

GROWTH OR GREED

Protection of rivers and rights
in the face of development



The story of the Our Rivers Our Life Project – Phase 2
Protection of Rivers and Promotion of Ecological Child
Rights (ECR) in South-East Asia

By Wasana Sittirin and Simon Purnell



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Upstream area of Cisadane River in Ciwaluh village.
Image source: Wasana, 2016



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Cover picture by Wasana: Sitio Dinaga, Bunawan, Agusan del Sur in the Philippines.



Foreword:

Over the past fifty years, the global economy has grown five times. Our earth, however, remains the same size for 4.6 billion years. Obvious there is tension between the two phenomena. Not growing is not the chosen option, but rather how we grow and distribute the gains among people. Growth has occurred in the last decades without a doubt and despite the flaws, there has been unprecedented progress for humankind in terms of poverty reduction, life expectancy, reduction of hunger, and more.

Greed denotes an “excessive, extreme desire for something, often more than one's proper share”. This means an avid desire for wealth or personal and material gains at the expense of others including all flora and fauna depending on earth. Greed can't be tolerated: It's a matter of life and death.

Terre des hommes, Germany recognises and promotes sustainable and fair development and in particular children's right to a healthy environment. It promotes alternatives to growth and development that will ensure and safeguard all natural resources and empowers children, youth, and communities around the world to shape a better, cleaner, greener, and safer world.

The following text provides an overview and summary of the Our Rivers Our Life project, showing how communities, children, and youth realised and contributed to environmental child rights. Youth and children from different communities in Cambodia, Indonesia, Lao PDR, Myanmar, Philippines, Thailand, and Vietnam said no to destructive dams, but yes to alternative energy, increasing awareness on consumption, the restoration of habitats and ecosystems, and organic food production.

Thus, the following text is a testimony of promoting a healthy and ecologically sound environment for 13,821 children and youth who, together with CSOs, local governments, and schools, showed that changes for the better are possible and necessary.



Marco van Grinsven
Regional Coordinator of terre des hommes, Germany
Coordination Office in South-East Asia

Note:

This book is a result of the work carried out by terre des hommes, Germany's, South-East Asia Office under the banner of the "Our Rivers Our Life" (OROL) Projects, and specifically from phase two "Protection of Rivers and Promotion of Ecological Child Rights (ECR) In South-East Asia" This second phase of the project ran from 2016 to 2019. The data used to compile this book has been taken from the reports and publications of project partners as well as interviews carried out by the authors. This has been supported with secondary data from a broader range of online and written publications.

This piece of writing has been developed to bring a more complete understanding of the range of issues that need to be considered when preparing and implementing 'development projects'. The examples on which it draws do not apportion blame to any group, party or individual for any actions. It simply represents the perspectives of the communities and actors that have been affected by development programmes or who have met with success in curtailing any negative impact of such programmes. These actors are often left without a voice in the grand scheme of national development and in doing so their lives are affected negatively. Therefore, this book brings forward accounts and information from such affected populations and suggests a new way of analysing development paradigms.



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Daw La Lake, Karen State, Myanmar
Image Source: Wasana, 2016.



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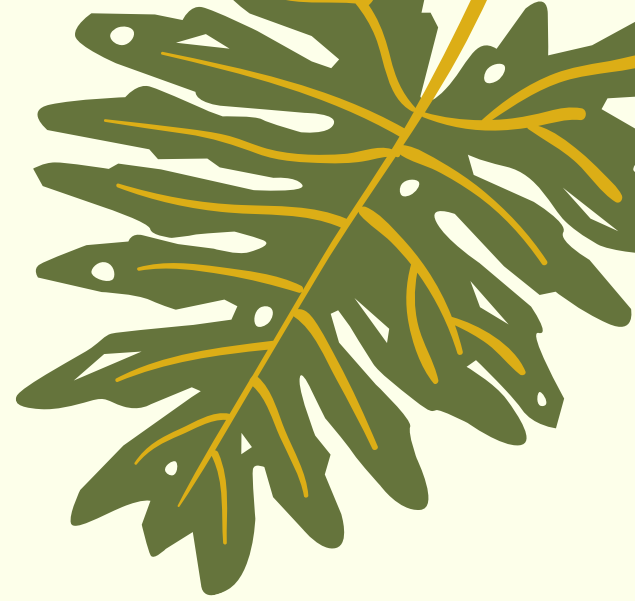


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Chapter 1



Image Source: ACED, 2018.

Introduction

OROL Project and the context of the work for OROL partners

Ecological Child Rights

Chapter 1

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Ecological Child Rights

Introduction

South-East Asia has witnessed vast economic, infrastructure and technological advances over the past thirty years (Sarel, 1996). Nations such as Thailand, Malaysia and Singapore have developed economies that are resilient to many external forces whilst massive economic growth has been witnessed in Vietnam over the last fifteen years. Indonesia and the Philippines have seen industrial and technological advances alongside increased rates of population growth. The People's Democratic Republic of Lao (Lao PDR) and Cambodia have seen a population shift from rural areas towards towns and cities, and Myanmar has moved away from being led by a military dictatorship. The development of labour, capital and technology supported manufacturing, energy production, resource extraction, tourism and more intensive agriculture to become key elements of the strengthening of the economies of all these countries in the region (Sarel, 1996).

Governments have ensured that they deliver on bringing advances to their countries to meet the rights of their own populations to access such resources. Education systems have grown with more universities and technical colleges being established ensuring the population are able to support the component parts of the emerging economies. Whilst there have been periodic political challenges for investors the relative stability of the region, when compared to some regions of the world, has ensured that progress has been made along the 'path to development'. This is underscored by the current growth rates, as determined by Gross Domestic Product (GDP) which show that the economies of Lao PDR, Vietnam, Myanmar and Cambodia have all grown above six per cent from 2000 to 2017 (The ASEAN Secretariat, 2018 p. 30). These growth figures have been realised due to the understanding displayed by South-East Asian nations of the role of investments in human, production and trade for economic growth (Asian Development Bank, 2017).

In countries throughout the region, these changes that are framed as advances that benefit the nation as a whole have been implemented in some cases without engagement of all sections of the affected communities. This has often been done in a completely top-down manner, where the pressure to deliver on ‘projects that are in the national interest’ has meant that the rights of all stakeholders are not necessarily considered alongside the rights of the shareholders. Energy production, food security, infrastructure and economic growth in urban areas have been prioritised ahead of inclusive planning. This has created a strain on the natural environment and communities that have remained therein from the potential impact of negative shocks (Mobarak and Reimao, 2020) and has led to a wealth of well documented cases of negative impacts on the environment and bio-diversity, as well as the rights of communities in affected areas in the region.

This gap between planning and implementation is the space where local community organisations, community action groups and key individuals are left to operate. Support for actors in this space is where *terre des hommes* (tdh) Germany has been active in South-East Asia for over forty-four years. Through this framework of cooperation within the region the Our Rivers Our Life (OROL) – “Protection of our rivers and promotion of ecological child rights in South-East Asia” project was developed and funded by Federal Ministry for Economic Cooperation and development (BMZ). OROL has been implemented in seven Non-Governmental Organisations (NGOs) who are members of a network of thematic country bio-diversity working (Bio-Div) groups across the region and has focused on the protection of ecological child rights and environmental protection of riparian and watershed areas. The cooperation under OROL began in 2012 and works specifically with target communities in Cambodia, Indonesia, Lao PDR, Myanmar, the Philippines, Thailand and Vietnam. NGOs in each of these seven countries have been cooperating since 2003. This working group and the secretariat for the OROL cooperation have provided oversight and steering for the country partner NGOs and community groups. The OROL project spanned two phases from 2012 to December 2019 and this book will present key themes and areas of engagement with communities in the aforementioned countries, focusing on work carried out during the second phase which ran from April 2016 to December 2019.

The rivers of South-East Asia are vital for the livelihoods of millions of people in terms of domestic use, agriculture, industry and transport (Opperman, 2018). Against the backdrop of development of infrastructure that supports a more urbanised and inter-connected life in all of the partner countries there have been changes in the ecology and bio-diversity of watershed areas. This has impacted negatively to the ways of life, culture and rights of communities, many of whom are rural or isolated or made up of indigenous people.

The partner organisations in each country are working with the communities in the following areas: Svay Rieng city and Rimdoul district in Cambodia; West Java and Yogya in central Java and Jambi in Sumatra in Indonesia; Salavan and Ta-oi districts in Lao PDR; Karen and Mon states in Myanmar; Davao City, Cotabato City, Maguindanao, Agusan del Sur and Ozamiz City in the Philippines; Chiang Rai, Chiang Mai, Lampang, Phrae and Nan provinces in Thailand; and Lam Dong, Binh Phuoc, Binh Duong, Dong Nai, Ba rai-Vung Tau and Ho Chi Minh in Vietnam.

In this book, the increasingly urbanised context of life in these countries, the role of dams, coal fired power plants, mining and quarrying, large-scale agriculture and plantation projects as well as infrastructure and industry in the project target areas are examined alongside the work of partners in the OROL project. This will be supported by examples of good practice and successes by communities, governments and individuals across South-East Asia. The purpose of this narrative is not to apportion blame or to suggest that individuals or governments are at fault for the negative impact of any development project. It is to highlight the importance of inclusive and collaborative development programmes that protect rights and resources for all, in ways that have as minimal negative impact on communities and their environments as possible.

OROL Project and the context of the work for OROL partners



The OROL projects were supported through their life-span by a Secretariat based in the tdh Germany office in Bangkok. Through the structure of the 'bio-diversity working group' which was established in 2007, the Secretariat team provided support for the two OROL projects. These projects focused on the protection of bio-diversity in and around South-East Asian Rivers and implemented local campaigns in which children and youth affected by the environmental disruption participated. As such it has worked alongside and for the partners in each of the seven countries (a summary of each partner is provided below), where the project was implemented.

Cambodia

In Cambodia, the partner throughout the OROL cooperation has been the Santi Sena Organisation (SSO). Santi Sena is a charitable NGO, founded in 1994 as a Buddhist monks' organisation in Svay Rieng Province in the area around the Waiko River. It registered in 2003 with the Interior Ministry. Its key aims are peace, improvement of livelihoods of the people, social justice and environmental protection.

Santi Sena works with grassroots group's leaders, provincial authorities, the Forestry Department, the Ministry for Youth and Sports, the Ministry of Agriculture and Development and Buddhist organisations, Svay Rieng University, Svay Rieng Fisheries Administration Cantonment, Agriculture Department, police administration and Local Authorities. Through these networks the organisation is able to support natural resource and bio-diversity management, education projects including community based forest and fish protection, collective re-forestation and strengthening communities against the negative impact of climate change.

Santi Sena is also coordinated with government departments and has developed relationships with key actors. Interviews with stakeholders in Cambodia highlighted an increased openness from government actors, and apolitical activities are welcomed by government staff. Santi Sena has established links with government actors and as such they are able to act as a channel to bring forward community voices to government personnel in Svay Rieng. Recent changes have been made to the operational structure of Cambodia's government with more centralised control hindering the extent to which that Santi Sena can enact change. There is a need to follow directives that come from central government through provincial government, but issues encountered by Santi Sena (and other organisations) now need to be carried directly to the central government.

Interviews in Cambodia highlighted the prioritisation of economic developments over environmental protection and the need for improved assessments of the

impact on the environment. It was stated that business and industrial estate planning should also include impact assessments. The prioritisation of economic interests over environmental protection is also present in the needs and priorities of the community members with the pull factors of employment and income leading youths away from the communities to jobs in factories and towns. A positive aspect of investment and job creation in Svay Rieng has seen around 170 companies and factories opening and providing employment for people. Further interviews carried out in Svay Rieng highlighted the aforementioned increased attention on economic prioritisation over environmental protection. It was stated that in Svay Rieng plastic and waste from factories should be properly managed. In fact all factories in Svay Rieng have signed a Memorandum of Understanding (MOU) with the Ministry of the Environment on waste management and should be penalised for illegal waste production, but the law enforcement is not consistent. As such industrial programmes and business interests have been seen to increase urban waste water, large scale agriculture has seen increased use of fertilisers and pesticides and with subsequent drought and flooding, there has been damage to the environment and bio-diversity.

The context of the work of Santi Sena in Cambodia is supported by the use of Buddhist institutions and resources. This has been proved to be very useful in enacting change and adjusting attitudes. Furthermore, the use of schools, temples, radio programmes, trainings and actions to raise awareness in communities have been valuable in increasing the knowledge of community members. This is reinforced by the following quote from a beneficiary, *"I think the role of Buddhist monk is important in Cambodia. Monk is an important person to educate others about social awareness."* Social media is also used to share key information to help people understand how to protect the environment in Svay Rieng. This is used to share information about children's rights and the issues of environmental protection and natural resource management. Furthermore, it links to the role of protection of ecological child rights and maintaining a clean environment, as there are a number of community people living along the river and, as shared by one interviewee in Svay Rieng, many of them do not know anything about river protection.

Indonesia

The partner in Indonesia is the Indonesian Institute for Forest and Environment (RMI). Founded as an NGO in 1992 as a charity in Bogor, West Java and registered as such. The institutional goals are to support poor farming communities to realise their rights, in particular the right to land and maintenance of their livelihood. This is realised through sustainable resource-saving systems of securing livelihood through collective action. RMI is the focal point for Indonesia for environmental protection and bio-diversity.

RMI works closely with grass-root groups along the Cisadane River in Bogor, West Java and Banten with projects for natural resource and biological diversity preservation and management. The organisation works with women's and men's groups and rural schools as well as youth groups and indigenous peoples. Ecological child rights, gender principles and participation form the foundation of the work which emphasises a "Better Life" community development. This is done by using innovative ecological and energy saving action to support sustainable improvement of livelihoods. This is carried out using social change activities, fair trade of produce and products and community based resource management. RMI also works on the promotion of land rights and resource management to support increased agricultural productivity of poor farming communities in the context of agricultural reform.

In Indonesia, governmental processes and planning have provided some space for project activities and for making changes in communities. Judicial reviews and the presidential priorities are examples of these and it was shared in interviews in target communities in Indonesia that government ministries have been open to engagement. There have been some challenges due to the structures and division of responsibilities in government which were cited to reduce the potential pace of change. This is because there is no environment person at local government level which reduces the opportunities for collaboration. As such RMI has needed to use community advocacy to provide a channel to link to government at 'higher' levels. Other broader issues related to government policy have also been voiced regarding the political positioning and subsequent influence which are linked to negative impacts on indigenous communities.

Discussions with youths in Indonesia provided evidence that economic development programmes in Jambi and West Papua have been seen to be spreading false information amongst local and indigenous communities. Also, in Java leisure resorts and other infrastructure works are a concern for community members and indigenous peoples. Further interviews showed that business decisions have been planned without consequences on local communities being considered and in one village the local tofu factory and a tannery were given as examples of businesses that have been noted to be polluting the local environment. Other issues cited included toll roads, factories, cottage industries and waste burning that all have a negative impact to the target communities and their environment.

Groups supported by RMI and through OROL have highlighted that some opportunities for economic support have occurred as a result of the industrial developments in their communities but these opportunities remain peripheral to the industrial works. These opportunities include small scale funding from recycling sales and making handicrafts. RMI is also looking at how sharing information about different community's experiences in rural and urban target groups can be used to strengthen the impact of the programme.

Lao PDR

The implementing partner in Lao PDR is the Association for Community Development (ACD). Registered since 2013 it aims to support ethnic groups in political participation as well as self-determination of livelihoods of communities in target areas. ACD works with numerous key villages and grass-roots groups in the poorest areas of Salavan province along the Xelanong River as well as with ethnic groups in Ta-oi, Samouy, Lao Nyam in Ta-oi district and Houn village in Salavan district. ACD collaborates with national and international NGOs on health, food security, agriculture, and education and leadership skills in target communities and carries out its work in close cooperation with local government authorities.

ACD, the OROL partner in Lao PDR has been working with indigenous communities in Ta-oi and in Salavan for a number of years and has established River Watch Groups in the vicinity. They have worked on educating people about the relationship between the agriculture and the river health. In the past many hardwood trees were cut down and sold to Vietnam, amongst other countries. These trees will take tens and in some cases hundreds of years to replace and replenish.

The context of work in Lao PDR is shaped by a much more engaged process with local government actors. The nature of civil society operations in Lao PDR means that all activities and programmes are given permission by staff of the local government units. The structure of government means that they are ubiquitous in any NGO work in Lao PDR. Subsequently, the government control of space to work reduces possibilities for community autonomy, but this has been seen to be positive as it was shared by beneficiaries and stakeholders in Lao PDR that government support for activities in schools does however provide opportunities for engagement of, and learning by government actors. ACD staff provided further evidence of the nature of their work in an interview with the OROL Secretariat during a field visit. It was stated that the collaboration for project implementation depends on the approval of the relevant government agency at the national level because it is related to children. So, ACD is working to adhere to the national policy implementation and needs to consider how the activity outcomes are meeting the national standards. ACD has a policy at local level on the protection of the environment and rivers and this policy is mainly initiated at the provincial level. ACD can implement the OROL project as it is in line with national policy because it aims for social and community development.

Concerns faced by the communities are mainly related environmental and river protection, as well as garbage management in schools, communities and

households. It was said by one interviewee that communities do not know how to properly manage their garbage and how to cut trees legally. Generally, communities have garbage bins to collect garbage but people just throw it away including into the river.

Drought and water management issues have been problematic and commercial tree plantations for paper production causing damage to soil and ecosystems have been another problem faced. In light of these issues, ACD has worked with communities on improving their understanding of their rights and the value of their land. They have sourced support for knowledge for communities from Thai institutions and have been using radio programmes to provide opportunities to reach large numbers of people throughout the districts where the OROL project has been implemented.

Further issues related to the context of the work in Lao PDR include deforestation from people practicing shifting agriculture in the mountain areas and bomb and chemical substances found in fishing waters. Furthermore, the social norms in Lao have meant that there can be difficulties for children to suggest new ideas for their communities.

Myanmar

The project holder in Myanmar is the Karen Environmental and Social Action Network (KESAN). It was founded in 2001. It has offices in Thailand and Myanmar and implements projects in cooperation with local grassroots groups to ensure sustainable livelihoods and preservation of indigenous knowledge. Under the OROL project, it worked with the Karen River Watch (KRW) network.

KESAN work engages communities on both sides of the Salween River in Myanmar and Thailand with much of the scope on the Myanmar side being around the proposed dams in Hat Gyi and Wei Gyi on the Salween River. The organisation focuses on the promotion of community based initiatives, promotion of indigenous knowledge and skills to maintain bio-diversity, increasing awareness in communities of the protection of the environment from development programmes and climate change. This is supported by core activities of research, campaigns, advocacy, community event organization and production of articles and videos for media.

KESAN's work in Myanmar is framed by a highly complex set of factors. The challenges faced in the operating environment for the partners in Myanmar are compounded by the as yet on-going clashes between ethnic armed groups and government backed forces. Whilst many changes have occurred to the political situation in Myanmar over the past few years the pressure of international development funding on government actors and their business partners means that Myanmar features regularly in this book.

Government policy is focused mainly on large-scale power production programmes and the structure of the government means that there are split decision making processes between the State level and Union or Federal level. Interpretation and implementation of the policies lead to an unstable environment to plan actions. This operating environment is made more complicated by the fact that there are splits in the control of areas between different ethnic armed groups such as the Karen National Union (KNU) or the Democratic Karen Benevolent Army (DKBA) and the impact of working under different groups' planning.

This aspect of allowing for interpretation of selected laws has been used, according to interviews with affected community members in Karen State to silence government critics and that government actors have largely been seen to not support community ideas. Comments made by KESAN staff in interviews in Karen State have shown that some government actors and elders look down on youths and question their knowledge and ability and this is in part linked to splits in communities over political and economic decisions. Also, as shared in interviews by the Secretariat in Mon State, village heads are afraid to allow youth to conduct awareness campaigns within the villages when it is not for a government project. They don't want to have problems with the government. However, exploitative business interests and 'crony capitalism' are rife and are causing negative impacts to communities with foreign investors reluctant to take interest in the issues affecting communities and the impact of their actions.

KESAN has built networks with other states and ethnic groups (Shan, Karen, Mon, Rakhine, Kayah Kachin, Ta Ann and Ku Ki) but it has been found that in many cases it is difficult to get real information from government actors and conflict zones. Interviews showed that community members do not have knowledge about the value of the rivers. Also, when communities are confronted by floods, dam construction, dirty energy such as coal, land grabbing, road construction, mining, air and water pollution there are difficulties for them in Myanmar to exercise their rights. This provision of information has historically been problem, with journalists that wanted to report a story or publish a photo, without an internet connection, had to run to the border of Thailand and since 2012 and the media has faced censorship on political issues. Articles related to environmental issues which cannot be separated from political issues, cannot be written. It was shared by community members that the government's strategy is that everyone can break the laws; the government selectively use this against those who break the law, and within Karen State other villagers shared that the main body of the National League for Democracy does not support sound environmental practice.

This has caused disenfranchisement of community members and has led to people leaving the community and others becoming involved in drugs, prostitution and gambling – youth are losing their education and becoming migrant workers. As such, KESAN has worked with youth groups. These provide opportunities for youths to have a voice, which is not always present in their home communities and it has been seen that there is a need to increase knowledge on legal matters and Environmental Impact Assessment (EIA) and they need more academics to support them as they work.

The Philippines

The Philippine partnership takes place through the network of NGOs and grassroots groups working on environmental protection and ecological child rights. The OROL project lead partner is Gitib (Resource Center for Sustainable Development as Leading-Project-partner of the Network KALITAWAN), a charity registered in 2001 supporting basic rights for ethnic and indigenous communities throughout Mindanao. The main focus areas for Gitib and the partners PASAKK (Panaghiusa Alang Sa Kaugalingnan Ug Kalingkawasan, Inc.), IMAN (Integrated Mindanaons Association for Natives Inc) and Y4CJ (Youth for Climate Justice) are the villages and communities along the Agusan, Labo, Rio Grande de Mindanao and Pulangi/Liguasan river courses. Gitib and partners provide alternative ecology and cultural education, trainings and support for campaigns on environmental protection and sustainable development, advocacy, relief and rehabilitation programmes as well as networking with government representatives and institutions.

