

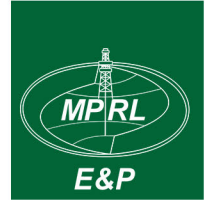
MPRL **E&P** Pte Ltd.



LIVELIHOOD DEVELOPMENT PROGRAM REPORT

CSR & Communications Department

March 2023



1. Introduction

We kicked off FY 2022-2023 by assessing our social return on investment in Mann Field where we have made a commitment to contribute to the sustainable development of the local communities and we have measured our success by our ability to identify and invest in their needs that range from access to water and sanitation to education, health and livelihoods. Since the pandemic has started, we have been listening to how community needs are evolving and dedicated our resources where they matter most. Here are some of the ways we are working to invest and strengthen livelihood opportunities for the host communities in Mann Field.

Putting farmers first - Although agriculture was hit hard by the pandemic, it bears a huge potential to assist economic recovery, and together with our community stakeholders and like-minded organizations in the region, we are working to ensure farmers resume their livelihood and even strengthen it via access to knowledge solutions to their common challenges in the farm.

Scaling up educational partnerships - Skills development is another area that the pandemic has disrupted as schools were locked down for months, and we are ramping up educational partnerships with local and regional institutions and schools to create a viable path from gaining skills to employment opportunities for community youths in Mann Field as they are keen to resume their learning.

Building on strengths - Our traditional model of providing vocational skills trainings to community members has been successful, but we have come to challenge ourselves to do better. We are focusing more on quality than on quantity and we believe the best way to double down the value we create is to build on the strengths of each vocational trainee.

MPRL E&P is one of the leading business organizations in Myanmar for corporate social impact, and we will continue working on the commitments we have set for now and for the years to come with a single conviction which is to help communities realize their dreams for a prosperous life by way of earning sustained quality livelihoods.

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2. Continued Uptake of Seed Loans

MPRL E&P's CSR Program completed planning and implementation of a set of initiatives to support agricultural and livestock farming households in Mann Field during FY 2022-2023. Highlights are chickpea and sunflower seed loans, sunflower seed production pilot farming, and agricultural knowledge sharing sessions for farmers.

Starting from FY 2018-2019, the seed loans have formed an important part of the agricultural development assistance to the farmers in Mann Field, and the farmers continued to secure quality seeds for their planting season when the seed prices were elevated due to increased demands through our seed loaning program. In FY 2022-2023, a total of 57 bags of chickpea seeds and 42 bags (126 kg) of sunflower seeds were distributed to the farmers.

Chickpea Seed Loans

Up to now, a total of 164 farmers from seven villages have been benefitted from participating in the chickpea seed loan initiative. The table below presents a summary of chickpea seeds loaned, returned and distributed to the farmers during the five fiscal years.

FY	No. of village	No. of farmer	Seeds loaned (Baskets)	Seeds returned with interest (Baskets)
2018-2019	4	8	21	26
2019-2020	5	31	72	102
2020-2021	7	74	148	195
2021-2022	7	107	191	265
2022-2023	7	164	248	323

Sunflower Seed Loans

Sunflower seed loans have been much in demand, and a total of 43 farmers gained access to 50 bags of quality sunflower seeds in FY 2019-2020 when the initiative was first launched in Mann Field. The initiative was a success as all the farmers had successful harvests and they returned the loaned seeds plus interest to the Seeds Management Committee.

Although the CSR Program did not purchase additional seeds in the following fiscal year, the Seeds Management Committee was able to loan its seeds to one more farmer in addition to the 43 farmers. This way, the number of seeds loaned continued to increase towards the end of FY 2021-2022. In this fiscal year, a total of 98 farmers from six villages joined the seed loan program, and the table below provides a summary of the sunflower seeds loaned, returned and distributed to the farmers during the four fiscal years.

FY	No. of village	No. of farmer	Seeds loaned (3kg bags)	Seeds returned with interest (3kg bags)
2019-2020	4	43	50	53
2020-2021	4	44	53	63
2021-2022	4	56	63	78
2022-2023	6	98	120	135



Photo record of provision of farm inputs to farmers in Mann Field

PROGRAM HIGHLIGHT: Sunflower Seed Production Pilot Farm Project

Sunflower seed production was one of the three focused areas of the Farmer Field School mounted by MPRL E&P's CSR Program in collaboration with the Department of Agriculture (Minbu) in FY 2021-2022 to support smallholder farmers in developing quality and climate resilient seeds.

