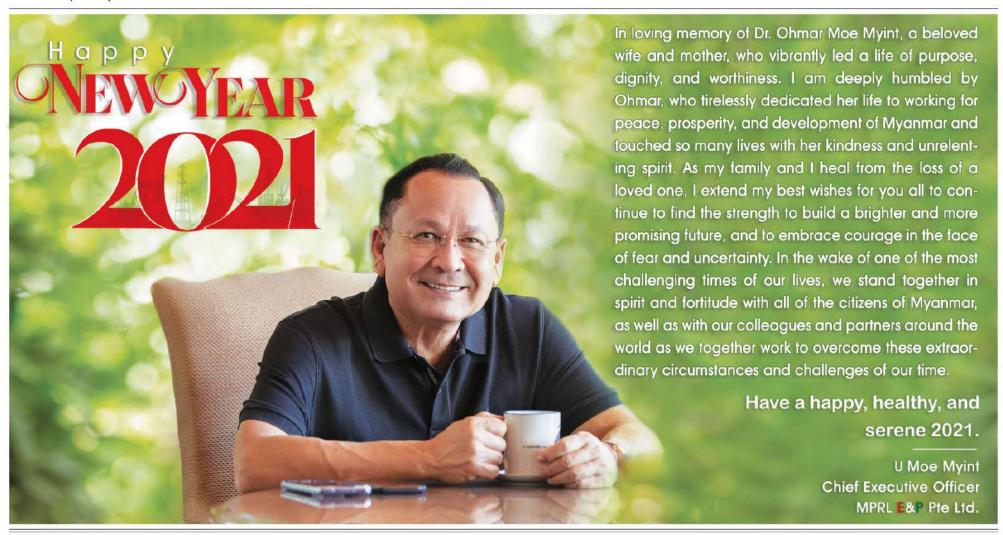
Insight!



www.mprlexp.com MPRL E&P Newsletter 23rd December 2020





2020 poses great challenges to humanity. We face an extraordinary global health crisis disrupting international travel, commerce, and consumer behaviors, which has unequivocally altered the demand for energy. Our Government have been far quicker to react than many other nations, rapidly putting in place necessary measures to contain the spread of COVID-19 in Myanmar. However, like in many other countries, such measures also come with trade-offs that have unfortunately resulted in suppressed business activity, and Myanmar's economic growth in fiscal year 2019-2020 is projected to be 0.5% or less (compared to 6.8% in fiscal year 2018-2019), according to the World Bank's Myanmar Economic Monitor, June 2020. During international upstream petroleum industry downturns, dating back as far as 1998-1999, and as recent as 2015 and at the present time, MPRL E&P has a demonstrated track record of remaining resilient, as evident by our company history. Since MPRL E&P's founding in 1996, we have successfully navigated and adapted through difficult times within the global upstream energy industry. We achieved resilience by focusing on pursuing high-value opportunities, practicing disciplined financial stewardship, and taking decisive actions when required. Through each downturn, we have captured best practices and

lessons learned that we have been able to leverage and apply towards subsequent challenges. I have no doubt that MPRL E&P is well positioned to persevere through whatever challenge the future holds by applying similar principles and learnings from the past. We are wholly committed to progressing a strategic project of national importance to Myanmar, Myanmar Offshore Block A-6 Integrated Project, as quickly as possible, further maintaining our unwavering commitment to realize Myanmar and ASEAN's first ultra-deep water gas development project.

In response to the current macroeconomic conditions, we have deployed a multi-faceted business resilience plan: we re-examined work programs and prioritized work activities that offer the highest value and impact to the business; we adopted measures to ensure the health and safety of our field operations staff by operating on a closed-system basis, and we initiated a work-from-home program for those in Yangon; we introduced a reduced compensation program across the board to ensure that we retain talent; we looked at our future workforce requirements and reduced 5% of our direct employees in light of this outlook; we optimized voluntary social expenditures and invested in projects that meet the immediate needs of local communities where we operate; we rolled out a resilience culture campaign to empower everyone to identify, propose, and undertake business resilience initiatives. We continue to monitor our business performance to ensure that we emerge out of these unparalleled challenges stronger, and that we continue to create value as a purpose-driven independent upstream energy company for Myanmar and its people.



More Stories

Staying Fit and Postive

Employee Spotlight 8 >

Block A-6 Integrated Development
Project - What are pre-FEED and Feed?

Feature 12 ➤

Employee Experience and the Moments that Matter

Feature 29 >



Your Opinion: "How has the COVID-19 Impacted Employee Engagement?"

Nandar Win Junior Departmental Assistant Government & Public Affairs

The World Health Organization (WHO) declared the Coronavirus a worldwide pandemic on March 11, 2020. This crisis shook humanity across the world. The pandemic has challenged many employers and employees to work under different and difficult circumstances. However, in order to get out of this crisis together, companies need to plan for business continuity. Therefore, Senior Executive Management and the full support from employees are essential for the business to continue. Our company started Work-from-Home Program in April. In the meantime, the Management has provided support to

streamline our operations by using appropriate communications and collaboration technology solutions. And also the MIS Team provided technical support to facilitate our work. In the beginning, there were difficulties, but we can easily communicate and conduct business activities through employees, collaborating, learning and helping each other, and following the guidelines of Heads of Departments (HoDs).

Working from home does not make it possible for employees to interact in the workplace, but this is not a problem as employees can communicate

with each other via communication devices or the Internet. Although there were difficulties accessing the required documents for the work, colleagues and managers from the departments provided support as much as they could. During the COVID-19 period, employees discussed and shared work-related issues and more health topics than ever before with each other. So, we can see that employees care about each other, as encouragements have also improved. In addition, resulting from the benefits of the Team Building Retreat Program, employees became more friendly to each other, and can communicate well with each other without difficulty in getting our work done.



Min Wai Phyo Corporate Affairs Associate Corporate Affairs Department

Employee engagement, to my understanding, is the impassioned commitment of employees towards organizational goals. It becomes a driving force in managing duties and assignment according to our pre-set individual goals and KPIs which are tied to achieving Departmental Goals, which is indeed aligned with Corporate Goals. During an unprecedented time like this, engaged employees are required more than ever to sustain the momentum of business operations. Engaged employees are usually enthusiastic and commit to their roles, the company, and the people they work with. COVID-19 precautions of

Social Distancing and Work-from-Home situations have tremendously impacted everyday face-to-face workplace communication. However, the efficient use of the digital workplace has brought about a new experience. The Management Meetings are moved up to video conferencing. Daily check-ins and check-outs were done digitally. Employees are engaged effectively through heads of business units to ensure the stability and substantial growth in their productivities and performances. Even though employees are being managed remotely and telecommuted, there is not much significant



impact on business continuity. The teamwork and accountability, taken by each department during this pandemic, has proven resilience within the organization. It can be observed that our Executive Management is very vigilant during these oil and gas price downturns and COVID-19 outbreak situations, and puts the well-being of people first. Furthermore, the business updates are communicated monthly to all staff through "Note from the Corner Office" so that everyone in the organization is kept informed and on track about the overview of organization performance. In my opinion, COVID-19 has constructive impact in terms of employee engagement. All employees are gradually adapting to this New Normal situation as a resilient workforce.

Insight!

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From Cover Page

Although the situation and circumstances on the ground continue to remain fluid and dynamic, the global demand for oil and gas may likely stay weak for the next few years and recover at a slower rate than it did during previous industry downturns, underlined by fundamental shifts in energy markets. That said, natural gas certainly will play a leading role in Myanmar's future energy mix as a key source of domestic fuel underpinning Myanmar's development. Natural gas from Myanmar undoubtedly will remain a secure form of energy for our neighbors with whom we share transnational pipeline networks and land borders, in turn providing further assurances for the future financial security of Myanmar. I am confident that the energy sector will be a key area for investments driving Myanmar's economic recovery from COVID-19.

Even in the wake of a global economic recession, we are committed to realizing an ultra-deep water gas development project offshore Western Ayeyarwady Region as swiftly as possible. Similar to many other projects of this size and nature, Myanmar Offshore Block A-6 Integrated Project has experienced delays due to COVID-19 related restrictions around the movement of people, goods, and services. Mobilization of field survey equipment and technical personnel has been hampered by travel restrictions, leading to delays in completing a

number of preliminary front-end engineering design (FEED) studies. Although negotiations of commercial agreements with potential offtakers are slower than expected due to the prevailing economic, political, and social circumstances, we continue to progress all other workstreams full steam ahead. We are targeting FEED entry in 2021. Myanmar Offshore Block A-6 Integrated Project is poised to meet Myanmar's increasing demand for clean, affordable, reliable, and sustainable sources of fuel.

Last but not least, I would like to extend my sincerest gratitude to the Government of Myanmar for its leadership in guiding our nation through these unprecedented times and for proactively deploying everything at its disposal to ensure that we successfully contain and overcome the COVID-19 crisis in Myanmar. Moreover, I would like to wholeheartedly congratulate the Government on the recent successful elections, and for continuing on our path towards democratization. We pledge our full support to the new Government as MPRL E&P stands ready to work together towards re-building a robust economy, whereby the realization of developing Block A-6 will play a key role with regard to this re-building initiative.

As 2020 draws to a close, I wish you a Merry Christmas and a Safe, Healthy, and Happy New Year.









Staff Members of MPRL E&P GoCs Donate Medical Supplies for Preventive Measures to Keep Front Liners Safe

Moe Thu Zar Soe

Staff members from MPRL E&P Group of Companies raised funds to support a battle against COVID-19 and donated medical supplies, cash worth over MMK 7 million to be used in hospitals in the Yangon Region under the Ministry of Health and Sports, and in COVID-19 preventive and control measures.

The event was held at Yangon Region Public Health and Medical Services Department on October 16, and the medical supplies aimed at keeping frontline healthcare workers safe were also handed over including 500 personal protective equipment (PPE) sets and 500 N95 masks amounted to MMK 7.35 million.

With the intention to support the Ministry of Health and Sports in their efforts to counter the spread of the COVID-19 across the country, similar donation ceremonies took place at Minbu General Hospital, Mann Kyoe Community Health Centre and Mei Bayt Kone Community Health Centre in June 2020.

Social Responsibility: Several Meals Donations during COVID-19

Moe Thu Zar Soe

Since COVID-19 hit Myanmar, the Government of Myanmar, NGOs, social welfare associations, and philanthropic groups have led the response within communities to battle against the outbreak. In Yangon, the worst-hit region of the country, these organizations have tried to overcome challenges through major support of healthcare service providers.

With the aim of helping the Ministry of Health and Sports in their efforts to counter the spread of COVID-19 across the country and as part of Social Responsibility, MPRL E&P has donated several meals and drinking water for healthcare providers, patients and co-workers from Yangon General Hospital, West Yangon General Hospital, COVID-19 Control, and the Emergency Response





Committee (Shwe Pyi Thar Township) and the Shwe Kyar Social Welfare Association in October 2020.

On October 15 and 18, MPRL E&P has donated breakfast meals for 200 people and lunch boxes for 160 people for 30 days to the two general hospitals in Yangon, lunch boxes for 30 days to COVID-19 Control and Emergency Response Committee (Shwe Pyi Thar Township), and 200 packs of drinking water to Yangon General Hospital and the Shwe Kyar Social Welfare Association.

In April and May, MPRL E&P Group of Companies CEO U Moe Myint and his family had donated dinner boxes for 18 days, and both lunch and dinner boxes for 12 days for the front liners and 200 patients at the Waibargi Specialist Hospital in North Okkalapa, and dinner boxes for 39 days for a total of 60 people including doctors, nurses and staff members at the National Health Laboratory.







Looking Back, Moving Forward: The First 6-monthly Reflection Workshops (Fiscal Year 2020-2021)

Thae Aei Khinn Zaw

The reflection workshops for the first six months of fiscal year 2020-2021 were held in two sessions: one with Assistant Heads of Departments (AHoDs) on 29 September, and the other with Heads of Departments (HoDs) on 9 October to review MPRL E&P's performance to identify key learnings to apply to day-to-day work going forward. Coping with the unprecedented conditions of 2020 and beyond, HoDs and AHODs took the opportunity to reflect on what is working well and what is not, across the business, in order to improve where necessary. The participants from technical and business support units presented the accomplished work programs and progress of the respective business functions, together with challenges, lessons learned, and best practices encountered



during the past six months of the fiscal year. There were altogether 33 participants attended the first 6-monthly reflection workshops through video conferences via Microsoft Teams. Alongside the workshops, quizzes and polls were included for interactive and lively discussions.

During the 6-monthly reflection workshops, updates on Mann Field Oil Production, HSE performances, Myanmar Offshore Block A-6 Integrated Project, the Social, Environment and Governance Milestones, Workforce Management, and MPRL E&P GOCs Resilience Taskforce were discussed and evaluated in detail to make the overall business functions more well-organized and operative in the following months.



MPRL E&P Participated in Myanmar HSE Webinar 2020

Thae Aei Khinn Zaw

In October, Workplace Safety and Health (WSH) Myanmar organized a Myanmar HSE Webinar 2020 and invited HSE professionals working across different industries to create a knowledge-sharing space for Workplace Health and Safety Management and COVID-19, Environmental Impacts due to COVID-19 Control Measures and Challenges for Skills Development during COVID-19.

U Sithu Zeya, Assistant HSE Manager from HSE Department of MPRL E&P, took part in the webinar as one of the speakers and shared how MPRL E&P has managed business sustainability during the first and second waves of COVID-19 in suitable working patterns relevant to the challenging situations such as a Work-from-Home Program. He encouraged mandatory precautions against the pandemic such as wearing face masks, face shields, and washing hands, and third-party practices -- disinfection services within MPRL E&P Group of Companies, quarantine facilities for operations staff while having the minimal workforce in Yangon Office. He then went on to talk about Mann Oil Field, organizing a series of online trainings for procedures such as Return to Work as per MoHS Guidelines, and provided suggestions on how to overcome pandemic fatigue due to the long Stay-at-Home period, and the tips on how to keep fit mentally and physically during these hard times.

The Assistant HSE Manager also discussed and exchanged views on risks and opportunities of this pandemic with the rest of the speakers such as the significance of increased awareness with the encouragement and reinforcement of strict health and safety measures.



Taking Steps to a Healthier Worksite at Mann Field Base Camp

Thae Aei Khinn Zaw





THINKING ALOUD with

Saw Eh Hsar Blute Htoo

Monitoring & Evaluation Officer



Please introduce your roles and responsibilities at MPRL E&P's CSR & Communications Department.

I joined the CSR & Communications Department of MPRL E&P in October 2017 as a Monitoring & Evaluation Officer and was tasked with taking on responsibilities for overseeing the implementation of key departmental goals and strategies around monitoring and evaluation. As a focal person in the M&E section, I am in charge of reviewing the development of monitoring and evaluating tools and systems that are responsive to data needs. I have to prepare monthly, quarterly, and annually reports that contain summary data, reviewing overall performance against targets, and make overall program recommendations. Also, I have to facilitate data collection and data-flow between different teams as well as coordinate and participate in the regular field visits to prepare feedback reports with recommendations.

What have been the priorities of the CSR Program for the communities in Mann Field for this FY?

Our CSR initiatives aim to raise rural living standards through increased investments in community infrastructure, human resources and services for employment and income generation. Two main areas which MPRL E&P's CSR Team have focused on in this fiscal year for the communities around Mann Field are community capacity building, and improving agricultural and livestock productivity.

The community capacity building is about promoting the 'capacity' of local communities to develop, implement, and sustain their own solutions to problems in a way that helps them shape and exercise control over their physical, social, economic, and cultural environments. The outcomes we expect from our community capacity building initiatives are their inclusive participation, strengthening individual skills, creating effective community organizations and institutions, expanding leadership base, and promoting resource utilization by the community.

The key objectives of fostering agriculture production and rural development are to increase agricultural output and productivity, raise rural living standards, improve market access, and support agribusiness. The outcomes we set for these initiatives are to increase output and productivity of agriculture, focusing on major crops as well as livestock; improve market access for small-holder farmers and promoting inclusive growth; and support the development of agri-business particularly for smallholder farmers.

What does the general trend of the OGM look like in Mann Field? Also, how have we fared with regard to the community capacity building up to this point?

MPRL E&P rolled out the Operational Grievance Mechanism (OGM) in Mann Field communities with the adoption of UN Guiding Principles on Business and Human Rights in July 2014. The objective is to enable local communities to have a voice, and to ensure that impact associated with operations affecting the environment, and surrounding communities, are solicited, monitored, and

effectively addressed to promote effective engagement between the company, communities, and MOGE.

A regular information session and annual community awareness campaign have been conducted to better understand how complaints will be handled and the types of remedies the company can or cannot provide, and the timelines in the procedure. The recent knowledge, attitude, and practice (KAP) survey indicates that 96 percent of respondents (n=331) had heard of OGM. This high percentage shows that almost all communities in Mann Field had heard and are familiar with this mechanism. At the end of November 2020, a cumulative total of OGM cases reached 130, with KPIs result of complainants' satisfaction at a 98 percent -- with the process being a 100 percent against 50 percent target. The above figures proved that the trend of OGM in Mann Field communities is in a positive direction, and I think that these mechanisms will continue to be the best tools that the community can rely on encountering problems in their fields related to the operations, and benefit.