In the Philippines, the partners face many issues in supporting the communities where they implement activities through the OROL cooperation. There is a wide range of different issues related to environmental degradation and infringements and violations of rights of community members. Mining, coal-fired power plants, logging, gold panning, deforestation and plantations, illegal fishing, garbage and water contamination are the main environmental issues faced. There are also peace and security issues that exist in target areas and staff members of some partners have been and continue to be exposed to risks. PASAKK, the partner in Agusan is working on protection of the Agusan River and the Agusan Marsh. It is doing this through a network of community members who are trained and supported with environmental education. Conversations with the community members in Agusan showed that the youths provide motivation, energy and dynamism for the older members and the elders provide guidance and advice for the youths, thus enabling them to work effectively by using the strengths of each group. The commitment to working on the issues related to protection of the natural environment is shown by the following quote from a River Watch Group member in Bunawan, *“I know as a youth, I need to care for our river and natural environment. We are the new generation”*.

In the area around the Rio Grande River the main partner is IMAN. This organisation works with village communities near the river and coordinates their work with the Local Government units to support care of the riparian environment and in cases of emergencies, such as flood relief.

Gitib is also supporting Theatre Arts Groups in Calinan and active and engaged youth groups such as Y4CJ to raise the profile of environmental care and youth rights to help ensure that broader sections of Mindanao society are aware of the impact of 'development programmes'. Staff in the Philippines shared that money is the driving factor in a lot of decisions related to development. As such the policies of the current government have been a focus of activities.

However, there are also difficulties for partners and some elements of society in Mindanao view engagement of communities and speaking out about the problems faced as political activism. Furthermore, government actors are not always open to listen to the voice of children and local communities. This social context is made more challenging as discussions with community members and interviews uncovered some knowledge and attitudinal difficulties.

Thailand

In Thailand, the partner for the OROL project was the Association for Community Ecology Development (ACED). It was founded in 1987 and was registered as a charity in 1997. The organisation works on education and environmental protection whilst promoting pesticide and chemical free farming and rights in rural communities. The main areas of project implementation are along the tributary rivers of the Mekong and its basin, with additional activities along rivers that feed into the Chao Phraya River, which runs through Thailand to Bangkok. Their core work focuses on thematic areas related to the improvement of the environment and protection of resources. They work with schools, youth groups to preserve natural diversity along the targeted rivers and the communities along their banks.

The partner for OROL in Thailand worked in the north of the country. The rivers in this area flow into two of the main rivers in mainland South-East Asia, namely the Mekong and Chao Phraya rivers. Communities along the Mekong River overwhelmingly provided evidence that the main concern for their life and connection with the river comes from the dams that have been built in China. The opening and closing of sluice gates upstream lead to irregular flows of the river. As a result, the normal agricultural zones on the banks of the Mekong River during dry season are at risk of rising water-levels due to water being released from upstream dams for Chinese shipping along the river. Information is provided by the Chinese companies related to the river level for their ships operating between Thailand and China, but there is no information passed onto the communities or government actors at the local level in Thailand.

Other issues at play in Chiang Rai on the banks of the Mekong include drilling for ground water from streams near the Mekong as well as sand quarrying from riverbeds and banks increasing pollution in communities. A further issue is the commercial agriculture that is practiced throughout the area and the fact that this is largely controlled by agents and ‘middlemen’ involved in agriculture sales – leading to conglomerate influence for genetically modified and pesticide and fertiliser dependent varieties to be grown. The following quote provided by the staff of ACED highlights the impact of this approach. “Industrial programmes have caused damage to the natural environment and there is a need to look after water resources and get parents to teach children about using environmental resources. This should be linked to our attitudes based on our knowledge of the ecosystem”

At the time of writing, the Royal Thai government has proposed a policy on water use and management and there is a need for communities to follow up what the impact will be from this. However interviews showed that in target areas, there is some support from sub-district and district council departments. The impact of these centralised development policies can be seen by the following quote from a monk related to the Ping River (a tributary of the Chao Phraya), as shared in interviews by the Secretariat. *“People used to drink and had showers from Ping River a long time ago. Now the River is not as clean as before. People are not able to do the same activities in the River.” “We have to try hard to conserve the Ping River”.*

Vietnam

The Vietnamese partner was the Forestry Association (FA). It was registered in 1987 and works on environmental protection and research. The main areas of focus for its work are with communities along the Dong Nai and Sai Gon Rivers in Southern Vietnam and it supports communities with research and action for practice of environmentally friendly agriculture. Its networks and associates provide support for work protection of mangrove ecology in the Mekong Delta.

In Vietnam, the partner FA works primarily with urban communities in Ho Chi Minh City and nearby towns. Partners and OROL activities have to follow government policy and as such there are no ways to suggest new initiatives, so civil society organisations (CSOs) stay at ‘their level’ (working in their niche roles). The government has a policy to reduce plastic usage and a policy related to protection of the rivers and banning the establishment of new factories however this is slow to be put into action. Interviews showed that profits are given higher priority over environmental protection and that factories have been known to dump waste or have fake filtration systems. Additionally, people living along the river are not always aware of the impact of their waste and throw it into rivers and along the streets. Whilst each province has a different policy on environmental protection, Ho Chi Minh City for example, has some sound policies that others do not have. Also, following the policy can be difficult as the participation from government agencies is limited and their role can be unclear.

In Vietnam knowledge of best practice for farming needs to be improved and there is reportedly a high level of use of nitrates and further south in the Mekong delta there are issues with increased salinity which can now extend to up to seventy kilometres inland. Media (mainstream and social) provide opportunities to share information and access knowledge and there is a strong connection with youths and children who believe that they have to change and increase awareness to protect the environment but there are difficulties for them to enact change. River Watch Groups went to talk to people who live next to the river, and asked them not to throw rubbish into the river, but sometimes received a negative reaction from people. They said that, “they cannot live in other ways”, highlighting issues with adaptation to new situations, including the types of waste and the increased urbanisation. Other discussions with youths demonstrate the knowledge about issues that they have. Children want to protect the environment, rivers and life of people around them. They want to learn what causes impact to their life and how to solve the problems, especially air and water pollution, pesticides and garbage. Another student said *“we have to keep the environment healthy for our new generation”*, with others echoing the desire to support improved practice and the challenges that are faced. *“ecological child rights is about rights for a healthy environment. “People don't care about what will affect their life. They throw rubbish on the road and into the river. They think that it's a job of cleaners to clean whilst police take money. As students, we can't do much”*.

Each country where the OROL project has been implemented the partners face their own challenges in supporting members of target communities’ rights. However, there have been successes in all locations. The use of youths and small communities has enabled focused messages to be put across and by working with actors from government and at times with support from the private sector the OROL partners have been able to enact some change for the good of the target community members’ lives. The success of OROL though would not have occurred if it had not been for the knowledge, networks, understanding of the local context and commitment of staff members, thus underlining the importance of local, indigenous know-how.

Ecological Child Rights

The meaning of “ecological” in a child’s rights context

Ecological Child’s Rights (ECR) is the right of children to education, sufficient standard of living, and to a safe, healthy and sustainable environment. This highlights the connection between the environment and the activities in children’s lives in ECR, which was first defined in 1999 by the National Coalition for the Implementation of Children’s Rights in Germany.

ECR can refer to the right of future generations of children to have a secure life with dignity. A healthy and secure environment should be equally experienced by everyone, whether they live in urban or rural areas. While social and environmental issues are often considered “second class issues”, they become more salient when linked to income generation. Thus, it is not unusual if massive development-induced environmental degradation results in social conflicts. Children and women are more vulnerable when social conflicts occur.¹

The way that ecology can be applied to the rights of children is as follows:

1. The right to life including basic health care, proper education, livelihoods, adequate living conditions and shelters, and clean food and water supply, all of which should be economically and politically equal.
2. The right to development, including responsibility of citizens, the government and all actors to take into account younger generation’s rights when the environment is destroyed and there is a loss of ecological balance due to exploitation of resources. In those cases, the laws and development policies that affect children must be considered as a priority.
3. The rights to natural ecosystems rich in biological diversity need to be shared within communities, including wildlife animals, rivers, forests and cultures. Resources should be optimised for utilisation and to restore natural conditions when the environment changes due to increasing urbanisation. The well-being of children, both directly and indirectly, should be fully realised in an ecologically intact environment.

The concept of ECR sheds light on the interdependence of environment and child rights protection and points to increasing human-induced environmental harm. The interrelation between environment, development and child rights has not yet been duly explored or recognised at the international level, while existing obligations have not been fully implemented.²

How does tdh Germany strategy support these?

Tdh Germany has been successfully working on ECR with non-government organisations across borders within South-East Asia for several years. They have contributed to strengthening the normative and institutional frameworks for environmental and children’s rights protection.

¹ Information from RMI’s document. Topic: Ecological Child’s Rights. Prepared by Indra Hatasura, Mardha Tillah and Ratnasari.

² Information from Alberto Cacayan’s presentation, tdh Germany. Topic: Ecological Child Rights.

Tdh, Germany has established International Working Groups made up of members from partner organisations, regional offices, youth, volunteers and staff. These groups have been supporting regional campaigns and attempting to do advocacy and public relations work at the national and international levels. They have called upon the international community to explicitly recognise the right to a safe, healthy and ecologically sound environment, thereby acknowledging the relevance of environmental destruction in the context of child rights protection and demand that national and international decision-making in the field of environment be based on child rights norms and principles.²

How has OROL worked to support Ecological Child Rights?

Since 2012 until December 2019, OROL partner organisations have implemented many campaign activities to protect the environment and promote ECR such as awareness raising, workshops, youth camps, River Watch Group forums, and peer-to-peer training. OROL partners have played important roles in lobbying and networking on ecological child rights and established allies with politicians in protecting the environment from local to international levels.

Children and youth groups were trained to become engaged in speaking out about their natural habitat at all levels, created river protection zones, and raised their voices to protect their rights and the environment in their communities. OROL has empowered children and youth groups regarding their rights and trained them to improve their ability to implement rights related to the environment. Awareness about the connections between children's rights and the environment has increased among local community leaders and national and regional decision-makers.

These provisions under ECR are further underpinned by the Convention on the Rights of the Child (CRC). Indeed, the CRC is one of the few human rights instruments that explicitly require States to take steps to protect the environment. There are two articles which specifically mention the environment, namely:

Article 24 (2) on the right of the child to the enjoyment of the highest attainable standard of health provides that:

“States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures: [...] to combat disease and malnutrition [...] taking into consideration the dangers and risks of environmental pollution”

Article 29 (1) on the aims of education provides that:

“States Parties agree that the education of the child shall be directed to: [...] the development of respect for the natural environment” (Committee on the rights of the child, 2016).

²Information from Alberto Cacayan's presentation, tdh Germany. Topic: Ecological Child Rights.

This type of measure is vital to protect the rights of children. Participation and the opportunity for children's voices to be heard and their views respected, so as to promote their best interests is far from universally accepted. Attitudes towards youths and children have in the past been seen to not always promote youths' voices in decision making and it has been suggested that there needs to be a drastic shift in youth to adult relationships across the board in all aspects of life. These could include within the family, at school or from local or national government actors. This would be needed to ensure that older generations are not taking decisions without truly considering the needs of youths and children (UN, 2003).



People especially children become IDPs due to the conflict in Karen State. Image source: KESAN, 2016/2019.

Chapter 2



The Ping River.
Image source: Wasana, 2018

Topography and the Rivers in South-East Asia

Land use change

Peoples and cultures

Chapter 2

Topography and the Rivers in South-East Asia,
Land use change,
Peoples and cultures

Topography and the Rivers in South-East Asia

South-East Asia is composed of eleven countries which is comprised of two distinct zones. The mainland, comprising of Myanmar, Thailand, Lao PDR, Cambodia, and Vietnam. Whilst the maritime region, (also known as the 'insular'), encompasses Malaysia, Indonesia, Singapore, Brunei, the Philippines and Timor-Leste (Andaya, n.d.). It is approximately 4.5 million square kilometres in size (Phillips, 2006).

The topography of South-East Asia and the subsequent make-up of the watershed areas have dominated the settlement patterns of the region. It is therefore important to examine the major river courses in more detail and explore the nuances of culture and livelihoods that have developed around these watercourses. The rivers of mainland of South-East Asia originate from China then flow through many countries in the region and out to the South China Sea (Andaya, 2018). With rivers crossing national boundaries and flowing through different topography, it is important to understand the nature of the river and the bio-diversity and culture related to it along its entire length and not only as a single entity or carved up into suitable and convenient planning spaces. Rivers need to be looked at as an entity that is changing and being changed by actions along its course.

South-East Asia is composed of over seventy percent water and have regular monsoon rains weather in the region (Andaya, 2018). These monsoonal rains and the subsequent structuring of patterns of life around these rains are integral parts of the culture and ways of life in South-East Asian society. The broad river valleys of the Yangtze, Mekong, Irrawaddy, Salween, and Red Rivers flow from Tibetan Plateau (MRC, 2005) between the mountain ridges into the wider deltas at the southernmost points. These regions are covered with alluvial sediments that support much of the cultivation, ecosystem of the rivers and water supply. The most extensive coastal lowland is the lower Mekong basin, which covers large areas of Cambodia in a large freshwater lake, the Tonle Sap which depends on the Mekong sediment transport (Lu et al., 2014). However, the rivers of insular South-East Asia are not as large as the rivers in mainland South-East Asia, with the Labo, Rio Grande de Mindanao and Agusan Rivers in Mindanao in the Philippines and the Citarum and Cisadane Rivers in Java being the largest in areas of focus for this book and the OROL project, as shown in the partner's reports.

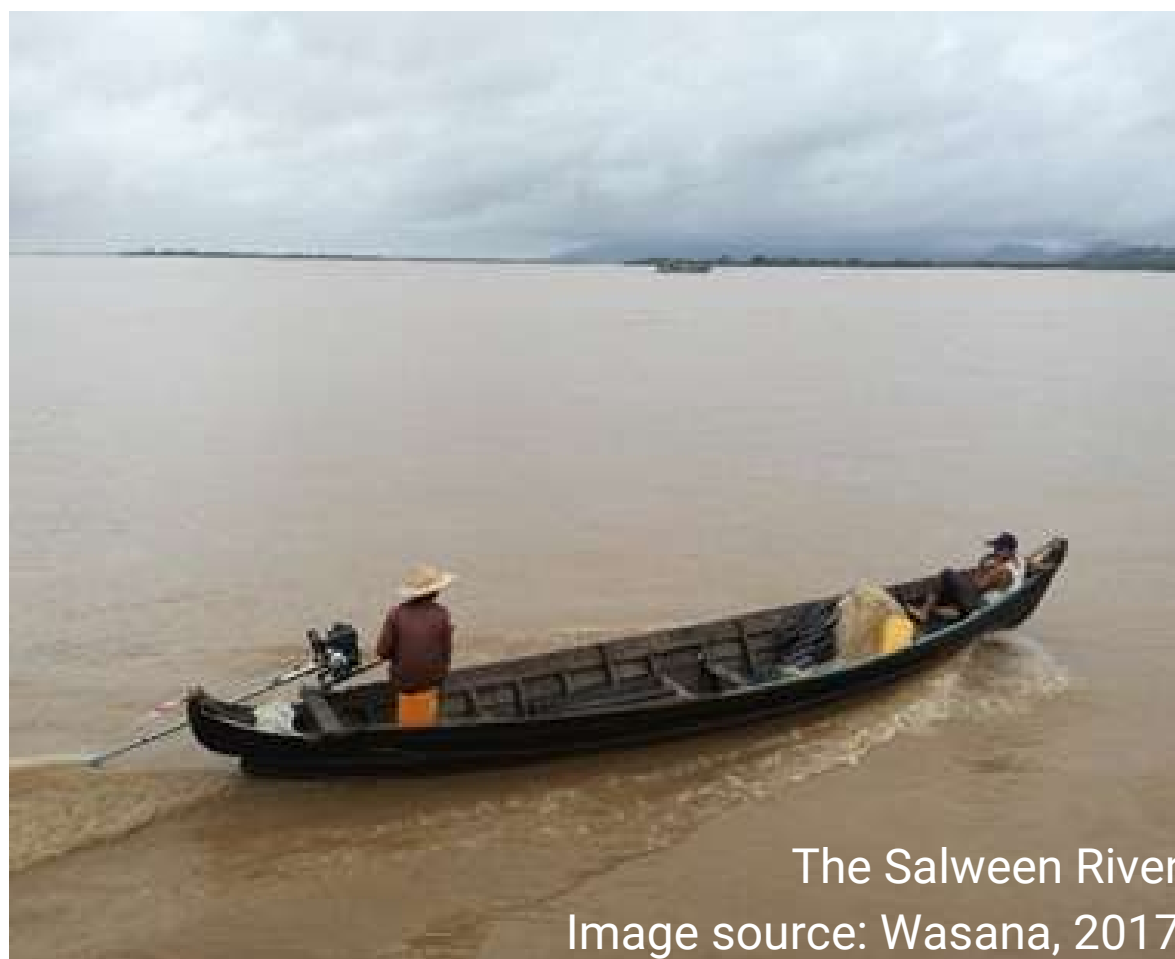
Water resources management and governance of the flow of rivers in the region is supervised by government departments, politicians, engineers and technocrats. The planning by these groups is characterised by large, often unilateral infrastructure projects with limitation of international cooperation which is resulting in issues of national security, territoriality, and competition. The river is important to the livelihood of over 780 million people in the region, thus the future of water resources management is essential to regional and international stability. However, the current approach is likely to become more unequal and unsustainable (Williams, 2018). With such an essential role in South-East Asia being played by the rivers and water resources in the lives of the people in the region, coupled with the often-centralised planning and governance programmes there is a myriad of different opinions on the best ways to use rivers and water resources. As such there are gaps and different priorities exist amongst different sections of society. Centralised planning by individual countries often values the water as a resource for the benefit of the nation as a whole, but as will be seen, this often comes at the expense of people and communities whose lives have been structured and supported by the rivers, riparian resources and ecosystems therein. It is in this context that the OROL project was implemented. Many project activities that were supported by OROL have been implemented along these rivers and a number of their tributaries and catchment areas in South-East Asia.

The Mekong River

The Mekong River is the longest river in South-East Asia (MRC Secretariat, n.d.) and it is the world's largest fisheries for food security (Sagar, 2016). The Mekong River basin can be divided into two parts; the Upper Mekong Basin in Tibet and China (MRC, 2005), and the Lower Mekong Basin in Lao PDR, Thailand, Cambodia then flow to Mekong delta in Vietnam (Sagar, 2016). The Mekong River has average annual discharge of approximately 475 cubic kilometres. The Upper Mekong Basin in China discharges only 16% annually in the river that flow through the Mekong Delta into the South China Sea whilst more than 40% of the flow comes from the Lower Mekong Basin between Vientiane – Nakon Phanom and Pakse – Stung Treng (MRC, 2009). The Lower Mekong Basin is the main source of food and income of 60% of people and water from the river is used to produce rice to feed approximately 300 million people in the region per year (MRC Secretariat, n.d.). Due to the vast distances that the river flows and the fact it crosses national boundaries the communities and their ways of using the river vary greatly. Furthermore, the dam building in the Upper Mekong Basin reaches of the river in China has important consequences for settlements and countries situated downriver. By flowing through different nations and in some areas forming the national boundaries between these nations, there can be issues related to the use and management of the water resource.

The Salween River

The Salween River is known by various names in the countries through which it passes. In China, it is known as the Nu River and in Myanmar is known as the Thanlwin River. The river originates 4,000 metres above sea level on the Tibetan plateau and flows through Yunnan province in China before making its way down into Myanmar in Shan and Kayah states (FAO, 2011), along the border between Thailand and Myanmar for about 120 km.



The Salween River
Image source: Wasana, 2017

Then the river flow enters Myanmar again and passing through Kayan and Mon states before emptying into the Gulf of Martaban. The catchment area of the river traverse's national boundaries with a total area of 320,000 square kilometres. The total length of the river is approximately 2,400 kilometres (Paoletto and Uitto, 1996). The Salween River is one of the most important rivers of ecological and ethnic-cultural diversity and it is the last free-flowing river that still remain in South-East Asia. (TERRA and FER, 2013). It is a river that supports over ten million people in floodplain agriculture, fisheries and farmlands, especially in Myanmar. However, this river is currently being threatened by the plan of more than 20 large hydropower dam projects across river basin in China, Myanmar and Thailand (Middleton and Lamb et al., 2019).

The Chao Phraya River

The Chao Phraya River rises from the mountainous terrain of northern part (Kosa and Pongput, 2007) and it is the major river of Thailand. The river basin can be divided into three parts: Wang and Yom rivers are in the upper basin, Ping and Nan rivers are in middle basin and the lower basin composes of Ping, Nan and Chao Praya River main stem (Molle, 2007). The area of the river is around 157,925 square kilometres (Wichakul et al., 2014) and the average annual rainfall of the river is approximately 1,000 – 1,400 millimetres. There are two major dam reservoirs in the river, the Bhumibol dam located in Ping River and the Sirikit dam located in Nan River (Sayama, 2015). The river comprises of forest area in the northern sub-basin and agriculture area in the southern sub-basin. The use of water tends to be increased more than the past (Kosa and Pongput, 2007) and water allocation becomes a major issue, especially the use for irrigation and for the capital whose needs can grow up to 10% per year (Molle, 2005).