Some of the agronomical practices in sunflower cultivation included selection of well-drained and fertile land with no previous history of growing sunflower, applying balanced and adequate nutrition including irrigation and having bee hives near the field. The 2.5-acre pilot sunflower seed production farm by the community volunteer U Thein Naing from Kywe Cha Village used a hybrid seed variety locally developed at a farm in Nay Pyi Taw - Tat Kone, and extension staff from the Department of Agriculture (Minbu) brought a total of 30 farmers from five villages on board an on-farm demonstration on human facilitated pollination in late December 2021. The demonstration on the pilot farm involved touching the pollen from a male flower with a gentle paintbrush and carrying it to the female flowers.

Basically, production of hybrid sunflower seeds required planting male and female lines in the same fields, usually alternating with four rows of females and two rows of males. In this regard, mediated pollination was essential for transferring pollen from a male plant to a female plant and this movement of pollen allowed the plant to reproduce and to exchange genetic information with other plants. Human mediated pollination should be completed within five days and a successful harvest can follow in the next twenty to thirty days.

Seeds from the male rows could be utilized to produce cooking oil while seeds from the female rows would become seeds for next growing season, clean and dried thoroughly in the sun and applied with fungicides before storing following advice and instructions from the Department of Agriculture (Minbu). Normally, sunflower completes its life cycle within 80 to 85 days in total.

Through the open and systematic cultivation of the oilseed sunflower, we could ensure farmers trust its authenticity, quality, affordability, region suitability, high yield, high oil production, ability to withstand local weather and pests, and more uniformity in plant height and flower size. Further, we intended to ensure the farmers gain problem-solving skills in accordance with local conditions and come in touch with agricultural science. U Thein Naing obtained 900,000 MMK in total from selling female and male sunflower seeds after harvest.



Photo record of hand pollination demonstration at pilot sunflower seed production farm

3. Empowering Farmers through Vital Agronomy Knowledge

In collaboration with Yetagon Farm Advisory Services (Pwint Phyu), MPRL E&P’s CSR Program continued to empower farmers by providing access to vital knowledge on agronomy via small-group knowledge sharing sessions in the first six months of FY 2022-2023 as they resumed working hard again on their farms to feed the population.

Essentially, the three sessions targeted to educate tomato farmers, chilies farmers and chickpea farmers on the application of low-cost and practical organic pesticides on common pests and diseases affecting these crops that many farmers in the area grow. Some of the participating farmers had come forward by sharing their personal experience of making and using organic pesticides learned from the sessions in cultivating tomatoes and chilies, and we were thrilled to capture their success stories that strengthen our farmers-centered approach to the sustainable agricultural development in Mann Field.

Building on this achievement, we extended the initiative to the chickpea and sunflower farmers and delivered a total of four sessions on producing liquid Fish Amino Acid fertilizer for pest control in chickpea and sunflower farms during the second half of FY 2022-2023. Once again, these sessions were arranged in collaboration with Yetagon Farm Advisory Services (Pwint Phyu), and they attracted nearly 100 farmers from the communities. Here is the list of agronomy knowledge sessions completed for the targeted farmer groups in FY 2022-2023.

Sr. No	Date	Village	Topic	Total participants
01	13 July 2022	Mann Kyoe	Pests and diseases affecting tomatoes and organic pesticides	49
02	23 August 2022	Kywe Cha	Pests and diseases affecting chilies and organic pesticides	35
03	21 September 2022	Mei Bayt Kone	Pests and diseases affecting chickpea and organic pesticides	27
04	4 October 2022	Kywe Cha	Fish Amino Acid Fertilizer Production	21
05	21 October 2022	Kyar Kan	Disease and Pest Control for Chickpea	30
06	11 November 2022	Mann Kyoe	Disease and Pest Control for Chickpea and Sunflower	25
07	23 November 2022	Auk Kyaung	Disease and Pest Control for Chickpea and Sunflower	20



Photo record of knowledge sharing sessions on agronomy

Farmer Survey

It is important to listen to the farmers' feedback about our initiatives that aim to support their livelihood development by providing skills and knowledge on sustainable farming. Accordingly, during the last two knowledge sharing sessions, we carried out a satisfaction survey to understand how the agronomy knowledge sharing sessions were beneficial to the farmers.