When we rolled out the OGM, community volunteers received training-of-trainers (ToT) on the OGM process, related capacity building training, and public-speaking trainings in order to disseminate information to community members and increase the level of community awareness on OGM. Also, community volunteers were one of the ways the community could submit their grievances to us. In this regard, the use of volunteers and their involvement in the OGM have improved their performance by a lot, and enhanced their skills and knowledge.

Do you think due to this watershed coronavirus crisis, the social needs with respect to response, resilience and recovery from the pandemic have changed? How can we reflect this in our future social management approach?

The coronavirus has been considered a global pandemic by WHO and this virus disrupted the world's socioeconomic circumstances. The virus was confirmed to have reached Myanmar on March 23, 2020. As Social Distancing plays a key role to reduce the spread of this virus, the Government of Myanmar announced lockdowns/Stay-at-Home orders throughout the country in mid-April. The impact of Covid-19 is immediately felt by all citizens. According to a press release from the World Bank Myanmar on June 25, 2020, Myanmar's economy was severely impacted after the closure of businesses, and many other restrictions. Many people cannot get by without a regular source of income and have lost their jobs, negatively impacting households which have fallen into poverty, and challenges relating to food security.

As we are now in of the coronavirus crisis, the basic needs of the people have been changed and it has been found that some companies are performing CSR activities by donating/supporting the current needs placed against their CSR approach. MPRL E&P is consistently supporting MoHS in their battle against COVID-19, through contributions such as food for healthcare workers and donating test kits. In promoting Social Distancing, the MPRL E&P CSR Team (in collaboration with the Department of Public Health, Minbu and community volunteers), conducted awareness-raising campaigns on COVID-19 in 14 surrounding communities and in Minbu. In addition, employees at MPRL E&P raised funds and donated medical supplies to Minbu General Hospital and other surrounding community health centers.

MPRL E&P's social management approach is to contribute to the sustainable development, and improved livelihoods of communities where we operate through active engagement and regular dialogue. This approach helps us to identify the needs of the host communities and address primary business risks and impacts. A good approach to social management is to still focus on issues and actions that are relevant to the needs of the community. Even in crisis situations, it needs to identify the company's priorities and its approach, and act accordingly, so that any interventions made are both consistent and effective to our approach.

MPRL E&P rolled out the Operational Grievance Mechanism (OGM) in Mann Field communities with the adoption of UN Guiding Principles on Business and Human Rights in July 2014.





MPRL E&P Released Inaugural Sustainability Report 2020

Sustainability is a journey, not a destination.

Thal Sandy Tun

American economist and 1976 Nobel laureate in Economics, Milton Friedman is largely associated with what was dubbed as 'the Friedman Doctrine' or 'Shareholder Theory' which he introduced in 1970 as "The social responsibility of business is to increase its profits."

The theory put forward that a company has a responsibility to its shareholders only and has to deliver maximum return. In addition, Friedman's theory suggested that shareholders, above anyone else, decide which initiatives are implemented for social good. Of course, the shareholder theory created a massive effect on the corporate world in America, and public policy formulation around the globe.

However, the business community and intellectuals began to have reservations about the sustainability of the business world (which has become increasingly interconnected on a global scale) that focusing the sole attention on shareholder value creation was not enough. R. Edward Freeman, an American professor of business administration, published his breakthrough book on business ethics and organizational management, "Strategic Management: A Stakeholder Approach" in 1984, paving the way for the development of a stakeholder theory with a more practical, ethical, and relevant sense to a world rife with problems stemming from single-minded capitalism and corporate misconduct.

Freeman's stakeholder theory can be regarded as a novel vision of capitalism that posits that a business has a web of interconnected relationships with its employees, contractors, suppliers, government authorities, NGOs, INGOS, media, communities, CSOs, and many others at multiple levels. All these stakeholders have a stake in the business, and the business should create long-term value that comes in more than one form for all of its stakeholders including financial returns for shareholders.

The author believes that business has never been 'as usual' since then. Companies around the world are facing increased regulatory changes, greater demand for transparency, rising expectations from stakeholders (with regard to their grasp on



corporate social responsibility), public scrutiny related to their social and environmental footprints, and multiple risks like climate change and the ongoing COVID-19 pandemic that continue to threaten our very existence.

On the other hand, there are many positive developments that have happened to improve business management and performance. The development of sustainability reporting standards help identify, measure and disclose ESG (Environment, Social, and Governance) material issues of companies, and is also aimed more at improving reality and decision-making than 'window-dressing' and PR stunts.

In its simplest structure, a sustainability report lets stakeholders -- in accordance with the definition of stakeholders mentioned above -- and the world see what efforts an organization has put in to improve daily operations, to become a desirable work environment for and to support local communities' needs -- in essence, businesses 'walking the talk' within the context of an evolving business environment, aligning with a universal roadmap towards sustainable development guided by the Paris Agreement and UNSDGs, and leading by example to end governance failures across the private sector.

MPRL E&P's Inaugural Sustainability Report for the Myanmar Financial Year 2019-2020 was published on October 15, 2020 in order to provide information on the company's policies, procedures, management systems, objectives, and performance regarding a set of sustainability material topics. Being its first report of the kind, we tried our best to reflect where we have come from and communicate where we are going with the confidence that our stakeholders will be able to appreciate our context, approach, and aspirations in the areas of ESG.

Most importantly, we have developed this report to educate ourselves first, and to increase internal awareness about the value we are creating for the country's sustainable development in the belief that this can lead to better performance against our triple-bottom line over time.

To this end, the report includes our 2019 materiality assessment and stakeholder engagement exercise which has involved department heads, Executive Management, and Senior Executive Management as internal stakeholder groups. Prior to the chapters on the environment, our employees, and our communities in operations sites, we discussed issues ranging from anti-corruption, transparency, labour and human rights to environmental management to corporate social responsibility that are pertinent to the country's upstream energy sector, and our approach and performance indicators to these material topics.

In this regard, within the context of a developing country where communities and the environment are in constant threat from natural resource development projects, it makes more sense to disclose a focus on recruiting local talent, contributing to local development and environmental stewardship than an attention to R&D, for example. It is important to preserve communities' perceptions that benefits outweigh risks from our presence through implementing dialogue and community investment initiatives which bring about value fast and directly to the communities unlike macro-level contributions.

Moving forward, we anticipate a better understanding of the wider social, environmental, and governmental outcomes that MPRL E&P has produced for the country. We also believe that creating positive social and environmental impacts, further than mere exploration and production of oil and gas resources in the country, is something worth doing and can be deliberated as one of the company's strategic capabilities.

Please send your thoughts directly to us at communications@mprlexp.com, or scan the feedback form at the end of the report which is available on our website.



Insight Land Instanted in 2015 Anniversary

Staying Fit and Positive

Thal Sandy Tun

Assistant Engineer U Aw Zar from Mann Field took the opportunity to talk to Insight! during his two-week isolation at a quarantine facility under the region's quarantine rules related to the coronavirus before joining the crew successfully in good health.



U Aw Zar Assistant Engineer Field Operations Department

How long have you worked at MPRL E&P?

I have been working at MPRL E&P's Mann Oil Field since March 21, 2012. I work as a supervisor at the Downhole Workshop and my responsibilities include maintaining the field management schedule for Production Measurement, Pumping Units Maintenance and Warehouse Tubular Inspection.

Please introduce your family and education background a little bit.

My hometown is Taungdwingyi which is just about 73 kilometres away from Minbu. I was born on July 11, 1985. My dad is U Hla Kyaing and my mom is Daw Pan Kyi.

I passed the matriculation exam in 2006, then I attended Magway Technological University where I earned a Bachelor of Technology in Petroleum Engineering in 2010. A year later, I got married and so after that period I started working at MPRL E&P.

I have two kids: a son and a daughter. My son is 7 years old and attending Grade 1. My daughter is only 4 years old and she is a very cute and agile kid. My wife has a bachelor's degree in Civil Engineering from Magway Technological University, the same university I attended. She is now working as a Junior Engineer in the Construction Department of HtaukShaBin/Kanni Oil Field.

You have won an outstanding performer award for the end-term of the fiscal year 2019-2020. Would you like to share your achievement related to the award?

Regarding the invention of the newly designed sand and gas separator, I won this outstanding performer award. Sand and gas were the biggest issues of the artificial lift method. We can get rid of the gas problem wells by using DHGS (Downhole Gas Separator). However, the sand problem remained to be the one of the biggest operations challenges for a long time before using my invention sand and gas separator.

For this invention, I studied a lot on separation methods to come up with an idea first. Then I used discarded parts and materials to test my idea and finally invented this downhole tool which basically means that this invention costs nothing and it is the first ever effective downhole tool to help tackle the sand and gas problem wells in our Mann Field project.

How do you feel about receiving such an award which recognized your achievement?

I would like to express my gratitude to the Field Operations Manager and the Field Management Team as well as all of my colleagues who have championed me in the award selection. Without them, I would not have been able to achieve what I wanted to contribute to improve the daily operations. I also would like to give my thanks to the kindness of Senior Executive Management for continuing this award program which is a source of inspiration and motivation for our staff as well as for allowing me to have this honour even in this time of economic crisis. I believe it is something that I will cherish throughout my life and would always look upon in those times when I feel low.

Could you please talk about your experience and thoughts on the second wave of the coronavirus cases in this second half of the year?

As far as I'm concerned, we have received appropriate procedures and guidelines to prevent and control community spread in Mann Field during the grip of the second wave of the coronavirus pandemic which hit the country in mid-August. Our offices and cafeteria have been redesigned to minimize crowding and ensure recommended space exists among us while everyone wears a mask.

The robust commitment of the Field Management Team to keep us out of harms' way and the adherence to the guidelines of Ministry of Health and Sports (MoHS) have enabled us to run our operations safely and sustainably without lagging behind the schedule.

In the wake of the coronavirus pandemic, the world is changing rapidly as people quickly react to adapt to new needs. Wearing masks and keeping ourselves at a distance from one another become the new normal. The pandemic has affected our way of life extensively and some of these can result in anxiety, stress, and depression.

This second wave of coronavirus cases in Myanmar marks with rapid community spread and week-long stay home orders in hotspot areas like Yangon and Rakhine. Myanmar became a country with the third-highest number of COVID-19 cases among the ASEAN, given its more than 63,000 laboratory-confirmed cases by the end of November.

This is a very difficult time for all of us and we need to nurture certain habits of thinking positively about what is going on in our life and in this we are not alone. By focusing our attention and energy into what we are doing to keep ourselves safe and happy, we will overcome this crisis together soon.





Study on Interesting Nature of Subduction Zone Myanmar Offshore Area

Than Tun

April 2005, Singapore

We were setting up on the French scientific research ship "Merion Dufresne" to sail to Rakhine's coastal region to research earthquake trends. As a research vessel, the ship fully facilitated a complete set of measuring instruments, as well as meeting, computer, living, and dining rooms.

This was an interesting trip, as I was tasked to investigate earthquake zones through Sumatra, Indonesia; to the Rakhine's coast in Myanmar. This trip is part of the project called Geodynamics of India – Asia Collision (GIAC), which is a famous research team studying the geotectonic nature in Southeast Asia. Underwater conditions in Myanmar and geological studies, such as the potential for oil & gas exploration are supposed to be helpful from this trip. The research was funded by French oil company, Total and led by Dr. Claude Rangin who is an expert. There were accompanying Geologists from Myanma Oil & Gas Enterprise (MOGE), an Associate Professor U Min Swe from University of Yangon and postgraduate students from France on this trip.

Geological Background

Large continental plates float on the earth's surface, and are either converging or diverging with each other all over the world.

Since millions of years ago, the Earth's continental plates are still moving. It has resulted in Earth's geological features due to plates colliding -- such as subduction zones which are contact points where two plates are colliding. Due to these movements, the lands become folded, faulted, and form geo basins. One of the distinct examples is the India-Burma plate subduction zone in the Southeast Asia. More than 40 million years ago, the Indian Plate moved to the North and subducted to the Eurasia Plate. From this subduction event, Rakhine Yoma and the Chin Hills were broadened in Myanmar. Meanwhile, a large subduction zone formed at the junction of the two plates at the Indian Ocean near Myanmar coast. As a result of the active subduction zone, a series of earthquakes were triggered, with some recorded as the highest ratings in the world.

The 2014 Sumatra Earthquake was triggered by this subduction zone, which caused widespread damage to properties and endangered lives. During this trip, I had a chance to learn about the geotectonic features with subduction zones and seabed surveys along the coastal parts of Myanmar.

Start of the Study Tour

On April 27, 2005, the Merion Dufresne left Singapore's Port of Keppel. Due to the unsafe marine zone at the Strait of Malacca, the whole ship was quiet at night and passed silently. It soon reached the Barren Islands where studies began. The underwater volcanic eruptions are evident on a 3D screen, and the underwater mountains and valleys are as interesting as the surface. The Andaman Spreading Center, which forms the vast Andaman Sea basin on the seafloor, is also found to be between 11 and 12 degrees' north latitude.

The observation ship was constantly moving at 17 miles per hour, and on April 30, we arrived



Marion Dufresne (Source:Page 249 GIAC Cruises -The Western Sunda Basins and the India-Asia Collision by Claude Rangin)

near the Andaman and Coco islands. Once in the subduction zone, after passing the subduction trend, the underwater floor suddenly descended more than 2,500 meters from a depth of about 200 meters. The sea water changed color from blue to a deep blue. From the Burmese side, the mountains are gloomy.

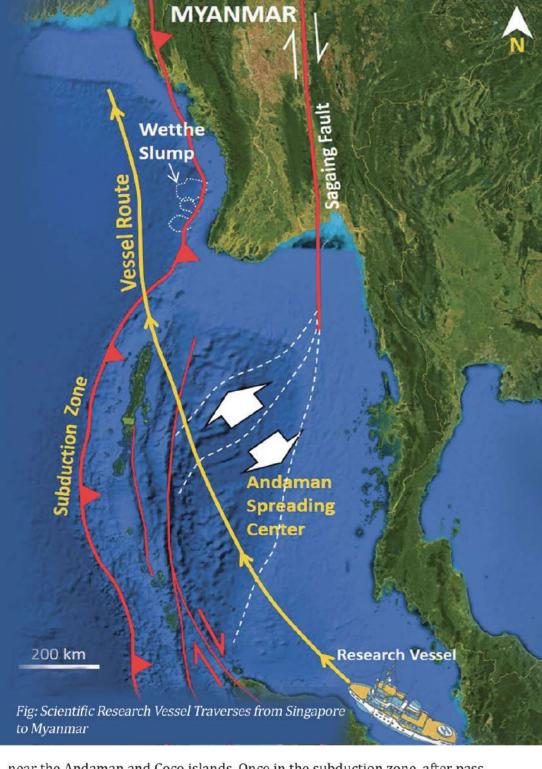
"This is the subduction zone between the Indian subcontinent and the Burmese subcontinent," Dr. Claude pointed out on the workstation computer screen, explaining the geotectonic elements and features based on the seismic data beneath the ocean flow. They prepared to make the necessary measurements for a deep investigation of the subduction zone. From there, all participants, scientists, and geologists worked day and night to record underwater geology and geophysical data, then posted on a map. Near the Coco Islands are three small faults crossing the earthquake trench. These cross-faults make a barrier and prevented the movement of the earthquake at Sumatra, preventing possible impact on Myanmar.

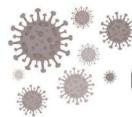
The observation ship was then moving towards the Rakhine coast, reaching Offshore Block A-6 located west of Chaungtha Beach. A submarine landslide about 50 square miles [30 km] west of Wetthe village was found on the seafloor. It is about 17 ¼ degrees north latitude which is a sign of recent earthquake on a geological time scale. In areas of interest, onboard scientists

drilled about 50 feet deep to take a soil sample for analyzing carbon content. Carbon content indicates oil and gas potential accumulation. Some soil samples were packaged for testing in a laboratory in France for in-depth studies. Soil samples taken near Block A-1 contained a high percentage of carbon content.

It can therefore be seen that there is a good potential for oil and gas off the coast of western Myanmar. All onboard scientists made further investigations for future exploration potential then subsurface geological data are collected and documented.

The return trip ended on May 6 and we left the Myanmar coast, returning to the port of Jurong, Singapore on May 11. The study tour uncovered a





Coronavirus Disease: COVID-19 Navigating a Pandemic

Thal Sandy Tun

We have a deep concern about this global pandemic and its impact to work, family, and the community. In a similar vein, we have been in awe at the individuals and communities doing their part to stop it. Here is one of our colleagues at MPRL E&P who shares his episode of working from home amid the pandemic, dealing with loss of an important family member to this new viral illness, and how he has pulled himself together.



U Myo Thu Aung Procurement Officer Material & Logistics Department

For more than 13 years, U Myo Thu Aung has been working at MPRL E&P as a Procurement Officer and this has been the first ever work-from-home experience for him during which certain life-changing events have happened to him.

