

CHANGING LIVES WITH CLEAN WATER



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This annual report presents a summary of Lien AID's work for the period from 01 January 2018 to 31 December 2018.

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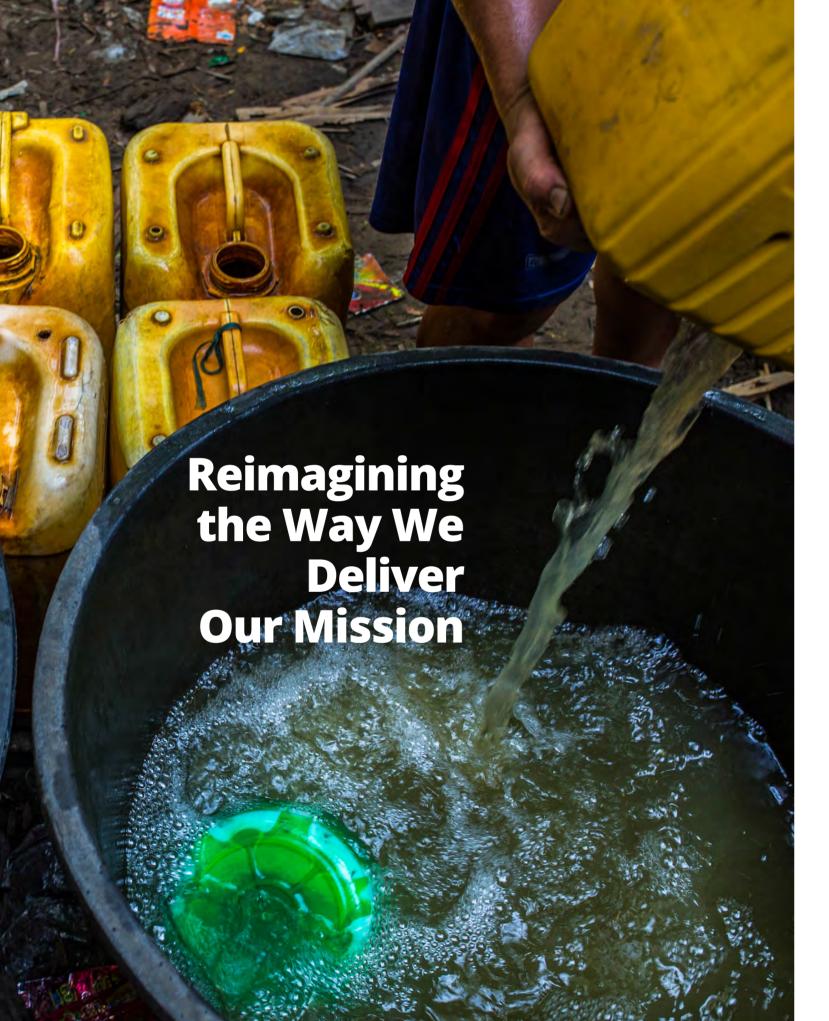
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A Letter from Our Board Chairman and CEO

2018 marked a year of significant change as Lien AID continued on the journey that began the previous year - to reimagine the potential to advance the health and wellbeing of at-risk communities in Asia through sustained access to clean water and sanitation.

Lien AID has deep roots in community based development and a long history as an effective field implementer. Our work in water, sanitation, and hygiene, has benefited nearly a million people from over 3,000 communities across Asia since 2006. Sustained change is not happening fast enough. Globally, 2.1 billion people still lack access to safely managed drinking water services while 4.5 billion people lack safely managed sanitation services, resulting in ill-health and poor educational outcomes for millions.

In 2017, we embarked on an initiative to explore better ways to meet this challenge and bring about transformational impact to the health and well-being of communities. A new strategy focused on building resilient, effective local water and sanitation systems emerged from a deep analysis of programme and country data, lessons learned from the field, and from dialogue with communities, partners, and stakeholders. Going forward, Lien AID will work to build a critical mass of local actors with the ability, resources, and commitment to improve and sustain access to clean water and sanitation, and whom together, would drive change and respond to challenges in mutually reinforcing ways.