A total of 39 farmers from five villages responded to the survey, and 85% of respondents attended previous sessions and the rest were new comers. Respondents mainly grew sunflower, chickpea, tomatoes and chili, and they also farmed pulses and beans. Respondents pointed out finding high-quality seeds, having limited access to water resource and fertilizers, unpredictable weather and pests and diseases as major challenges affecting their livelihood. Respondents who had attended previous knowledge sharing sessions said that they applied the knowledge gained to solve these challenges: 79% of respondents participated in the seed loaning initiative to secure quality seeds they needed and the rest were keen to join in the next season.

Overall, 95% of respondents indicated their satisfaction with these agronomy knowledge sharing sessions. They expressed an interest to obtain natural fungicide and pesticide making techniques, pest and disease preventive measures, and Good Agricultural Practices (GAP) for cultivating seasonal crops. Further, respondents encouraged MPRL E&P's CSR Program to maintain the current initiatives that backstop the farming communities in Mann Field such as qualified seeds, farm inputs and knowledge sharing sessions.



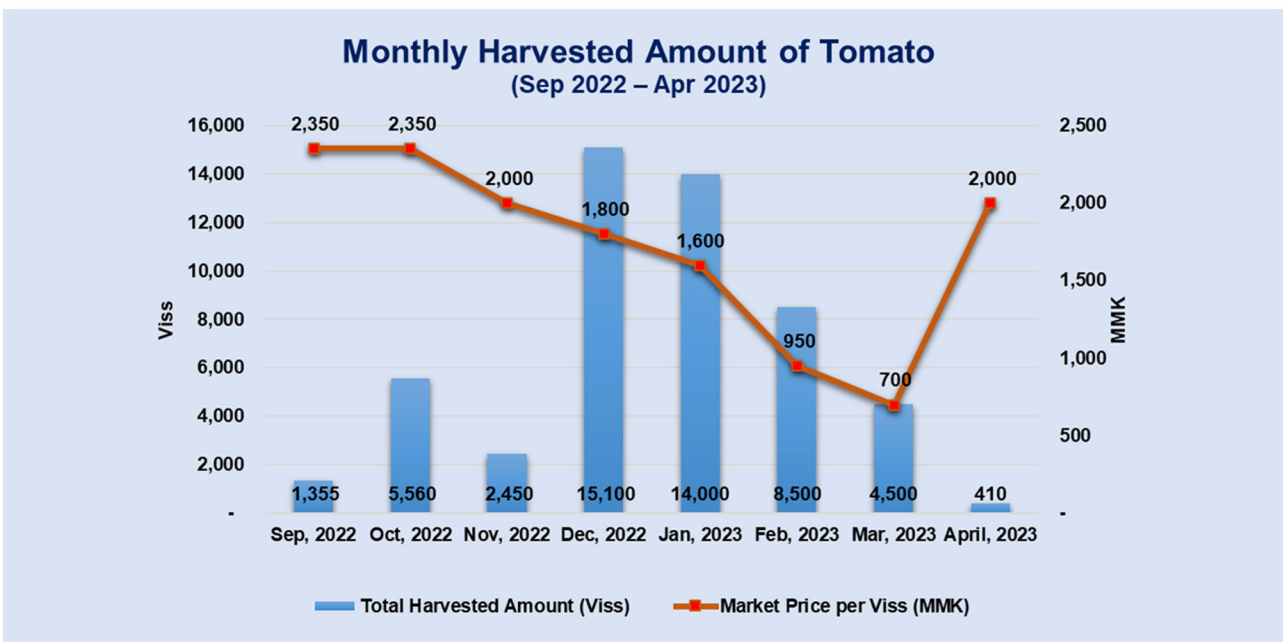
Photo record of farmer survey

4. Plastic Mulching in Tomato Farming

The fact is that the first tomatoes that hit the markets fetch the best prices. How can we do it? Use plastic mulch!