The Cisadane River in Ciwaluh village
Image source: Wasana, 2016

Rivers in Indonesia

The main rivers in Indonesia are not on the same scale as those found in mainland South-East Asia, but the rivers have held and continue to hold an important role in the country's economy and culture. Indonesia has more than 5,700 rivers and it has been divided to 131 river basin territories (ADB, 2016). The major rivers that have mostly been used for irrigation are Musi, Batanghari, Indragiri, and Kampar rivers on Sumatra; the Kapuas, Barito, and Mahakam rivers on Kalimantan; the Memberamo and Digul rivers on Papua; and the Bengawan Solo, Citarum, and Brantas rivers on Java (Federal Research Division, 2004).

Another focused river in this book is the Cisadane River, which according to RMI is around 130 kilometres in length and is situated in the northern part of West Java, Indonesia. The river has its source at Mount Gede-Pangrango and Salak, and passes through Bogor and Tangerang before flowing to the Java Sea. The Cisadane is used for a variety of purposes and its important roles are for agricultural, domestic, and industrial (Effendi et al., 2018).

Rivers in the Philippines

The longest river in the Philippines is the Cagayan River and it is shared by 11 provinces. It is located on the island of Luzon, which is in the northern section of the country (Alfonso et al., 2019). After the Cagayan, the second longest river is the Mindanao River Basin (Rio Grande de Mindanao). This river is in the southern section of the Philippines on the island of Mindanao, covering the provinces of Bukidnon, Davao del Norte, Lanao del Sur, Maguindanao, Sultan Kudarat, North Cotabato, South Cotabato, some parts of Agusan del Sur and chartered cities - Cotabato City and Davao City (College of Forestry and Natural Resources University of the Philippines Los Baños, n.d.). The river has a total catchment area of 21,503 square kilometres (DENR et al., n.d.).



The Agusan River Basin
Image source: Wasana, 2016

In the east of Mindanao lies the Agusan River. It is the third largest and longest river basin of the Philippines with a total drainage area of 10,921 square kilometres (UP TCAGP, 2015) and a river length of 350 kilometres.

The basin is divided into three sub-basins: (i) lower Agusan River Basin, which is the area along the downstream reach from Amparo in Agusan del Norte Province; (ii) middle Agusan River Basin, which is the area along the reach between Amparo and Sta. Josefa in Agusan del Sur Province; and (iii) upper Agusan River Basin, which is the area along the upstream reach from Sta. Josefa in Compostela Valley Province. The Agusan is prone to flash floods during periods of heavy rain (Miyazato, 2004).

All of these rivers form an integral part of the life of the communities found around them, with communication, income and livelihoods, sources of food, trade and culture interlinked with the river. The watershed areas alike provide sources of water that sustain communities and support bio-diversity. The predictable cycles of the river depth due to the seasonal rains has allowed for communities to plan when to plant crops, store water or take advantage of riverbank silt deposits for temporary vegetable plantations. Interviews with members of communities along the Salween and Mekong Rivers have shown how along these rivers have been historical trade links between riparian communities that are now divided by a national border, down the middle of what was historically their main 'highway'. Additionally, there are communities who live in floating houses on rivers who rely on the river for raising fish (in cages) and depend on the river to maintain their traditional ways of life. These communities are common in Cambodia on the Tonle Sap Lake and on rivers in southern Vietnam.

The seasonal rising and falling of the river level during the course of the year have been interwoven with the norms and customs of communities therein. The levels of the river change along with the seasons and seasonal falling of river levels allows for the rich sediment that has been deposited along the banks of the rivers to be used. The types of fish that can be found in the river at different times of the year have links to cultural events and ceremonies throughout South-East Asia. Traditional belief systems connect meaning to the river and its role in the cultures in the region, with ceremonies to bless rivers and appease river gods a common feature of cultures throughout South-East Asia.

Land use change

Relation on land use changes to biodiversity and local communities in South-East Asia

Approximately fifteen per cent of the world's tropical forests can be found in South-East Asia and the region is home to at least four of the twenty-five globally important bio-diversity hotspots (Estoque et al., 2019). South-East Asia is labelled as a specific region, however, the stark contrast between mainland and insular South-East Asia present additional and distinct challenges for the protection of bio-diversity and communities' rights to practice their traditional ways of life. This is because South-East Asia is situated where two major divisions of the world's fauna meet. Another key distinction that needs to be made here is the difference in the role of the forest and the bio-diversity therein for indigenous communities that use it for their own needs in a sustainable manner against the commercial exploitation of the forest resources (Hughes, 2017).

South- East Asia's forest is facing the threats of the high rate of deforestation by 0.71 % per year in the region. It is expected that the forest in South-East Asia can be cleared by 2100. (Koh and Kettle et al., n.d.). The presence and activities of humans has been rapidly changing the virgin forest in South-East Asia. The majority of deforestation results from removal for fuel-wood and clearing for agriculture and grazing. The region, however, is also one the world's major deforestation hotspots and it has been identified that the bulk of deforestation takes place in tropical humid and lowland forests. There are estimate that the habitat loss in South-East Asia is one of the highest and most severe in terms of the impact on bio-diversity loss (Hughes, 2017).

Therefore, exploring the situations faced by communities throughout the region as they manage the impacts of their government's economic policy priorities will provide for a broader understanding of the nature of the impact of these drivers. The nations of the region, with only few exceptions, have become aware of the need to maintain forest to preserve the diversity of flora and fauna. This has taken on many forms across the region. In Indonesia developing understanding amongst policy makers has focused on how the local communities and indigenous peoples have a role of great importance in preserving the forests through sustainable management practices. In fact, bio-diversity damage has increased by excluding people local communities from forest management and led to increases in destruction.

During the past two centuries, there has been a real change in land use into global level. It is increasingly occurring at local and regional and there will be repeated often by adding patchwork to dimensions around the world.

Agriculture revolution is the main cause of land transformation and the main factor that influence the demand for land is population growth (Hubacek and Vazquez, 2002). These changes to the agricultural practices used within the region have additionally been fuelled by the increased demand for South-East Asian produce from outside the region. This can be seen with the example case of increased amount of land used for palm oil production. Whilst the palm oil is native to Africa, it has been seen that the conditions for palm oil plantations and profitable growth in South-East Asia has meant that from the four original trees planted in Java in 1848 there has been a massive growth of South-East Asian plantations developed over the last century. In 1996, Indonesia and Malaysia started to dominate palm oil world trade, with them eventually overtaking production from Nigeria and Zaire (now DR Congo). Since then production in Indonesia rose from 168,000 tonnes grown on 105,808 hectares in 1967, to roughly 16.4 million tonnes grown on 6.2 million hectares in 2006. (Sheil et al., 2009).

The increases in palm oil production is in response to a worldwide demand for these commodities and because of a nearly continuous harvest period that provides year-round employment. This employment aspect needs to be considered alongside the historical, cultural, and environmental influences that have affected their livelihood in the region. The largest cities Jakarta, Bangkok, and Manila are among the most populous in the world and the growth of cities of all sizes is being fuelled by both natural increases in population growth and rural to urban migration. People from rural areas have continued to be drawn by the pull factors that exist in urban areas. These can include the promise of employment and other opportunities, but it is important to highlight that the choices that are made by many migrants the informal or undocumented economic sector in urban areas are driven by the hope of some form of employment. The changes to the land use and bio-diversity have exacerbated the pace of change and subsequent impact to the lives of communities across South-East Asia. It has been within these communities that the efforts, activities and successes of the OROL projects have taken place.



Palm oil plantation adjacent to tropical forest in Sabah, Malaysia.
Image source: Rhett A Butler and William F. Laurance, 2011

The peoples and cultures

These cultural traditions outlined above have become intertwined with the major religions that are practiced in South-East Asia. Whilst there are dominant religions in countries across the region, there is also considerable religious diversity within some countries. The topographic and religious differences that exist between mainland and insular South-East Asia have allowed for a vast range of cultural expressions to be constructed and these form an inherent part of life in the region. As such, there are numerous examples of connections between the cultural expressions of communities and the natural environment. It is therefore important to examine some examples of these connections to help frame how the rights of communities to practice their traditional culture are inextricably linked to the rivers and natural environment where they live.

It is also pertinent to highlight that the animist traits are present in some traditions associated with trans-cultural or major religions. It is not correct to depict animism as a philosophy or religion of rural, isolated communities. According to Sprenger, 2016, it is highlighted that animism refers to ontologies or views of the world that connect agency and personhood to both human and non-humans in the same way. Animism is directly connected to the mind-body dualism and the concept of otherness in social relations between humans, spirits, life-forces and environment. There are two types of animist adherents, with some who do not identify with major faiths and then there are those who include principles of recognition of spirits and other life-forces alongside their main faith (Sprenger, 2016).

Traditional beliefs and rivers

In South-East Asia, one of the traditional ceremonies called “the ceremony of life prolonging” is considered to be a sacred ceremony. It is the tradition that has been associated with the way of life of local communities since the ancient time. This tradition also shows the acculturation of belief in Buddhism, Hinduism and spirits that can be found as the central ritual in Thailand, Myanmar and Lao PDR. People believe that this tradition will help to extend life. Moreover, this ritual also includes links to the natural environment with ceremonies being carried out for prolonging the life of rivers and forests (Thanaphatpuangwan, 2018). Other spirits are associated with specific places such as the household, the river, or a grove of trees are neither inherently benevolent nor evil. However, occasional offerings ensure their assistance in human affairs.



The ceremony of life prolonging in Northern Thailand.
Image source: Wasana, 2018

Another ritual related to the recognition of spirits can be found in Thailand and Lao PDR towards the end of the rainy season, when the rivers are in full flow. Men compete in races in boats which are designed to look like they represent the mythical creature naga. Nagas are the protectors of the Buddha and of the dharma and sometimes they can be earth spirits. It is a thought to live in any body of water, from an ocean to a mountain spring (O'Brien, 2019). The symbolism is linked to the idea that they serve to ensure that the earth as the supreme naga will accept the flood waters so that the rice is drained in time to harvest. At the time of the harvest the focus is on the 'Rice Mother', to whom offerings are made, including sour fruits to ensure that the spirits of the rice will remain (Jotisakulratana, n.d.).

Although the observers have noted that the prevalence of the rituals such as sacrifices associated with spirit religion has diminished in recent years but that there are exceptions. However, they continue to note that amongst both highland populations and lowland populations the rituals still prevail. It has been suggested that formal religion acts as a type of umbrella under which other beliefs and practices can be placed and built into modern methods. However, this ritual can still be the belief to raise awareness for people to participate and realise the value of rivers to restore the loss of ecosystem in the rivers (Ponrach, 2006).



The Makekal Hulu River.
Image source: Wasana, 2017

Orang Rimba or people of the forest

The name Orang Rimba equates to 'people of the forest', they are a people who have a local dialect and exhibit variants of regional Malay customs and beliefs and live in the upstream area of Makekal Hulu River in Jambi and South Sumatra in Indonesia. Orang Rimba have an egalitarian social system based on sharing and reciprocity, which occurs within the context of a system of relationships in which women have great rights over forest resources and extraordinary distribution rights. They have inhabited the area for hundreds of years, so for them the forest is not just a place to live but also a space for their livelihood and cultural actualisation. The forest is also a source of their traditional knowledge and wisdom which has been passed down from generation to generation. The customary laws that have governed their lives include three important things in life, namely the relationship between humans and their creators, with others, and with nature. The last of these three is connected to many customary laws for the Orang Rimba to manage the entire forest including the rivers. The river is the lane for their gods. That is why the river is considered a sacred and protected area³.

This connection is also made clear that as well as being a source of their livelihood the forest is linked to their cultural resources. By taking non-timber products from the forest and selling them to help support their lives they serve to protect and preserve the forest (Presetijo, 2015). Their mainstream society is crucial for them to continue their traditional way of life in the forest. The Orang Rimba keep their social identity as 'the people of the forest' by adhering to their customs, beliefs and religion (adat), and their beliefs and rituals related to foods such as the annual season of fruits in the lowland dipterocarp forests of Sumatra (Sager, 2008). However, difficulties have arisen for the Orang Rimba due to laws that dictated that the forests were an asset of the state, thus harming the ways of life of the indigenous people (Presetijo, 2015).



Orang Rimba (Forest people) was making fish trap.
Image source: Wasana, 2017

³Information from Tilla Mardha, the Director of RMI organization.

Their belief systems are interwoven with the forests in which they live and thus intrusion into these areas by outsiders are putting the Orang Rimba's traditions and right to practice those traditions into jeopardy. The challenges faced by the Orang Rimba are examined further later in this book, but are included to underline the significance of the forest and rivers in the constructions of identity in Indonesia.

These examples highlight the inextricable links that have existed for centuries between the natural environment and the ways that meaning is ascribed to the parts of the natural environment that play important roles in the lives and decision making and understanding of the world amongst people in the region. These systems of assigning meaning to the daily life of people are not only found in the communities cited here but form part of the fabric of the culture of peoples across South-East Asia. Thus, the natural environment forms a major part of how culture, life and norms for people throughout the region are constructed and ceremonies and rituals associated with that culture have their roots in traditional belief systems, even today.

These elements of traditional culture and practices that exist today are an integral part of the rights of communities in South-East Asia. In the context of the work implemented by OROL project and partners across the region which has a predominant focus on working with children and youths they relate to the concept of ECR. This concept forms a fundamental part of the design of interventions with communities in South-East Asia as the opportunity to practice one's culture is a central part of rights in this context.

This chapter shows that the relationship with the natural environment forms an intrinsic part of the life of communities throughout the region and thus changes that occur to the natural environment impact on the lives and rights of the citizens living there. Therefore, rapid changes that take place to communities in the region logically present increased risks to the ways in which community members structure their lives and can lead to abuse or lack of realisation of rights as being more pronounced. This increased risk becomes more of a reality when the members of these communities are not included in the planning of projects that affect them.

This does not mean that rural and indigenous communities are against the presence of development projects or that they are not in a position to benefit, in some ways, in the long-term from changes. However, it does mean that they are often not in a position to ensure that the changes allow for them to maintain their culture and the norms and values that are the manifestation of that culture.

The potential for economic development and improved access to education and healthcare services are normal outcomes to improved access to resources, markets and energy. Dams provide important water storage resources and opportunities for hydro-power for both national use and export, extractive industries allow for minerals and sources of fuel to help drive economic growth. Plantations and intensive agriculture provide for increased food security for nations as a whole and improved industry and infrastructure allow for enhanced trade and transportation of goods and raw materials.

As populations migrate towards urban centres these supporting elements of development planning become more vital as governments work to meet the needs and demands of those populations. Water is stored and subsequently diverted to urban areas, food distribution becomes increasingly centralised, electricity and gas provision becomes focused on ensuring stability for towns and cities and the increased scale and scope of road and rail infrastructure mean an increased concentration of traffic and trade around urban centres to provide for the population.

It is this type of shift in demographics and economic structuring that supports, and serves to maintain the primacy of urban centres such as Bangkok, Jakarta, Ho Chi Minh or Manila. The sheer numbers of people living in these cities means that there is a subsequent perception development that places increased importance on providing for these urban populations. Thus, governments logically ensure that they make provisions for the key drivers and actors in the economy to meet the needs and demands of these populations.



Culture night, River Watch Group Forum 2018.
Image source: KESAN, 2018.

Chapter 3



Orang Rimba children.
Image source: <https://www.flickr.com>, 2011

Framing the issues and concerns

National Development and the Nature of the Projects in South-East Asia

Chapter 3

Framing the issues and concerns,
National Development and the Nature of the Projects
in South-East Asia

Framing the issues and concerns

Since the 1950s the economic development strategies of virtually all the South-East Asian nations have prioritised urban-focused industrialisation, while agricultural development has been generally viewed as secondary to industrial growth. In specific terms this meant that ensuring energy, water and food security to meet the needs of the ever-growing urban population has influenced central government policy and planning throughout the region (Phillips, 2006). Migration from rural areas and farming communities, to towns and major or capital cities have meant that these urban areas have grown at an exponential rate. Cities that developed as trading cores with satellite settlements around them have now morphed into mega-cities.

Aside from people moving from rural to urban environments, there are also changes to the social fabric as a result of these changes. Young adults who migrated in the past have started families in the cities, leading to a continued trend of urban expansion coupled with an increased separation from the traditional ways of life in rural areas. Smaller urban centres throughout the countries where the OROL project was implemented have seen similar patterns of migration and population growth.

This increased urbanisation and the policy and planning processes that both enable and support it are self-perpetuating. As people move to urban centres, there is a need for greater areas of the country to be used for food and energy production for these urban centres. This in turn impacts to the ways of life and use of the natural environment in rural areas but is linked to the choices that people make in moving away from their own community to towns and cities. This is exacerbated further by the use of the critical mass of the population in urban centres for economic development. Workforce, infrastructure, industry, ports and airports are positioned around key urban areas and as such government policy becomes focused on incentivizing businesses and programmes to support this. This dual process leads to an increased rate of urbanisation and increased removal of people and human resources from rural areas.

Power production infrastructure in the form of dams provides sources of electricity for nations as a whole but the bulk of the electricity produced is used to support the industries, lighting, computer systems, light railways and the communications infrastructure in cities and urban areas. Myanmar's largest city Yangon frequently faces power cuts or electricity black-outs while the government tries to push ahead with the development of dams along the Salween River. Coal mining and other extractive processes for resource provision in countries such as the Philippines provide for energy needs and raw materials for industry and for telecommunications devices. Food that is grown on plantations in Northern Thailand is not consumed by locals but sent to Chiang Mai (the largest city in the north of the country) and Bangkok. Industrial works are placed along the banks of rivers in the south of Vietnam and are essential stalwarts of the economy.

The key issue at stake here is that not everyone wishes to move or is able to move from rural areas to find employment. It is essential for a stable economy and national security that the populations are able to maintain their rights of access to land and livelihoods in their own areas, as well as to limit the primacy of an urban centre. This increased urbanisation creates an imbalance or at least a perceived imbalance between the value of the voice of rural and indigenous communities and people in urban centres. This is compounded further by the loss of indigenous knowledge and locally tried and tested ways of preserving the natural environmental balance created by seasonal changes in weather and water-flow patterns.

The communities that people leave behind when they move to the urban areas are then placed under increased pressure to support the national interests, at least in part, by the very people who have left those places. Land and rivers that were once used to ensure livelihoods and food security for a few thousand people are now supporting the lives of people in far reaching parts of the country. This is a task that the natural environment can never achieve without facing harmful consequences. The bio-diversity present within rural areas in South-East Asia is part of a fragile food web that ensures its own stability. A range of different species each with their own niche in an ecosystem is essential for its sound functioning, but so are other aspects of ecosystem structure. Biodiversity includes not only the number of species, but is also linked to the genotypes, populations, functional groups, within any ecosystem (Haines-Young and Potschin, 2010).

As water courses and the frequency of the flow changes are altered by dams the cycles of wet and dry soil cause changes to the cycles of bacteria production and mulching processes which weakens the ability of the soil to support insects.

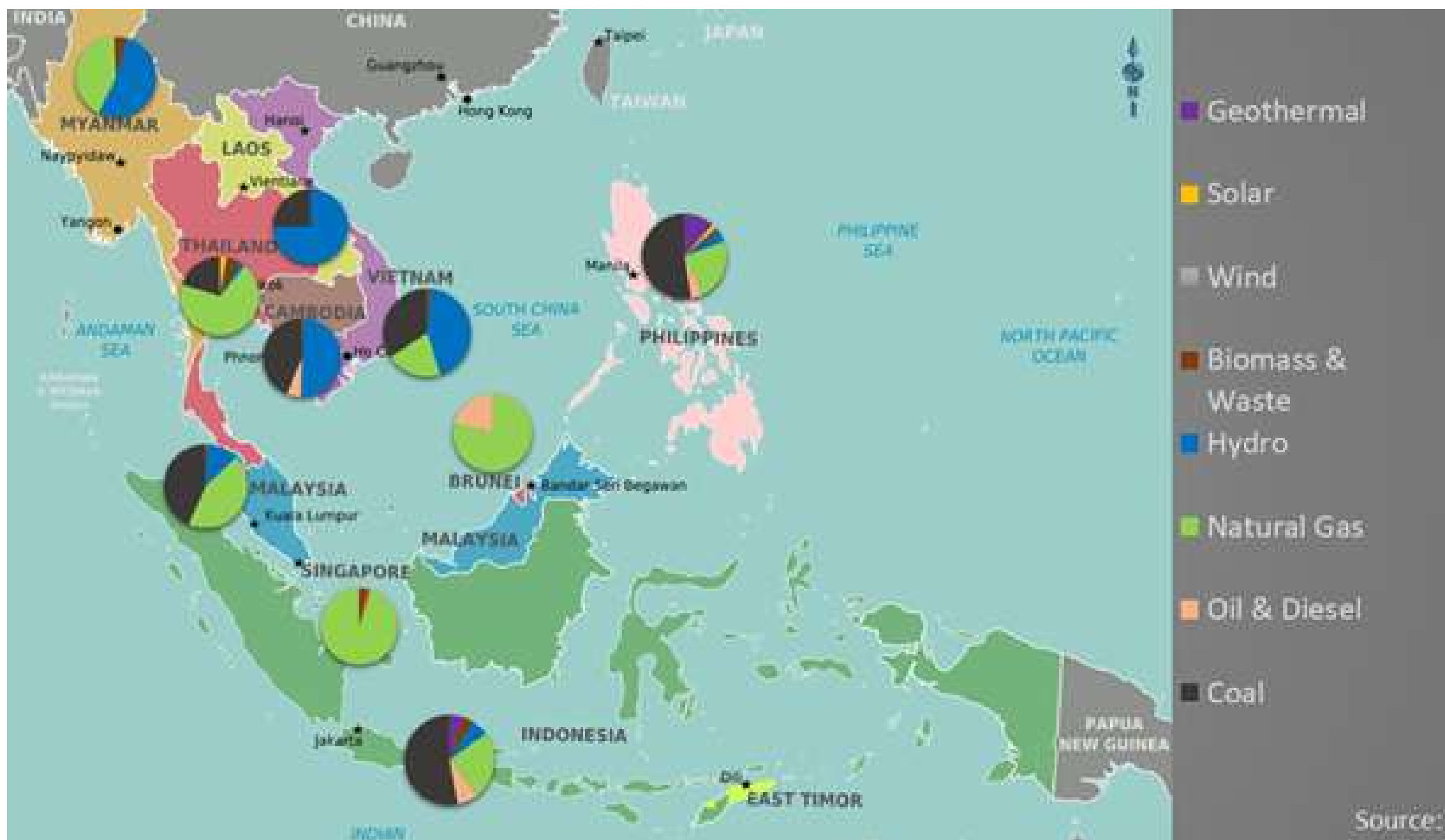
Mining and quarrying alongside other issues, cause changes to the chemical composition of the water that is used for small-scale farming. When crops are grown at a commercial scale and the use of chemical fertilisers and pesticides is prevalent the chemical balance of the soil becomes affected and the insects that form a vital food source for birds and another fauna are either absent or become contaminated. Industry and its guiding motive of delivering profits for shareholders and the supporting infrastructure to enable it to operate are placed above the protection of bio-diversity in the national interests. So it can be seen that the policies and plans made by government actors that are being put in place serve to put increased strain on the natural environment and communities therein. This need to follow this direction has ironically been caused by the same policies in previous years and will continue to follow this path whilst the voice of urban populations is given a more important standing than that of rural communities, and it will continue, as has been seen the increased rate of the population nowadays.