By mid 2018, we translated this strategy into a plan of action, defining the pivotal roles Lien AID would play in the coming years as a convenor and a catalyst for accelerating access to clean water and improved sanitation. Key elements of our new approach include being driven by evidence and health impacts; taking a bigger role in raising the efficacy of local actors and enabling collaboration amongst them; and advocating for change where needed.

In addition to formulating our new strategy, 2018 saw Lien AID entering the completion phase of its programmes in Cambodia and China, while implementation of the programme in Myanmar continued. In Myanmar, a further 23 villages are expected to gain access to improved supplies of water by 2019. Our storytelling took an experimental turn as we explored the use of virtual reality videos in our outreach and partner engagement.

Meaningful progress toward improving the lives of children and their families cannot be made without addressing the water and sanitation crisis, which continues to impact millions particularly in rural and underserved regions around the world. Through our engagement and collaboration with communities, governments, academia, businesses, non-governmental organisations, and expert practitioners, we will continue together to contribute in shaping the agenda for sustainable local water and sanitation systems.

Lien AID's achievements are possible because of the strong support of our principal sponsor – Lien Foundation, and other generous donors, partners, a dedicated and committed Board and executive team, as well as the trust of all our stakeholders. We take this opportunity to express our deep appreciation and gratitude for their contribution to our success. In particular, we would like to record a special note of thanks to two of our long-serving Board members, Mr. Lee Poh Wah and Mr. Alex Khoo, who retired from the Board during the year.

Michael Sim Board Chairman Koh Lian Hock
Chief Executive Officer

2018 Highlights 2018 Highlights

Water Projects in Myanmar

New Implementation | Under the Community Water Management programme, workshops were conducted for village leaders and village tract administrators representing 57 villages from the 5 townships of Bogale, Dedaye, Labutta, Myaungmya, and Pyapon in the Ayeyarwady Region. Community site assessments were also carried out in conjunction with township officials from the Department of Rural Development and invited civil society organisations. As a result, water project proposals from 35 villages were selected for implementation. 5 schools from among these villages were also selected to receive support for improvements to their water and sanitation facilities.

Post-project Monitoring | Sustainability of pilot projects completed in 2017 is tracked through collection of regular monitoring data from the village water committees of Ashaekwin, Bothingone, Kakayo, Kan Gyi, and Ngwe Taung villages across the townships of Bogale and Labutta in the Ayeyarwady.

About the Community Water Management programme | In collaboration with the Department of Rural Development in Myanmar, the Community Water Management programme provides a channel through which village leaders and village tract administrators share information about the water resources and needs in their villages, seek funding support for community water infrastructure schemes, and receive training in the management of village water resources. The programme focuses on addressing pressing water supply challenges during the dry season.







Conversations with Local Actors

To inform Lien AID's strengthening local systems strategy and its implementation in Myanmar, a series of dialogues with government partners, township and village stakeholders, and civil society organisations were held. Engaging with donors, partners and other experts through consultative sessions also contributed to the systems strengthening strategy framework and laid the ground for new projects in 2019.

2018 Highlights



A Roving Virtual Reality Exhibition

Windows of Hope was an immersive experiential event which gave audiences the opportunity to "journey" to rural communities in Cambodia and Myanmar, and discover for themselves what life without clean water is like, as well as Lien AID's efforts to address this challenge.







Widely covered by media in Singapore and Myanmar, the event travelled to the offices of AECOM, Arup, Allen and Gledhill, Asia-Europe Foundation, Credit Suisse, Ernst and Young, Expedia, Starhub, and UBS, and was viewed by the public in Singapore at 313 Somerset, Star Vista, and Ocean Financial Centre.



Programme Completion

The Community Water Enterprise and Village Water Management programmes came to a close in 2018 after more than 6 years. Through the 2 programmes, 158 water services were established across 21 provinces in Cambodia and China. 95% of these were reviewed through analysis of project data and phone surveys to determine the current status of the water services.