Graduating in 2007 with a bachelor's degree in Physics from Dagon University, he started his long career as a Material and Logistics Assistant at MPRL E&P. With no prior work experience, he spent the first two years learning about procurement processes for local and overseas purchases as well as the use of the basic features of OGSYS software from senior colleagues before further picking up far more complex materials and logistics processes. He earned a diploma in Logistics Management in 2012. He has diligently learned to avoid common errors in his job while being careful about issues associated with the supply chain of an upstream energy company.

"We work hard to support the company's goals from our procurement role through which we have provided required materials and services to the end users in a timely, safe and cost-effective manner," said the Procurement Officer.

As a long-time employee, Myo Thu Aung finds the workplace culture to be respectful and open in which employees support one another and there is a close interaction between managers, supervi-

sors and staff. This enables all to count on one another during the time of crisis.

Then the COVID-19 pandemic happened.

"I can work from home for most of my procurement jobs, but I still need to be at the office for receiving, collecting or transporting the required materials to Mann Field. Sometimes I have to go to a bank to withdraw money as some vendors prefer cash payment over online payments. So I cannot complete a hundred percent of my work from home obviously. However, our team gets flexible arrangements in place in light of specific and urgent work requirements."

Then he started to feel overwhelmed after a few months into the work-from-home program and then his wife gave birth to their baby.

"During the months of June and July, I had a hard time fulfilling my office duties, taking care of my wife and the baby, and doing household chores. I felt like my workload had doubled. Anyway, my baby girl gave me the energy to keep me going. I was pleased that I was able to take care of them closely during the work-from-home period."

He was adjusting to not only the new work and family demands, but also adoption of technology and preventive measures in response to the pandemic.

"My experience of attending trainings and conducting meetings online was great. There were some technical bottlenecks at the beginning but later we fixed them and we found these online events to be as effective as face-to-face meetings. Good internet speed, concentration and proper recording did the trick. I believe our office communications and collaboration have been enhanced with the use of Microsoft 365 Office Apps which ensure business continuity and performance management at both individual and team levels."

On a weekly basis, employees were required to provide reports to help the company monitor their health and related behaviors as part of its playbook for COVID-19 prevention. Employees have been in close contact with their managers and supervisors to get updates from Senior Executive Management, and seek necessary support and guidance throughout the work-from-home period. This was important because the long period of staying and working at home impacts the mental and physical health of employees. Myo Thu Aung explained how the pandemic prevented him from doing his favorite sport—cycling.

"I could not go cycling, running, or walking outside, so I put on a few pounds. I tried to practice mindfulness meditation at home. I keep in touch with my friends and relatives via social network and video calls. I keep myself well hydrated. I keep myself busy—trying to accept the fact that the

pandemic affects everyone not just me. As my home was located within the red zone which meant the infection hotspot areas such as hospitals, wet markets and fever clinics were within walking distance, I should not go out and put anyone at risk."

After overcoming the first wave with only 374 cases and 6 deaths from March 23 to July 16, Myanmar was hit by the second wave of COVID-19 which started on August 16. Since then, the country has seen its first true exponential surge in cases, and Yangon bore the brunt of the highest positivity rate. The country's restrictions and regulations continued to tighten in an effort to contain the spikes.

"Let's say me and my family survived the first wave of COVID-19 in Myanmar like many people across the country did. However, it was the second wave that took my father's life who tested positive for the virus," said Myo Thu Aung.

He continued to explain about how COVID-19 and its related rules affected the whole family and how dealing with the death of a family member got even tougher.

"It was a tragic moment for we could do nothing to help my father who was hospitalized at an isolation ward at the North Okkalapa General Hospital. He passed away on October 10 following being tested positive for the coronavirus and its related health implications. Our apartment was locked down subsequently and we could not see my father when he was cremated. We were choked with both sadness and helplessness of the situation."

U Yan Aung, Myo Thu Aung's beloved father, was a long-service employee working for Myint & Associates Co., Ltd. (M&A) a sister company of MPRL E&P before his unfortunate passing. Myo Thu Aung said how the news had saddened the company personnel when he finally decided to break it over the phone.

"I reported what happened to my manager of the Material & Logistics Department and my father's boss who sadly replied how he considered my father not just his chauffeur but also his best friend. Then the news reached our CEO who in





From Page 8

Would you like to share the production enhancement operations and the results up to this point of the fiscal year 2020-2021?

Currently, the operations in Mann Field produces more than 1,000 barrels of oil per day on average. The production enhancement campaigns for the first half of the year 2020 include completion of the spot water injection program for four wells, drilling out BP (Bridge Plug Packer) for two wells, and well-servicing activities to optimize field operations.

We understand you are an active participant in the CSR initiatives in Mann Field.

Regarding social impact management in Mann Field, our Field Operations Team has the opportunities to work together with the CSR Team in Trash Hero Minbu's clean-up activities, rainy season's tree planting activities and the OGM (Operational Grievance Mechanism). Therefore, we have been able to develop and maintain a warmer social relationship with the local people from villages surrounding Mann Field.

How have you taken care of your health during this health crisis which affects our work and personal life?

It's really important to continue looking after our physical and mental health before the pandemic comes to an end. This will not only help with our general well-being in the long-term, it will also help to fight COVID-19 even when infected.

First, I adhere to a healthy and nutritious diet to boost my immune system to function properly and defend invasion. Second, I avoid drinking alcohol and sugary drinks. Third, I avoid smoking as smoking can impact the respiratory system and result in implications in case of contracting COVID-19 which attacks the respiratory health primarily.

Fourth, I exercise every day. WHO recommends 30 minutes of physical activity a day for adult people. Regarding the coronavirus, I have learned how to take care of our own fitness and health effectively. I understand we need to pay attention to our food and physical activity levels. Henceforth, working on developing healthy habits and build a healthy lifestyle will make a difference.

What is your observation with regard to the general outlook of the global oil markets in coming months?

According to oil price monitors, Indonesia's Minas prices rose to \$41 at the beginning of October and fell to \$38 at the end of the same month. However, according to my studies, I believe long-term oil price trends are now appearing more positive as we approach towards the end of this year.

Industry analysis like Goldman Sachs' projects the oil market to recover in 2021 as the coronavirus-induced oil demand collapse is alleviated to an extent by the probability of successful production of a vaccine. The forecast is international benchmark Brent crude will pick up to \$65 per barrel from \$45 per barrel in the third quarter of 2021 and settle at \$58 by the end of 2021. WTI crude is at the moment anticipated to hit \$55.88 from \$51.38 next year. The World Bank expects that the major benchmark oil prices above will be on an upward trend after 2020 to reach \$70 per barrel on average.■

From Page 9

wealth of information on geological sciences off the coast of Myanmar and confirmed the potential for oil and gas; this large subduction zone moves about 3 cm annually, which we observed from this trip; and the Indian plate is moving northward, colliding with the Burmese plate (confirmed by the indication of acquired data). It will be interesting to see what kind of geological changes occur 10 million years from now. Likewise, Dinosaurs appeared around 160 million years ago (the Jurassic Age), then disappeared after a few million years.

During the Eocene Age, about 35-40 million years ago, primitive humans appeared. The human lifespan is just a blink of an eye compared to the geological time scale. It is unlikely that there will be any humans in the next twenty million years. However geological processes will change and go onward. ■



From Page 10

return showed his empathy towards our loss and supported with one million kyats for my father as bereavement money. Although being asked how they could help me, I could not think about anything to request at the time as I was swallowed with sorrow. I could only say 'thank you' to our CEO and everyone for their benevolence."

The family could not have the closure yet given there was an important custom that had to be completed. Myo Thu Aung continued:

"We wanted to offer alms and robes to a monastery as a formal post-funeral service for my late father within a week so that he could collect merits and gain a good afterlife. However, we could not go outside for being under the quarantine's rules and social distancing restrictions did not allow us to gather at a monastery. Personnel from Myint & Associates and MPRL E&P arranged donation of alms and robes to a monastery on behalf of our family for which we have been very thankful. We appreciate the colleagues from the Material & Logistics Department for helping us to buy necessary medicines and household supplies during our stint at a community-based quarantine facility as lockdownees."



Finally, the nightmare was over--Myo Thu Aung, his mother and his brother, who had been in primary contact with their late father, went home after testing negative for COVID-19.

As the year 2020 was rounding up, some good news about COVID-19 vaccines have been making the headlines in the western corner of the world. What is the possibility of returning to work with some sort of normality? Myo Thu Aung mulled over

"Unlike the first wave, the second wave hit Yangon hard due to a large population and there was a weakness in following the guidelines of the Ministry of Health and Sports (MoHS). As of mid-November 2020, in the aftermath of the general elections, there was a slight reduction in daily positive cases. However, we have to wait and see the results again for some more weeks to understand if the trend is really going downward. There is a growing hope around the world to get a vaccine ready soon. I guess, for all of us to resume office safely, it will take a few months per se."

After having his own share of a corona-coaster, the Procurement Officer was ready to offer some messages.

"It is a blessing that our company remains resilient and continues supporting its employees affected by the pandemic despite non-profitable oil prices. As a matter of fact, everyone is wont to stay resilient with the pandemic wreaking havoc across the various sectors of the economy and prolonging people's suffering. It's true 'health is wealth'. Let's keep protecting our health so that our lives and the economy will recover quickly."



Block A-6 Integrated Development Project What are pre-FEED and FEED?

Brian Logan

Integrated A-6 Project Development Team Lead

Introduction

You may have heard that the ultra-deepwater integrated Block A-6 Project is now in pre-FEED stage progressing toward FEED. But what does that mean? What is the significance of FEED?

FEED stands for **Front End Engineering and Design.** It is the project phase where "the i's are dotted and the t's are crossed". It is the time when the prior assumptions are confirmed with more certainty and more accuracy. It is the time when all remaining questions are answered before fully committing to move forward with a multi-billion dollar project. FEED, in essence, is the final phase of project due diligence.

You may ask, "But I thought we already declared a commercial discovery?" A more accurate statement is that we have discovered what we believe will be an economic project, based on what we know at this time and what we expect to verify over time. That preliminary assessment is based on a lot of assumptions, some within our control and some outside our control. FEED is the time that we confirm, with a reasonable and acceptable level of doubt, the exact and final conditions, and confirm that all prior assumptions are correct, to the point that all parties, including banks and lenders, are willing to put up the money to move ahead. At the end of FEED, while submitting the project for approval by MOGE, the parties then make a **Final Investment Decision** (FID), which is a firm commitment by all parties to move forward with the development. Therefore, FEED is the final phase of evaluation before moving forward with the commercial development.

Some **commercial confirmations** that are being pursued are the identification of a buyer at an acceptable price for the life of project, and verification that we have reliable means to deliver the gas to the buyer for the life of project. During FEED, all the details of the gas sales and gas transportation will be finalized with firm executed agreements.

Some financial concerns during FEED are confirmation of the capital investment amount, confirmation of operating and maintenance expenses throughout the project life, verification of the gas volume available for sale, and verification of the price of the gas to be sold. In simple terms, it is confirmation of the cash flow over time and rate of return on the investment, and confirmation that the economics justify the operational and capital risk. FEED is also the time when project financing will be secured, so that project funding is guaranteed once the FID is declared.

The **technical work** during FEED will confirm that the reservoir and wellbores are capable of producing at the required rate and for the required period of time, and the production systems (subsea and surface) are also capable of delivering the same quantities. In other words, the technical design must be able to support the assumed project cash flow for the entire life of project.



Fig. 1: The three conditions for taking the Final Investment Decision (FID), the conclusion of a successful FEED

An important point is that MPRL E&P is not in the offshore oil and gas production business, as you may have believed. Instead, we are in the money-making business, the same as any other legitimate company. No matter what product is produced or sold, the end goal is for the product to generate revenue at a sufficient rate to offset the cost of production and provide a reasonable profit, or "return on investment". Although the business models may vary greatly between companies and

industries, the end goal for all businesses is the same: "to make money".

For the oil and gas business, the business sequence is Exploration, Appraisal ending with Pre-FEED, Development starting with FEED and continuing until FID then implementation, Production and then end of life Decommissioning/abandonment.

To simplify the topic, let's assume that you want to start a business to make fabric bags, and compare that simple business to the Block A-6 Development. Although the Block A-6 project is much more complicated, expensive and risky, the same basic processes and philosophies apply.

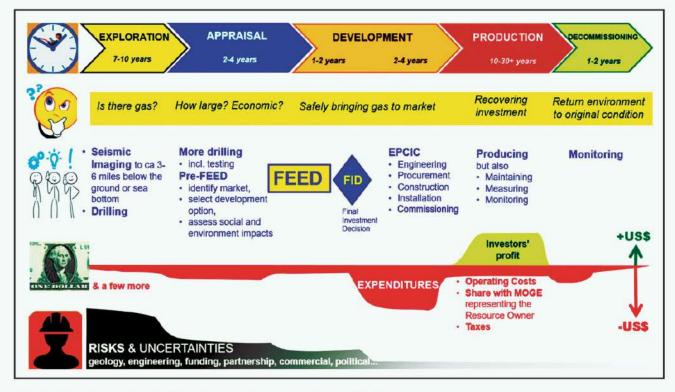


Fig. 2: The (simplified) life of a petroleum project, 25-50 years



The Exploration Phase

During the exploration phase for any new business, you evaluate a new area where you have little initial knowledge. You explore the area at a high level looking for any opportunities for new business, then look more closely at particular areas once you have narrowed the search. You might consider many different geographical locations, and may consider many different business types such as cooperative, retail, manufacturing, or service.

In the example of bag making, which provides an ecological substitute to plastic bags, you may have also considered manufacturing the various fabrics and materials used in bag sewing, opening a retail store to sell the finished bags, and starting a bag distribution center, in addition to the core business of making bags. In the process, you identify several areas of interest and gather basic information on each of those ideas until you uncover a business idea that you believe is most likely to have merit. You might go through multiple attempts before finding a reasonable option. You may also determine that no reasonable opportunities exist in that area, and decide to look at other areas instead of making further investment in that area.

By comparison to the oil and gas industry, this is equivalent to securing an offshore concession, conducting seismic and exploration drilling to gather information until discovering gas which is believed to possibly be large enough to be a viable business opportunity. It is the riskiest part of the business as it may take multiple exploration wells before making a discovery, or you may never make a discovery and decide to leave the area without making further investment, as happens in approximately 2/3 of exploration projects worldwide

The Appraisal Phase and Pre-FEED

Pre-FEED means before the Front-End Engineering and Design phase and includes basic data gathering, as well as high level technical and economic scoping of the project. A successful appraisal process is the necessary premise of pre-FEED and starts after discovering what is **believed to have the potential for becoming a viable business opportunity.** Appraisal includes the process of confirming the size and scale of the potential opportunity: will our wells flow enough for long enough to economically sustain production? The key words are "have the potential for". The outcome of appraisal may be confirmation that the opportunity is large enough to warrant further investigation, but it may also prove that the opportunity is too small to be further considered.

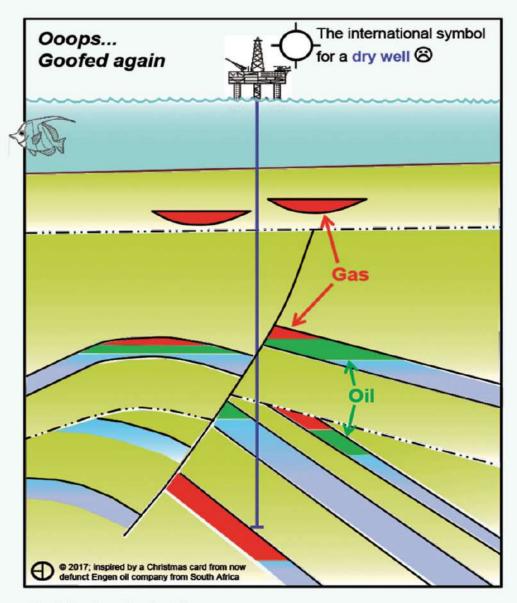


Fig. 3: Exploration is risky

Now let's consider how that would apply to your bag business. After considering many different business opportunities, you have discovered that bag making has sufficient potential to justify further evaluation. During the appraisal and pre-FEED process, you might consider how big the business might be. How big is the local bag market? Would the bag market be limited to that local area or would it extend to other nearby areas? Should the business scope be limited to making the bags, or should you also consider an integrated project where you make, distribute and sell the product? To answer these questions, you start gathering information in the area. You might visit bag shops in the area to check pricing, and check local marketplaces to gauge the consumption of plastic bags. You might also talk with local shop and stall owners to see if they would be interested in buying your bags. You would also check the availability and price of the fabrics and materials used for bag



Fig. 4: The (simplified) bag making process





making, and confirm the availability of sewing machines to fabricate the bags. You may also determine the best business model to fabricate the bags: home-made by a cooperative whereby you invest the seed capital, or centralized fabrication in a local factory. Using this preliminary information that you have gathered from the area, you make some gross assumptions about the cost of establishing and running the business, the market price of bags, the number of bags which can be sold, and the expected economic results which can be realized if a bag making business is established. Many of these assumptions are based on your past experience and knowledge of the area, but lack detailed validation and evaluation. The assumed costs for materials and sale price of finished product may be informed opinions based on conversations with potential buyers, but there are no firm contracts in place to confirm those economic results.