The challenges faced by planning departments of governments and their business partners are highly complex and take on their own different nuances across the region. The nature of the difficulties faced by communities supported under the OROL project require spelling out to help demonstrate that there is no simple fix to this conundrum. The next section of this chapter will share the types of issues faced by communities in target areas of all of the country partners under OROL to show the complexities of environmental and bio-diversity protection in South-East Asia.

National Development and the Nature of the Projects in South-East Asia

South-East Asia has experienced massive changes over the past few decades. The growth of economies of the countries throughout the region has enabled road, rail, electricity coverage, and trading partnerships to be developed. Goods that are bought around the world are made in South-East Asia. Televisions and other electrical goods are manufactured in Thailand, Vietnam and Malaysia. Garments and brand-name clothing is made by workers in Cambodia and Indonesia, with migrant workers from Myanmar in Thailand and Malaysia an example of the low-wage work-force that is available and willing and needing to find employment. International investment in infrastructure projects has proliferated in recent years and the disposable income of huge parts of the countries in the region has seen large increases over this period. These advances have happened in part because of the stability in the region.

National Development and the Nature of the Projects in South-East Asia



Power generation in Southeast Asia by sector, 2017, Source: Eco-Business

As seen thus far, economic growth has largely been the primary focus of the development planning of countries in the region. As investments have grown, so too, have the urban areas with cities and towns having experienced rapid rates of population growth over the past forty years as people leave their area of birth and move to the cities in search of education and employment. Alongside this the city dwellers have continued to reside and have more generations of their family in the cities. The migrants who have settled have had families in the urban areas as well as so there has been a mushrooming of population numbers.

At times city planning has struggled with this rate of growth and consequently plans have often been reactive in meeting the needs of their residents. Urban transport plans and systems have been developed in some of the cities with overhead and underground railways being constructed and expanded, for example in Bangkok. Additionally, visits to the countries in the region have shown that road networks and supporting transportation infrastructure has expanded exponentially with toll roads and additional ring roads and highways put in place in cities such as Ho Chi Minh, Jakarta and Bangkok.

This expansion of population centres brings with it new challenges for the governments in the countries across the region. As businesses develop and adjust to new technologies, as trade connections between countries are strengthened and as disposable income has been increased, there has been a need to meet the demands of the populations. Governments are faced with confronting the issues as they need to meet these demands that are placed upon them by the consumerist society that has been created in their countries. Leaders know that they have to make their country inviting for investment simply to meet the

demands from within their own population. In some cases with multi-party political systems people in positions of leadership are very aware of the fact that if they do not deliver on the demands and subsequent promises that were made they will be voted out at the next election.

As inflation impacts on these economies there have been demands for increases in the minimum wage from workers, this has subsequently pushed up operating costs for companies and has led to relocation of businesses to other parts of the region. Examples of this can be seen by the shift of operations from Thailand to Cambodia for garment and brand name clothing factories in the last ten years. This has created a situation where governments are not able to simply attract investment and then keep it in the country. The free-market dictates that the lowest operating costs will be a primary decision making factor in company planning.

To enable competitiveness and to develop economies beyond simply manufacturing there has been the development of tiers of the economies of the region over the past twenty years. During the course of visiting countries in the region to collect data for papers it was clear to see that Thai companies are active in Myanmar and food conglomerates are now established in Cambodia and other countries in the region. Vietnamese businesses have invested heavily in Lao PDR and supported business and infrastructure projects. It must be noted that China has also invested heavily in programmes in the region, from ports in Myanmar to railway networks in Thailand, mining in the Philippines and road infrastructure in Lao PDR.

To meet the energy needs and products that are demanded by businesses, investors and consumers alike there has been a need to transform the economies of the region. Food security for urban populations is a vital element of ensuring a productive workforce. As populations in urban areas have increased there has been a parallel expansion in extensive agriculture programmes and plantations to ensure that the demands are met. Land use has changed and communities have been sometimes left at the mercy of the changes to land classification and zoning that has forced them to move. This has led to a decrease in the numbers in rural areas allowing for continued expansion of large-scale agriculture. As the size of the companies involved grows there has become an increased space between the producers and the companies at the end of the line. This space is then filled by brokers, agents and 'middle-men'. As the scale of production has gone up and an increasingly lower number of companies have been able to compete there has been an increase in profits for shareholders and the companies, whilst the farmers have not seen an equal share of the profits. Hand-out programmes and welfare support for farmers have served to keep them essentially trapped by their own dependence on the companies that purchase their produce.

Dam projects and water resource management is a central part of the development planning of all the countries in the region where OROL has been implemented. As shown in earlier chapters, the water courses have defined the settlement patterns and shape of the land throughout South-East Asia. These systems have been adjusted and adapted to ensure that water is stored and managed for the population. Programmes of dam construction have ensured that urban populations are able to access sufficient water for their daily needs. They have ensured that smaller reservoirs and water storage ponds have been kept supplied for farmers and villagers to use, as well as provide water for off-season rice crops, which helps ensure the population can be fed.

Whilst policy makers often point to the benefits of dam construction and the essential role that they play in meeting the resource needs of populations, there are negative consequences. The changes to the natural seasonal changes in flow of rivers affect the alluvial plains and the riparian ecosystems alike. Displacement of people from the dam lakes has been experienced wherever large scale dam programmes have been put in place, resulting in economic hardships for the people up country but they are powerless to speak out against programmes that have been deemed to be in the national interest and in most cases are left displaced with little or no compensation.

The increasing demand for energy to supply electricity to factories and industries and to enable urban populations to keep their electronic devices running and charged up all has to be provided. Furthermore, power stability is essential in attracting investments in manufacturing and service industries. The pollution caused by energy producing industries such as coal fired power stations has been known and will be seen in the next chapter, to have negative impacts on health and the environment, but if these facilities are far away from the cities there can seem to be less concern about the impact. Furthermore, the recent changes to use of electricity to run cars, other road vehicles and trains mean that the needs for electricity production will be increasing in the near future. Energy from bio-fuels is a new issue that is currently becoming more prominent and the need for crops to be grown to support this new technology increases the areas of land used for energy production and not food production. These changes to land use have also been seen to affect the soil structure and the ecosystems within. This enables greater weathering of the soil to occur and increased dust pollution, impacting negatively to the health of people and the environment.

As people move to cities, the former land near where they once lived has been used to meet all the above demands. This has meant that there is an on-going shift towards urban centres, which has led to calls for increased numbers of housing developments. These housing developments need to be connected to

the urban areas and so road and transport infrastructure has been developed to enable the population to access the places they need for employment, leisure and meeting their daily needs. Essentially a cycle of increased urbanisation and supporting development based on the perceived and real needs for that population has been created by the policies and planning of the governments in the region. As the needs and demands are met there is increased urban migration allowing for increased opportunities for large companies and state owned industries to use the space left behind. This planning has all too often led to the consideration of the shareholders above and beyond the consideration of all stakeholders.

Risks faced by workers and communities from development projects

The volume of people in urban centres means that elected governments are often forced to consider their needs above the rest of the country. City dwellers and their perceived importance to governments and the economy would not accept industrial parks in the city. They are usually placed in the sub-urban areas outside the centre of the city. Power plants that supply the energy to meet the needs are often situated away from the urban areas. As a result of this, governments look to situate these essential parts of support for the cities far away. This policy can be referred to as 'NIMBY', or 'Not In My Back Yard'. It means that people in the cities are happy for their energy demands and food needs to be met, but they do not wish to see the power station or be reminded of its impact. The lack of participatory planning and inclusion of communities in planning processes directly violates the rights of affected community members. The risks associated with failure to carry out adequate EIAs and maintenance of satisfactory level of safety for workers, communities and the environment effectively relegate the citizens to being less important than those living in urban centres and the economic growth that can be carried out with such programmes.

The communities in the affected areas have less ability to voice their concerns and are often powerless without support from civil society in the face of development programmes that seek profit for a few rather than the country and its resources. It can be highlighted that the risks that exist for these communities is a selection of examples of weak regulations and enforcement that has contributed to catastrophes for communities in South-East Asia. All impacts from development projects is from a lack of oversight of the operations and this is largely down to the enforcement of the law. Companies that provide support to the economy are sometimes overlooked in terms of meeting the required standards and as such there is, at times, a lack of responsibility being taken by companies and leaders in these countries. This may be a lack of understanding, it may be due to a different set of values but it can also be due to corruption, where it is easier to turn away from the issue if there are incentives to do so.



When governments and the private sector fail to recognise the rights of the people and the importance of preserving bio-diversity and the natural resources that they have, there is often only one option left for members of affected communities. Civil society, community action groups and NGOs are at times the only channel that they can use to be heard. When people try and speak out alone, they are often arrested, or they can be shot and killed, as happens to people working to preserve the environment. In researching this book and holding discussions with activists about the topics herein, stories of attempted murder and intimidation have been provided. The risks that people take to simply try and protect their rights and their community's resources from unfettered 'development' cannot be understated. The risks that individuals take in some of the places where the OROL project has been implemented just to carry their community's voice to higher levels of government and to try and ensure that commercial interests consider environmental and community interests are significant. To set the scene for some of the issues experienced in these communities and the communities where the OROL project has been implemented a few case-studies related to the topics examined later in this book are presented.

Chapter 4



The Dachaoshan dam on the upper Mekong River is pictured in Dachaoshan, Yunnan province, China.
Image source: David Boyle, Voanews, 2018

Dam Projects on the Salween and the Mekong Rivers

Chapter 4

Dam Projects on the Salween and the Mekong Rivers

South-East Asia's electricity shortages make hydropower an attractive energy source. Advocates see the dam schemes as an environmentally friendly solution to reduce poverty in the region. For the least-developed countries such as Lao PDR, Myanmar and Cambodia, hydropower can be the key factor for the plan of energy investment (Weatherby, 2017). Hydropower renewable energy can be viewed as a positive approach to generate electricity with it using the principle of harnessing the energy from moving water, such as waterfalls, rivers, and dams, and it is an alternative to fossil fuel based energy sources.

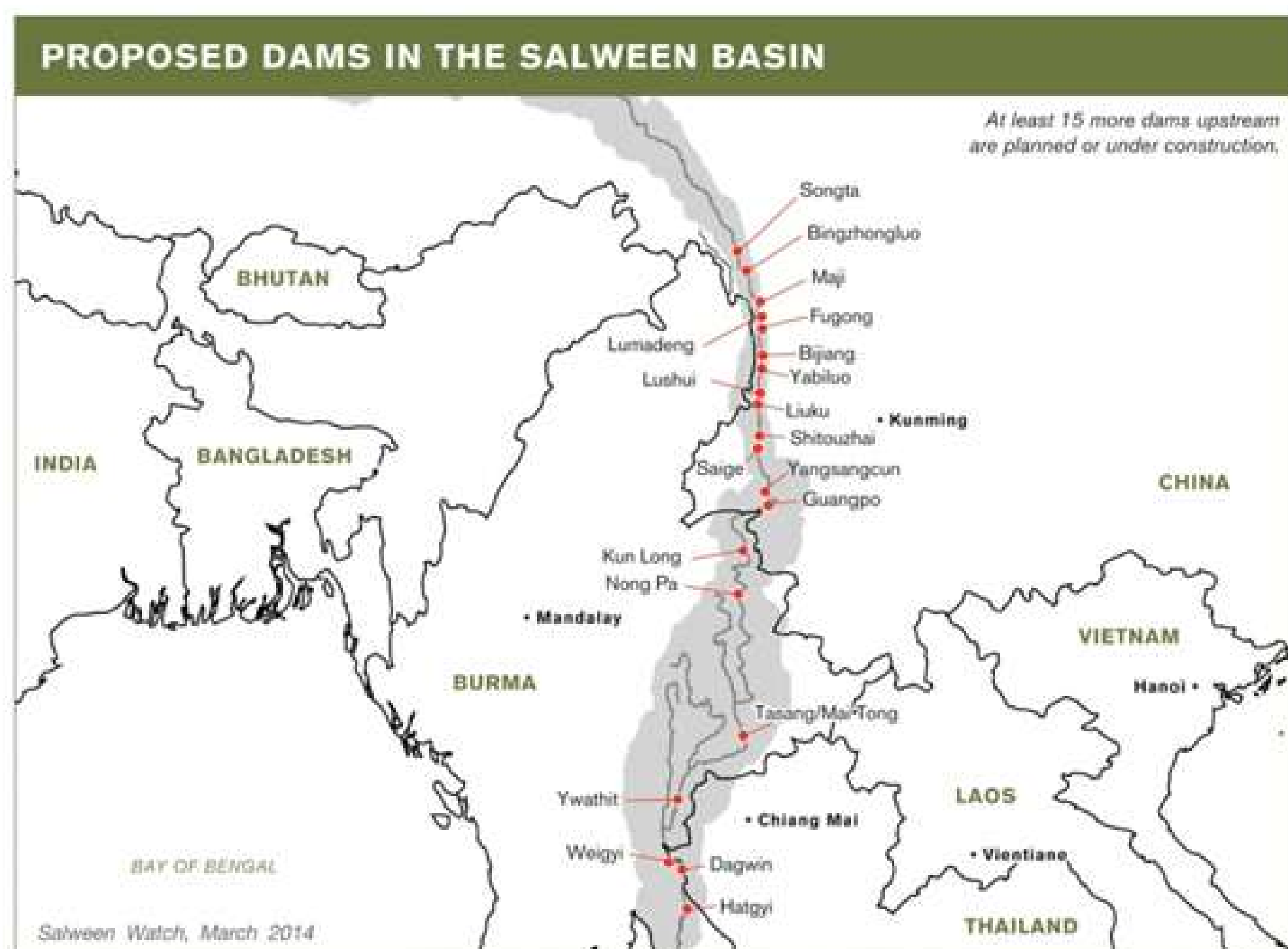
The region contains a range of smaller dams and weirs through to mega-projects that support hydro-electric power generation that have been built or are under construction or have been planned. The close connections between the target communities in OROL and the water courses of South-East Asia mean that the changes to bio-diversity that are caused by damming the river are directly linked to changes in the ways of life of these community members. Rights of people are impacted and further the relevance and value of inter-generational knowledge that has been integral to the culture of these communities is decreased. Children and youths are the citizens who have to live in these areas and it is their future that will be affected the most.

The most prominent dam projects in place or being developed that influence the narrative around dam construction and water resource management are on the Mekong and the Salween Rivers. The work of OROL project's partners is directly linked to the proposed and operational dams and how those projects will impact on the lives of community members. Impacts of local people in Karen State is the first example provided. Then the role of the dams on the Mekong River and the impact that they have on the lower course of the river in Thailand, Lao PDR, Cambodia and Vietnam will be examined to provide an insight into the ways that dams cause major changes to the livelihoods and bio-diversity along the riparian ecosystems.

Dam Projects on the Salween River

Dam projects plan on the Salween River in Myanmar

The construction of dams is a central part of water resource management for governments in South-East Asia and the situation in Myanmar provides significant evidence of this. Planning for dam construction throughout Myanmar appears to be a central policy position of the government and at least 12 large dams are planned to be built on the mainstream Salween River basin in Myanmar and Thailand (EarthRights International et al., 2004). Whilst the OROL project has focused on partners working along the Salween River, it must be highlighted that these are only a fraction of the total number planned for the country.



Proposed dams in the Salween River basin:
Image source: Salween Watch, 2014

The government of Myanmar has viewed dams and hydropower programmes to be essential to meet the energy needs of the nation for a long time. The areas through which the Salween River flows have a long history of war, displacement, land appropriation and diametrically opposed views on the rights of the citizens therein to access their traditional ways of life and to maintain aspects of culture that are inherently linked with the Salween River in South-East Myanmar. Myanmar has an abundance of resources which include fossil fuels and suitable sites for hydropower dams and whilst hydropower is understood to be a cleaner source of energy than fossil fuels, the large-scale hydropower projects are a concern for the populations that will be affected.

The government of Myanmar's National Electrification Plan (NEP) is looking to ensure access to electricity for all homes in Myanmar by the year 2030. To achieve this anticipated future demand, Myanmar plans to expand the infrastructure and systems. These concerns are based around the fact that many of the current and planned hydropower resources are located in Myanmar's ethnic states. This includes Kayin (Karen), Kayah (Karenni), Kachin, and Shan States. These are, still, at the time of writing sites of on-going ethnic conflicts and armed tension. This is reported to be increasingly problematic as the plans for large dams in these areas have resulted in clashes between interest groups as well as social and environmental impacts, including violations of human rights (KHRG and KRW, 2018).

To understand the complexity of the situation in Myanmar, it is essential to understand the investments behind the dam projects. The dams are not solely Myanmar government funded programmes. Private enterprises and state agencies are involved in investments and technical support for construction and operation of the dams, with some of the planned hydropower dams are set to export electricity to neighbouring countries.

According to a KESAN document, it can be understood that before the 2012 ceasefire between the Karen National Union and the Government of the Union of Myanmar, there were three government owned hydropower projects on rivers in Karen State. Now the planning for hydropower dams along the river's course has been seen to be moving along more rapidly as the KNU has developed a closer relationship with the quasi-civilian government. In fact, since the 2012 ceasefire plans are now in place for eight dams on the river. One of these dams is the Hat Gyi dam and its planned location in an area of armed conflict and it has been under consideration since long before the ceasefire was agreed⁴. This is backed up further by the 2016 report from Karen Rivers Watch entitled, "The Real Motivation behind the Renewed War", which concluded that the increased conflict around the proposed dam site were connected to the control of the area and there is now a form of 'resource based conflict' between armed ethnic actors, state forces and militia and communities and business owners. This increase in conflict is evidenced by the following from the partners in Myanmar. In Karen State's Hlaingbwe Township, armed conflict in September 2016 forcibly displaced approximately 6,000 people from their homes as government security forces fought to secure increased access to the Hat Gyi Dam site. Alongside the proposed Hat Gyi dam, the Myanmar Government has plans to construct at least seven more dams in each of the seven districts in Karen State. These proposed projects represent a serious threat to the rights and culture of Karen people and the natural environment of these areas

⁴ Information from KESAN's concept note for ASEAN Civil Society Conference / ASEAN People's Forum 2017 in the Philippines.

Table 1: List of hydropower dams in Karen State or areas with Karen population:⁴
Completed Pre-ceasefire (2012).

No.	Completed Pre-ceasefire (2012)	Areas
1	Kyauk Na Gar Dam	Nyaung Lay Pin District, Karen State
2	Pa Thit Klo Dam	Toungoo District, Karen State
3	Htone Boe Dam, AKA Thauk Yeakat 2	Toungoo District, Karen State

No.	Proposed for construction	Areas
1	Hat Gyi Dam	Hpa-an and Mutraw Districts, Karen State
2	Baw Ga Hta Dam	Nyaung Lay Pin District, Karen State
3	Thauk Yeakat 1 Dam	Toungoo District, Karen State
4	Bi Lin Dam	Tha Htone District, Karen State
5	Pa Tar Dam	Hpa-an District, Karen State
6	Taninthari Dam	Tavoy – blee District, Tanninthari Region
7	Yun salin Dam	Mutraw District, Karen State
8	Megatha Dam	Dooplaya District, Karen State

These projects are not addressing the lack of electricity supply for households in Myanmar because many of the plans include the primary function of the dams and hydropower would be direct export of electricity to Thailand and China (KHRG and KRW, 2018). So, the shortfalls in electricity coverage that have been identified are not being addressed by this project. The dam in this case would not be benefitting local communities and the construction and operations of the dam would result in severe consequences for the livelihoods of villagers in the area.

The following information from an interview with a member of an affected community in Karen State by the Secretariat can show as an example case from the dam project plan. A youth leader shared that he became displaced due to the dam project, which has been planned since when he was seventeen (twelve years ago). His home got burned by the army twelve times. He understood that this was because they wanted villagers to leave the village.



Local people helped to build the road in Karen State, Myanmar.
Image source: Wasana, 2017

The villagers' and communities' position is made even more challenging due to misinformation and deceptive tactics. An interview with the Secretariat staff with beneficiaries in Karen State provides another example that highlights this issue. *"An investor used a monk to control villagers and to get them to build the road to the dam site area. The monk told villagers that if they helped to build the road without payment, the village will have a proper road, which means it's more developed. However, the real purpose was to build the road for the trucks to enter dam site area."* The villagers worked on the road without protective clothing and surrounded by dust in the air.