With the first horticulture training on plastic mulching in tomato farming launched in July 2019, MPRL E&P's CSR Program has commenced to support a group of progressive smallholder farmers who were keen to adopt sustainable horticulture practices and excited about the use of plastic mulch in growing tomatoes. In this fiscal year, we were delighted to witness a successful venture of tomato farmers as they went for another growing season using plastic mulch again.

There were 27 farmers from four villages in Mann Field who grew 7.3 acres of tomatoes with the support of the CSR Program in FY 2022-2023, which included the distribution of plastic mulches and qualified tomato seeds through the Horticulture Farmers Committee and the provision of regular monitoring and technical assistance to the farmers through the Community Liaison to achieve an optimum output. The earliest tomato harvest started in September when the prices were at their highest level, and the largest volume of tomatoes were harvested in December when the prices started to decline gradually as shown in the figure here.



In this FY, not only did the market prices of tomatoes go up significantly higher than the past, but tomato wholesalers from Minbu town also took care of the whole process of making sales agreements, picking the produce in the fields, packing and transporting them to the markets on their own. Therefore, the farmers were able to reduce costs related to transportation and hired labor as well as less dependent on middlemen; thereby retain substantial profits from selling their produce that sustain their livelihood in a difficult time.

This is the evidence of the success of using plastic mulching in tomato farming where plastic mulch is mainly used for earliness and water retention. By aiding in storing heat in the soil, plastic mulch boosts the rate of plant growth, and it can cut the period from planting to harvest by seven days with the availability of sunlight on a daily basis.



Photo record of tomato farming

PROGRAM HIGHLIGHT: The Role of Organic Fertilizers in Tomato Farming

At present, there is a growing concern about the state of the environment and the widespread use of synthetic fertilizers in agriculture which can lead to contaminations in water sources and complications for human health.

Organic fertilizers serve as alternative low-cost agricultural inputs for ensuring soil fertility and quality of produce and they do not produce harmful residual effects into the environment. Therefore, they play an important role in our farming sector to become more sustainable and efficient.

Therefore, in FY 2022-2023, in observance of COVID-19 prevention measures, we delivered two training sessions on Fish Amino Acid fertilizer, including a live demonstration making it to a total of 16 horticulture farmers from two villages in Mann Field.

Fish Amino Acid fertilizer, which can be produced using simple and inexpensive locally-available raw materials such as fish scraps and small fish and brown sugar or jaggery, is a natural farm supplement rich in nitrogen and encourages plant growth. Due to its low cost, practical use, it was well accepted by our farmers. Basically, they used fish parts from their kitchen, practically practicing zero waste and the fertilizer was stored in upcycled drinking water bottles.



Photo record of hands-on training for making Fish Amino Acid fertilizer

5. Mushroom Model Farm Project in Progress

These days, Ko Nay Zaw, the community volunteer from Kywe Cha Village in Mann Field, has been doing well with his mushroom model farm which he tended together with his wife. When the demand for the produce was high, he hired three women from their village as daily wagers. From October to December 2022, he produced 2,700 bags of pearl oyster mushroom spawns and all were sold at 750 MMK per bag. Therefore, the mushroom model farm continues to bring economic benefits not only to the owner but also to his fellow community members.

Ko Nay Zaw received a hands-on training on mushroom cultivation in August 2019, and since then, he has made consistent efforts to share knowledge and build his mushroom producer network in Mann Field. MPRL E&P intends to plan to support extension of the mushroom model farm project to other communities who are interested in it.



Photo record of the mushroom model farm

6. Skilling Youths for Employability

In Myanmar there is a need to prepare different segments of the population to take advantage of job prospects in and outside the country, and technical and vocational skills provision can serve as an effective alternative to higher education for youths that live in disadvantaged contexts. MPRL E&P works with both private and public sector organizations to develop feasible models for skills development that meet the country’s economic needs and scale up these models. Our educational partnership initiatives are designed to:

- increase access to skills by removing financial difficulties through scholarships;
- assure quality and relevance through public and private educational provider partnerships;
- implement demands-driven, competency-based, cost-effective, scalable, and on-the-job trainings.