The pre-FEED process is a more detailed consideration than the initial exploration study, but still not sufficiently detailed to justify spending money to start the business.

The A-6 Project is **now in the pre-FEED phase.** The appraisal work was completed by drilling and flow testing additional wells that confirmed the reservoir contains gas volumes that are expected to be economic under the assumed conditions. The technical pre-FEED evaluation considered multiple development scenarios and defined the preferred concept based on preliminary engineering studies for each major component. Costs have been estimated based on industry knowledge, past experience and potential contractors' input, but still lack firm contracts to confirm the actual costs. The sale price of the gas is estimated based on current market conditions and preliminary discussions with the potential buyer, but firm contracts for the gas purchase have not yet been signed. Based on everything we believe at this time, the project will be economic. However, final confirmation of all these assumptions is needed in order to confirm the project economics and justify the significant investment required to fully implement the project. Those confirmations will happen in the next phase, which is FEED.

FEED (Front End Engineering and Design) Phase

FEED is the phase when all of the significant technical and commercial aspects of the project are fully confirmed with detailed designs and negotiated contracts. Upon the completion of FEED, all parties (including the government and lenders) consider whether to declare FID (Final Investment Decision). Only after sufficient parties agree to move forward is the project finally declared as a "Commercial Development Project" and advanced into the construction and implementation phase.

Let's again consider your bag business. During pre-FEED and Appraisal, you evaluated various business concepts, and decided that the business should be limited to bag making, and should not include distribution and retail sales. You obtained estimated pricing for raw materials and heavy-duty sewing machines, located potential buyers and established expected sales pricing, estimated local resources and labor costs, identified possible locations for the business with home-based vs factory-based fabrication, and confirmed that the business would be economic under the assumed conditions.

During FEED, all of the above assumptions will be confirmed. Contract terms for the purchase of raw materials and equipment will be negotiated and finalized. The decision will be made whether to use cooperative's workshops or a

centralized plant. Plans for the design and/or construction of the plant or workshops will be finalized, along with firm cost determination for any such requirements. Buyers for the bags will be confirmed, and bag sale agreements will be negotiated and finalized. Any required financing will be secured. All equipment and construction contracts will be ready for signature as soon as the project receives final approval. Labor will be confirmed and arranged for workshop or plant start-up. With confirmation of all of the above terms, the project economics will be verified using final and actual data. Only after this final confirmation, will you make the decision to invest your money into the bag business and move forward with the project.

The same applies to the A-6 Project during FEED. During FEED, all final designs and details will be finalized to the point where there is little unresolved technical or commercial definition. This will establish the Basis of Design for all of the detailed engineering and construction in the implementation phase. While the pre-FEED process includes negotiating and agreeing to key contractual terms for gas sales, which allows a reasonable level of economic assurance, the FEED process provides fully termed contracts for execution upon FID. Bid tenders will be issued for most major work during FEED, so that fully termed contracts are ready for award upon FID. Through this process, all major financial terms and project economics are confirmed. Using this confirmed economic information, the parties will also secure the necessary financing contingent upon FID declaration. The end of the FEED phase is the official Declaration of Commerciality, and the start of the implementation and construction phase.

The Next Steps

The Block A-6 Development is now late in the pre-FEED phase. Nearly all technical studies have been completed. All commercial agreements for gas sales and gas transportation are in progress, with the hope to finalize key terms by the end of 2020. FEED bid tenders are will soon be prepared so that they are ready to award as soon as all key commercial terms are confirmed. With a lot of hard work and a little luck, we hope to enter the FEED phase in early to mid-2021, followed by FID in mid-2022.

Shortly after that, we will be ready to "start making bags"

Want to know more about FEED? We'll be including more detailed papers in future Insight! publications to better explain various aspects of the FEED stage of this exciting project. And meanwhile, do visit our CSR shop, and its amazing collection of bags saving on plastics. ■

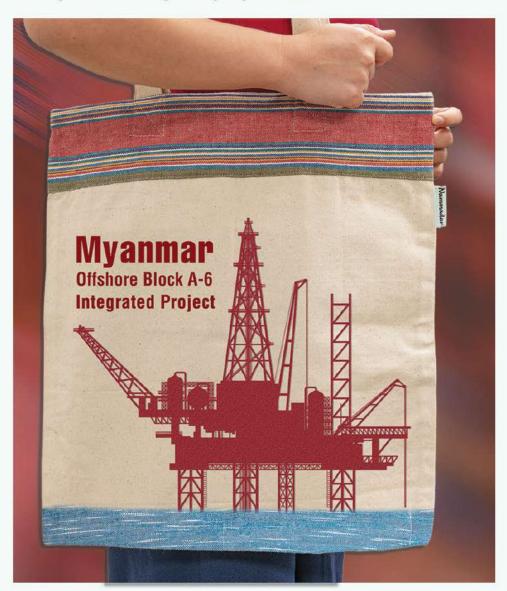
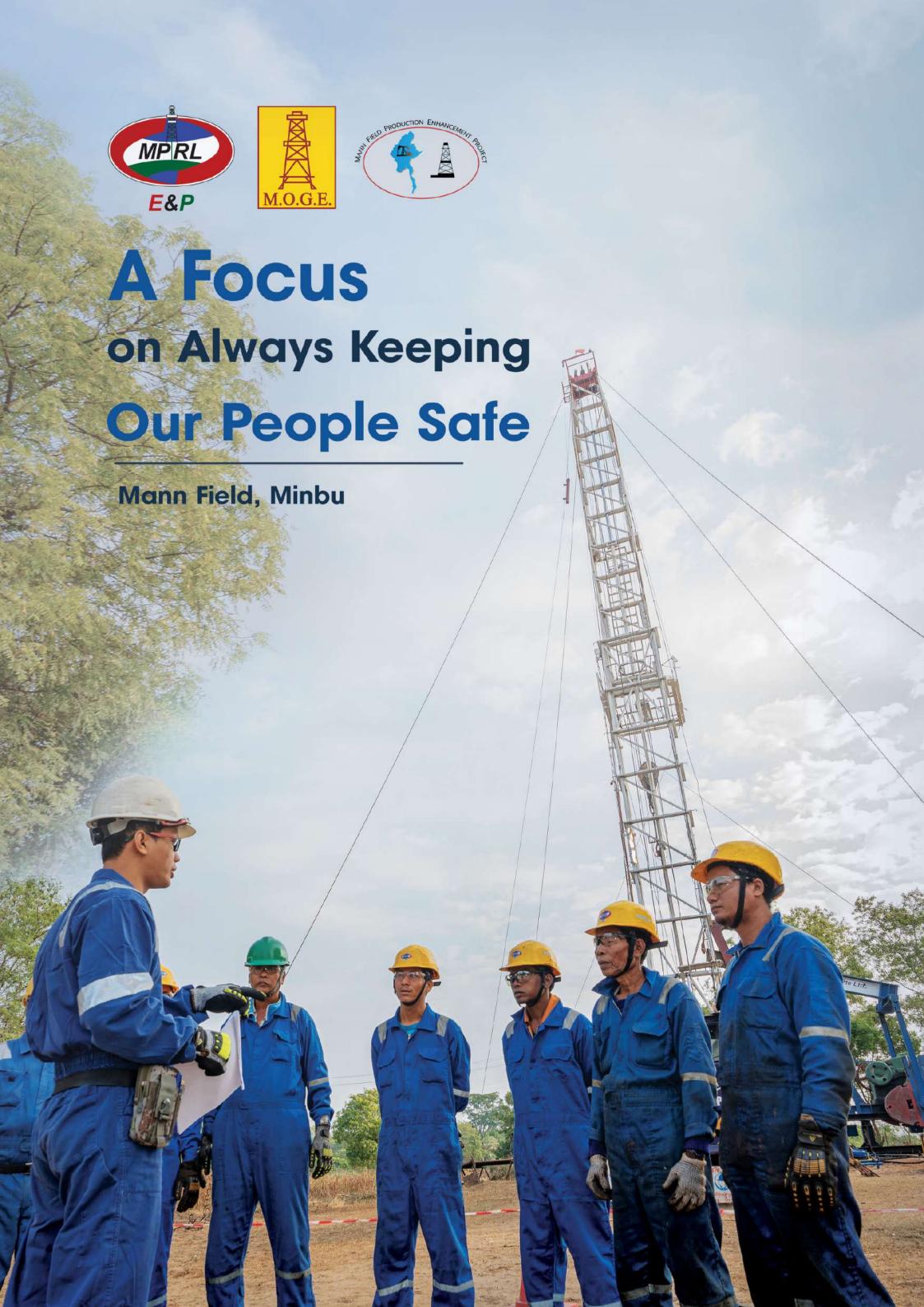


Fig. 5: A "bagged" gas processing platform





Field Management Team

All of the field activities such as daily Production Enhancement Operations, HSE activities, Field CSR activities, and Joint Venture communications are led by Field Management. We have so many sections to implement all of the field operations and have discussions with these sections for smooth operations on a daily or weekly basis. Our Field Management Team members subsequently were promoted step-by-step for well-managed the field operations. So, Management Team members were already caught up with all of the field activities and can tackle challenges.

Our company has a development plan for academic students from industry-related with technical and other universities especially for those who specialize in geology. There is an annual internship program. All interns want to learn the technical knowledge of our field operations and our field management arrange a plan to study field operations. They are also provided with a mentor who can explain operational techniques, how to apply academic theory practically and show the differences between academic and work life. Our field operations study plan not only focuses on interns but also on fresh graduate junior engineers.

Field Management implements HSE activities such as operational safety procedures, creating positive safety culture, taking care of the health of field staff, planning for environmental impact, emergency drill exercises and CSR & Communications plan like the OGM Mechanism, collaboration for community infrastructure, necessary arrangement of vocational trainings, and mobile clinic for communities.

We systematically collect field operational data through either software or a filing method. They provide the required data to technical and other business support teams to proceed with the forward plan. Data acquisition is very important for our field operations because most operations depend on old data to review for the next plan. With the aid of technology, we can see the well problem and downhole equipment conditions.

We have to negotiate with third-party services for transportation, catering and laundry services, and all of the users' complaints submitted through CARE Card to our field management. We also collaborated with other operational third-party services such as Schlumberger to avoid operations delay. If we have to operate big projects such as Hydraulic Fracturing and Semjet Operations, etc., we prepared necessary pre-operational actions for expert consultants. We always keep an eye on our operational equipment and materials so they are ready for our operations in the warehouse. Before the purchasing process, we need to confirm if purchases are actually needed or not as per our supply chain.



Joint Venture communications is very important for the long-term relationship with stakeholders. We ensure building a good relationship with MOGE in flexible ways. We have a lot of operational difficulties and some are related to MOGE to solve the solution as per contract terms and conditions. We also maintain a good relationship with local authorities including township administrations and other governmental bodies such as working partners, and the Labor & Social Security Board (SSB). During COVID-19, we discussed with MOGE and Local Authorities for field operations in compliance with the MoHS Guidelines such as setting up quarantine zones suggested by authorities.

People management is one of our responsibilities. We assess their performance and hold discussions to endeavor individual improvement and career development. To get the perfect team, we need to have quality members. Our field operations activities are teamwork performance and we have always closely monitored each team member. We tried to avoid blaming each other in discussion with our team members and explained present conditions of our work in order to be safe and successful.

Administration issues have been carried out and solved with the collaboration of Human Resources and Administration Departments. Our Field Operations Team do not have separate departments but we have Field Business Support Officers for HR, Admin, and Finance issues. We have many casual crews as per operational requirements. Our Field Management Team is working together with Field Business Support Officers not only for attendance & salary but the labor & SSB processes to comply with current law and order and Casual Employment Contract (CEC).



We implemented small construction project to raise awareness on environmental impact. We have Construction Engineers' Team called Special Project for construction and renovation of necessary places. We have focused as planned on the neat and cleanliness of GOCS (Gas & Oil Collecting Stations) compound, workshop, warehouse, and base camp by following Environmental Management Plan.

In conclusion, we, the Field Management Team, try our best for our company while accelerating to enhance the existing good performances of HSE and CSR activities to meet targeted field productions. We look forward to applying the lessons learned and get through everything by excellent teamwork. We believe in "Let's not dwell in the past, focus on the future."



U Zayar HtetAssistant Field Operations Manager
Field Operations Department

I have been working with MPRL E&P under the Mann Field Production Enhancement Project since 2007, and became the Assistant Field Operations Manager in 2017. Before my current position, I had worked in various field operations as a supervisor for Gas and Oil Collecting Stations (GOCS) under Production Measurement, Pulling Unit in Remedial and Workover Operations, Downhole Workshop, Echo/Dynamometer, and Data Inputting and Processing. In my current position, there were many challenges regarding people management, communications, and negotiations with MOGE personnel and communities around Mann Field. Due to the favor and guidance of my seniors, I was able to cope with challenges, and I am now accustomed to the nature of my job.

My main role is to maintain a smooth running of

daily field operations according to our company's policies. Therefore, I have to emphasize on operations and people management. For daily operations, I have to monitor and track all materials which are being used to avoid material shortage, operational downtime, and cost waste. So, we manage and drive the leaders of each operation. As per the Performance Compensation Project (PCC) of Mann Field project, we have to negotiate and work together with MOGE. On a yearly basis, the Technical Team makes plans for drilling, Workover Operations and Water Flooding, which is one of the enhanced oil recovery methods.

Mann Field was discovered by MOGE in 1972 as the second-best onshore oil producing field in Myanmar and achieved peak production up to 24,711 bopd in 1979. After reaching peak production, production decreased in subsequent years. Our Technical Team planned for many methods of operational activities such as Greenzyme Treatment, Additional Perforation, Deepening, In-fill Well Drilling, and Water Flooding for oil recovery. The Field Operations Team is responsible for implementing these activities as per the timeline. Communications, negotiations, and organizing with MOGE personnel is a major part of successful operations to meet targets. All enhanced oil recovery operations are led by our Field Team with the assistance of operational technologies, and material planning. MOGE is responsible for supporting necessary facilities for each operation.

There are 14 communities around Mann Field, and our company is responsible for the local community's social development. We have a CSR Field

Team to implement CSR activities, and we have to drive whole field teams to actively participate in each of activity such as Community Infrastructure Development, Community Capacity Building, Community Healthcare Program, Stakeholder Engagement, Community Livelihood Development, Community Waste Management Program, and the Operational Grievance Mechanism (OGM).

In my opinion, people management is the key for organizational development and improvement while monitoring the ability and behavior of each junior co-workers — assigning them for suitable duties, guiding them to self-improvement, and reviewing those who perform well to maintain the sustainability of field operations. Successful operations with human, and environmental safety is our major goal. The Environmental Compliance Certificate is proof of our achievement.

On behalf of Field Management, I take care of employees' mental health. As our working rotation schedule is 4 weeks working and 2 weeks off, Mann Field means more than being together with family with us having more interactions with co-workers. It is obvious that mental and physical health are interrelated. So, we set up facilities such as a library, recreational room, gymnasium, a playground, table tennis, and futsal for leisure activities. Working out plays a vital role both for mind and body. Playing sports with teams can also build a stronger and better team, so I play sports everyday with my colleagues. To meet targets successfully, all teammates need to be strong physically and mentally.



U Zaw Thet Senior Engineer Field Operations Department

I have a Bachelor's Degree in Petroleum Engineering from Yangon Technological University and a Master's Degree in Petroleum Engineering from Mandalay Technological University. I worked at the Petroleum Department of Thanlyin Technological University as a lecturer for 2 years. In July 2010, I joined MPRL E&P as an Assistant Engineer and am currently working as a Senior Engineer.

I have had experiences with most of the operations in Mann Field such as Well Servicing, Workover Operations, and Echo/Dynamometer as Production Team Leader. I have also taken roles to participate in GreenZyme Treatment, Acid Treatment, and Water Flood Projects for enhanced production. Currently, I am taking on Field Management responsibilities for about 2 years as the acting Assistant Field Operations Manager, building a good working relationship with my team members. In addition, I have built a good relationship with stakeholders, MOGE personnel and communities by cooperating well in ceremonies, traditional festivals, and CSR activities. Simultaneously, I have made progress on my technical, problem-solving, decision-making, delegation, and communication skills from all trainings provided by the company and cross functional trainings for my professional development. I have actively participated in the safety culture of our company, too. Moreover, I perform my duties to implement and complete tasks and plans, while mitigating the environmental impacts as per the Environmental Compliance Certificate (ECC) for Mann Field. I also try to adjust well with the adaptability and change management in today's oil and gas industry.

As per the yearly internship program, I have actively participated and shared technical knowledge with young engineering students to help them gain practical experience for their professions. This program is our mission, and is a great opportunity for young engineering students.