Situated in an armed conflict area, the Hat Gyi dam is not only challenging the livelihoods and culture of the local people. These local people have also been seriously affected by decades of violent conflict resulting in human rights violations and mass displacement of civilians. It must be noted that these are not just isolated incidents as there are numerous reports documenting the attacks on communities in Myanmar. The details here are provided to show key highlights of events from September 2016 to March 2018 near the Hat Gyi dam. This information from the KRW fact-sheet and KESAN document are summarised below.

Table 2: Timeline of September 2016 conflict near Hat Gyi Dam⁵

Dates	Reports
28 Aug.	Thai newspaper reports that EGAT is interested in restarting discussions with the [Myanmar] government about the Hat Gyi Dam project
29 Aug.	Leader of DKBA splinter group, Maj. Na Ma Kyar, announced dead. DKBA splinter group accuses BGF and Burma Army of arranging murder.

⁵ Information from Karen River Watch factsheet, "The real motivations behind renewed war", Karen State September 2016 conflict.

Dates	Reports
2-3 Sept.	DKBA troops attack BGF bases in Hlaingbwe Township.
7-8 Sept.	BGF moves into area between Yinbaing (BGF-held) and Wah Klu Lu mountain (DKBA-held), and DKBA and BGF clash near Yinbaing Bridge, close to the eastern bank of the Salween.
10 Sept.	Around 130 trucks relocated over 2,000 civilians from villages located along the Mae Tha Waw-Myaing Gyi Ngu road to Myaing Gyi Ngu town, - BGF Unit 1014 commander Maung Chit contacts the Karen National Liberation Army (KNLA) and demands to take control of five locations in KNLA territory on the western side of the Salween, near the Hat Gyi Dam site: Htoh T’Ba Wai, Klaw Tae Hta, P’Tae Hta, Yaw Ma Hta, and Mae Lah.
13 Sept.	KNU issues statement calling for Burma military to end its operations in Karen State, due to decreasing public faith in the peace process, and reiterates KNU commitment to the national peace process. Over 200 people have fled across the Moei River, which forms the border to Thailand, for safety.
11-18 Sept.	Armed clashes continue along the Mae Tha Waw-Myaing Gyi Ngu road, concentrating around DKBA camps between Wa Klu Lu mountain and Bhu Har Gone village.
19-20 Sept.	BGF announces that it has complete control over the Mae Tha Waw-Myaing Gyi Ngu road. Over 4,000 internally displaced people took shelter at the Myaing Gyi Ngu monastery. An unknown number of villagers were relocated from Baw Th’Raw, Klaw Dae Hta, P’Tae Hta, Yaw Ma Hta, Pyar Kyauk, Sit Wai and Taung Kyar villages to Meseik, collected in Myanmar army boats and carried to Myaing Gyi Ngu.
21-27 Sept.	KNLA sources report BGF troop movements advancing upstream along the eastern side of the Salween River. Villager reports that BGF and Burma Army troops are stationed in Baw Th’Raw village.

Table 3: Timeline of March 2018 conflict near Hat Gyi Dam

Dates	Reports
4 Mar.	<ul style="list-style-type: none">• 4 Burma Army Battalions arrived from the south near• Htoh Moh Pleh Meh and 2 Burma Army Battalions arrived from the north near Hsa Law Joh and cross into KNLA territory between the two camps.• By 3 PM., the villagers began to flee from the advancing soldiers.• Burma Army soldiers starte to shoot at KNLA near Kay Bu.

Dates	Reports
5 Mar.	<ul style="list-style-type: none"> Armed clashes erupted between Burma Army and KNLA in Ler Mu Plaw on four occasions in the morning, afternoon, and evening.
6 Mar.	<ul style="list-style-type: none"> Armed clashes erupted between Burma Army and KNLA in Ler Mu Plaw on two occasions in early afternoon. Burma Army soldiers in Ler Mu Plaw shot two buffaloes belonging to local villagers. By evening, Burma Army soldiers had dug trenches in Ler Mu Plaw. They were reportedly calling for reinforcements. In Kay Bu, Burma Army soldiers shot at KNLA. Five additional clashes broke out during the day in various locations.
7 Mar.	<ul style="list-style-type: none"> After 9 PM, Burma Army soldiers in Ler Mu Plaw area shoot at villagers coming to collect their rice.
8 Mar.	<ul style="list-style-type: none"> At 3:40 PM., Burma Army clashes with KNLA at Ler Mu Plaw; Burma Army soldiers extended their forward positions to Way Day Kyoh, inside the Baw Htaw Kyoh community forest. At 7:00 PM., Burma Army soldiers in Ler Mu Plaw shot at villagers who came from their rice fields.

The impact of these types of events is brought home clearly by the following quote taken directly from the KESAN report that was used for OROL. “Now, the government of Myanmar approves many dam building projects in Myanmar producing about 42,259 MW. It is unclear who will get the benefit from those dam building projects. We only found the increased refugees affected from development projects and now, they have to be in the refugee camps and cannot go back to Myanmar anymore, or they are in ‘internally displaced persons’ (IDP) camps. We cannot find the solution to solve the problems in relation to refugees now. Most of dam building projects are near refugee camps and living areas that refugees and people suffered and had to move to other places and become IDP.”⁶



IDP Camp, Karen State, Myanmar
Image source: Wasana, 2017

⁶ Information from KESAN’s Internal report for OROL project in 2016.



Map of conflict areas. Source: KESAN, 2018

Given the history of the difficulties faced by communities in the Myanmar border areas with Thailand, support for the communities there has formed a key part of the OROL project over the past number of years. Within the OROL project, phase-two the partner's reports demonstrate the on-going difficulties faced in the lives of the people they worked with, as shown in the following from KESAN narrative report 2016, "Many Karen people from different ethnic groups are suffering from development projects in Myanmar, especially women, children and elders who had to resettle around Mae Tha Waw and Myaing Gyi Ngy. Local communities in Karen State are also caught up in serious conflicts between ethnic armed organisations, business actors and the State military. People have been displaced due to the proposed Hat Gyi Dam and Cement Factory project". This tension is also present with the Asia Development Bank project for the Asia Highway which will include the removal of culturally significant mountain and is heritage site for Karen people.

The narrative provided by the secondary data in reports and publications was also echoed by interviews carried out by the staff of the Secretariat in 2019. Inhabitants of a village which is due to be affected by the Taw Au Ta dam highlighted the extent to which they have been able to speak or share their concerns about the project. *“It is the recent plan (from the Chinese company) that we just received information about two months ago, Taw Au Ta dam will be used to produce electricity. The villagers are not aware of this plan. The Chinese company has already come to the dam site area to check information but they don’t share any information to people in the area. They haven’t provided information on the EIA to the communities”*. The interviewee went on to state that, *“If we lose everything, we will have no hope for our further, we can’t do the same work, how to make money and where to get food?”* Youth groups from this village plan to collect data and share information to other villages in the mountain areas near the dam site.

This lack of involvement of the local villagers is further demonstrated by the following quote from a KESAN staff member. *“The government tries to control the road around the area where they plan to build the Hat Gyi dam. There are many alternative ways for producing electricity but the government does not allow people to do it because if they accept the villagers wishes, they won't get funding from the World Bank. The government is corrupt.”* Furthermore, the role of KESAN the main project partner in Myanmar is made more challenging by this lack of access to the information by communities that will be affected. This division in understanding is not just characterised by the methods of government officials and business partners, but is present throughout the nation, as evidenced by the following quote from a KESAN staff member which was shared during an evaluation visit to Karen and Mon States in 2018. *“Myanmar people are not aware of Karen people's livelihoods. More than nine dams are planned to be built in Karen State's river.”* This lack of access to the facts by the people whose lives will be most negatively impacted by the dam projects and the inherent complications that will be brought far beyond the communities therein is highlighted by the following quote from a staff member of KESAN. *“The connection between such impact and dam construction in Salween River is hidden. The country would like to build the dam although such a project makes local people poorer. For direct impact, dam area will increase saltier water that will damage the agricultural site.”*

Control and intimidation practices are evident in all the layers of government bureaucracy and it was shared with the authors that village heads are under the government and they report to the central government, so it is difficult for the staff and community members to approach them to discuss the challenges faced by the villagers. As such they do not approach them for fear of reprisals. In another interview with a member of staff of KESAN it was highlighted that there was training about community members’ rights in Mawlamyine and so a village head blocked villagers from going to that training.

Further discussions with community members in Karen State highlighted that politicians commit to help people only before the election but they actually do not care much about environmental protection. Another challenge raised in discussions was that the government does not want to share any information or provide full information to the public about big projects or the MOU signing with companies so it is felt by some that the government lacks transparency.

This situation is very rightfully worrisome for villagers in Karen State due to the years of conflict that have seen military outposts established throughout their land and the actions in 2016 and 2018 around the Hat Gyi dam. In places where there has been dam construction work started or dams completed there is a similar tale of the difficulties faced by villagers. The extent to which the international community is legitimizing the programmes is shown by the fact that major recent investors in and providers of technical support in developing Myanmar's energy sectors are the World Bank Group, Japan International Cooperation Agency (JICA) and the Asian Development Bank (ADB). This development funding from international investors and the government threatens to have a significant impact on the ecological child rights of future generations. In affected communities, some villagers were poorly compensated. Evidence provided by villagers showed that they received less than half of the compensation that they were supposed to receive and some have received nothing. The project partner in Myanmar had to take a risk to run campaigns against the backdrop of this international support for hydropower projects in Myanmar, with police visiting them and creating obstacles for their work to support the rights of the people they represent.



International River's Day: concern on dam projects, Myanmar. Image source: KESAN, 2018

Further discussions with KESAN staff provided evidence that the government land policy is not good for local or small communities. *“They focus on building dams, coal power plants and do not look at the alternatives and do not support community activities for energy production”*. Since 2006 until now, many dams have been built in Thailand, Myanmar and Lao PDR in order to produce hydropower along big rivers across the region with huge investment from the government and national & international partners. Participants in discussions continued to share that the development projects should be formulated in order to set up the shared model promoting and realising international development standards.

In spite of the highly complex environment in which KESAN and partners are working there have been activities and programmes put in place that have increased understanding of the issues for the communities which will be affected by the dam programmes along the Salween River. Engagement with some members of parliament has reaped rewards with members of the Mon State parliament and discussions with a member of the government at the Mon State Hluttaw, or State parliament building, showed the level of understanding of some people. *“As a politician, I should take Salween River issues importantly. The river is of shared value for everyone in Mon State. I help to provide KESAN and Save Salween Network (SSN) to draw policy recommendations, strategies to lobby people and public speaking, such as what issues they should tell the public.”*

Activities related to dam on Salween River.

OROL's partner in Myanmar.

KESAN has engaged communities in training sessions and developing knowledge for affected community members, throughout the implementation period of the second phase of the OROL project. Some of the events organised by KESAN to assist with upholding the rights of members of affected communities are detailed below.

The impact of hydropower and environmental education

To support their project planning, KESAN ran a training session in Hpa-an, Karen State, in which Karen River Watch (KRW) shared knowledge and built up awareness for participants on environmental issues about the impact from the Salween dams and held a subsequent training session with youths in Yangon. These events were later supported by a forum held in Shan State in October 2016. The aim was promoting the voices of ethnic groups for protection of the Salween River with around 300 people from various ethnic groups participating.

Dam Projects on the Mekong River and activities of OROL's partner in Myanmar

A further event saw senior government personnel, lawyers and leaders of ethnic groups attending a meeting on the issue of the proposed dams on Salween River. Participants from the CSOs also shared information and reports about human rights violations and the conflict that has been exacerbated by the proposed Hat Gyi Dam among national and regional actors. The outcome of this forum was that the attendees drafted and reached a network consensus on the SSN's policy recommendations which have been used to advocate at all levels of government.



SSN youth member introduces key environmental concepts and principles to children and issues on Salween River.
Image source: KESAN, 2019

Other work under OROL by KESAN engaged community members whereby KRW and Karen Human Rights Group (KHRG) representatives shared knowledge and updates on the proposed dam projects, EIA, a breakdown of the government's guidelines, policies and laws relating to the Salween dams, a brief overview of the Myanmar Energy Master Plan and the current peace negotiation process. This was done so that participants could plan and implement community dam research work plans in their communities. The focus issues identified for research included livelihood insecurity, land grabs, land mine contamination, human rights violations associated with dam projects and the current status of the dam projects.

In spite of the support to help the citizens of Myanmar become more aware of the risks associated with the Myanmar National Energy Plan and these risks entering into national discourse at various levels, the prevailing attitude of the government is that the energy plan is for the national interests. As such, the government of Myanmar is trying to move forward with Salween dam projects. Peace processes and ceasefire agreements between the government and ethnic group leadership are still fragile.



Media data collection and community research workshop with Myaing Gyi Ngu IDPs Camp.
Image Source: KESAN, 2018

Thus, there are some risks for personal security to collect information on the ground, especially about displacement of villagers and conflict related to dam issues.

International River's Day and other events

Each year KESAN and partners in Myanmar have been supported through the OROL project to arrange events such as the International Action for Rivers Day held annually on March 14th. These grew from only 150 or so participants in 2017 to several thousand in subsequent years. Representatives from Kachin, Shan, Ta Ann, Ku Ki, Rakhine, Kayah (Karenni), Yin Ta le, Kayan (Karen) and Mon ethnic groups and organizations have attended. In 2018, over 4,000 attended this event at Ei Htu Hta IDP camp and Taung Kyar Village. As the events grew they took the opportunity to engage the public on social and environmental issues that impact negatively on the Salween River and many other river basins. Participants from across the country learnt about the social and environmental impacts of large hydropower dams, and the potential negative impact of large dam projects on biodiversity, natural heritage and the lives of different ethnic groups around the Salween River basin. Other activities include ceremonies to bless the river and a focus on the Hat Gyi dam.



More recently under the banner of “Free Flow Our Rive, The River is Our Life” CSOs in Myanmar organised events such as the Myanmar Green Gathering Forum in October 2019. The theme of this event was “Renewable Energy for Hydropower and Climate Change”.

The cooperation led to the opportunity to explore the different ways social movements can bring about change and advocate for an anti-coal, anti-dams and a clean energy strategy in Myanmar. With this type of event KRW have managed to gain national coverage of some of the issues which meant that people across Myanmar have been able to gain more information about the government planning.

Data collection, forums and publications

Other key work from partners in Myanmar has been about data collection and research. During the OROL project from 2016 to 2018, a process of data collection on the Hat Gyi dam as well as mining and coal issues in Karen State was run.

Other events such as forums have seen Karen State government representatives participate in panel discussions presenting the government perspectives and plans on energy projects in Karen State. After the forum, KESAN, KRW and key groups' members have been able to meet with the Karen State Chief Minister to talk about alternative energy potential.



At British Council in Yangon.
Image source: KESAN, 2019

This was used to develop key recommendations for the various actors in the dam programmes in Myanmar and the main issues that have been carried forward to represent their position are listed below:

1. Moratorium of all of large-scale development projects, including Hat Gyi Dam, in Karen State;
2. The issue of decentralisation of resource governance should be taken into account in accordance with the 21st Century Panlong Peace Conference's commitment;
3. The Myanmar government should recognise the customary land and water practices in their legal mechanisms and demonstrate respect for the practices and beliefs of indigenous persons in the country;
4. Other relevant policy actors should engage in meaningful policy and institutional reforms that are in line with the political aspirations towards democratic federal union in Myanmar;
5. Local communities must be recognised as one of the key policy actors in any development plan or projects (Saw John Bright, 2017).

The strategies used by KESAN and partners have been varied and the use of social media has been found to be a valuable method for sharing information and creating a greater critical mass of support for the community needs. A further tool used which has supported the cause was the 2017 documentary film, "Mega-dams on the Thanlwin and Salween" produced by KESAN which highlighted that large dams are not necessary for community-centred development, and that on the contrary, small scale alternative energy projects are the best solution for the environment and local communities. This was shown at the British Council office in Yangon.

This concept highlighted by the film and the policy recommendations summarised above are in line with the protection of human rights, peace and security, integrated with local contexts and in accordance with international community's expectations and goals by enforcing Sustainable Development Goals 12, 13, and 15 and the Paris Agreement; addressing mainstream hydropower dams in Mekong, Salween and ASEAN rivers and environmental issues as a non-traditional security issue challenges and the need to integrate them within the framework of ASEAN. The Salween dams have been a major focus of the work in Myanmar under the OROL project and the associated coal and mining issues that are also present will be reviewed in the chapter five.

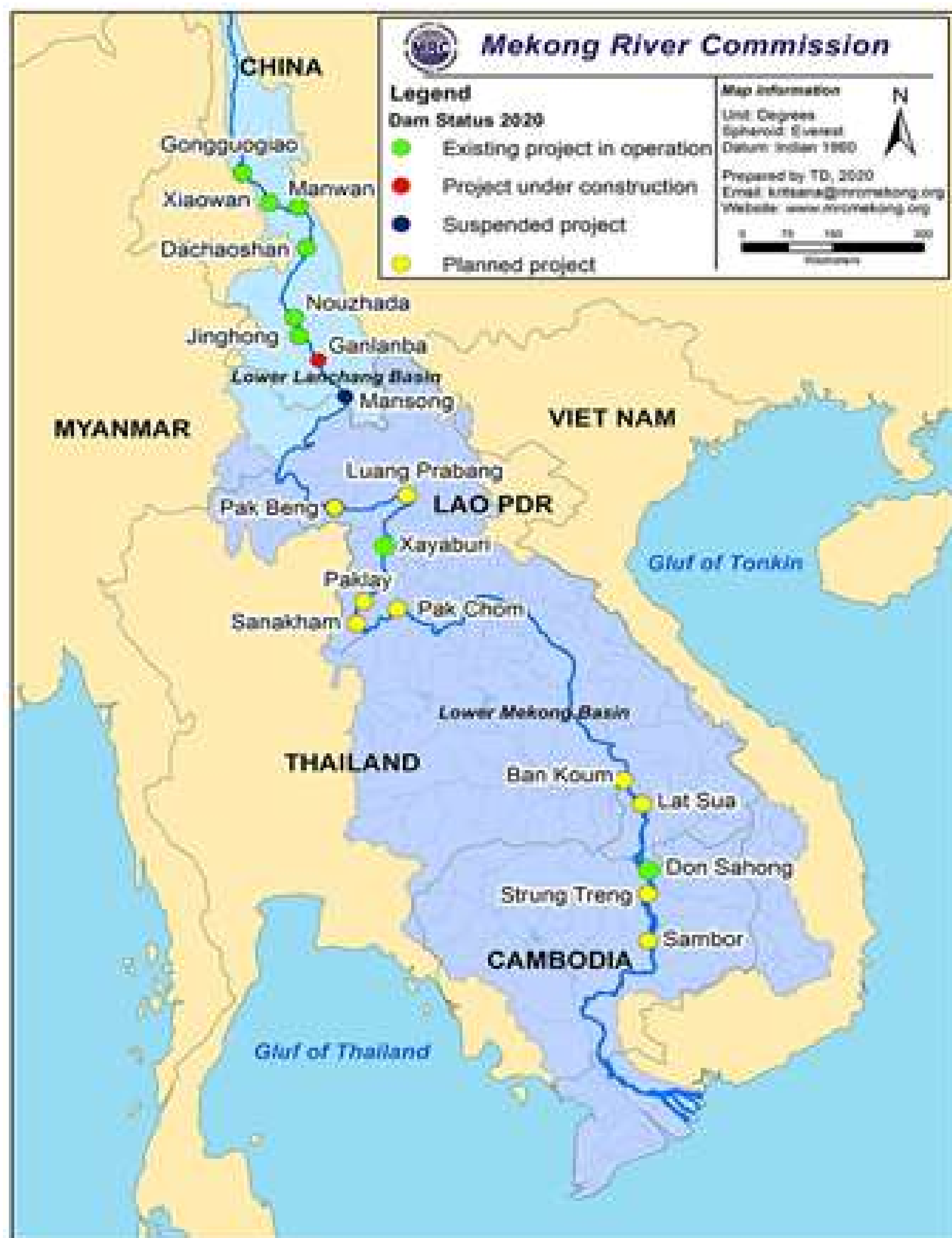
Dam Projects on the Mekong River

Dam projects on the Mekong River and tributaries

The economy in the Mekong region has been growing dramatically to the benefits from hydropower dam construction. The urban population will reap benefits of these developments, rather than the local people along the Mekong River. This is due to the changing after dam construction causing impacts on livelihoods in rural areas who depend on riverine resources (Sittirin, 2016). Since 2006, the interest on investment in hydroelectric power in the Lower Mekong Basin (LMB) has increased. The investors, mainly from China, Malaysia, Thailand and Vietnam have submitted the proposals to construct twelve hydropower dams on LMB (ICEM, 2010). This planned is including over 120 dams to be constructed on the Mekong River tributaries (Open Development Mekong, 2017). In September 2010, Lao PDR started the process to improve the eleven proposed dams on the LMB (Grumbine and Xu, 2011). The first two dams under construction are Xayaburi Dam and the Don Sahong Dam. It is predicted that these dams will reduce water flow and increase drought (Olson and Morton, 2018). As of mid-2013, China had built six mega dams and at least fourteen dams are planned to be constructed in the Upper Mekong Basin (UMB) in Yunnan and Tibet (International river, 2013). This demand for electricity and the potential for financial gains have been said to be driving factors in the decision to build a series of dams on the Mekong River because the value of these dams for the economic is approximately USD\$ 235 million per year (Hon, 2014). Opponents of the dam construction boom have voiced concerns that the projects are not necessarily carried out transparently and usually local communities are not being taken into account in dam's impact assessment (Sittirin, 2016).