Population (2023) (World Population Review)	54.4 million; medium age = 28.2 years
Human Development Index rank out of 191 countries and territories (UNDP, 2021)	149 th
Human Capital Index (World Bank, 2020)	48 percent
Quality of education system rank out of 130 countries (WEF, Human Capital Report 2016)	116 th
Vocational enrollment rate for those aged 15-24 out of 130 countries (WEF, Human Capital Report 2016)	117 th

Myanmar’s Human Development and Labor Market Indicators

6.1 Educational Partnership with No. (5) Industrial Training Center (Magway)

MPRL E&P has focused on supporting the recovery and mitigating the effects of the pandemic on community youths in Mann Field by continued delivery of skills training in cooperation with resource organizations as they reopened after closing for months due to the pandemic control and prevention measures. Starting from December 2021, a second round of scholarships were offered to seven community youths who met the selection criteria to study at No. (5) Industrial Training Center (Magway). The scholarships covered the students' one-time enrollment fees, monthly stipends and general expenses for the 11-month courses in Automobile Maintenance and CAD/CAM.

All the students took their exams, passed all the subjects and received certificates in November 2022. Among 135 students from Batch 10, the training center selected Maung Aung Paing Phyo as a recipient of two awards for the highest subject grades and for his extracurricular activities and observation of school rules. Among the seven graduates, Maung Aung Paing Phyo, Maung Ye Naung, Maung Khant Thu Tun and Maung Nyi Shin Thant secured employment within six months after graduating, a key success indicator of the initiative. Maung Aung Paing Phyo left the job in January, 2023 and he is now learning the Japanese language at JEC Japanese Language School, Mandalay to work in Japan.

Maung Ye Naung from Pauk Kone Village and Ma Moe Hayman Tun from Mann Kyoe Village said that they learned about the scholarship program from the former trainees, and that the program was a great opportunity for the community youths to acquire skills for employability. Going forward, MPRL E&P plans to initiate a third round of educational partnership with No. (5) Industrial Training Center (Magway) to support up to five community youths who are aged between 17-20 and completed the Matriculation Exams among other requirements through open recruitment.

No.	Name	Completed course	Current status
1	Ma Ingyin Khaing	CAD/ CAM Course	Preparing to work in Japan
2	Ma Moe Hayman Tun	CAD/ CAM Course	Preparing to work in Japan
3	Maung Nyi Shin Thant	Automobile Maintenance Course	Driving Assistant, Shwe Pwint Phyu Express, Minbu
4	Maung Ye Naung	Automobile Maintenance Course	Mechanic at German MotorWorks Automobile Service & Repair, Yangon
5	Maung Aung Paing Phyo	Automobile Maintenance Course	Preparing to work in Japan

6	Maung Khant Thu Tun	Automobile Maintenance Course	Apprentice Mechanic at German MotorWorks Automobile Service & Repair, Yangon
7	Maung Ant Mhue Naung	Automobile Maintenance Course	Looking Forward to the hiring announcement from MOGE, Minbu



Photo record of the seven students joining No. (5) ITC (Magway)

6.2 Educational Partnership with State Agriculture Institute (Pwint Phyu)

In May 2022, seven out of eight applications from Mann Field were qualified and enrolled in the State Agriculture Institute (Pwint Phyu) with which MPRL E&P's CSR Program initiated an educational partnership to support community youths with scholarships for three years of study at the school.

Our CSR Field Staff closely monitored the students' academic activities, progress and conducts, and had meetings with the school instructors and the students to discuss challenges and improvement plans while reinforcing good practices. The table shows the list of four male students and three female students under the educational partnership program with State Agriculture Institute (Pwint Phyu). Furthermore, MPRL E&P's CSR Program donated five brand-new Lenovo laptops and accessories to the institute in March 2023 to address its shortage in academic facilities.

