A sessions.

Figure 49: The chart of trainer's evaluation



The workshop evaluation by participants revealed that the training was helpful and engaging, with participants finding the content and exercises to be easy to understand. The trainer's evaluation was positive, with most participants appreciating his level of knowledge, style, presentation, and efficient use of training material. The training was also appreciated for engaging participants in discussions and encouraging them to raise questions. Some participants suggested improvements, such as more time and flexibility during Q&A sessions. Overall, the workshop evaluation provided valuable feedback for both the trainer and the participants.

X. LESSON LEARNT AND BEST PRACTICES

- The training procedure has run more smoothly as a result of the design modification. The trainers guaranteed more interactions, sessions, and hands-on activities, which makes it straightforward for participants to comprehend how to use the machines and the advantages of vegetable oils.
- Since the participants and private-enterprise were engaged in individual activities, only a small portion of the session lasted longer than planned. If a similar program is scheduled in the future, additional time should be allotted for practical lessons.
- Because there wasn't a big enough market for their products after they were produced, almost all participants were dissatisfied with their farming. There should be more approaches or answers to this issue if comparable programs are found in the future.
- The demonstration of the machines and the hands-on experience of pressing and refining vegetable oils piqued the participants' curiosity. However, the trainers were only able to provide information on the costs of the equipment that they were instructing when participants enquired about the costs of the machines. A list of machines and their costs have to be provided in case future applications of this nature are established.

XI. RECOMMENDATIONS

- Less time should be spent on slide shows by trainers and more time should be devoted to machine demonstrations and practical training with filters and presses for vegetable oil.
- Since farmers would be able to contemplate expanding their company (buying vegetable oil pressing and filter machines) after they have a higher quality of life, the initiative should concentrate more on addressing the market shortages that farmers are currently experiencing.
- To help participants examine the potential of ordering, the project should include a list of vegetable oil pressing and oil filter machines (pictures, sizes, costs, capacities, etc.).