These proposals have increased significant concerns for the dam's impacts on bio-diversity and fisheries due to the change of river flow in the Mekong (Cochrane et al., 2014). These dams that change the flow regime may delay

the arrival of the flood and shorten the flood in the flooded areas. This change would cause negative impacts on river ecosystem and fish habitats (Hon, 2014). The impact on fish populations in the entire Mekong River basin could be devastating. Dams may block migrating fish from reaching crucial spawning habitat, which would be resulting in certainly decrease of aquatic life in the Mekong River (Kiguchi, 2016).



Planned dams along the Mekong River:
Image Source: MRC, 2020.

The hydropower dam's development would also have impact on local communities who rely on income from fisheries (Yoshida et al., 2020). A significant concern with this situation is that the productivity of fisheries is deeply linked to local knowledge and communities' connections to and interdependence with the river and there is a need to take seriously the claims of local fishermen in Thailand who asserts, *"We use to get a lot of fish around 50-100 kilograms per day to make fermented fish for food and for sell when the water flow naturally. Recently, we cannot catch much fish in the river anymore. The fish is the main protein for our region but now we have to buy it. The situation is getting worse, especially this year (in 2015)"* (Sittirin, 2016). This has backed up into the way that dams inevitably alter the hydrology of the river system. A further impact from dam construction can be shown in the following example case of recent dam collapsed in Lao PDR which caused effects on livelihoods in Lao PDR and also in Cambodia.

On 23 July 2018, the Xe-Pian Xe-Namnoy hydropower dam collapsed in Attapeu province in southern Lao PDR, sending water downstream to more than 12 villages. Over 7,000 people in Lao PDR and Cambodia were made homeless and around 5,000 displaced villagers in Lao PDR are still living in the temporary camps receiving thin allowance from the government (Peter, 2019). This flash floods from collapsed dam had also killed at least 20 people and more than 100 people were missing. This project involves Lao, Thai and South Korean firms and it was one of the subsidiary dams that collapsed. SK Engineering & Construction, which is a South Korean company that holds a stake in the project, reported a day before the collapse happened that fractures were discovered on the dam (BBC, 2018). International Rivers Organisation highlighted that the dam was not designed to deal with such extreme weather events as were experienced, and that locals were never meaningfully consulted before construction commenced in spite of their requests (International rivers, 2018).



A girl uses a mattress as a raft during the flood after the Xe Pian-Xe Namnoy hydropower dam collapsed in Attapeu province, Laos on 26 July 2018.

Image source: Voanews, 2019

The impact of this dam collapse was also seen across the border in Cambodia. Stung Treng sits by the Mekong River close to the place where the Mekong flows across the border from Lao PDR. Three days after the dam collapsed CNN reported that government staff in Stung Treng province were left to evacuate towns and villages located further down the river from the dam which had collapsed and led to the waters rising above twelve metres in places, citing Cambodia's state news agency. The agency quoted a spokesman for the Cambodian Ministry of Water Resources and Meteorology who said there was no sign of waters receding as of three days after the collapse. They had to move around 25,000 people to the higher ground (Watson et al., 2018). This destruction had destroyed crops and property around 80 kilometres away. Most of land used for agriculture in Cambodia is still covered with sediment and debris after one year from a divesting Laos dam collapsed (Turton and Jaewon, 2019). This is compounded further by the fact that the lack of an early warning system meant that people simply did not have enough time to move to a safer space.

The findings of research which are echoed in the views of the members of affected communities do not mean that these people are against improving the infrastructure of their country. They just wish to have some control of the environment in which they live and to be able to rely on their culturally transmitted knowledge. If the development and design of a hydropower system is done well, including all necessary considerations being taken on board, it can be provided a relatively sustainable and low-polluting power source. The major issues are associated with the blocking of rivers with dams and the fact that reservoirs can engender problems, including displacement of people, forest and fauna habitat destruction, and the prevention of movement of migratory fish.

In the case of the Mekong River dams, South-East Asian nations of Myanmar, Lao PDR, Thailand, Cambodia and Vietnam face emerging concerns. The first of these concerns is related to the amount of water impounded in Chinese reservoirs and the second is related to the flow of water once the hydropower systems are up and running (The Straits Times, 2010).

Activities related to dam on Mekong River.

OROL's partner in Thailand.

The activities under OROL in Thailand have included the area of the Mekong, where they have witnessed the changes to the river since the dams were constructed in Upper Mekong Basin. ACED, the OROL partner in Thailand has been working on awareness of the issues related to the rivers and dams. They have provided training with communities and youth in communities along the Mekong River and its tributaries. Part of their work involves supporting communities to advocate for the communities' perspective on dam issues.

Interviews with villagers in a village in Chiang Saen District in Thailand brought forward information that demonstrated their experience with the dam. The dams in upstream areas were said to have an impact on the level of the water. A second villager went on to share that, *“in the past, there was always a period each year when there were many fish and now after the dam has been built, the river level and the colour is not natural for the corresponding time of year. For example, in December normally the water is clear, but now this is not the case. Also, the temperature of the water is changing”*. Further information was provided by another villager who shared that, *“When China closes the dam the fish are stuck on the rocks and die”*. Further discussions with villagers highlighted the on-going use of electrical equipment to catch fish in spite of government announcements and increased controls over this practice. Indeed, the preservation zones set up along the Mekong River and community-based River Watch Groups have led to fishermen stopping the practice in those areas yet they admitted that they just go and use such equipment in other areas.



Image source: OROL II Project, 2017

These changes to the flow of the Mekong have affected the livelihoods and the ability to plan the fishing and irrigation schedules for the villagers in these areas. In addition, the types of fish that can be caught have become fewer with almost no recent sightings of larger fish. Amidst this uncertainty for the way to manage their lives communities are facing increasing concern with the national water resource management planning of the Royal Thai government.

Staff from the partner organisation ACED shared that the new government policy for management of water gives the government control of the water resources. As such a proposal is planned that users should pay tax on the water used. At this early stage of planning for the rule, at the time of writing, it is not possible to comment further but there was information provided in interviews that the government is allowing people to input as part of the process for finalisation of the rules. ACED has supported implementation of the OROL project throughout the two phases and has played a key role in establishing the fish conservation zones with riverside communities as well as supporting cultural and the ceremony of life prolonging for rivers and associated spirits and gods. During OROL to help target communities throughout the Mekong watershed area they have held learning sessions for local youths to involve in projects to gather updated information about dams, disasters, and fish species in the Mae Kok and Mekong Rivers.

Dam Projects on the Mekong River and activities of OROL's partner in Thailand

Youth and children proposed to develop a learning centre for communities to learn about fish species in the rivers. These activities by ACED directly support the rights of children to understand and have a say in their learning and the environment where they live. Workshops have been held communities along the Kok River. The activities in 2016 were for community members and youth leaders to monitor and co-operate in the Kok River problems about dam construction on the river in Myanmar.

ACED has also supported improving the local government sector's comprehension on the project and operation plans on Kok River in Myanmar and the earthquake faults which can cause the damage to the dams in China and the potential for impact to areas in Thailand. A partner of ACED, the Kok River Conservation Network has been engaged with the Local Government Office in Chiang Rai to collect and share information from the Ministry of Foreign Affairs about this.



Fish conservation zone in Chiang Saen, Chiang Rai, Thailand
Image source: OROL-II Project, 2017

Further promotional work about the protection of the rivers in the north of Thailand has been done by ACED and includes the Mekong Film Festival in Chiang Saen on the banks of the Mekong. Documentaries and short films were made to share communities' experiences with dams and the role of the river in their lives. This included information about the longer-term effects of the dams, with increased reductions in fish, the subsequent migration to towns and cities and the consequent separation of families.



Film festival in Chiang Saen, Chiang Rai, Thailand
Image source: ACED, 2019

Chapter 5



Coal fired power plants.
Image source: Thailand construction news, 2019.

Mining

Quarrying

Coal fired power plants

Chapter 5

Mining,
Quarrying,
Coal fired power plants

Alongside hydropower projects, governments of countries in South-East Asia have implemented policies that have favoured mining operations for minerals and to supply power plants. Further resource extraction programmes include quarrying, as well as rock blasting in riverbeds. Also, in the last two decades, the fastest growth has been registered by coal, especially with the commissioning of many coal power plants since 2000. (IRENA, 2018).

Mining and quarrying activities create a lot of solid waste which are most often left in the open areas. Waste disposal from quarrying is one of the environmental impacts of these activities. The unsuitable management of this waste can have a serious impact on the population and the environment (Adajar et al., 2016). Similarly, the coal fired power plants also create the same impacts to human health due to the emission of toxic air pollutants that has resulted in numbers of deaths and diseases with approximately 6,000 to 10,700 deaths from heart ailments per year (Penney et al, n.d.).

These practices are more connected to infrastructure and construction than energy production, but are inherently connected to the development agenda, as they relate to the infrastructure works case-studies in chapter seven. Mining and quarrying works are found in every country in South-East Asia where OROL has been implemented. This chapter will examine mining, quarrying and coal fired power plants work in the Philippines and Myanmar to show the impact of the operations on the natural environment and the achievements of communities in protecting their rights and environment.

Mining, Quarrying and Coal fired power plants in the Philippines.

Mining in the Philippines

In the introduction reference was made to the position of the Philippines archipelago on the western rim of the Pacific plate where it is part of the 'Ring of Fire' (Masum and Akbar, 2019). As the Philippine islands have been formed through volcanic processes there are large mineral deposits located throughout the archipelago. These include precious metals such as gold and platinum; base metals like copper and zinc; alloys such as nickel as well as minerals such as bauxite, iron and rare metals for example, uranium (Stark et al., 2006).

Mining in the Philippines has been promoted as a main driver in the country's economic growth. This policy began in 2003 under the Arroyo government as the focus changed from one of tolerance for mining operations to one where mining was actively promoted and thus economic reforms were used to build it up (Alban et al., 2004). With these government plans, the supporting systems have been put in place for the mining industry because of the rich mineral resource deposits located there. Mining, like other large-scale industries can spur economic growth and employment as mining companies' operations lead to additional infrastructure, utilities and facilities in and around the mining sites. However, some commentators state that in the Philippines the mining industry has not provided the anticipated contribution to the development of the country.

In light of this, critics have argued that the industry has had only a small contribution to the domestic economy and supported only a few employees and it has a destructive impact on the environment and on the welfare of the people. Advocates though claim that it is the current laws pertaining to the mining sector that are flawed, whilst other constraints have reduced the amounts that can be provided in investments in the sector, thereby limiting its contribution to the economy. This has led to the mining industry in the Philippines being made up of large mines, which produce gold, copper, nickel, coal and chromite (Cabalda et al., 2002).

Moreover, the risks of these ventures impacting negatively on bio-diversity protection areas and farming land have been known to governments and environmental protection groups for a number of years. For instance, the administration of mercury in extracting gold leads to environmental damage but other practices such as the removal of forest and vegetation cover serve to strip the natural environment. The concerns related to the natural environment and people's health and livelihoods has left NGOs trying to negotiate for an alternative mining bill to further regulate companies' operations whilst at the same time, providing more of a focus on local communities and environmental conservation (Wetzlmaier, 2012).

Mining issue for OROL's partner in the Philippines

Work under OROL with the partners in the Philippines has been in the area of actions to support communities to be strengthened in their fight against extractive industries and the impact on their community. The main locations where Gitib and partners are involved in working with communities affected by mining and the use of the raw materials are in Agusan, Ozamiz, Catabato and Davao.

In Agusan del Sur the focus of work has prioritised action against destructive extractive works, such as the mining around the Agusan Marsh. The area is the site of numerous mining ventures, from large scale and open-pit mining through to small-scale ventures around the marsh in Agusan. The OROL project partner PASAKK has been working with the communities in this area. To the north of the town of Bunawan in Agusan del sur there is the Agusan Marsh Wildlife Sanctuary, around the peripheries of which and across Rosario-Bunawan District.

This work has in part been borne out of the need to address the growing concerns of the communities around Bunawan. In 2008, small scale mining activities in Agusan del Sur were developing at an increased rate, thirteen small scale mining permits awarded to companies operating in the province. In this case the mining permit applicants were all looking to find gold (Allan and Egirani, 2008).



Interviews with beneficiaries of the OROL project in Bunawan provided information that showed that the villagers had become aware of contamination of water from mining. They shared that people in the area were affected by skin rashes, skin diseases and hair loss. People sometimes use rain water but mainly they use river water so if it is contaminated it is dangerous for their health. As such they requested a team from a nearby university to come and test the water so they could know about the composition of the water and the results showed that it had been contaminated with mercury and cyanide.

In discussions, evidence collected by the community was said to show that the rights of children and community members had been violated because the water, of which access to and use of, cannot be used by the local communities. They shared that they knew they need to stop mining operations so that the destruction would not be continued, and pointed to the water samples as evidence. They have faced problems to get traction in the past with government officials and there have been difficulties for NGOs to get support from Local Government Units as there has been a mutual mistrust present at times.

Other operations in the region have seen open pit mining with the company using backhoes. In this case, they found support from the local government who demanded that the company stopped the operations. They invited experts to

identify if the water was contaminated, and it was polluted and was the cause of rashes experienced by some people. This does not mean that the risks have abated; it just shows that community pressure has helped these people to a small degree. However, another story provided by an interviewee in Bunawan highlights how incremental any successes can be. She shared that representatives of the mining company owners visited her home and asked if she had reported to the police about the mining. She said she had to lie to them for her own safety. Another example of the uncertainty about who can be trusted by the villagers is shown by the following quote, *"I told PASAKK to invite a media person from a Mindanao Newspaper to join the advocacy against mining and the Mayor got mad to us because the news was on Facebook"*

These issues and the risks to personal safety by simply trying to protect the local environment and their rights led partners and groups working around Bunawan to work on the OROL projects by planning what they would do together with the team based on the approved project. At the start, there were many problems with open pit mining. Community members formed an alliance on community orientation on protecting and maintaining bio-diversity of the rivers and forests. They have been able to collect data from consultations and there is a one foot deep siltation in the river in Agusan Marsh. The project has since been monitoring the changes when mining and backhoes were in use and when the company was using water hoses to do hydraulic mining it was noted that there was an increase in siltation during extraction works. This led the River Watch Groups to make a petition to the local government. This type of cooperative engagement has helped the communities in Bunawan take back a part of their community. During the span of the OROL projects there was an improvement in the situation and some species of fish that are eaten at ceremonies for auspicious days have returned which has instilled a sense of pride in their community for members.



Interviewed KPAKK leader.
Image source: Wasana, 2018

The groups working with PASAKK in Agusan have also been involved in Mindanao wide meetings and forums on climate justice in Davao City. KPAKK (Youth River Watch group) leaders from Agusan del Sur focused on the impact of mining and logging. In addition, River Watch Groups in Mindanao focused on how they have strengthened their team collaboration for the OROL project campaign. The River Watch Group leaders in Agusan del Sur are indigenous people who participated in the local government unit's initiated activities to mobilise their community to stand against mining in Agusan del Sur that is operating at the expense of these peoples' lives.

The OROL partners in the Philippines have also expanded its River Watch Group network across Mindanao through different sectors. They selected the communities which have been impacted by mining in Surigao del Sur. They have been campaigning against abusive and extractive industries owned by big companies which have direct impacts on river health, children and the environment. The leaders in the River Watch Group in Surigao took action for OROL by cooperating with the government and try to stop activities that destroyed the environment. It is this connection that has been made with the government that has proved to be valuable in working on the protection of child and community rights.

Due to the proliferation of mining concessions granted in the Philippines, there has developed a very active anti-mining lobby. The spotlight focused on Philippine mining has also rekindled fierce opposition from international and local environmental groups and other non-government organisations who are seriously concerned about non-economic issues like the adverse impact on the environment and the violations of rights of indigenous people. The local networks and well-funded machinery against mining has already gained roots in the Philippines and have impeded a number of mining projects.

Quarrying and dredging issues for OROL's partner in the Philippines

The work of OROL supported action related to the areas where quarrying and sand-dredging has been happening. Interviews carried out with beneficiaries in Ozamiz showed that there have been similar issues faced there to the ones in Agusan del Sur. In 2017 it was shared that there had been problems of sand quarrying and dredging in the upstream areas of the Labo River with soil erosion worsened by the cutting of Banyan trees. This river system has been modified for agricultural and other human uses. Untreated human sewage, urban development, logging and pollution have had negative impacts on the river. Studies on the insect life including Odonata around the Labo River have been used to determine the species richness, species composition and bio-diversity indices in and around the Labo River in Ozamiz City.

Community members in and around Ozamiz have voiced their concerns about their struggles to protect the riparian environment. Intimidation and threats have been received by people trying to understand more about the impact of quarrying, highlighting the risks taken by community members to try and protect the environment around them.

The Secretariat staff interviewed one beneficiary in Ozamiz who shared that, *"in 2003, I was attacked by the security guard of quarrying company when I tried to research more about quarrying. They came to my house during the middle of the night and prohibited me from telling the police or they would be back again. I reported the case to the previous mayor, but the case did not improve with just a small amount of compensation provided for attack. The impact to bio-diversity has been reported to not only be related to the mining."* Fishermen use chemicals to catch fish in the Labo River and as such children cannot swim in the river due to pollution. In addition, there is a lot of garbage in the area and there is no truck to collect garbage because the area is far away. As a result, people throw garbage directly into the river and they blame other villages for the garbage in the river.

To try and ensure that the community members are not left to the devices of mining companies and their security personnel partnerships, OROL River Watch Groups in Ozamiz have been developed in cooperation with Misamis University. Representatives from the university shared with the Secretariat that they have worked with Gitib for more than ten years. The University works on the 'Save Labo River' program and also the OROL project. "Two years ago, we worked on research project sponsored by GITIB (by AusAid and Pakap) for the water system part of Save Labo River project, which covered twelve cities. LILAC (Linusas-Laburak Cooperative – A rural water provider in upland areas near Ozamiz City) and GITIB trained researchers and GITIB provided technical support. *"We worked directly with beneficiaries on local poverty reduction schemes and policy development."* In the interview, they went on to state that, *"We want to work more on Labo River issues as the Labo is the only river of Ozamiz, and on enforcement of environmental protection, on research and Information Education and Communication materials and get more attention from politicians."*

This collaborative approach and the subsequent legitimisation of the work through institutions such as universities has helped there to be success in reaching positive outcomes. River Watch Groups together with civil society groups succeeded to help the protection of their environment by stopping the quarrying operations in the Labo River, Ozamiz city. The Local Government Unit of Ozamiz City implemented an ordinance banning the operation of small scale mining and quarrying in and around the river and this was supported by the Barangay Local Government Unit.



To alleviate the problems caused in by mining and quarrying the partners in the Philippines, like in other OROL partner countries, initiated River Watch Groups to ensure there is a basis for organised groups to work on similar themes and to provide for opportunities for them to come together and to share what they have achieved and how it has been done and learn from each other.

The forums held by Gitib and partners included the Press Conference and Press Statement in Davao City and in Ozamiz City on 10 December 2016, to launch the result from river trekking and present a statement about the situation faced in communities by flash flooding and pollution from plantations and mining across Mindanao. Further meetings allowed for River Watch Groups to share their concerns and challenges related to flooding and mining and the River Watch Group in Misamis Occidental developed their campaign plans highlighting their battle against quarrying in Labo River.



Activities related to Mining and coal power plants in the Philippines.

OROL partners in the Philippines's and anti-mining and coal power plants

There are numerous activities involving River Watch Groups in the areas around the Davao city and the city has been a focal point for many groups from around Mindanao to gather and learn from each other. OROL support against mining and the impact of mining across Mindanao has brought communities from Agusan, Ozamiz and Davao to share and exchange knowledge about the difficulties faced in each location and what has been successful in reducing the proliferation of mining concessions awarded in Mindanao.



Image source: Gitib, 2016

In 2016, a series of events were held related to mining and the impact of mining and raw materials extraction. Davao Peoples' Forum for coal affected communities was put on in Davao City in September 2016. The participants from coal-affected communities provided testimonies that contributed to providing proof on how harmful coal fired power plants are to health and the environment and that coal is not the answer to the "power shortage", by sharing how it causes harmful effects to the community, as well as aggravating the impact of climate change.

Three invited speakers from environmental groups namely; Power Alternative Agenda (PALAG) – Mindanao, SANLAKAS (approximate translation: Unified strength) and Y4CJ, were invited to ensure that the connections between civil society and popular groups were maintained.

The work in 2016 was followed up in 2017 with a forum in Davao in to formulate a comprehensive plan for an anti-coal, ecological child rights and climate justice campaign in Davao City by OROL partners in the Philippines and Y4CJ under the banner of 'Intensifying the People's Struggle'. The issues such as effects of mining and climate change as well as plantations were presented for children and other participants. In the forum, a plan was formulated to carry out protest action for the campaign against environmental destruction which was later held on 28 February and 1 March 2017. Other events to develop the understanding of the communities around Davao were held in five locations with participants attending photo exhibitions to help them to understand the impact on the environment. Photos showing the environmental impact of mining, quarrying and other extractive activities were displayed. This was used to clarify their position on regulations on quarrying and how to move forward their campaign plan and challenge their community to help each other in defending the rivers from mechanised quarrying and problems caused by improper waste disposal.

Other work done with community members included provision of training and learning sessions for youths on ecological child rights, bio-diversity and river protection in Calinan, near Davao City. After trainings, youth and children became speakers to share their acquired knowledge with others. Some of the children who participated used their knowledge on the issues of ecological child rights, plantations, mining and climate change have also become choreographers and teach basic dance to selected pupils of Calinan Central Elementary School. They use creative dance to demonstrate their perspective on the pertinent issues affecting them. This medium has seen to be an outlet for youths across Mindanao to find a voice to share to others. Knowledge of these

issues was expanded to thousands of spectators on 10th March during the celebration of the 80th anniversary of Calinan Barangay. This event enabled connections to be made with the Congressman of the District, village officials, community leaders and other prominent visitors. These events allow youths and children to share their perspectives and they are given a voice in ways that cannot be achieved through direct consultations.