COVID-19 has wreaked havoc on the oil prices across the globe. The outlook for the oil and gas industry will depend on how quickly the govern ment can contain the coronavirus outbreak, how successful their efforts are, and what lingering impact the global health crisis has on economic activities. But it will definitely be better in a few years. To remain competitive for oil production in Mann Field, we have to make new operational strategies for resiliency during this period of hardship. According to the current global pandemic, all staff in Mann Field followed MoHS Guidelines to prevent coronavirus spread in daily operations. We followed and prioritized procedures such as wearing masks and face shields, washing our hands, using hand sanitizer, exercising social distancing in every worksite, promoting online working, isolating staff with quarantine zone if needed, and running operations with a minimal workforce.



In Loving Weynory The Light Shines On in Heaven

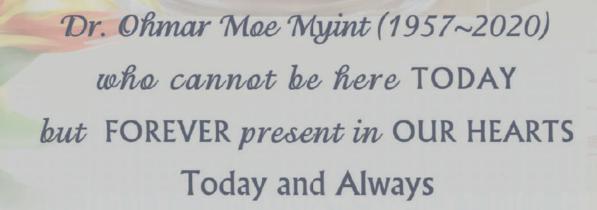
A Life well-lived is like a light so beautiful and rare

That everyone within its glow is blessed because it's there.

And though the light goes out on earth in heaven it shines still

And the beauty it revealed to us

lives on and always will.



တာဝန်ကျေပွန်မေ့သားမွန်တို့

အပြစ်ကင်းဇင် ကြည်လင်မျက်နှာ ပထမဆုံး ချိသာပြု းမှား မြင်လိုက်ရသည့် တဒင်္ဂပင် မေမေ့ရင်ကိုဆေးမြစေသည် မေမေ့ကိုယ်စွားသားလေးမှား၊

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လူလားမြောက်ပြီး ဆယ်စုနှစ်ခု၊ မဖြည့်လုပ် မေခေသားများ အဓိမြေတွက် တာဝန်ကြေသည် မေခေမိုတိ ရှိုင်းမရှိပြီ.... မေမေမွေးကျိုးနှပ်ပါပြီ။

To Mother's Dutiful Sons

Nine months conceived, born on tenth, Bright young faces on innocence Mother's heart resound with joy, At first glimpse of your beautiful smiles Mother's own flesh - little boys.

Year by year from time of birth
They grew up strong and smart
And even before a decade was reached
Young and daring for their age
Crested high seas full of rage
Hoisting sails out in small boats
They made Mother proud of both.

Maturing but still under twenty
Mother's sons had done their duty
Towards the Motherland, fulfilling,
Mother's heart with unsurpassed elation
You are, Mother's worthy offsprings.

Nge Thu May May













From Page 17



U Nyi Nyi Zaw Engineer Field Operations Department

In 2009, I graduated with a Bachelor's Degree in Petroleum Engineering from Pyay Technological University, and a year later I joined MPRL E&P in August, 2010. As soon as I left university, I faced a lot of difficulties and challenges regarding a practical working life. During that time, I understood the concept of work by asking questions, learning from seniors, and studying in my free time. I have

I graduated with a Bachelor's Degree in Petroleum Engineering from Pyay Technological University and am currently working as Field Operations Engineer with MPRL E&P (Enhancement Project) in Mann Field. I joined MPRL E&P on April 9, 2012, and since then I have gained a lot of knowledge, experiences, skills, and enjoyed working with the team.

During my eight-year service, I have been working at Gas and Oil Collecting Stations (GOCS), then moved to the Downhole Workshop, Pumping Unit Maintenance Team, Well Servicing, and Workover Operations.

Now I am working as part of the Echo/Dynamometer Team. The nature of an Echo/Dynamometer Engineer is to monitor and inspect the well performance by interpreting the Dynamometer Cards and Acoustic Survey Plots. Depending on the well analyzer plots we can make decisions and be able to understand what is going to be in such wells, what happened in such wells, and how to improve.

The two main functions of a well analyzer are mostly applied in Mann Field: Dynamometer and Fluid Level Survey. The Dynamometer is used when we need, or want, to know about the performance of pumping string and downhole insert

become familiar with my crews and also enjoyed working with them. Everyone works with a good team spirit in Mann Field.

I was first assigned as a supervisor for the Remedial and Workover Operations where I supervised a number of tasks – Swabbing, Bailing (clean out bottom), Bottom Hole Assembly and Change All Tubing, Raised Up/Down Pump Setting Depth, Pump Service with Paraffin Cleaning, BAC setting (anchor tubing) or removing, and Zone Isolation/Combination. I actively participated in special projects using technology such as Hydraulic Fracturing and GreenZyme Treatment operations. In order to gain more knowledge, I was assigned in Downhole & Pumping Units (PPGU) for two weeks.

After that I was assigned in Echo-meter/ Dynamometer Survey. If the well behavior was bad, I had to inform and assist all pulling supervisors to make decisions for Remedial and Workover Operations. During all operations, we always prioritize safety first and comply not only with safety policies but also environmental policies. I also actively took part and supported CSR activities for the surrounding communities.

Now I am working in data processing and configuration of production and field operations. In the early mornings, I have to inspect daily production data, discuss with the night team-leader, and input daily production data with a MOGE coworker in detail. I update daily cost tracking, service times, well service records and daily well views, and check hourly rates, and inform team leaders and all pulling unit supervisors if each producing well is less than Technical Production Limit (TPL). I have to send mail for invoicing processes on time. I also have to plan and encourage for repumping the unit effectively with the respective supervisor after an Electrical Shut Down. Moreover, I monitor daily water injection project and production comparison of water compensation. If needed, I also run a Spartek Tool inside the well with a wire line unit to get bottom hole pressure and temperature of reservoir. And after that I interpret the retrieved data and send it to the Yangon Office.

I am always proud of being a Petroleum Engineer with MPRL E&P. I try to be innovative with technologies for field operations, and contribute my experiences to be a part of supporting force for the long-term success of MPRL E&P.



U Soe ThihaEngineer
Field Operations Department

pump condition. For example, is the rod unlink due to a screw or is it parted? Is there exceeded friction between the pumping string and tubing? Is the downhole insert pump worn out, or are the valves in an abnormal condition? Is there something suction blocking of downhole insert pump? For a Tluid Level Survey, we can know and understand how much fluid level is above the pump setting depth. How much is the casing pressure? How much pressure is produced from the bottom hole pressure in the desired well? And even for gas flow rate?

An Echo/Dynamometer Engineer's role is really important in oil and gas production. We need to familiarize ourselves with the oil well behaviors and performances. We monitor all the wells and run the well analyzer to interpret on it if there are abnormalities in the wells. We thoroughly study technical points from every angle and provide solutions -- taking into consideration and idea on how to solve or overcome the problem of the wells to the leader of well servicing team. A Well Analyzer Engineer's technical information of well performance interpretation is very important in daily petroleum production and servicing. Our Field Operations Team is working skillfully in harmony for operations, while preserving safety culture. We are always thinking about and trying to produce residual crude oil in compliance with environmental policies.

In conclusion, well analyzing provides correct results for daily oil and gas production and servicing teams. And I have always loved to study and work on the well behaviors. I felt I was born to work in the petroleum field. MPRL E&P has lit up my career and now I am running with great force to be part of our company's greater and brighter future. My favorite motto is "Love your job, and you will be loved!"



Daw Thin Thandar Win Junior Engineer Field Operations Department

I have been with MPRL E&P for two years, as it is my first job, and I am glad to participate in the special edition of Insight! Though the transition from student to professional life was difficult at first, working at Mann Field (which was destined for me since my intern days) has led me to become a responsible and reliable young professional. I had been undergoing cross-training for field operations such as Echometer, Pulling Unit section etc. and performed the tasks independently during the last few years. Now, I am assigned under Data Inspection and Processing where the combination of engineering and management lies.

My day starts with a daily field report preparation along with production data inspection for the accuracy of individual well's production in cooperation with MOGE officials. The daily basis of data inspection is very critical for the invoicing process. It is then followed by operational data inputting and updating in technical software (WellView), cost-tracking servicing wells for project planning and budgeting, updating technical facts so that all Pulling Unit supervisors can review the well and assist their technical concept and operational decisions. I am also responsible for daily data monitoring such as checking hourly rates, and production comparisons to spot which well behavior is changing and the injection wells condition to monitor irregularities. If something is abnormal, I discuss with section leaders to find the root of problem. Moreover, we need to check the Production Figures like daily sales loss, bulk tank water out (TAC) and discuss with Team Leaders for



better outcomes. We also support required technical data for technical teams from the Yangon Office like updates on distinct well behaviors, trend of production figures on a weekly or monthly basis for further invoicing processes.

I also keep an eye on daily operational activities and communications with all sections including MOGE personnel for field operational management. When there is an emergency such as spill or fire, everyone must contact Base Camp via radio or mobile phone. We then follow emergency response procedures and proceed to handle the situation in time.

To sum it up, we provide informative data and support, discuss technical aspects, and drive operations. That's why soft-skills such as people management, effective communication, being attentive and accurate are the traits required for managing our wide scope daily. I might not have experienced critical operations practically but I like to learn and try my best to become a competent person. Every section is interesting and challenging. This section shows me the unification of technical and practical knowledge, problem analysis, being supportive, and cooperation within organization are the keys to the success of team.



U Chan Myae Aung Field Geoscientist Field Operations Department

As a Geoscientist with MPRL E&P, I would like to share my knowledge and experience about the responsibilities of a Wellsite Geologist in a drilling campaign. The role is like being a translator between Geology and Engineering. Wellsite Geologists monitor the drilled cuttings and all related data such as drilling operations, then we interpret the data to understand the nature of drilled rock formations. Afterwards, we prepare reports to inform all drilling engineers about the well status

including predictions for next drilling section.

Communications is also key, as we frequently communicate with the Technical Team and Rig Supervisors, and the Chief Executive Drilling and Executive Geologist (MOGE) at the wellsite. A geologist works under the supervision of the drilling operation supervisor and headquarters – normally I work closely with Mud Engineers, and Drilling Operation Engineers. I work frequently with third parties like Mud Loggers and Wireline Logging Engineers. I am also assigned as the main contact for the Executive Geologist (or MOGE representatives) for operational approvals and reporting.

During a drilling campaign, I make descriptions of drill cuttings coming out of the borehole, and identify and classify the drilled rock by analyzing the drill cutting. Evaluating cuttings allows me to check borehole stability and confirm the presence of hydrocarbons. This analysis is also important to help drilling optimization. We analyze offset well logs and data to correlate with the current well to interpret the hydrocarbon potential at the well. Correlations are done using data provided by third parties such as MWD/LWD for wireline logs, gas, and cuttings. This ensures the formations being drilled in the borehole are recognized and

identified. This can help us to predict the reservoir quality and calibrate the current geological models. We can foresee important events like significant gas changes, drilling breaks, and potential hazards which occur in offset wells. The final interpretations are reported to Technical Team members at the Yangon Office for production testing. There is two-way dialogue between Well Site Operation Team and the Technical Team at headquarters to find the best solution as the Wellsite Geologist has the responsibility to advise both teams to either carry on or stop drilling-we usually make decisions as per the Yangon Office. Daily well reports are developed to inform the status of geological data and operation status. Once the operation is completed, final well G&G report is sent to Geoscience Department and Technical Team to archive for database.

Health, Safety and Environment is a key culture at the oil & gas industry. Safety is one of the most important areas for well site operation. To sum it up, a Wellsite Geologist's duty is one of the most important roles at the drilling operations like a transit hub between Engineering and Geology. Every assignment is interesting and challenging to me.



Saw Ne Lin Tun Engineer Special Project Team

I was born in Yangon on November 2, 1963. In 1984, I had completed my study at the Government Technical Institute in Insein, specializing in Civil Engineering. I started my work as part of Measurement Team with MPRL E&P in 2000 and went on working for Environmental and Special Project in 2002.

My main responsibilities include working on drain pits inside Gas and Oil Collecting Stations (GOCS) and other field requirements such as construction of gear reducer containment and installation of anchor post. Besides, I had built single, double and containment cellars, GD2 mud tanks roofing and

tarpaulin sheet laying through 2009 to 2011 and supporting infrastructure development in the villages which is also part of CSR Program and provided the necessary construction advice if needed.

I also worked for Asia Drilling, well MDE-1 at Ywar Thar Village in 2011. I also installed the fuel oil storage tank and dispenser at the warehouse. I had constructed the school lavatories of Ywar Thar and Mei Bayt Kone Villages and school of MOGE housing and other field works that need the assistance of Special Project Team from 2011 to 2016.

From 2016 through 2020, I have been constructing concrete pads and additional cellars, operator's huts for water injection wells, fence for pumping units, reconditioning of sludge tanks and constructed their roofing at sludge management compound. For the camp, I have to connect the grey water line and septic tank over flow line separately from E and S ablutions and other lavatories in the base camp. I also had constructed the bio filter tank, septic tank overflow line pit and grey water line pit at the outside of the base camp compound. During my working years, I have assisted CSR Team with community infrastructure development whenever necessary.

I have also joined environmental activities such as trash collection and trees planting throughout my working time. Whenever I work, I always focus on the safety of people and environmental impacts.



U Zin Min Aung Engineer Special Project Team

I was born in Myan Aung Shwe Pyi Thar Oil Field, and in 1988, at the age of seven, I arrived to Mann Field because of my father's work. I grew up learning in Mann Field's education school. I am currently working as a Civil Engineer in Special Project Team. I passed Basic Education High School in Minbu and attended Government Technical Institute (GTI) in Yenangyaung.

In 2002, I joined MPRL E&P initially working as a Daily-wage Laborer in a Special Project section. Afterwards in 2003, I became a permanent staff member as a Field Technician. I then worked for a Special Project according to job requirement. I obtained promotions from 2010 to 2013 where I

Insight!
Publication started in 2015
Anniversary

rose from a Field Technician to Assistant Engineer to Engineer. I worked together with my Senior Saw Ne Lin Tun in a special project section. Before operations, I have to conduct daily toolbox talks on Job Safety Analysis (JSA), Standard Operating Procedures (SOPs) in two-way communication, and open type to work as per Health and Safety Procedures and MoHS Guidelines. During the past 17 years, there have been no accidents under my supervision.

I drew up and designed estimated costs to con-

struct single and double cellars, gear reducer containment, and containment cellar mainly to reduce environmental impacts in Mann Field. During the drilling operations period, tarpaulin sheets were laid along the drain line around the mud tanks. Also supported the wellsite supervisor in swabbing and other servicing operations. I installed the anchor post in the work site area through discussions with all pulling unit supervisors. Later in 2016, I constructed concrete pads, additional cellars, fences for pumping units, reconditioned sludge tanks, and also operator huts used where injection pump is settled. I construct-

ed a zero-discharge pit for working areas of Warehouse, Downhole and Workshop.

I carry out necessary renovations in the camp based on findings inspections of the camp doctor. I also have to work to collaborate with the environmental officer according to instructions from Field Management, and participated in CSR activities for the assistance of infrastructure development in the communities. I am very happy working with my colleagues. They are kind and helpful, and I am deeply proud of my work.



U Min Zaw Tun Field Business Support Officer Field Operations Department

Mingalarbar! It is such an honor to participate in the special edition of Insight! I was born in Myingyan and my career life began as a Finance Assistant at Myint & Associates Co., Ltd. (M&A) in 2003. While working I was able to earn my B.A in Geography. Afterwards, I transferred to Mann Field Operations as a Field Technician at MPRL E&P. In 2010, I was promoted to Administrative Assistant in 2010, then on April 1, 2010, I became a Senior Administrative Assistant.

My current position is Field Business Support Officer for Field Management and Operations. My responsibilities include handling administration process of Mann Field's staff and daily wages laborers as well as business support process of Mann Field under instructions and supervisions of Field Operations Management and Yangon Head Office (MYO). The nature of my job requires cooperation with sub-teams from Field Operations and governmental organizations, MOGE for the matters related to administration and business processes such as managing coupons, meal allowances, and incentives. Our team has to cooperate and support HR functions and activities for the convenience and ease of the staff working in Mann Field. I am very pleased to be working with MPRL E&P. Since the beginning, I decided to invest my time while fulfilling my responsibilities, and continue to do so for the benefit of our company.



U Zaw Lin Aung
Field Business Support Officer
Field Operations Department

My career with MPRL E&P Group of Companies began 23 years ago. At that time, I had just finished the matriculation exam, and started employment at Myint & Associates Co., Ltd. (M&A) on July 1, 1997. I was first assigned under the Administrative Department. I then moved on to Engineering Department, Export and Import Clearance by Airfreight and Logistics Department where I had some diverse duties. After 3 years working at Myint & Associates Co., Ltd. (M&A) I was able to earn a degree in history from the University of Distance Education (Mandalay). After which I joined MPRL E&P as a Technician under Production Measurement on November 30, 2000, and became permanent staff member at MPRL E&P on March 1, 2002.