Three seasons ago, more than twenty households in Kakayo village fell ill and had severe diarrhoea, with one child succumbing to the illness.

It was an extraordinarily hot summer.

Kakayo is an island village perched on one of the terminal branches of the Ayeyarwady river in Myanmar, as it empties into the Andaman Sea. Frequently buffeted by harsh winds and stormy weather, Kakayo was also one of those hardest hit by cyclone Nargis and saw its numbers decimated by the disaster. But the two community ponds which villagers are reliant on, survived.

Representing different spirits - the ponds, the land, and the sea, three shrines stand on the banks of the ponds. Every summer, villagers make offerings at the shrines, asking for protection from disasters and good karma. But water shortages became increasingly common. Kakayo grew again while the dry seasons became longer, and hotter.

Over the years, differences over the management of the ponds led to the fencing falling into disrepair, allowing animals to roam freely and defecate on the banks, and giving passing villagers the opportunity to fetch water indiscriminately. Many in Kakayo did not treat water before drinking, and defecating in open fields was common practice, with people seldom washing their hands afterwards.

All this culminated in the mini-epidemic three seasons ago, when a child with severe diarrhoea infected his neighbours.







In 2017, Kakayo participated in the Community Water Management pilot. Through dialogue facilitated by Lien AID, villagers came together to discuss how they would improve water availability and reduce contamination. Sessions were also held to share the importance of handwashing with soap before meals and after defecating.

A water committee was formed to manage their shared water resources, and villagers agreed on the construction of another rainwater collection pond. "It is an endless merit to donate for water." U Thein Aung, an affable 62 year old traditional medical practitioner and well respected community leader, had come forward to donate land for the new pond.

Led by U Myint Than, another committed village leader, the newly formed water committee started collecting monthly contributions from each household – a modest sum of 300 Kyats. Ko Zaw Oo, a 38 year old fisherman who had lost 80 relatives to cyclone Nargis, says that the villagers do not find the monthly contributions a burden.

"We know that it is important to maintain the source of our water. The well-being of the pond means the well-being of the village and its villagers." Last year, with the collected funds, the committee put what they learned into action - repairing the fencing around the old ponds and building simple wooden bridges for villagers to fetch water. Villagers are supportive of these changes and look forward to more improvements.

"We are also planning to install a system with a motorised pump to bring the pond water to an elevated large storage tank in future. This will make it easier for the villagers to fetch water," U Myint Than shares their next aim. "This way, we can prevent contamination of these ponds and keep it more hygienic."

Participation in the Community Water Management programme has fueled change that continues to this day, as villagers build upon the knowledge and assets they have gained to realise their dream of a healthy and safe home for all in Kakayo.

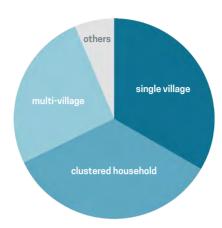


Village Water Management

Household piped water for mountain villages in China

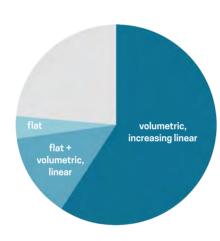
The Village Water Management programme identifies villages with acute water needs through the national platform of Student Village Officers (大学生村官). Workshops on basic rural water project management are conducted for selected Student Village Officers. With the support of township and county water bureaus, they mobilise local resources and implement (mostly) small-scale household piped water services that are maintained and operated by village water committees.

Piloted in 2012 in 3 provinces, and scaledup across 7 more provinces in China from 2013 to 2018, almost 100,000 people from 76 villages have access to household piped water.



Water Scheme

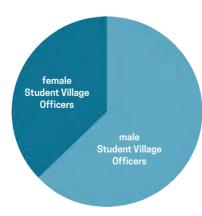
The type of piped water schemes varied, with centralised systems for single villages marginally more common than decentralised systems for clusters of households (33%), or centralised systems connecting multiple villages (26%). Other projects implemented were non-piped water schemes (6%).