Y4CJ is a network of engaged volunteers who support public understanding, support public representation at conferences and climate policy discussions whose main focus is ensuring that rights of youths and their voices are brought to the forefront in the discussions around policy and environmental protection.



In 2019, it was one of the co-organisers of the National Youth Summit and led the climate strike during the last day of the summit and the youth climate strike on May 24th in Davao City together with 'No-Burn'. The Ecological Justice League (EJL) was then formed with Y4CJ taking the lead for the coordination committee of Mindanao Island. It was attended by students from different schools and new Y4CJ members. Furthermore, River Watch Groups expanded their membership in their communities and in other villages, with some of them having become forest guards fighting for their rights and defending their ancestral lands from big mining companies alongside pushing their demands to the government.

Issues of mining closure and the strong stance of the Department of Environment and Natural Resources and CSOs including Gitib and partners have become more and more known to the public and as such have begun to steer peoples' opinions on the issue. Articles from recently concluded press conferences have been shared in social media and various media outlets.

The Sustainable Davao Movement (SDM) is a broad coalition of different environmental organizations and climate justice advocates based in Davao City. Two of its member organizations are Gitib and Y4CJ, and its first press conference was held in February 2019. OROL partners were able to present in public their position supporting the Department of Environment and Natural Resources decision to enforce the closure of twenty-one large-scale mining operations and the suspension of five more mining companies in the Philippines.

These companies have been acknowledged as having directly destroyed the watersheds, rivers and environment, which has affected the lives of communities and children. This type of success where communities have been mobilised to speak out on issues affecting them is seen in the following statement from Philippine Misereor Partnership, Inc. (PMPI), a network of people's organisations (POs) and NGOs in South Cotabato. OROL works in partnership with IMAN in this province and their work is detailed in chapter seven.

Mining and Coal fired power plants in Myanmar.

Mining in Myanmar

In Myanmar, a series of mining disasters has been occurring for a number of years. In November 2015, the tailings or waste materials which had been piled up at a mine in Hpakant, in Kachin State, Myanmar where it produces some of the world's best quality jade collapsed and fell onto the huts where workers were sleeping. State-run media placed the number of casualties at over 100 people. At the time of the collapse it was estimated by local officials that there could be up to other 30 people buried under the collapsed hill of waste soil (Hume, 2015). Then again in April 2019, it was reported that around 54 jade miners were understood to have been killed by a huge mound of waste materials which collapsed and fell into an open-pit mine resulting in workers and equipment being buried. The incident happened in the same region as some of the collapses outlined above in Kachin State. In this area, the miners extract jade valued at billions of dollars each year in harsh working conditions. The lucrative jade mining area has largely remained under government control (Nang and Paddock, 2019).

In August 2019, a coal mine run by the Inngyin Taung mining company in Magwe Region's Minhla Township caved in after heavy rains caused flooding. Four miners were trapped in the 180 metres deep pit. As has been shown in the case of jade mines, coal mine accidents can also be common. It was estimated that there are about forty small and medium-sized coal mines in the region and they are operated by only nine mining companies and produce about 2,000 tonnes of coal per month (Mann, 2019).

By contrast to the Philippines where there have been success stories of company mining activities being halted as a result of community and civil society action against mining, quarrying and coal fired power plants, the situation regarding mining and quarrying in Myanmar is harder to affect in this way. This does not mean that there have not been success stories but there are unique challenges to

the operating environment in Myanmar. The centralised nature of government decisions and the lack of ability of affected communities to engage and enact change at the State level have meant that bringing concerns of communities to the table is hard. Decisions for coal mining are made at the Union (national) level, and are agreed to at the State level.

Mining issues for OROL's partner in Myanmar

Myanmar as in the Philippines has decided that mining and extractive industries are a preferred choice in supporting the economy and providing power for the national (and neighbouring countries) grid. KESAN reports place the total number of mining project sites in Myanmar at around 70,000. Interviews with villagers in Karen State in 2018 highlighted various issues that have been witnessed since the start of mining and quarrying. As with mining activity in the Philippines the environmental impacts include loss of bio-diversity, air pollution, water pollution and damage to the fertility of the land. The communities in the area point to the fact that the companies are in effect removing whole mountains from around Hpa-an in Karen State. The area is renowned for outstanding natural beauty and has the potential for supporting eco-tourism and the development of nature reserves. However, the dust produced by blasting has forced villagers to plant additional trees to try and act as a shield against the continuous dust pollution. Villagers stated that they are really worried about health problems and the condition of the village from the mining and quarrying. In summer, (March and April are usually referred to as summer due to the high temperatures), there is a lot of dust and if more companies are provided with concessions to work then the amount of dust will increase. Discussions with the Karen State governor highlighted that she said that the road design was changed to use 10% less materials than originally planned. Villagers shared that this has made no difference. It was reported that this had been going on since December 2017 when machinery came and within four months 40,000 cubic metres had been removed. As a result, part of the mountain has gone. The work is happening at the back of the mountain so it is not immediately obvious to people looking from Hpa-an. The companies involved have been reported to be Chinese owned firms. It was stated by a villager that the Chinese do not respect communities and they destroy villagers' trees and not pay villagers compensation. It was stated that the Chinese company is supposed to consider the local communities' needs, but this does not happen.

Interviews with villagers from near Hpa-an in 2018 during the project evaluation provided evidence that in Lwun Nya village near Hpa-an there is a quarry for removing rocks for the ADB funded highway project. Complaints from villagers

have forced a temporary halt in the work, but further pollution led villagers to inspect the site. Upon visiting the site to take photographs, (where there was evidence of continued quarrying) they encountered soldiers and quarrying works being carried out by the DKBA. In spite of the ADB halt being imposed on rock being taken for the construction of the highway, the villagers were told that DKBA was allowed to continue as the rocks were not being used for the highway project. The situation faced by the villagers in Lwun Nya is made more difficult as they have now been made into scapegoats for the delays or cessation of the projects and that issues that come about as a result of the failure to deliver the projects on time are because of them. The pollution and impact to bio-diversity are not considered as issues. The impact to the environment has been said to be increased risks of landslides, contamination of water sources and a loss of land viable for agriculture.

Another villager shared the situation faced by the communities. *“The village head did not share information about the quarry, so they used the local elections as a way to remove him from office. After electing a new head the villagers found him to be more sympathetic to the situation in the village, but he was soon replaced by State level authorities. After that they could not get any information from the government on the projects. They sent an open letter, which according to national policy and procedure has to be approved by the village head. This was not done, so it was left as an unofficial letter,”* (carrying much less weight with the government). Villagers are now involved in a lengthy court battle with community members trying to raise money to support legal fees.

One interviewee provided a candid perspective of the situation in Karen State. “Crony capitalism, Border Guard Force rock mining and companies which are friendly with the military have led to massive negative impacts to communities which cannot be controlled. Questions remain as to why the local Karen State government is interested to support a local coal power plant when this idea was stopped at the Union level, but is as yet continuing at State level.”



Landscape in Hpa-an, Karen State.
Image source: Wasana, 2016.

Coal fired power plant issues for OROL's Partner in Karen State, Myanmar

As seen in the previous chapter on dams, the people of Karen State have been facing resources based conflict between ethnic armed groups, the government supported forces, communities and business actors for a number of years. A further issue facing the communities along the Salween includes the proposed coal fired power plant project in Hpa-an township, in Karen State.

KESAN reports to the OROL project provided information showed that the investor company, Toyo Thai Company Limited (TTCL), signed a MOU with the Karen State government to implement the coal power plant in Hpa-an township. After the agreement with the government, the investor arranged for an exposure trip to Japan's coal power plants and aimed to advocate about coal to the government. Furthermore, the participants for the company's exposure trip were also selected by the government. The State government allowed the investment company to carry out consultation meetings in the villages and the township in June 2017. The coal-fired power plant will affect about 150,000 persons in Hpa-an town and 700,000 persons in Mawlamyine. The fact that villagers are not part of decision making processes and a lack of information about the project has been provided for those affected makes this plan problematic. It was said that the government ignores the rights of local people in the project area. The government wants to move forward with the coal power plant project but the community does not want it because of consequences for the environment and their lives⁷.

Communities in Karen State shared that currently they can collect forest items for food and medicine and fish from the rivers, thus ensuring their food security. They said that when the coal power plant is built they will be affected and most likely displaced. They have been told by the government that they will not need to move, but they guess that they will be affected. Villagers said that if they do not move there will be noise pollution, there will be issues from air and water pollution. This was cited to increase the risk of health problems from toxic air and particulate matter. This will contribute to acid rain which will create skin problems and contamination of wells for drinking water. The construction of the plant in the Hpa-an area will mean that large areas of community forest will be cut down. This will impact to the access to the forest which in turn will affect the ability of communities to collect items from the forest. It was said by one interviewee that, *"currently there is no need to buy food items"*, showing that their expenditures will increase when the plant is built, depriving them of their right to practice their traditional culture and there will be an increase in their dependency on financial income and potential for moving to urban areas to meet these needs.

⁷ Information from KESAN's draft concept note for ACSC/APF 2017 in the Philippines.

Community members in Karen State provided a valuable insight into their situation with the following quote. *"We all want energy but if we just produce it through dams and coal and it will create problems on the climate and environment"*. The government has postponed the building of the coal fired power plant in Karen State. KESAN submitted evidence of the impact of the projects to the Union level government but in spite of the decision to postpone these two projects in Karen State it is feared that it will be continued in five years.

Empowerment and Awareness Raising Training in Thae Baw Boe village, Kwee Lay Su and Ta Eu Hta village, Karen State.
Image source: KESAN, 2019.



A staff member from KESAN said that the government only looks at large scale energy projects and they do not have an integrated energy plan or system. Wind, solar and other means are not considered, there is solely a focus on coal and dams. Whilst the energy produced by the planned coal plant is slated for use in Karen State, even if communities push for their own ideas the government does not readily show support for them.

Reports from partners and interviews with villagers during the project evaluation in Karen State have shown that the 1,280 MW power-plant in Karen State plans to be run using so-called "clean coal" technology and coal imported from Indonesia. The construction project was intended to start in 2018 and to be completed in 2020. According to the plans 1,000 acres of land from nearby villages will be acquired for the power-plant, and expansion of facilities on the bank of the Salween River for coal shipment will also be carried out. The feasibility study and EIA for the project were conducted without the local people's participation or consent. Moreover, authorities have been blocking coal awareness training by CSOs and information sharing about the project in the affected communities. The authorities have also destroyed signboards erected in the public areas with the local people's messages about the project.

The local community has clearly rejected the proposed so-called "clean-coal" project in Karen State on many counts. These include the unstable political situation, the country's weak environmental and investment laws, serious lack of corporate transparency, unlawful actions of the government and - not least - the fact that no matter what is done to reduce pollution from burning it, coal remains among the dirtiest of fuels. Local people are worried that the project will

contaminate their clean water, air, damage the fertile soil and the forests and mountain area bio-diversity, thereby destroying their natural wealth and that of future generations. The proposed project was once planned to be built in Mon State but strong resistance from the local communities in Mon State has resulted in the project failing to proceed there. Media Advisory on Report Launch “Burning the Green Future”.

Activities related to coal fired power plant and mining in Myanmar.

OROL partners in the Myanmar work with communities.

The work carried out by KESAN and its partners has been engaging youths and affected community members around the issues that they are facing. The KESAN reports that were submitted during the course of the OROL project show that KESAN prepared for their work in Myanmar on the issue of coal and other mining by running workshops and providing training with youth, young environmental activists and local authorities. This was done for lobbying and advocacy action on 26-27 September 2016 in Myanmar. This workshop, held in Yangon, was to gain a better understanding of mining operations (gold, coal, iron) in Myanmar.



Capacity building training for local communities on rights-based advocacy.

Image source: KESAN, 2018.

The Save Salween Network updated on the increases in the number of foreign investment partners in the energy sector. This development has created massive pressure and conflict between ethnic groups, particularly in Shan and Karen States. Also in 2016, the campaigns by CSOs including KESAN and Karen River Watch to advocate for the inclusion of environmental issues of impacts from dam construction, coal mining and cement factories in Myanmar were productive and received cooperation from local communities, journalists, governors, activists and youth groups.

KESAN reports also show that to advance the learning an advocacy and campaign exchange event was held in Shan State around the issues related to the Tigit Coal Mine with community members in December 2016 in Shan State. They aimed to promote environmental awareness among youth groups through CSOs focal persons and community activists. To follow up on earlier work it was arranged for a trip to visit the Upper Paung Luang Dam area and to gain

Meeting with PaungLaung Community in Shan State.
Image source: KESAN, 2016



knowledge from local activists at the Tigit coal mine on the effects of these large development projects. In these areas, people have lost their farmlands and did not receive enough compensation from the government. Local villagers have been trying to protect their lands and environment but they have not had a chance to seek for the justice as the implementation agreement was signed by former military dictatorship.

The reports continue to show that in 2017 KESAN and partners provided training to 254 children and 45 youths to increase their understanding of natural resources management, to understand their rights and local community empowerment, as well as to also improve their English skills for the campaign at an international cooperation level. In the Natural Resources Management Training, they drew an action plan for the campaign on river protection related to the issues with the Myaing Ka Lay Cement Factory and Taung Kone Mine as well as the Hat Gyi Dam.

Social media networks were set up to share information and build the network focused on coal issues, the cement factory project, quarrying and rock mining in ethnic areas of Shan, Karenni and Mon States, according to project reports. Karen River Watch members also worked on refugee issues in mining and coal use in Karen State for three months to collect information and monitor any human rights violations in the area around Myaing Gyi Ngu where villagers were taking refuge in a monastery because of fighting around the access road to the Hat Gyi Dam sites. The information and data was used to produce reports or materials for advocacy purposes. These reports and advocacy materials were used in pushing forward the community driven agenda to make clear their views regarding the coal fired power plants.



No Coal sign in the villages.
Image source: Wasana, 2017

In both the examples provided in this chapter there has been a clear omission of the concerns and rights of affected community members. The Philippines agencies have used the space that is available to them to engage all relevant

sections of society using methods that allow for explanations to be provided through dramatic presentations as well as through direct protest actions. These methods are contrastingly absent from the situation faced by communities in Myanmar where direct protest actions would be met with the full resolve of the authorities. The stark contrast to the ways that the partner agencies in each country demonstrate their intrinsic understanding of how to approach the problems shows how valuable local knowledge can be. This in turn shows how there has been a gap in the policy planning by governments and businesses which has resulted in local communities being ostracised from decision making processes that will affect them negatively the most.

These gaps in the inclusion and involvement of members of affected communities exist due to the priorities that are set under the current model of planning 'development projects' that are framed to be in the national benefit. The risks associated with environmental pollution and degradation seen in the course of the examples in this chapter highlight how there need to be drastic changes in the ways that business permits are provided and who is consulted in the decision-making processes for these permits. The impact of pollution from mining and coal fired power plants and the clandestine ways that are used to protect mining interests mean that there are real risks faced by the individuals who stand up to the people behind the provision of permits and their financial power.



Chapter 6



Translation:

ATTENTION

This land belongs to PT. Lido Nirwana Parahyangan

IT IS PROHIBITED TO

claim, divert, or cultivate without PT. Lido Nirwana Parahyangan' agreement

THIS BANNER IS A PROPERTY OF PT. LIDO NIRWANA PARAHYANGAN

Whoever destroy, injure, or dismiss this banner will be prosecuted for 32 months jail time at maximum as regulated by Article 406 of The Criminal Code Law

Land usage - land grabbing

Plantations

Chapter 6

Land usage - land grabbing, Plantations

As increased urbanization has continued throughout South-East Asia the need to produce sufficient food for this urban population has logically increased. Plantations and extensive agricultural production have been used largely under the guise of necessity for the population, but the practices therein have at times been shielded from the populations that have relied on them. There are two type of land-use change which are not accepted for society and environment: lands for growing food crops that have been converted into plants for bio-fuels, and forest lands that have been converted into bio-fuels or into food production for export (Borras Jr. and Franco, 2011).

Lands in millions of hectares have been allowed and developed into plantation by dispossessing villager's lands and generating widespread deforestation in South-East Asia (Kenney-Lazar and Ishikawa, 2019). These acquisitions and rental contract of large-scale land for agro-industrial have affected hundreds of thousands of small-scale farmers and local community land owners in South-East Asia, especially indigenous and minority groups are the most at risk (Hak et al., 2018). Palm oil plantation can be a good example of land- use change and land grabbing as it is being a rapid expansion in South-East Asia as well as being driven by increasing global demand for edible oils and bio-fuels (Colchester, 2011) which Indonesia and Malaysia are the major two countries that export over 80% to global market (Colchester et al., 2011). Developing countries in South-East Asia will face challenges on global agriculture as provider of food and as engine of growth to feed a projected population of 9 billion people by 2050. This investment will impact livelihoods of people in rural communities, including impact on land rights and access to land because local people often do not understand what rights to land under the laws of the country (Gironde et al., 2016).

Land usage - land grabbing and plantations.

Land usage - land grabbing in Indonesia

Indonesia is the world's leading palm oil producer with supplies approximately half Global commodities (Petrenko et al., 2016). The prevalence of palm oil

plantations and subsequent production for industry and food purposes is an issue throughout many parts of Indonesia. A lot of the production sites have been situated in areas that are inherently linked to the lives and culture of the indigenous populations. An example of this occurred in West Java, when in 1990 land was taken over by the private companies for palm oil plantations. The following quote from interviews with RMI staff and the 'Relawan for Life' group (Youth River Watch Group) support in Indonesia shared by Secretariat provides an insight into the history of the situation. *"The private company came to the village and offered money to local people. They asked people to sign a contract. People don't have knowledge about the value of the land and the meaning of contracts and more importantly they did not understand the impact on their ancestral lands and their lives and so they accepted it."*



Palm oil plantation in Indonesia.
Image source: Bangkokpost, 2019.

The discussions further revealed that in the upstream areas of the Cisadane River in Java, back in 1990 communities lost their land to a private company. The communities were offered money and many people did not have sufficient understanding and education around the value of the land and what they were agreeing to. As a result, they accepted the offers and the lands have now been occupied by businesses.

This particular location is being developed for a large-scale tourism venture which will take over around 3,000 hectares of land. The project is to build the largest golf resort in Asia and is being run by the company of the President of the United States, Donald Trump. The head of the house of the Indonesian parliament visited Trump during his election campaign to sign agreements and was witnessed at his rallies, highlighting the extent to which these issues are not solely the by-product of South-East Asian or Asian businesses.

Moreover, in the upstream area of the Makakal Hulu River in Sumatra, the indigenous people have witnessed the impact from palm oil plantations. RMI has worked alongside another organization called Sokola in the area and according to the organisation, in the past four decades the Orang Rimba forest area has seen massive changes. This began with the forest conversion for transmigration settlement areas as well as large-scale oil palm and rubber plantations. The living space of Orang Rimba has become increasingly smaller. In 2000, the remaining forest was designated a conservation area (National Park). This helped to stop forest conversion, but it was a problem for the Orang Rimba due to various

restrictions imposed. The Secretariat of OROL highlighted the challenges faced by the indigenous communities in the area that they don't have formal education and they live in the area designated as a national park. This is even though the area became a national park after they have been living inside the forest for generations. There are twelve villages in total inside the forest area of about 65,500 hectares. The government, when planning for the region did not have complete information on the river and its role in the communities and thus issues began for the people therein.

Against the backdrop of the migration and the changes for land use, the government's position led them to sign a MOU with a company to plant palm trees for palm oil production, forcing indigenous people to move from their ancestral lands. The government later informed the population of Indonesia that the Orang Rimba had a problem with their health, and that was why they had to move out. Discussions with RMI in Indonesia highlighted the multi-faceted role of the deception, with some NGOs spreading false news and used the tactic of always inviting elders, who were not literate. This allowed the illusion of consent to be maintained. Later the communities sent younger representatives who could read and understand the information being shared. This misinformation led to programmes such as housing developments to move the Orang Rimba out of the forest to these settlements.



Sokola's has worked with the Orang Rimba in Makekal Hulu since 2003 through a community-based education programme. The education facilitated by Sokola aims to complement their traditional knowledge, to deal with new problems that come with the changing environment of their living areas. Together with Sokola, Orang Rimba advocates for recognition of their customary forest and the right to manage natural resources in it.

Sumatra is not the only site in Indonesia that has witnessed clandestine methods to gain access to their resources. Interviews with youths from West Papua whilst in Java showed more evidence of the methods used. The interviewee said that, *"in West Papua, the local community is isolated and secluded but believed they were being misinformed by outsiders. The aim of the outsiders approaching*

these communities was stated to be to look at ways to develop eco-tourism. To assist with developing the area they were informed that they can cut trees from the forest areas and that as long as the roots are left then there is no risk of landslides.” This piece of information is simply not true but provided outsiders with the opportunity to seize hardwood trees and other resources from under the noses of the Papuan communities.

Activities related to land use and palm oil issues in Indonesia.

Improving knowledge of rights for community members and enacting changes in law.

Information provided by RMI staff has shown that their work has taken in developing education materials as a tool to help develop greater understanding of the rights that members of target communities have over their land and the resources. The team in Indonesia produced a book titled, “Anak dan Kehidupan” (Children and Life) in September 2017. Publications with articles are very effective in drawing the wider attention of the public. This approach of making publications and other materials to disseminate information has also been proven to be successful in another area of RMI’s work. A team of journalist from ABC Four Corners contacted RMI to make film on the development programmes conducted in the Cisadane area supported by Donald Trump as a result of the paper that was produced on Repling environmental education. The knowledge gained by Jong Cigombong has been used to spread the status of the resort development to gather more data to complete their advocacy materials for the community’s rights over their land. The development of these materials led them to understand that agrarian issues are hardly recognised by urban communities even though issues impacting negatively to the environment have been present in this area for a long time. This has led to difficulties between the national park and local communities. The local communities are now forbidden from managing natural resources on the land which has been integrated as part of the national park.