After 5 years as a Technician with the Measurement Team, I had the opportunity to work as An administrative Assistant to resume my very first career path. My hard work and reliability really paid off on April 1, 2010 when I was promoted to Senior Field Administrative Assistant. Pursuing my lifelong career interest, I became a Field Business Support Officer on January 1, 2017. One precious memory in my career life is achieving the Yearly Outstanding Performer Award for Fiscal Year 2018-2019.

Let me describe my role in daily operations. As we are working together with governmental organi-

zation (MOGE), I have to manage incentives for MOGE officials and crews, arrange, inspect, and issue fuel for Pulling Units and Vehicles. I cooperate with other departments such as HSE and CSR for their field activities, arranging crew-change transportation, providing overtime timesheets for MPRL E&P's staff, issuing casual laborers' salary, and providing documentation and processing for the Social Security Board (SSB) for our staff and laborers. I work together with the Camp Boss for base camp inspections along with the Camp Doctor. On daily basis I need to communicate and cooperate with other departments for employment contract renewals.

Being a part of company for a long time gives me the opportunity to be an Administrative Officer; where I am able to explore a variety of working experiences in different sections, and also finish my education. Again, I would like to show my gratitude to our CEO and his family for my employment. Thus, I am determined to be highly competent and dutiful for the benefit of our organization.









INTERVIEW with M&AOSB Project Manager

1. Could you please explain what an "Offshore Supply Base" is in general?

An Offshore Supply Base is a logistic platform where oil & gas offshore exploration and production activities rely on to perform their activities. It is an essential part of any oil & gas offshore project, ensuring that the materials and resources required (either by drilling rigs or production platforms) are delivered efficiently and on time. An Offshore Supply Base requires the following infrastructures within the same premises: a jetty capable of receiving vessels with minimum 8 m draft, warehouses, bonded areas, open storage, a liquid mud plant, a dry bulk plant, machining workshops, waste treatment facilities, and other services alike required by oil & gas operators and service providers.

2. As we all know, our neighboring countries have a maximum of three OSB projects. What is your opinion on local and international OSB projects?

The number of OSBs required by a country is a function of their geography and the location and number of its oil & gas offshore blocks. As a rule of thumb, Offshore Supply Bases should be located within a 200 nautical-mile distance from oil & gas offshore acreage, which is equivalent to 24-hours sailing distance on an Offshore Supply Vessel. If you look at Malaysia, there are two main OSBs: one covering the eastern offshore blocks (located in Kemaman), and the other covering the western offshore oil & gas blocks (located in Labuan). More recently, Malaysia has developed a third OSB to cover the central offshore acreage. In the case of Vietnam, so far only one OSB was developed in the south, which may change in the future if additional oil & gas reserves are found in the northern Vietnam. Thailand only has one fully capable OSB,

located at Songkhla and serving the Gulf of Thailand, while Ranong, facing the Andaman Sea, is targeting oil & gas projects in Myanmar -- however, it is not a fully developed and capable OSB, relying heavily on Songkhla and Kemaman.

In Myanmar's case, and considering its geography and coastline, a maximum of two OSBs should be allowed: one covering the northern and central oil & gas acreage, and the other covering the southern oil & gas blocks.

3. What would you say about the importance of OSBs and M&AOSB in specific?

Offshore Supply Bases are strategic infrastructures to any oil & gas production country: they should be the cornerstone of a country's oil & gas industry. An OSB plays an important role on the development of oil & gas capabilities and resources within each country, fostering the establishment of an industry driven by, and for, oil & gas resources. For years, Myanmar has allowed most of its oil & gas services to be offered from either Singapore or Thailand, which represents considerable amount of capital outflow but most importantly, it jeopardizes the opportunity to develop and train Myanmar people in the oil & gas service industry. OSBs should be designed as centers of excellence, focusing at offering competitive services to the oil & gas industry as well as developing resources and capabilities within the country. M&AOSB aims to be the reference of the oil & gas industry in Myanmar, reducing the country's dependence on foreign countries when it comes to operate our own oil & gas fields.

4. Why did M&AOSB select Nga Yoke Kaung as site location?

Our vision is to develop the western coast of the Ayeyarwady Region as the Western Seaboard of the East-West Economic Corridor (EWEC), acting



Antonio Franca
Project Manager
Myint & Associates Offshore Supply Base Ltd.



as Myanmar Gateway to the occident via the Indian Ocean. As we all know, Myanmar is lacking Deep-Sea Port infrastructures especially in coastal regions, which will eventually hamper Myanmar's future as an agricultural, manufacturing, and exporting country. We look to our Offshore Supply Base as the very beginning of what will be a Deep-Sea Port, serving not only Myanmar but also as a connection to the EWEC through Thailand and Vietnam. Therefore, site location is not only about the Offshore Supply Base but also a location for a future Deep-Sea Port. Nga Yoke Kaung Bay ticks all the boxes in terms of water depth, land availability, proximity to offshore oil & gas blocks, socio-environmental aspects as well as other technical requirements. In fact, we have secured the services of the Dutch Maritime Consultant, Royal HaskoningDHV, to assist us in the selection of the preferred location for both an Offshore Supply Base and a Deep-Sea Port.



5. Recently, the final report meeting for "Feasibility Study on the Central Backbone Expressway in Myanmar (Yangon-Mandalay Expressway and Yangon-Nga Yoke Kaung Expressway)", jointly conducted by the Department of Highway of the Ministry of Construction and KOICA Myanmar Office, was successfully accomplished. What are your thoughts regarding such expressway development regarding to M&AOSB Project in Nga Yoke Kaung?

This is great news, learning that the Government is supporting the development of the Ayeyarwady Region and its coastal area which is in line with our vision and will come as a support to our project. Road connectivity is an essential part of any OSB or Deep-Sea Port, therefore knowing that an Expressway is being considered to connect the Ayeyarwady Coastline to Yangon is very encouraging. The Expressway Feasibility Study prepared by KOICA considers two options for the end point at the Ayeyarwady Region: Nga Yoke Kaung Bay or Danson Bay. We are perseverant in our vision and we shall continue to work towards the development of Nga Yoke Kaung Bay as the preferred location for a Deep-Sea Port and as the end-point of the Expressway.

6. What are the proposed project activities and the current project updates?

The world is facing an unprecedented crisis with the ongoing COVID-19 pandemic. Unfortunately, Myanmar is no different and is also being severely affected, which is resulting in delays to our project commencement date. Our Construction Contractor is ready to start construction, subject to positive developments of the pandemic.

7. What are the key milestones and future goals of M&AOSB?

We have achieved great milestones so far, being the most relevant the award of the project Environmental Compliance Certificate (ECC) and the conclusion of our tender process and selection of the Construction Contractor. In the short-term, we are very keen to commence construction works and finally to start operations within (2) years after commencing construction.

8. What are your thoughts on Social Management in M&AOSB?

I am positively surprised and impressed with the standards of MPRL Group of Companies when it comes to Social and Environmental Management. We do not think short-term, we make sure investments made in the communities are far more reaching which is why our main areas of investments (when it comes to Social Management) are in education, health, infrastructure, and livelihoods. I am particularly impressed with the recent full scholarship award through U Moe Myint & Family's Educational Foundation to a student in Nga Yoke Kaung Town, who was capable in achieving distinctions in all subjects in the 2020 Matriculation Exam.

9. What kind of opportunities will the project bring to the country and the host community?

The opportunities for the country are several and have been explained in previous questions. In summary, it is all about developing local expertise in Myanmar to serve the country's oil & gas industry, ensuring that Myanmar is less dependent on

neighboring countries. There will also be plenty of advantages for the community, which will allow for a sustainable development of the people in the Region. M&AOSB's CSR Program has provided skill and vocational trainings to promote job opportunities for local communities, and to help increase their income. Since 2018, a total of 420 community members have completed trainings organized by our CSR Program. We have also ensured that the construction contractor will give priority to the local community when it comes to employment.

10. What would you like to deliver as a concluding remark in this conversation?

It's been a challenging journey to arrive where we are today, I am proud to participate and offer my contribution to this wonderful team, and I look forward to bring the project to a successful completion in a near future. MPRL Group of Companies is a diversified conglomerate that gives plenty of opportunities for its employees to grow, develop, and participate in projects that are materially significant for the country. We believe in the further development of the Ayeyarwady Region, which is why our investment is mostly focused in this Region. The ongoing development of Block A-6 Gas Field and the future landing of a gas pipeline in Nga Yoke Kaung, will act as the catalyst for a solid establishment of our Offshore Supply Base, but will also open an avenue for further investment projects such as a Power Plant, and a full fledge Deep-Sea Port. For this to happen, proper road connectivity is of the essence, which is why it is so inspiring to learn that the Government of Myanmar is seriously considering the construction of an Expressway from Yangon to Nga Yoke Kaung.







Providing Vocational Trainings for Inclusive Economic Growth

Pyae Pyae Phyo

"Give a man a fish and you feed him for a day. Teach a man to fish, and you feed him for a lifetime." It is more worthwhile to teach people how to do something themselves than to just do it for them. Teaching people a useful skill can be more beneficial in the long-run than filling a need for them temporarily.

Looking forward to sustainable development, M&AOSB practices this belief in creating shared value for business and society. Since August 2017, we have planned and implemented strategic and impactful community investments in order to achieve inclusive and sustained economic growth. During these three years, our community investment projects focused on developing education, health, infrastructure, and the livelihoods of the community around the project area.

While driving an inclusive development, it is necessary to have an adequate local workforce where we operate. We all know people with inadequate vocational training find it difficult to enter the workforce. That's why our CSR Program partnered with Regional Government Departments and private training schools to provide vocational skills trainings. We successfully organized a total of 12 vocational trainings to improve the competency of the local community and to help them start their own businesses. A total of 232 participants completed the following vocational trainings and gained hand-on experiences.

M&AOSB Vocational Skills Trainings			
No.	Training Topic	Training Institute	Trainee
1	Home Gardening Training	U Phon Mang (Agricultural Expert)	29
2	Coconut Handicraft Training	Myanmar Coconut Producer and Trader Association	40
3	Good Animal Husbandry Practices Training	Livestock, Breeding and Veterinary Department	11
4	Value-Added Food Products Training	Small Scale Industries Department (Pathein)	21
5	Value-Added Consumer Goods Training	Small Scale Industries Department (Pathein)	19
6	Welding Training	Skills Training Center (Pathein)	10
7	Excavator Training	Myanmar Kaido Co., Ltd.	5
8	Masonry Training	Central Training Center (Thuwanna)	24
9	Carpentry Training	Central Training Center (Thuwanna)	25
10	Heavy Machinery Operator Training	HE Group Training Center	14
11	Rebar Fixing Training	Central Training Center (Thuwanna)	22
12	Cooking Training	Center for Vocational Training (CVT Myanmar)	12

As part of our CSR initiatives, we also supported community participants from Welding, Masonry, Carpentry, and Rebar Fixing trainings to sit in for the certificate exams of National Skills Standard Authority (NSSA) in Yangon — a total of 67 trainees achieved a national-level skill certificate from NSSA.

M&AOSB conducted vocational training series targeted for communities from Nanttharpu Village Tract, Kyway Village Tract and Nga Yoke Kaung Town, in order to promote entrepreneurship, produce skillful labor from the community, and reduce potential social risks during project operations.

At M&AOSB, we always strive to uphold positive values and impacts for both the company and the community. We promote our ethical and social compliance in a sustainable manner.

Success Stories from M&AOSB Project Area

As a result from vocational training series, three former trainees shared their success stories from the project area. One former trainee from Good Animal Husbandry Practices Training, and two female trainees from Value-Added Consumer Goods Training have started up small businesses, and have increased their incomes by applying knowledge and skills from their respective trainings.

Success Story (1)



U Kyaw Thu Win @ U Mann Mg Win, a 43-year-old man, who lives with his wife and two kids in Nanttharpu Village Tract, completed Good Animal Husbandry Practices Training course provided by the Livestock Breeding and Veterinary Department from Ngaputaw Township in June of last year. He gained knowledge on how to feed and raise animals, identify and prevent animal diseases, and vaccinate livestock.

After training, he started out pig farming and planting nivea grass for livestock food. He reduced animal-feeding costs by applying a method from the training, and he vaccinated not only his farm animal but also the community's livestock by applying training knowledge from animal vaccination.

He raised and bred pigs himself without buying other piglets by applying the systemic knowledge from the training. He raised a total of ten domestic pigs with an investment of MMK 900,000. He gained a net profit of MMK 400,000 after farming pigs for a five-month period. Pig prices trended downward due to the lack of local consumer market and the current outbreak of COVID-19.

Currently, he is farming a sow to produce piglets and is also providing nivea grass to community neighbors for free.

He expressed gratitude to CSR Program's support for the community needs. He also awaited more CSR trainings, and suggested M&AOSB to make a market for the former trainees' businesses, if possible.■







Pig Farming and Planting Nivea Grass for Livestock Food by U Kyaw Thu Win

Insight! Publication started in 2015 Anniversary

Success Story (2)



Daw Khin Ei Zar, a 27-year-old seller living with her family at No.2 Ward of Nga Yoke Kaung Town, is a mother with one child, who is also one of the community-based volunteers of M&AOSB.

She attended the Value-Added Consumer Goods Training provided by the Pathein Small Scale Industries Department from July 3-9, 2019 at Kyway Chaing Village Tract. The training delivered ways to

make various kinds of soaps, detergents, glass cleaners, thanaka- based cosmetics products, make-up, and lotions.

Daw Khin Ei Zar increased her household income by producing "Miba Gone Yee", a dishwashing liquid based on training knowledge and skills. She said that it was actually difficult to enter the market as there was poor trust on local products. She tried to convince consumers of her product quality. She invested MMK 150,000 in the production and gained MMK 70,000 profit by selling dishwashing liquid bottles for MMK 600 per unit.

She acknowledged her gratefulness to M&AOSB CSR Program for supporting community development and also her pleasure to see more interest and more trust on M&AOSB from the community. ■







Producing "Miba Gone Yee" Dishwashing Liquid by Daw Khin Ei Zar

Success Story (3)



Daw Ahby Thin, a 21-year old seller, lives with her family in Nanttharpu Village Tract. She was a former trainee of Coconut Handicraft Training and Value-Added Consumer Goods Training organized by M&AOSB CSR Program.

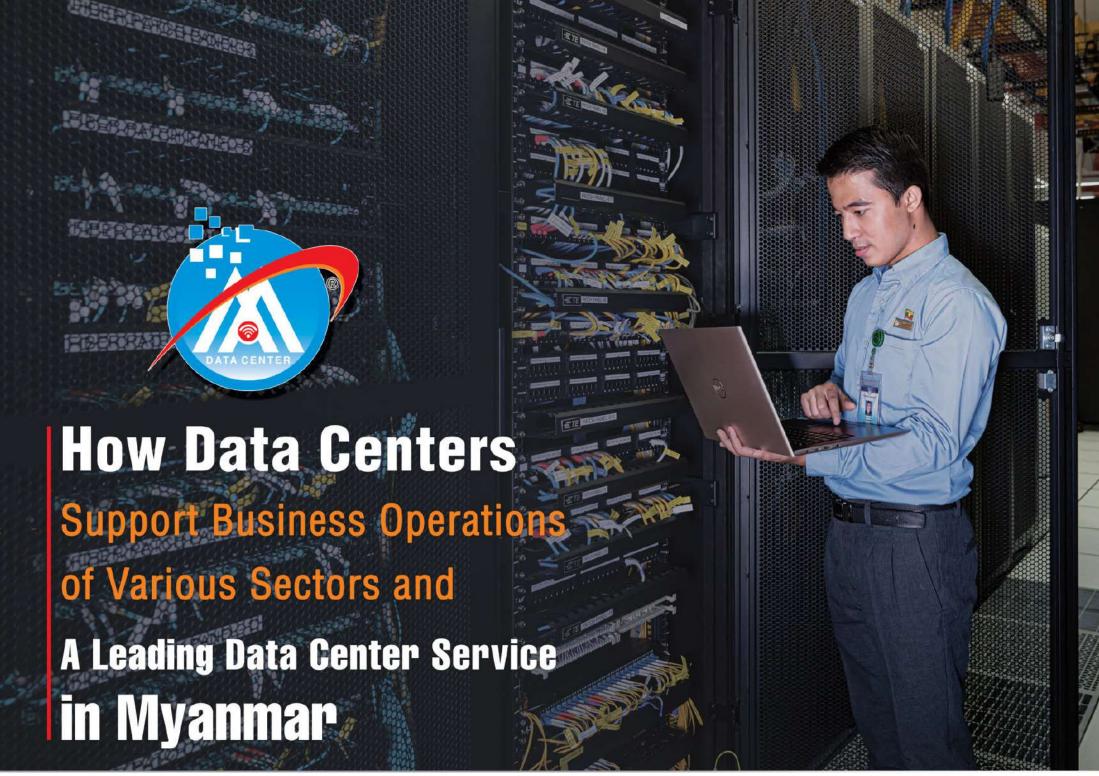
She produced dishwashing liquid after attending the Value-Added Consumer Goods Training at Kyway Chaing Village Tract last year July. She started up her business with the investment amount of MMK 100,000.