User Fee Structure

Among the villages where the tariff structure is known, user fees are predominantly charged based on an increasing linear rate. Tariff structures that include an initial flat block (13%) or are based on a flat fee (4%) are usually found with clustered household water schemes.

*Fee structures for a significant percentage of villages are not known (23% - light grey segment).



Gender Representation of Participating Student Village Officers

Water project proposals of 73
Student Village Officers were selected
representing 81 rural villages.
Female Student Village Officers made
up slightly more than 1/3 of those
selected and mentored by Lien AID in
the implementation of the projects.
3 of whom managed more than 1
project each.



Location & Accessibility

A large percentage of the Community Water Enterprises contend with accessibility issues. 10% of them are located in floating communities where boats are needed to transport the treated water while 60% are located in floodplain communities where remorks are used to transport the water.

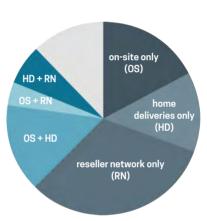
Significantly, 29% are located in floodplain communities where both transportation by land and water is required to bring treated water close to households.

Community Water Enterprise

Bottled drinking water for rural communities in Cambodia

Blending a community-based approach with the principles of a social enterprise model, the Community Water Enterprise programme works with local governments and communities to establish small-scale, community-owned water stations. Managed and operated by village entrepreneurs and local governments, each station provides affordable, treated water in 20-litre reusable bottles to rural households.

Piloted in 2009 and scaled-up across 12 provinces in Cambodia from 2011 to 2018, 75 Community Water Enterprises were established. As of 2018, households from over 300 villages were being served by 65 of these stations. 32% of the water services had expanded their reach to 60 more villages than when they first started.

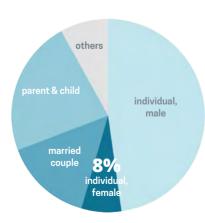


Sales Channels

The type and combination of channels through which entrepreneurs sell their treated water varies, although it is generally more common for them to have just 1 predominant sales channel (62% - all dark grey segments).

Among those who rely predominantly on one sales channel, the reseller network channel is the most popular, followed by on-site sales (17%), and home deliveries (13%).

More entrepreneurs use on-site sales and home deliveries as their two main channels compared to a combination of on-site sales and reseller network (4%) or home deliveries with reseller network (6%).



Management & Operational Structure

Two of the Community Water Enterprises started off with paid operators managed by the Water Management Committee, but all of them are now entrepreneur led.

37% of entrepreneurs work in teams - parent and child (23%) or a married couple (14%), while 55% are run by individuals, with male entrepreneurs being the overwhelming majority (46%). One of the water stations is managed by a community membership association.



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Among one of the earliest to be established, the Treay Community Water Enterprise has been serving the residents of Pou Treay commune for more than 5 years. Its success has sparked the emergence of a private water station in the same community.

Located on one of the major tributaries of the Tonle Sap Lake – the Stueng Sangker, more than 400 households live here in the villages of Pou and Treay. The community moves with the river as it swells and recedes throughout the year. Villagers bathe, clean, and defecate directly in the river, and use its waters for drinking and cooking. The river is the lifeblood of the community.

"We cannot farm here – the land is protected, and during the rainy season the river floods the surrounding areas. We have no choice but to rely on the river for everything." Chem Boeun, the commune chief shared. Most of the villagers depend on fish as their main source of dietary protein and income. Some households also raise crocodiles in floating pens to supplement their meagre earnings, adding to the pollution of the river.

Num Ly and his brother were in their twenties when they were selected to run the Community Water Enterprise at Pou Treay commune. Through Lien AID's training session, they learned how to operate and maintain the water treatment system, and check the quality of the treated water.

A few years ago, Num Ly's brother got married and moved to another commune, leaving Num Ly to manage the water service by himself.

Num Ly shared, "Sometimes it is really hard work and I don't want to go out and deliver the water, but I know how important clean water is to my village, so I am happy to do it."