No.	Selected Student	Matriculation Exam Marks	Village
1	Maung Zayar Phyo	337	Ywar Thar
2	Maung Kyaw Soe Lwin	326	Ywar Thar
3	Maung Hein Pyae Sone Aung	391	Mei Bayt Kone
4	Maung Zay Linn Aung	331	Mei Bayt Kone
5	Ma Yoon Eaint San	360	Ma Bayt Kone
6	Ma Chit Hnin Phyu	351	Chin Taung
7	Ma Thida Aye	323	Kyar Kan



Photo record of the seven students joining SAI

6.3 Educational Partnership with Government Technical High School (Magway)

The purpose of this initiative in this fiscal year is to provide a specific segment of community youths who have finished middle school education the opportunity to study technology subjects at the basic education level and seek employment opportunities in the technical and vocational sectors. We planned to support only three students as a pilot phase since it is a three-year-long program.

Therefore, in cooperation with the community volunteers and village administrators, we screened a total of 10 applications to the program and selected three candidates who met the criteria. According to their test scores in English and Mathematics, two candidates have been enrolled into the Building Technology Course and one candidate in the Information Technology Course. All of them would study English, Myanmar, Physics and Chemistry as minor subjects at the school.

No.	Selected Student	Age	Village
1	Maung Sithu Maung	17	Aye Mya
2	Maung Zaw Myo Aung	20	Auk Kyaung
3	Ma Khin Hnin Aye	16	Lay Eain Tan



Photo record of the three students and CSR field team member

6.4 Nurse Aide Training Program

MPRL E&P intends to resume the nurse aide training in collaboration with external resource organizations based on demands and interests of the communities. Since February 2022, a former nurse aide trainee, Ma Moe Thandar Naing from Kywe Cha Village, has started working as a healthcare assistant at the Mobile Clinic run by MPRL E&P's CSR Program that addresses the increasing healthcare needs of the medically under-served in Mann Field.

In addition, starting from January 2023, MPRL E&P's CSR Program is providing a medical student with a scholarship to study at the University of Medicine (Magway), and therefore, there are 18 community youths who have received scholarships under the educational partnership programs of MPRL E&P in this FY.



Photo record of Ma Moe Thandar Naing, Healthcare Assistant at Mobile Clinic

PROGRAM HIGHLIGHT: Farm Value Addition

In collaboration with the Small-Scale Industries Department (SSID) (Magway), MPRL E&P's CSR Program provided a hands-on training on making tomato value-added products in September 2022, and a total of 20 women from seven villages in Mann Field joined the 7-day training in Aye Mya Village.

11 trainees currently run their own small businesses and sell their tomato-based products in and out of their villages as well as shops in Minbu. Three of them have already secured a license for their products under brand names "May", "May July" and "Pyae Sone" respectively. However, the trainees have voiced their struggle with gaining market access, package design and investment. Therefore, MPRL E&P's CSR Program plans advanced trainings to support these entrepreneurs.

MPRL E&P's CSR Program offers vocational trainings to the community members in Mann Field since FY 2016-207 to help them gain alternative livelihood skills and employment in cooperation with resource organizations in the region. We closely monitor and support the trainees as part of the program effectiveness assessment framework. The table shows trainees who have started their own micro-enterprises after the training.

No.	Trainee	Village	Product	Product Sale Location
1	Daw Khaing Thazin	Kywe Cha	Tomato body wash, shower gel, multipurpose foam	Within the village
2	Daw Hnin Wai Aung	Kyar Kan	Tomato multipurpose foam	Within the village
3	Daw San May	Kyar Kan	Tomato soap, body wash, shower gel, shampoo and scrub	Within and around the village
4	Daw Su Hlaing Myint	Kyar Kan	Tomato multipurpose foam	Within the village
5	Daw Htay Win	Kyar Kan	Tomato soap, scrub, body wash and shower gel	Within and around the village
6	Daw Toe Toe	Auk Kyaung	Tomato body wash, shower gel and multipurpose foam	Within the village, Friends from Minbu

7	Daw Hla Hla Win	Chin Taung	Sun-dried tomatoes jam	Within the village
8	Daw Saw Pyae Sone	Kyar Kan	Tomato body wash and shower gel	Grocery shops within the village
9	Daw Moe Myat Myat	Kyar Kan	Sun-dried tomatoes jam	Within the village
10	Daw Khin Chan Myae Aung	Mann Kyoe	Tomato soap	Within the village
11	Daw Thin Nwe Soe	Mann Kyoe	Tomato body wash, shower gel and soap	Within the village



Photo record of hands-on training on tomato value addition



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