She said there were some difficulties with market entry due to her product being local and the cash flow due to buying on credit. However, she could earn MMK 80,000 profit by selling dishwashing liquid bottles for MMK 1,000 per unit. She expressed her thanks to M&AOSB for providing CSR trainings free and increasing her family income fairly, while working from home.



Producing Dishwashing Liquid by Daw Ahby Thin

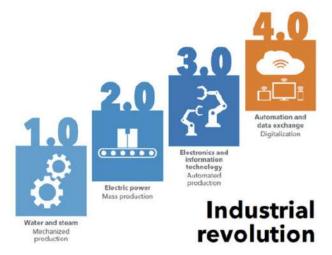




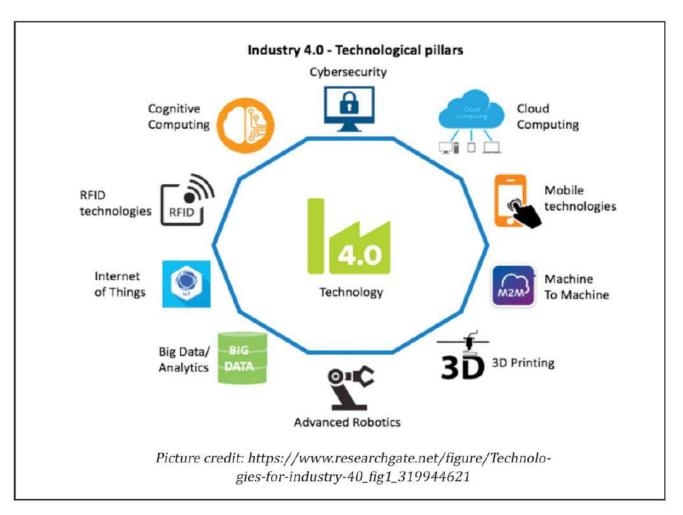
Kaung Myat Thu

The world has always been evolving. In this evolution, economic and political reforms, and industrial revolutions have been significant changes in human history. Information and technological changes, especially as part of the industrial revolution, is developing every day.

The industrial revolution has grown from Industry 1.0, 2.0 and 3.0 in the past, and is now Industry 4.0. The fourth industrial revolution also known as "Industry 4.0" concerns advanced technologies such as Artificial Intelligence (AI), Internet of Things (IOT), Advanced Robotics Technology, Blockchain, 5G Technology, Augmented Reality (AR), and Quantum Computing, which are interconnected through a network to achieve rapid and positive results in various sectors such as education, health, social, digital economy, and governance.



Picture credit: https://news.itu.int/ict-infrastructure-crucial-achieing-sdgs-era-fourth-industrial-revolution/



As Industry 4.0's interconnected technologies become more sophisticated and complicated, cyber technology, computer security, large data collection models, new forms of administrative support, communication groups, technologies, and Internet service systems are also needed -- data centers play a key role in implementing them.

Data centers are large warehouses that store information, and are also intermediary centers for easy and fast access to data from one place to another. They are also the hubs for cyber security of

organizations. In addition, the role of data centers will be innumerable.

In today's fast-paced world, government agencies, business organizations and private organizations are already working with enterprise data centers to be able to complete their work quickly and without delay, securely storing their data and enabling the rapid flow of stored data at any time. The most popular computing industries today are social media, multimedia, gaming, search engines, and data science. They have set up their own data









Data Center Knowledge Sharing and Industrial Visit from The Students of Myanmar Institute of Business and Technology (MBT)

centers and leased enterprise data centers around the world to make their platforms more user-friendly to quickly access data from the main server to users around the world, facilitating the flow of data.

Over the years, the financial industry has been gradually transitioning from physical to digital platforms. Today, as customer service and user experience analysis of the financial sector play an active role, the use of customer involvement and ICT tools are becoming more widespread and essential. With the advent of modern technology, paper systems have transitioned to digital systems in financial sectors where transactions and other data transfers in the past were handled with paper. By making it easier to store data in one place, monitoring and streamlining data, and delivering data is also becoming faster and smoother. In this way, sectors in the financial industry are able to digitize information to make quicker, higher and securer transactions. So the role of data centers is becoming increasingly important for the smooth, secure, and fast operations of the above processes.



Similarly, data management has become an important theme in the oil and gas industry. The availability of real-time data during exploration and production activities in the oil and gas industry is helping companies to evaluate project requirements and accurately determine drilling locations. With high bandwidth capacity, the availability of seismic data, historical data, maps, analytical data, and other data in real-time contributes greatly to decision-making, revenue opportunities, increased drilling performance, and improving operational efficiencies so that oil and gas companies are investing in enterprise data centers. This makes it easier and faster for them to perform big-data management in real-time.

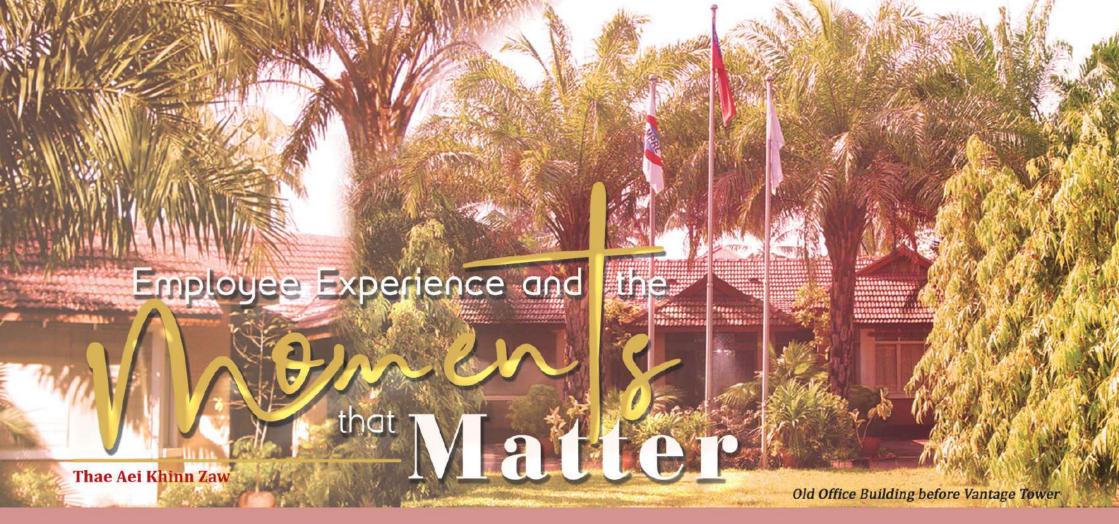
As mentioned above, MPRL E&P Pte Ltd., (the flagship company of MPRL E&P Group of Companies, a leading independent foreign-registered oil and gas exploration and production company in Myanmar) aims to improve performance and efficiency in the oil and gas sector, as well as speed-up the



transfer, receipt, and storage of data transmission issues in other industries. The company founded Myint & Associates Telecommunications Ltd. in 2015, as an information technology arm of the MPRL E&P Group of Companies, and in the business unit of data center services as well as other IT managed services.

Myint & Associates Telecommunications Ltd. fully owns Myint & Associates Data Center. The M&A Data Center is the first Tier III Design Certificate Data Center in Myanmar accredited by UPTIME INSTITUTE which guarantees world-class standards for data center construction and upholds standards such as reliability, safety, and security. M&A Data Center has also achieved independent third-party compliance certification making the facility compliant with the Payment Card Industry Data Security Standard (PCI DSS) which is administered and managed by a consortium of major payment and credit card brands such as Visa, MasterCard, Discover, American Express and JCB -- PCI DSS is a stringent set of security requirements and protocols established to protect cardholder information from credit card fraud. Myint & Associates Telecommunications Ltd. operates an international standard data center with accreditation from the above international organizations, and in accordance with the above industry standards, it is providing the best services such as being the most cost-effective, safest, and full-capacity for businesses operating in various sectors.





Let's hear out the moments that drew a STRONG emotional response out of our colleagues, who are working at MPRL E&P for quite a long time. Not just their 'Best' or 'Happiest' moments, but the moments that have impacted them, changed their perspective, shook them, helped them feel supported or appreciated, or brought them immense joy.





In 1989, while I was awaiting the results of the matriculation exam, God blessed me with the opportunity through my sister to work for our CEO, U Moe Myint. During my very first interview at 77 (A), University Avenue with our CEO back in1990, I was impressed first by the CEO's presence with his sharp eyes and voice. After passing the interview, I started my very first job at Myint & Associates Co., Ltd. (M&A) in January 1990. The more I got to work near the CEO, the more I realized that he was very good at instilling discipline and very strict with work.

One of the very first memories is the day when I did landfill as he told me to make the slope and lane smooth within the compound of the office.

In the following days, CEO sent me as a Cook-Helper on a Hino-BM bus with the rest of the group to Seismic Field of SSL (Seismographic Service Limited-UK), which was situated in "Ka Zun Ma" village, 30 miles away from Seik Phyu Township, on the other side of "Chauk" Town. CEO himself saw me off and said some very moving words to me, "Aung Zaw Lwin, go and do your best, I trust you." Words cannot describe how I felt. During my stay at SSL Camp, I found the job difficult and was tempted to go back to Yangon many times.

In the following months when CEO came to SSL Camp, he asked to shift my work to a catering store with the assistance of Uncle David Chan. While working as a catering provider, I was diagnosed with hepatitis A and B and I thought I would lose my job. But CEO saved me. You see, it was really touching to see such compassion and benevolence of our CEO and I was totally speechless by his loving kindness towards me.

After returning to Yangon from SSL Camp, I was introduced to GM uncle U Myint Swe and was assigned tasks for Trading Business under the supervision of Board Director (D2) Dr. Ohmar Moe Myint, CEO's wife. At that time,



At Ka Zun Ma Camp (1990) for Unocal Block F – SSL Seismic Processing Project

CEO extended the business to other projects in data survey, restaurants, hospitals. Dr. Ohmar Moe Myint also provided her best efforts, time and strength along with our CEO to sustain and flourish the businesses. I regarded CEO and his wife as my idol couple due to their love, unity, dedication, enthusiasm, and perseverance through their personal and work lives.

While working, my benefactor CEO allowed me to pursue my education without a paycut -- I owe my CEO a lot! In 1997, there was a vacancy at Baker Hughes and Dr. Ohmar Moe Myint sent me. It was there that I was introduced



M&A 4th Anniversary - Performance Team Photo at 77 (A) University Avenue Office



to Mr. Brian Logan and recalled what CEO said, "This is Aung Zaw Lwin and he is Ohmar's right-hand man." That made me proud. In 2001, CEO and his wife made their honorable presence at my wedding and I felt really blessed and special due to his charismatic nature and kindheartedness.

I will never ever forget the time when CEO proudly introduced me to the Management Team whenever he pays visits to Mann Field Base Camp.

Moreover, I am impressed with our CEO's vision, mission and values, especially for Myanmar Offshore Block A-6 Integrated Project, which a Myanmar-led company plays a key role in the best interest of the nation.





With Nge Nge & Sithu at Pyin Oo Lwin



At Ka Zun Ma Camp (1990) for Unocal Block F – SSL Seismic Processing Project with Ko Taung Lay & Catering Store Personnel





It was in the latter years of the twentieth century that I was on a ferry crossing the Ayerwaddy River from Magway to Minbu. There was no bridge back then so the trip took almost 24 hours including preparation and waiting time to transit across the river from Yangon to Mann Field. The ferryboat was owned by Myanma Oil and Gas Enterprise (MOGE) and the river craft was named "Pipe-liner". There were only a few passengers and local villagers including me but some of MOGE vehicles. I was appointed as a Field Operations

Engineer under MPRL E&P, one of the contractors of Mann Field Production Enhancement Project that was initially contract-awarded to Baker Hughes. While listening to the noisy sound of the locomotive engine as Pipe-liner



After Completion of Mud Engineering Training in 2004

slowly moved upstream, I remembered the difficulties of transportation, by all means (land, water and air), in our country. Roads are narrow and bad, buses transformed from pre-war trucks were transporting people on the highway (no express-way at all back then). So, I imagined as if I were one of the characters from Mark Twain's stories steaming down the Mississippi River during pre-war time since westerners sat beside me who started joining the project as well.

Initially Baker Hughes began the project with many expatriates, multi-nationals, and a few Myanmar nationals, with the number of Myanmar technicians, scientists and engineers continuing to increase. After morning meetings, teams were going out to the field to record the x-y coordinates for well locations, measuring trajectory deviations, and measuring pumping performance. Simultaneously, some of the engineering teams were transferring manually recorded papers to a digital database at the office. Digital transformation, by using different computer software and applications, is crucial to operate project time and cost efficiently and effectively. The required data will then be accessible the right way at the right time. We can also minimize duplications and maximize opportunities for speed, scale, and collaboration among our cross-functional teams.

The very first Expatriate Field Operations Manager was Mr. Lawrence Hartnett, who graduated from the University of Colorado, Boulder. He appreciated Myanmar's culture and he very much liked to be called "U Larry" instead of Mr. Hartnett. He introduced Merek WellView software to the engineering team. In 2000, and after taking sole responsibility, MPRL E&P managed the field with mostly Myanmar nationals. The Field Operations Manager was U Khin Maung Win, a retired pilot from Myanmar Airways. Both of them are kind, straight-forward, and show equity to all subordinates. They have the respect of the government MOGE staff and local communities as well. Some tremendous milestones of the project that I remember are the activities to achieve incremental production from



From Left to Right: U Kyaw Soe (NLD Education Network and now Elected Candidate for Yangon Region Pyithu Hluttaw, Mr. Lawrence Hartnett (The First Field Operations Manager of Mann Field Project, now Retired) U Thu Nyo (Field Engineer, now Deputy Technical Manager of MPRL E&P) in 1998

13 boepd to benchmark incremental production of 1574 boepd and total produced oil of the project is 14.4 million barrel of oil and 17 billion cubic feet of natural gas up to October 2020.



From Left to Right: Ko Ko Lay, Thet Win Naing, Zin Kyaw, Thu Nyo on the Ferry Boat

Unforgettable memories of training of MPRL E&P's young technicians, scientists, and engineers to build capacities according to their areas of expertise. Many were sent abroad mostly to institutions in the Asia-Pacific Region for short courses, and to pursue graduate degrees in countries such as Australia and the USA.



Time flies by quickly and now we have been working in Mann Field for more than a couple of decades. A bridge crossing from Magway to Minbu was built so that the duration of the travel by bus is now only 8-9 hours. Even domestic flights are able to land at Magway Airport to reach the field within a few hours.

Throughout the industry life, we have learned many lessons, shared experiences, improved and exerted efforts together. In summary, I believe that the future of the next generation of this industry will be transparent, clear, open, and successful.



From Left to Right: Dr. Khine Soe (Safety Officer/Medic), U Thu Nyo (Assistant Field Operations Manager), U Mya Sein (GM, MOGE) at Drilling Operation Site at Well M-655



From Left to Right: Zin Kyaw, Thu Nyo, Kyaw Zeya at the Wellsite of Remedial Operations



From Left to Right: Thu Nyo, Field Operations Engineer, Bill McKnab, Field Operations Manager (2nd FOM), Ko Ko Lay, Camp Boss



AD-1 Drilling Rig at Sin Ma Lite Dockyard in 2007

Another unforgettable memory I want to share was when I was a team leader in Team Building Retreat 2017 for "U San Shar" team, that involved 24 players from MPRL E&P Group of Companies. We played games, performed together at a talent show, and successfully achieved a third prize and consolation prize. 15 years of service and MPRL E&P is still bringing a lot of endless memories.



With U San Shar Team in 2017 Team Building Retreat





February 1, 2006 -- What a memorable date! I can't believe it has been almost 15 years working in MPRL E&P but it seems like yesterday. Reminiscing about the past, there were a lot of happy and delightful moments which cannot be expressed in one page. Among them is the everlasting memory when I was interviewed by the CEO at my first job as a receptionist. He asked me, "What's your level of honesty?" I did not understand the question and did not know what I should answer due to anxiety. After he repeated the question three more times in

Myanmar, he asked me to answer between 1 to 10. I answered, "I think my honesty level may be 7 or 8." I made sure not to answer "10" because we sometimes need to tell "white lies". The CEO then smiled and said, "okay". I never forget that question and my answer, which always reminded me to evaluate things throughout my life.

Another precious memory is "The Visit to Sin Ma Lite Dockyard" when the very first AD-1 Rig arrived in Myanmar, which was a first drilling rig purchased by our sister company Asia Drilling in 2007. As an Office Administration Staff, I had never been to such a place, enclosed by water in a port for loading, unloading, ship repairs. It was an amazing experience for me to witness a huge crane carrying a big rig, and I felt lucky for working in the Oil & Gas industry.







During my eight-year service with MPRL E&P, I have had a great deal of experiences and memorable happy moments. Regarding work-related memories, I learned from my seniors and worked hard under their guidance and mentorship, and gained a lot of technical knowledge for our accounting and finance sectors. With all my heart, I thank my seniors and mentors for everything. My time working with my colleagues and solving problems together are opportune and interesting, which make great and significant impacts on my career life.