Initially, most of the villagers did not place much value on the use of clean water and the benefits it would bring. Changing their attitudes and willingness to pay for the treated water took time and effort. Thankfully, Num Ly's hard work has paid off.

"I am very happy. We have almost no stomach issues anymore." said 47-year-old Choy Sottaea, a mother of six boys and a regular customer, is grateful for the affordable source of treated water that the Community Water Enterprise provides.

Another villager, 33-year-old Yee Siaa who runs a small drinks shop shared recently, "Not having to boil water saves me a lot of time. It also saves me money for gas or wood that I would use for the fire. My shop is more profitable because of it, and after my family started drinking the treated water regularly, we don't have so many stomach ailments anymore."

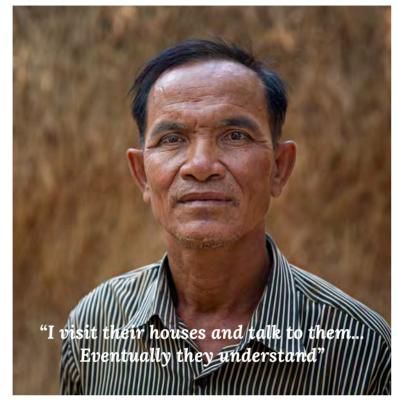
The support and confidence in the water service shown by villagers like Choy Sottaea and Yee Siaa, is testament to the work that Num Ly, the water management committee, and Chem Boeun, have put into promoting clean water as well as Num Ly's commitment to ensuring a high quality of service.

Villagers know that Num Ly can be depended on to ensure treated water is always available whenever they need it. Yee Sia attests, "Delivery is very reliable, and even if I miss it, the water station is close enough that I can carry the water back by myself – even if it is quite heavy."

Num Ly now counts half of all the households in Pou Treay as regular customers of the Community Water Enterprise. "People have become more understanding of the need to use clean water over the past few years. When they see the difference it makes in their lives, it creates demand."

Num Ly's success has aroused envy in the community. One family invested in their own water station and started rumours that the treated water produced by the Community Water Enterprise is not safe. But Num Ly is not worried about such gossip or the competition. "I was selected by the commune chief and I have been delivering water for years now. The people trust me and the water I produce."





Ly Sophon, Entrepreneur Koah Roka Community Water Enterprise, Prey Veng province

Ly Sophon poses near the Community Water Enterprise where his son and daughter-in-law have taken over daily operations of the water service



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Sor Niaken, Entrepreneur
Koul Community Water Enterprise,
Kampong Thom province

Sor Niaken washing the reusable 20-litre bottles with the machine she bought

Finding the "right" entrepreneur is more of an art than a science. Speaking to entrepreneurs of successful Community Water Enterprises unearthed some common traits – empathy, resourcefulness, and dogged determination.

In Koah Roka commune, a former commune chief took on the role of the entrepreneur when its Community Water Enterprise was established nearly four years ago. 63% of the 1,465 households now purchase treated water from the Koah Roka Community Water Enterprise through a network of over 50 resellers spread across the commune.

When asked of his journey in raising uptake of the water service to where it is today, 45 year old Ly Sophon, a soft-spoken father of five believes it's because he cares about his community. Initially, he faced a lot of scepticism regarding the quality of the treated water.

"They say that because I sell the water for cheap, it must not be as good as private company water or water from Vietnam. I don't mind. I visit their houses, talk to them, and explain the process. Eventually they understand what we are doing and how we are helping."

Having been involved in helping Ly Sophon right from the start, Un Poy, Ly Sophon's 18-year-old daughter-inlaw, witnessed his patient determination in convincing households to purchase treated water from the Community Water Enterprise. Since last year, Un Poy and her husband, Ly Sophon's son, have been almost entirely responsible for day-to-day operations at the water station.

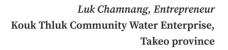
For Sor Niaken, the entrepreneur of Koul Community Water Enterprise, being able to relate to the concerns of the residents of Koul commune and investing her time in building trust, have been paramount to success. "I spend a lot of time going door to door, explaining about the bottled water, creating my own promotions for resellers, and educating people about clean water. I am never just sitting around."

A bright-eyed and energetic 37-year-old, Sor Niaken is one of the few female entrepreneurs managing a Community Water Enterprise. With the help of two full-time workers, she distributes bottled water to a resale network of more than 30 local grocers. In a short span of two years, she has raised uptake of the water service tremendously, and now serves 97% of the 916 households in Koul commune.

She often invites villagers to visit the water treatment station. "Its really important to have transparency. I want people to come and see how the filters work, to understand for themselves why it's important, and not just take my word for it."

Last year, frustrated with the time-consuming and labourintensive process of washing the reusable bottles by hand, Sor Niaken sought a way to mechanise the process. She found some shops selling simple bottle washing devices, and bought a second-hand one for 70 USD.

"The bottles used to smell after we cleaned them by hand. With the machine, there is no smell. Washing the bottles is so much faster too." Sor Niaken rates this as among one of her best investments.



Luk Chamnang demonstrating how he fills up the 500ml bottles with the device he fashioned out of plastic pipes





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See Mean & Cheng Channa, Entrepreneur Pongro Community Water Enterprise, Kampong Cham province

See Mean and Cheng Channa's wholesale delivery model gives them the time to stay home to oversee their small fuel station When Luk Chamnang, a young father of one, first became the entrepreneur of Kouk Thluk Community Water Enterprise three years ago, he too found washing the bottles a chore. Acting on the recommendations of some of his friends, he purchased an air powered pressure washer. Cleaning the dust and mud stained bottles became a lot easier, and his customers tell him the bottles are cleaner too.

Luk Chamnang's inventiveness can be seen in other areas of the water service as well. Wanting to brand the treated bottled water, he made his own stickers, fashioning them from printed paper and tape; Encountering problems with customers replacing the reusable bottles with others of inferior quality, he created product codes and marked his bottles.

"I am constantly thinking of new ideas to improve each part of my operations – how I can provide a better service, and sell more clean water." When his customers requested for treated water bottled in smaller 500ml containers, he found the process of filling each small bottle laborious. He fabricated a simple device from a few pipes which allowed him to fill a number of small bottles at the same time.

For the entrepreneurs of Pongro Community Water Enterprise, See Mean and her husband Cheng Channa, turnover of workers was a challenge. It drove them to adopt an unusual method of distributing the bottled water – a wholesale model. They sell the treated water at just 13 US cents per 20-litre bottle to their wholesaler, who in turn delivers and sells them to a network of local resellers, from which households purchase the bottled water.

"We have to be flexible in our thinking, and find ways to adapt. Otherwise, it's not possible to sustain this service as there are other bottled water suppliers competing with us now." Cheng Channa replied on why they adopted a different operational model, reducing prices to focus on volume sales instead. This has proven so successful that in the preceding year, Pongro Community Water Enterprise sold the highest volume of treated water among all the Community Water Enterprises in Cambodia by a wide margin – a staggering 35% more.

The efforts of See Mean and Cheng Channa, as well as that of Commune Chief Kaem Oteang, and other influential figures in the community such as Chea Sophon, a well-respected teacher, in conducting regular promotions of safe hygiene behaviour and clean water consumption, has played no small part in this success.

Exemplifying how ingrained the habit of drinking clean water has become for many villagers in Pongro commune, See Mean shared, "I can never go back to well water. If I go to a wedding party, I have to bring my own water or wait until I get home to drink. Even when I travel to Phnom Penh, I bring my own water with me!"

The achievements of the Community Water Enterprise Village Entrepreneurs such as the father-daughter team of Ly Sophon and Un Poy, Sor Niaken, Lak Samnang, and the husband-wife team of See Mean and Cheng Channa, demonstrate that despite the challenges inherent in sustaining rural water services, success is possible.