From time to time, my job requires me travel to Mann Field to take stock together with the MOGE Audit Team. As a financial staffer stationed at Yangon

Insight!
Publication started in 2015
Anniversary

Office, I still remember seeing the pumping units and Gas and Oil Collecting Stations (GOCS) for the first time. While stocktaking, the weather was quite hot but the teams were happily working together. The sun could never bother us while we were working.

At MPRL E&P, yearly ceremonies and celebrations such as the Team Building Retreat (TBR), Staff Party and Anniversaries of Group of Companies are held annually to relieve employee's free from work stress and routines. At the 2015 Staff Party, I won the lucky draw prize, a Sony 40-inch TV, which I remember as one of the happiest times of my life and the memories of Team Building Retreats. The point I am making here is that work and life are blended.

Team Building Retreat (TBR)









MRPL E&P started its Team Building Retreat Program since 2014. Currently, there have been four Team Building Retreat (TBR) Programs hosted in Ngwe Saung Yacht Club and Resort (NSYC). I happily participated in every Team Building Retreat was a part of several teams ("Lion Team" in November 2014, Kyar Zan Team in November 2017, "Team Captain Mike Kan" in February 2019, and "Team Matt Matt" in February 2020. I had many happy moments and experiences during those days as I performed in the talent show and played in team games, which were very exciting and had fun. I befriended my colleagues from different fields and other departments. Getting to know each other across our Group of Companies is very supportive as it aides in working on-ground and also created the chance to build good communication with each other. So, I would like to say thank you very much to the Management Team who makes this happen.





Throughout my six-year working experience at MPRL E&P, I have had exciting work challenges and a variety of work experiences that made me strong while sharing fun moments with my colleagues from my own team and across departments. It is really memorable for me to learn and have knowledge from dear colleagues; it is like having many cousins working happily together, so we sometimes fight, argue and finally make up. I would like to call myself the "Misunderstood HSE Buddy" due to the harsh tone that sometimes comes out of my mouth for the safety of my co-workers. All I



HSE Inspection on Well Servicing in Mann Field in 2014

want is that every single one of my colleagues go home safe and sound at the end of the day. I would like to send my apologies to those who think I have acted strictly while putting HSE rules and regulations in place for safety.

Of the many memories in Yangon and Mann Oil Field, one of the best unforgettable moments was when I was out in the field together with CSR and Technical Teams and participated in the Environmental and Social Impact Assessment (ESIA) survey in order to obtain the Mann Field Environmental Compliance Certificate (ECC).





ESIA Survey in 2017 around Mann Field

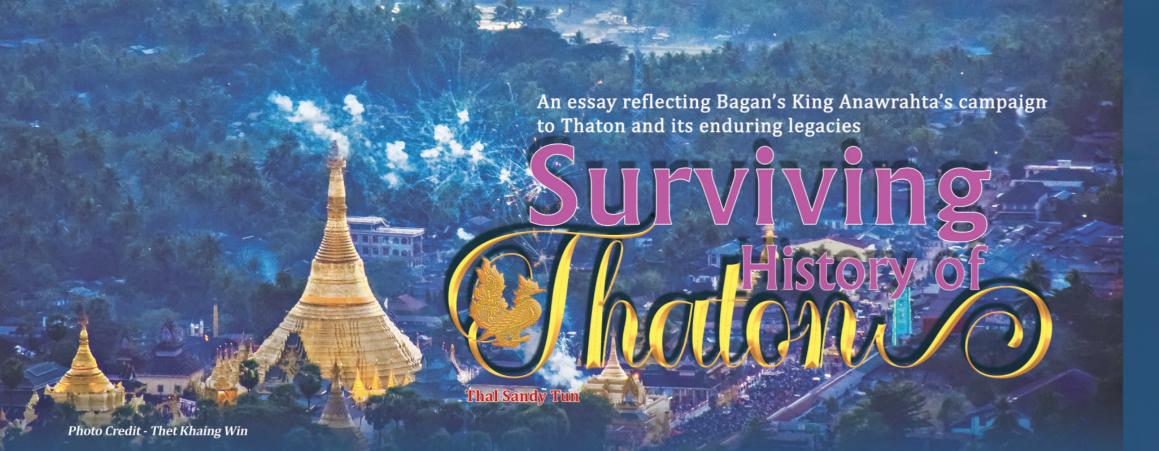
During that time, I witnessed in person the two-way communication between our company and the host communities and the importance of a social license, which is having strong partnerships with the locals. I learned a lot that not only HSE matters but CSR and Environmental issues, and learned in detail the transparency of the environmental and social management plans carried out by our company surrounding the villages in Mann Oil Field. I must say that participation in the ESIA survey opened my eyes to new experiences apart from my daily Health and Safety routines. I would like to thank everyone who let me have the opportunity to take part in the survey.

Throughout my working years, I always felt a sense of joy that created memories such as the joining staff party held at Inya Lake Hotel in 2014 and going on field trips for regular periodic HSE inspections along with my seniors and coworkers, staying and working at Mann Field, and I hope to have more fun while working hard together with my dear colleagues in the future.



Staff Party at Inya Lake in October 2014





Mon State, the ninth most populated state in Myanmar, is composed of two districts and ten townships inhabited by more than 3 million people representing around 4 per cent of the total population of the country, according to the most recent census. Mon State is resided by Mon, Bamar, Chin, Kachin, Rakhine, Pa O and Shan peoples side by side. Studies indicate that out of approximately 8 million people being considered to be of Mon ethnic origin today, only one million speak the language. The Mon people and their civilization hailed as one of the oldest in Southeast Asia, and they had a great influence on and assimilation with the culture of the peoples during the period of the Bagan Empire.

Thaton is one of the two districts of Mon State. Today Thaton is a sleepy town sitting on the site of old Thaton which was the throne for Mon kings from the fourth to eleventh centuries.

Specifically speaking of Thaton, it was a Mon capital in southern Myanmar with flourishing Buddhism and Indian cultural influences from the time of Ashoka until the eleventh century when it fell to the Burmans under King Anawrahta who unified Myanmar from the north to the south, consolidating the entire Irrawaddy (Ayeyarwady) valley and its outlying settlements such as Shan, Kachin and Rakhine for the first time as a multi-ethnic state with the majority being Burmans during his reign from 1044 to 1077.

In her notable historical novel named "Anawrahta of Burma" first published in 1970, writer Daw Khin Myo Chit meticulously painted a vivid picture of the bustling town of Thaton in the past just before being conquered by King Anawrahta in his bid to bring Theravada Buddhism from Thaton to Bagan.

The Mon people who migrated from where it is now known as Thailand occupied the area between the Sittaung River and the Salween River (Thanlwin River) at that time. They spoke an Austroasiatic language. To their north lived the Pyu people whose city-states occupied central Myanmar, and to their east was the Khmer people (today Cambodia). The Mon people and their learning, art, and way of life had been profoundly influenced by Theravada Buddhism which had been spreading throughout Lower Myanmar by the fifth century thanks to earlier Buddhist missionaries sent by King Ashoka ruling the Indian Empire in the desire to proliferate Buddhism across Asia.

By the ninth century, Thaton - then called Suvannabhumi or "the Golden Land" - enjoyed importance and affluence as a port city at the mouth of the Salween River through which the Mon engaged actively in maritime trade activities with India, China, and mainland Southeast Asia. The Mon people of Thaton mastered fusing their culture with other civilizations that came in touch through interaction with such as India, Sri Lanka, and Khmer, becoming one of the most culturally advanced people in the region. Around that time, Bagan had established itself as a kingdom on the eastern bank of Irrawaddy (Ayeyarwady) River by the Burmans who spoke a Sino-Tibetan language and migrated from China's present-day Yunnan area to the Irrawaddy (Ayeyarwady) valley around two centuries earlier.

Thaton was then under the rule of King Manuha, the last and 59th king of the kingdom, who was known as a patron of Mon culture whilst being a fierce defender of the Buddhist faith. King Manuha was also known for his hauteur which estranged him from other rival Mon city-states in the vicinity such as Uttha Pegu and Twante-Dala.

King Anawrahta was cruising down the Irrawaddy (Ayeyarwady) River southward when he heard discouraging news about Thaton and its ruler — he was hoping to get in touch with his royal counterpart and make sure the Theravada Buddhist canons came within the reach of the men of Tampadipa (Buddhist kingdom), who were being considered by outsiders to be warlike and barbarian-worshipping spirits and dragons, neither gentle nor refined.

His message of goodwill and overture of uniting peoples throughout the land under the "Word of Buddha" through the mission to Thaton failed to reach in the manner he intended. Worse yet, the mishap and its subsequent consequences meant war.

Mon State, the ninth most populated state in Myanmar, is composed of two districts and ten townships inhabited by more than 3 million people representing around 4 per cent of the total population of the country, according to

"Thaton alone of her contemporaries is found when tested, to be greater than her reputation. Rather, the admiration of the present and succeeding ages will be ours, since we have not left our power without our witness, but have shown it by mighty proofs. We have forced every sea and land to be the highway of our daring, and everywhere, have left imperishable monuments behind us. Such is the Thaton for which we must nobly fight and die. If I have dwelt at some length upon the character of our country, it has been to show that our stake in the struggle is not the same as theirs-those barbarians from Tampadipa who have no such blessings to lose."

Of course, Thaton was by no means an easy win. To the east of Thaton lied thick mountains as high as 700 feet, and to the west was the turbulent sea with regular tides, serving as natural barriers from invaders. To the north and south were three lines of walls and moats, and massive guarded forces further fortifying the city and its magnificent palace inside. The city which sat on the vantage ground also seemed to be able to withstand a siege given its security of essential supplies such as water and rice. All in all, it was anything but an impregnable city.

Anawrahta's campaign to Thaton involved the flotilla of boats, land forces, cavalry and elephants, interconnected intelligence cells, men well-versed in jungle warfare, accompanied by friends from Twante-Dala acting as great PR people delivering messages of Tampadipa and its people as ones who were friendly, helpful and hoping to understand more about Buddhism, with the ultimate goal of reaching to the people on the other side of the river.



They readily offered a helping hand to local peoples along the way with their community works such as digging a well or repairing old religious buildings, winning their trust and friendship in return.

After locating a secret soft spot in the wall on the southern part of Thaton with the use of intelligence and sifting through the legend of a sitting hen's lap, the final assault to the city was fastidiously and discreetly planned among Anawrahta's War Council during which the King commanded:

"... on no account should Buddhist Scriptures and objects of worship be destroyed and also that no efforts should be spared to save the works of art." Meanwhile, he praised his enemy King Manuha:

"I sin in envying his nobility; and were I anything but what I am, I would wish me only he."

He asked his generals to not harm to the king and his family as the victory was in sight.



Travelogue 35

So we are now at a stage to find out what has been the legacy of a campaign 'paid with lives'.

The defeat of Thaton in 1057 marks the completion of Anawrahta's conquest of southern Myanmar and the establishment of Myanmar's longest-surviving dynasty reigning a single kingdom, the size of today's Myanmar, as well as its civilization centered at Bagan serving as the major political, economic and cultural hub until its descent in 1300 owing to harassments by the Mongols. In terms of geopolitics, the fall of Thaton as a thriving port enabled Bagan to secure its access to the trade in the Indian Ocean while keeping an eye on advances of the Khmer along the Tenasserim coast.

As Thaton was seized at the dawn after a fierce battle during the night, the first face-to-face encounter between Anawrahta and Manuha was neither hostile nor peaceful. Of course, they were not adversaries. They were not friends either. What can we expect?

Daw Khin Myo Chit continued to tell eloquently how Anawrahta found the fallen king in his chapel room alone in deep prayer, and how the two kings prostrated themselves in front of the throne seated by the Venerable Primate who addressed both the defeater and defeated with great compassion:

"Victory produces hatred; he that is defeated is afflicted with suffering. He that has renounced both victory and defeat lives in tranquility and happiness." The meeting resulted in the two kings declaring to renounce both victory and defeat in order for their peoples to avoid hostility and be united under Thaton's purest form of Buddhism, culture, and learning. The Kingdom of Bagan was on the path to become one of the domineering civilizations in mainland Southeast Asia in parallel with the Khmer's capital Angkor!



Brought on the way back from Thaton to Bagan were the Three Baskets of the Buddhist Scriptures and theras as intended. In addition, Mon artisans, craftsmen, builders, and architects were taken to take part in a massive campaign to design and construct thousands of Buddhist temples, stupas, pagodas, shrines, and other religious monuments, making Bagan the center of Theravada Buddhism with approximately up to 2 million residents. Out of more than 10,000 monuments that were built by both the ruling elites and commoners, around a fifth over an area of 30 square miles withstood the test of time and disasters to the present day.

However, the most important task of how to introduce Buddha and his teachings to the people of Bagan (who had been so much absorbed in animistic beliefs) weighed heavily on Anawrahta's shoulders who decided to act 'discreetly and cleverly' as he simply couldn't impose the Buddhist doctrines on the people at once, starting with the Suttas and Jataka stories which taught them how to live a good life naturally and aesthetically.

The news of this fabulous metropolis, sophisticatedly built with the culture and economy brought from Thaton, reached its contemporaries as far as Italy. Marco Polo, Venetian merchant and adventurer, was said to have described Bagan as 'a very great and noble city with the most beautiful towers in the world'. While Europe was undergoing the period between the demise of the western Roman Empire and the Renaissance, known as the Dark Ages as studies indicate, the Bagan civilization was arriving at its zenith in the twelve and thirteen centuries. At this point, should I say that Thaton deserves some long overdue credit?

What about contemporary Thaton? The distance from Yangon to Thaton is 130 km (a 6-hour journey by car). If you are interested in Mon culture and literature, you should visit Shwesayan Pagoda where you can find stone inscriptions from the eras of the Mon dynasty and there is an annual pagoda festival every March, and Kyaikhtee Saung Golden Pagoda which is one of the earliest hair relics pagodas on Monland. If you would like to understand socio-economic life of people in Thaton, why not go to its Myoma Market which is a classic small-town market located at the town center with a bus terminal attached? Whilst Mon State is blessed with relatively far-developed transport infrastructure than its neighboring states, Thaton is part of the major multi-stakeholder strategic infrastructural development project called the Greater Mekong Sub-region East-West Economic Corridor which links Vietnam's Danang and Myanmar's Yangon and ultimately to Nga Yoke Kaung in the



The Shwezaryan Pagoda, near Mandalay, Build by Saw Mon Hla (Photo by countesy of the Archaeological Department

western coast of Myanmar with a goal to expedite regional trade and movements of peoples.

Personally, I believe writer Daw Khin Myo Chit beautifully and impressively portrayed Anawratha's personalities and political activities, and other individuals in her novel without emphasis on details such as their names, genealogies or the dates of the events. History at its best is a subject full of debates as it involves victors and the vanquished who are eager to tell their story to their advantage. However, the writer, if I may, accomplished her task of putting together a historical novel with a well-balanced mix of fiction-like imaginings and historical facts through which we meet human characters both entertaining and educating us at their best.

Although we are confined to our homes for the most of 2020 due to the coronavirus pandemic, we may then visit Thaton and Bagan sometime in the future, and be able to better understand what Anawrahta said, "... cities and kingdoms must finally tumble down in dust leaving nothing but the wisdom of the sages to guide posterity." Most importantly, we would not leave the past as it is but in due course put it at our service.





Editor's Notes



The Insight! Story

It is hard to recognize a company which does not have a face. It is even harder to distinguish it from any other company. Worse yet, it potentially evokes suspicion. On the contrary, being open about who you are and what you do breeds legitimacy, trust, and a positive reputation. That's exactly what Insight! has been doing!

Insight! is an MPRL E&P newsletter which was initially launched as an internal communications tool that intended to maintain 'Staff Engagement' and was first published by the CSR & Communications Department on December 2, 2014.

With a band of dedicated contributors, and staff participation at all levels within the organization, we have evolved to tell our stories which prove that we are more than just drilling rigs and pumping units. We continue to touch external audiences by publishing subsequent issues on our website and social media pages.

Throughout each issue, we have engaged our staff with matters that matter most to the company: the upstream energy sector and the country. In correspondence, we have made sure to capture the voices and values of our staff which showcase their pride of being a part of a globally important industry, and that what we produce drives modern civilization.

Above all, 2020 marks Insight!'s 6th year anniversary, and to celebrate the occasion, we are releasing a special anniversary issue. In this issue, we weave together stories and featured articles that offer a glimpse into how MPRL E&P perseveres as a business organization given the COVID-19 doldrums which require the company to think outside the box, devise ways to operate safely, and be in a position prepared for the future. As usual, we too explore how the pandemic affects our staff differently either at home or at work in an effort to offer inspiration and lessons. We hope this issue

will stimulate a discussion surrounding the role of the publication over coffee or lunch among our colleagues.

Last but not least, the ability to connect with others is a cornerstone of any organization. We rejoice in connecting with the wider world which in turns gives us purpose and meaning in what we do as a business organization.

We wish you all a happy new year and happy reading!

The Editor