Thank you

We are grateful for the trust, generosity, and commitment of the individuals, non-profits, corporates, governments, and communities who make our work possible.

Your support has made all the difference in realising the achievements described in this report.



Governance Financial Review

Our Board of Directors

Our Board provides leadership to the Management, and sets strategic direction and long-term objectives for Lien AID. It exercises active oversight on all the activities of our organisation and ensures that proper and effective internal systems are in place to monitor the achievement of Lien AID's goals and long-term objectives. As successful leaders in their respective fields, our directors collectively bring a broad range of expert knowledge, skills, and experience to Lien AID.

Directors are elected on a 2-year term and generally, do not serve more than three consecutive terms. Directors are all non-executive and receive no remuneration. The Board establishes Board Committees as necessary, to assist it in the discharge of its functions, and meets at least 3 times a year.

Our Board of Directors

Sim Juat Chee Michael (Chairman)
Anthony Stephen Puckett OBE
Koo Boon Thong*
Lee Kia Jong Elaine
Lee Poh Wah*
Lien Tsung Chern Laurence
Lim Swee Lin
Ong Lay Khiam
Puah Aik Num
Tan Soon Keat

Our Board Committees

Nominating Committee

Sim Juat Chee Michael (Chairman) Lee Poh Wah

The Nominating Committee ensures there is a formal, rigorous, and transparent process for the appointment of new directors to the Board and the re-appointment of retiring directors; robust human resource governance mechanisms have been put in place by the Management; and effective remuneration framework and policies covering all levels of employees, complying with statutory requirements in the locations where Lien AID operates.

Audit Committee

Ong Lay Khiam (Chairman)

Puah Aik Num, Sim Juat Chee Michael, Koo Boon Thong

The Audit Committee reviews the audit plan of external auditors and assistance given by Lien AID's officers; annual financial statements and the auditor's report before submission to the Board; effectiveness of Lien AID's internal controls including risk management; legal and regulatory matters that may have a material impact on the financial statements; and related compliance policies and programmes.

Partnership Committee

Anthony Stephen Puckett OBE (Chairman) Lee Kia Jong Elaine, Lim Swee Lin, Lee Poh Wah

The Partnership Committee works between the Board and the Management to develop, review, and recommend partnering arrangements to the Board, with the aim of furthering the reach and effectiveness of Lien AID.

Technical Advisory Panel

Puah Aik Num (Chairman)

Tan Soon Keat, Anthony Stephen Puckett OBE

The Technical Advisory Panel reviews technical proposals of projects prior to construction; provides advice on resolving engineering issues that arise; and brings in volunteers with the necessary technical skills and experience to assist with on-site technical assistance for specific projects.

Financial Statement 2018

	FY 2018 S\$	FY 2017 S\$
Grants/ Funds/ Other Income	3,075,541	3,260,019
Total Fund	3,075,541	3,260,219
Expenses		
Programme Costs*	957,708	1,730,842
Other Operating and Administration Costs	558,765	718,316
Total Expenses	1,516,473	2,449,158
Changes in Net Assets	1,559,068	810,861
Net Assets at Beginning of Year	4,862,872	4,052,011
Net Assets at End of Year	6,421,940	4,862,872

^{*} Lien AID completed the programmes in Cambodia and China, and paused the implementation of new projects to focus on the development of our strategic plan. New pilots and programmes are expected to be initiated in 2019.

Key Policies

Reserves Policy

Lien AID's programmes are principally funded by contributions from the Lien Foundation. We work closely with our principal contributor for our funding needs and aim to hold adequate funds to meet our operating expenditure and ongoing programmes.

Conflict of Interest

All directors, members of sub-committees and staff of Lien AID are required to read, understand, and adhere to the conflict of interest policy and make full disclosure of interest, relationships, and holdings that could potentially result in conflicts of interest. All directors and key management staff are required to make an annual declaration of any or no conflicts of interest.

^{*} Koo Boon Thong retired in June 2018; Lee Poh Wah retired in September 2018

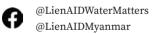




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