In the case of the Trump backed resort complex the OROL project was used as a vehicle to influence alternative opinions on the value of the project. However, the compelling arguments needed to stymie the progress and decisions that have been taken requires extensive research and without being able to access the area this was stated to be very difficult to achieve. Furthermore, given the nature of the investments and the scale of the business operation advocating for a more inclusive policy for this can be dangerous. By approaching the area under the guise of looking at coffee growing, community members took advantage of an opportunity to discuss the issues around the Trump backed business. However, it



Short course.
Image source: RMI, 2019

was admitted in interviews with members of staff from RMI, when they shared this story, that to continue is dangerous and requires skilled legal support, which is not possible for the communities. Even proposing alternative development programmes is not a safe option.

Despite the massive challenges that are faced to create a more inclusive system of planning for development and commercial programmes in Indonesia there have been significant advances made by RMI and other agencies within Indonesia. Partner reports show that the 2012 judicial review included a ruling that adat (customary) law now applies to forests and it has subsequently been ruled that they are no longer owned by the state. This is now in the process of being applied and the rights of access to their lands have been supported by this law, helping an estimated eighteen million people. RMI has also been involved in using the OROL campaigns on community forests and adat and has linked them to other NGOs that are helping with revision of the national forestry law. Women's rights and the forest is another advocacy area along with children's rights to practice their culture as indigenous forest dwellers.

Partner reports from Indonesia from 2017 provided additional information about their work to provide further support for the rights of indigenous communities across Indonesia has been provided by RMI and its collaboration with community groups and partner agencies. In Indonesia, youth and young generations' rights over natural resources are a novel idea for some parties, and usually people agree to incorporate them into the work. Youth have since been acknowledged as a substantial subject group in regards to agrarian issues. The access to ownership of land is highlighted in regards to the struggle to realise ecological child rights. Relawan for Life members gained knowledge on Indonesian agrarian matters. Besides, RMI has lobbied for support from BIJAK-USAID on Forestry Law no. 41, 1999 revision and to include youth issues in the natural resource and forest governance. The BIJAK-USAID cooperation agreed to explore further opportunities and schemes to support the CSO coalition in the advocacy of Forestry Law revision and agreed to conduct a workshop to mainstream youth and gender issues among CSOs and government officials in collaboration with BIJAK-USAID. Moreover, the coalition agreed to also consider young people's involvement in the community forestry enterprise initiative. Thus, RMI has built a stronger collaboration with local governments for future advocacy.



RMI's work with youths

Papers produced by staff of RMI and their reports have shown that they have worked with youth to support them to collect data and information about river and land conditions and use by local communities, cultural values about natural resource governance and ways of living. Through exposure trips managed by Kasepuhan Karang youth group: “Pesona Maranti”, awareness and understanding have been improved amongst regency governments and media in relation to youth contributions in forest management. RMI is also involved in the customary forest advocacy work, and the issues that they have been focusing on, i.e. women and youth in the agrarian movement, are more likely to be taken into account in the national context. Global Land Forum created opportunities to increase the support for ecological child rights using the perspective of youth's rights over land and to highlight youth land issues.

In the event, stakeholders shared information about case studies from various initiatives to communicate the overall impact of women's inclusion and participation. This was done to acknowledge and support understanding about gender rights and efficient ways to empower women in community led efforts for managing land and natural resources. Other topics were related to the risks associated with different technology, communication platforms and how to minimise these risks and improve their personal security and taking the initial steps towards developing a digital security protocol.



Water quality measurement by Relawan for Life group
Image source: Wasana, 2016

Furthermore, RMI has agreed to conceptualise the approach for youth in relation with land rights issues as a strategy to increase ecological child rights topics. There is recognition of the injustice that happens in the education system whereby violation of children's cultural rights can occur.

Land-grabbing, chemical fertilizers and plastic waste issues in Lao PDR

The OROL project in Lao PDR has been implemented in Salavan Province, specifically in Ta-oi and Salavan Districts. Salavan is a relatively small town, when compared to other country's province level towns in the region, and Ta-oi district is situated around 100 kilometres away towards the Vietnam border. On the journey between Salavan and Ta-oi the road is crossed by a number of river channels and streams forded by bridges. This area is in the hills on the Bolaven Plateau and the population density is low, even when compared to other populated areas in Lao PDR. Despite its remoteness there have been big changes that have affected the environment in the area, as revealed in discussions with villagers.

The communities in Ta-oi further reported in interviews and group discussions that there was a lot of land-grabbing in the past. Companies or business agents would visit villagers and offer them money for the use of the land that had been used by villagers for shifting cultivation. This practice was often in the form of a lease arrangement for a period of years. Villagers found that the majority of the companies used the land for Eucalyptus trees for paper production. This was stated to be largely along the Xelanong River. The Eucalyptus is popular for paper production due to its very fast growth rate in most soils. However, the tree is non-indigenous to South-East Asia and is viewed by many as a controversial species due to the impact it has on the soil.

Xelanong River:
Image Source: Wasana, 2016



Interviews in Ta-oi highlighted the subsequent lack of fertility of the soil and the water content and supply after plantations had been grown in the area. The layer of humus that is associated with the annual leaf loss of indigenous trees does not happen with the Eucalyptus and as such the opportunity for mulching of leaves and the bacterial growth that attracts insects and subsequent increased soil fertility was not happening. This is backed up by the research carried out by a paper by Hoogar et al, Ravikumar and Sujatha titled, “Impact of Eucalyptus plantations on ground water and soil ecosystem in dry regions”. They found that areas with eucalyptus plantations to have lower levels of seed germination of other types of herbaceous plants, thus reducing the extent to which mulching can occur (Hoogar et al., 2019). Plantations around the area where OROL has been implemented have been noted to be sources of chemical run off with one staff member of ACD pointing out that there is a banana plantation owned by a Chinese firm close by and there are a lot of chemical fertilizers in use there.

The pace of change to the community in this part of rural Lao has been difficult for villagers to cope with and even just simple changes to lifestyles such as in the past daily food was stored in banana leaves and wicker containers, were used and not plastic, thus synthetic waste was minimal. As lifestyles changed and there was increased access to goods and foods that were wrapped in plastic, due to increased opportunities for employment and increased cash in the area because of the profits from leasing or selling land. So, the same people who practiced shifting cultivation began to throw garbage into the river, use chemical substances and pesticide in fields not far from communities and the garbage that was now being created flowed to lower areas downstream.

At the time of carrying out the evaluation as part of the work for the OROL project in the area it was December. Rains had not fallen in any significant amount for about two months. Stream channels were mostly dried up and in many places alongside the road and in the stream beds there was plastic waste. Discarded upstream and when the waters dried up, it had become lodged on rocks and in bushes. This continued for most of the journey, yet when entering Ta-oi and nearby Houn village, the amount of garbage along the road, in fields and in dried up stream beds was minimal. This stark contrast is a result of the support that has been provided for the communities around Ta-oi by ACD. The lack of understanding of the impact of waste and chemicals amongst community members is one aspect that ACD has tried to address with its programme in schools. This is because as access to the area opened up the local communities were not prepared for the changes that they and the environment around them would experience.

Activities of OROL's partner in Lao PDR.

As a result of the initiatives supported by ACD, schools in the area were immaculate with garbage in bins, or at least on the floor next to them. On a visit to one school, upon arriving outside the school building the whole school, of around sixty students, was involved in a series of games and quizzes. Prizes were given as children were asked about the natural environment, what to do, how to look after it etc. Alongside the activity between the school and ACD were representatives of local authorities and a member of the local police. All were observing the lessons being taught to the children, as well as to monitor what was being said.

In this area students at the schools involve in games and learning sessions that promote understanding of the natural environment, responsible waste management and ecological protection. There has been work to try and alleviate the impact of this gap across the district by using a community radio station to reach thousands of community members with key messages about environmental protection and rules and regulations that exist concerning use of natural resources.



RWGs in Laos presented about river and environmental protection. Image Source: OROL II Project, 2018

This education is vital for the new generations as in the rural peripheries of Lao PDR animism and belief in the role of spirits plays a significant role in the construction of how the population understands the world and builds and reinforces their cultural norms. Villagers who experienced poor harvest after the beginning of commercial Eucalyptus tree plantations understood that ghosts and

spirits were not happy with them. There was no connection made between the changes in agriculture and the impact on their lives. ACD with assistance from the OROL projects have supported the communities to understand and see the connections between the plantations and the soil infertility. Now they are more aware of their role in protecting the environment. This has included the establishment of a protected area for the forest. However, logging still occurs.

The River Watch Groups have helped the new generations to know about the value of these trees and the role they play in forest and riparian bio-diversity and health. ACD has also worked with schools and youths as a primary target group in Ta-oi and teachers link the norms that they are accustomed to in the community and the changing bio-diversity of the area. The connections between the forest and food and medicine and the culture are established and used to highlight the impact on the lives of people in the area. One interviewee in a school in Ta-oi when asked what would happen if the forest was gone and they could not get food from it and the river, she replied, *“I would have to live in the city to work to support my family.”*

The changes made to the knowledge and the practice of communities in Ta-oi District show that there are concrete results from the total engagement of communities and working to support them to understand the consequences of the decisions that they are making. The positive impacts are that people are aware of environmental issues and know how to protect the environment, such as stopping the dredging in the river. “According to our observation, people can change their lifestyle to protect river and environment more. Several households have been given an award for being ‘good practice families’ and now, slowly people are aware of the importance of environmental preservation.”, said by ACD staff.

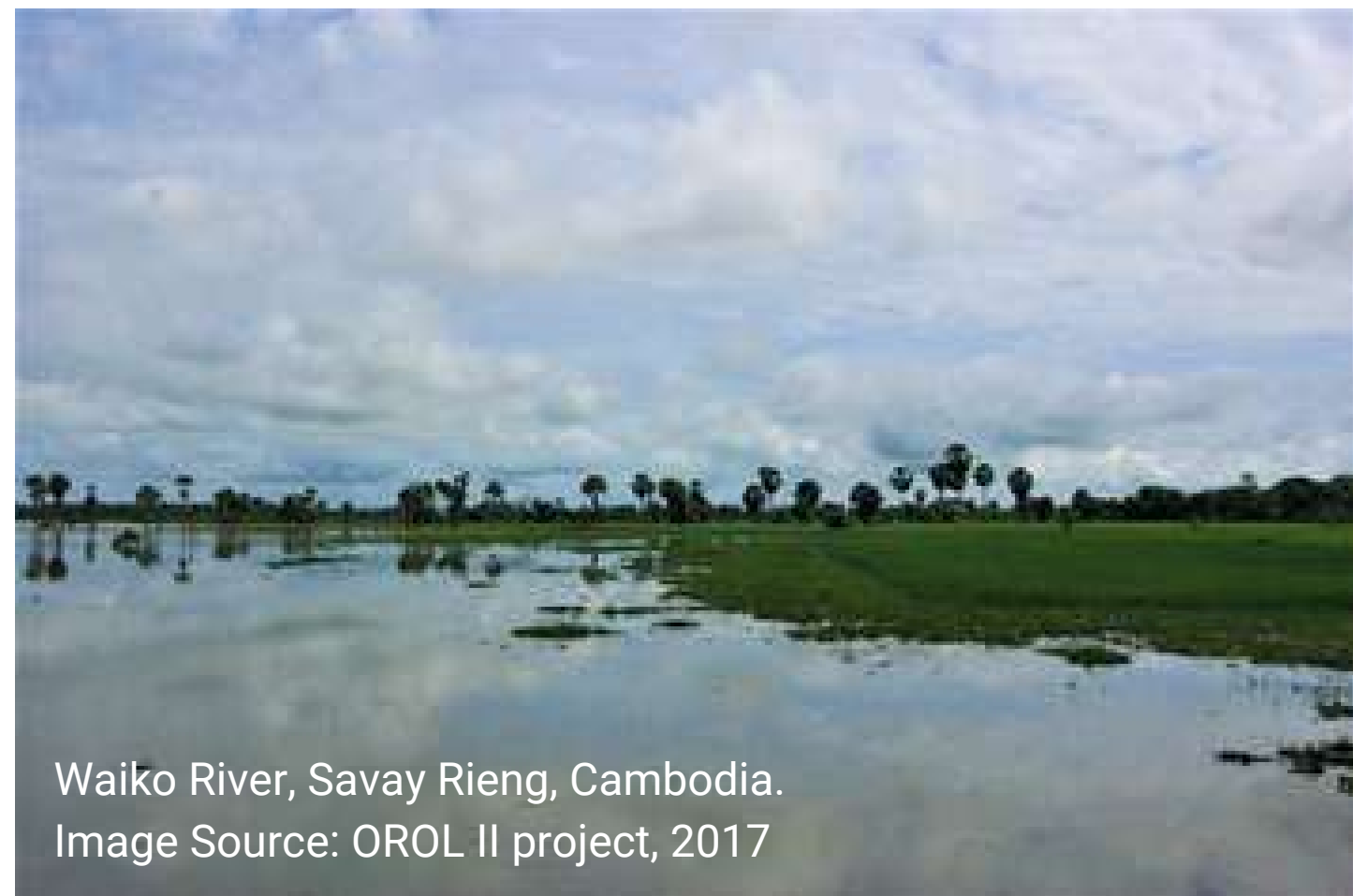
Land-use change and chemical fertilizers issues in Cambodia

Svay Rieng is a growing town of 482,788 inhabitants which is approximately 3.6% of the total population in Cambodia (National Institute of Statistics, Ministry of Planning Phnom Penh, Cambodia, 2013). The shift towards increased urbanisation has been fuelled by increased opportunities for education and employment in and around the town. Correspondingly there has been an increased need for agricultural production to meet the demands of the urban population. Consideration of this demand has been a driving force in the ways that farmers have shifted their approaches.

The proximity of Svay Rieng to Vietnam has opened opportunities for importing fertilisers and pesticides for farmers in the border regions of Cambodia. The understanding of farmers has been locked in a mind-set of using more chemicals

will increase agricultural yields. The lack of literacy of some farmers and the lack of comprehension of the impact of the chemicals has meant that in recent years there has been a massive spike in the use of chemicals to produce the food needed for the population. This was backed up in discussions with people in Svay Rieng who stated that, *“farmers use too much fertilisers as they think it will make crops grow bigger and they have low understanding of the process for using fertilisers.”* This growing urbanisation has led to an increase in deforestation, with forest cover stated to be around thirty per cent less than in the past in living memory by community members in Svay Rieng. This has been for use of wood as a resource and to clear land for increased agricultural production, thus accommodating the needs of urban populations. By meeting the need companies can effectively plan for further expansion as their demands are being met, exacerbating the rate of the population flow into the town. This was stated to create a by-product of increased waste, such as plastic and increased air and water pollution, as a result of increased factory production. An interviewee in Svay Rieng shared that it seems that authorities do not know or do not care about the impact of unregulated factories and that maybe some people ‘take money under the table’, a polite way of saying that corruption is rife.

The impact of this shift in behaviour over the past few years has been reported to be responsible for changes to the colour of the water in the Waiko River. Despite the dark colour of the water and the reduction in fish and plant species in the river, people still come and catch fish in the river (as they have always done) for food. In interviews in June 2018 respondents shared that in the town of Kratie (north of Svay Rieng) it was reported that twenty people died from the impact of consuming polluted water. They shared that the ‘local’ information was that this was the case, yet the government authorities in the Ministry of the Environment denied that this was the case but did not offer any further explanation as to why it happened.



Waiko River, Savay Rieng, Cambodia.
Image Source: OROL II project, 2017

Further evidence of the issues with regulatory frameworks and implementation of rules therein was provided in a further discussion with community members in Svay Rieng. They said that even though some pesticides are not allowed in Cambodia, they still find their way into the market. These were cited to be chemicals from the United States, such as paraquat. This space between the rules

and the reality for agriculture in Eastern Cambodia was explained by the following quote from a staff member of the OROL partner in Cambodia, *“One of the main problems is that there is policy to help people who have impact from disaster but it stays only on the paper.”*

As a result of this, the health of people has been impacted negatively. There have been increases in the number of cases of children getting ill. The effect of this is that children are absent from school and when adults are affected their income and financial stability is impacted negatively, leading to increased risks for the family. When Santi Sena staff members have spoken with community members the standard response has been that they could not stop using chemicals but can only reduce the amounts a bit as Svay Rieng has poor quality soil. The quality of the soil has been worsened recently due to increased deforestation, increased chemical use and leaching of vital chemicals from the soil. The cycle of decreased fertility has begun.

Activities of OROL's partner in Cambodia.

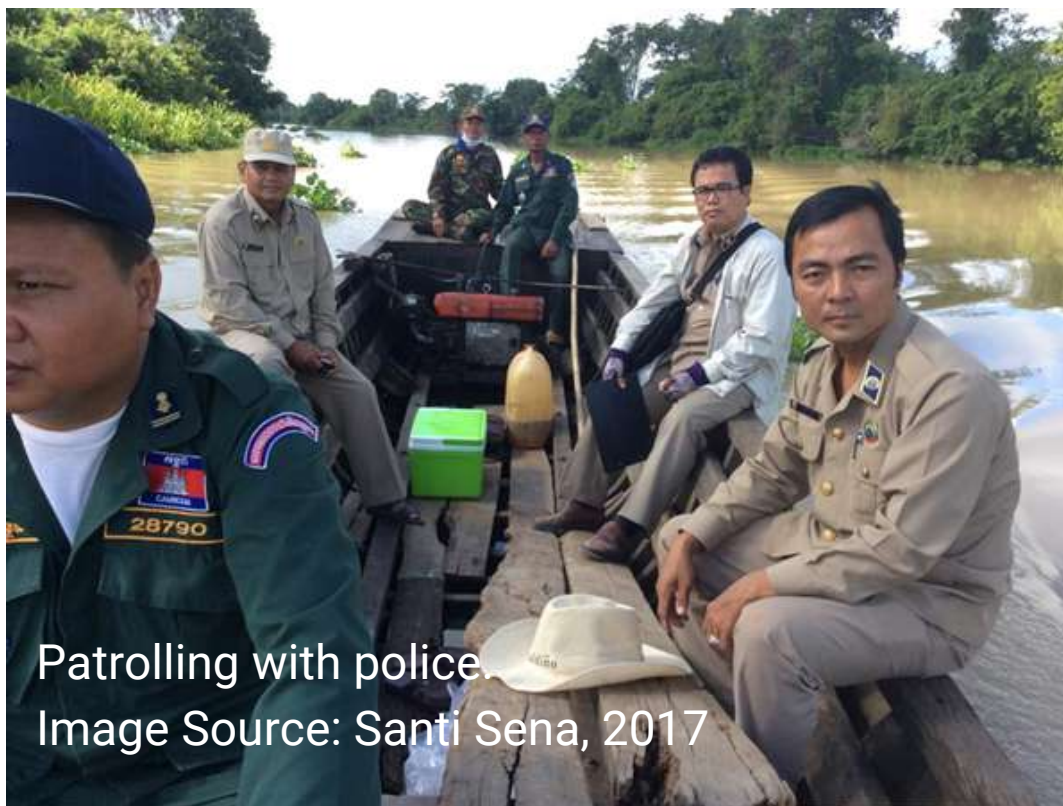
Santi Sena has been working with communities around Svay Rieng to educate them about the ways of using and protecting oneself when using chemicals. They have shown villagers the impact of pesticides to help people apply the knowledge. They have helped them to understand about wearing gloves and masks whilst using them. They have also highlighted the importance of keeping them stored away from children and how children and pregnant women need to stay away from areas where they are used. Children have been taught about the issues and as such they share the information to their parents and siblings. Interviews with school-age children near Svay Rieng showed that they have learnt that if they see farmers spraying chemicals they should stay away and told farmers to keep the chemicals in a safe place where children cannot access it as well as explaining the relationship to health for the farmers.

Further learning for community members has focused on the ways that the chemicals enter the water system and how fish stocks are affected. Other training has focused on the farmers who use the chemicals. They have been shown how to follow the instructions on the packaging and the use of alternatives such as organic fertilisers.

Santi Sena has also been working with local authorities and police in order to protect and preserve Waiko River by patrolling for illegal fishing every month during OROL phase two. There were



many cases have been found and reported to the police officers about this illegal activity. As a result, the cases of illegal fishing in the river have decreased. Local communities are more aware of the importance of the river and they have established the committees in the villages for river conservation.



Patrolling with police.
Image Source: Santi Sena, 2017



Fishing nets were found and burned.
Image Source: Santi Sena, 2017

Land-use change and chemical fertilisers issues in Vietnam.

Research for this book in Vietnam was focused on communities in and around Ho Chi Minh City and as such they are the focus of this case study. In Vietnam, the majority of the work under the OROL project is concerned with urban and semi-urban communities and will be explored in more detail in the next chapter. However, the role of the plantations and the support system to provide adequate food for the populations in and around Ho Chi Minh City play a significant role in the state of the river health of the Dong Nai and Sai Gon rivers and the life of people along the course of the rivers. This is reinforced by the following statement from schoolgirl in Ho Chi Minh City, *“Dong Nai and Saigon rivers are very important, people use the water every day so people along the river have a need to protect the environment along the river.”*

Discussions with primary school students in Ho Chi Minh and in Schools near the Dong Nai and Sai Gon Rivers uncovered clear understanding of the problems at hand. The deforestation (for plantations) was stated to be directly linked to the flooding that has been occurring along the rivers. Consequently, when flooding has occurred the harvests have been damaged. This in turn damages the economic stability and food security of the nation.



Fish farming at Dong Nai River, Vietnam.
Image Source: Wasana, 2016

The participants in these discussions went on to share that when there are floods Vietnamese crops are destroyed and the quality of the rice is not good, thus it can't be eaten. The following quote supports this, *"if farmer cannot grow good crops, then there's no food to eat and no money and so farmers will be poor. They will need to eat noodles instead of rice."* The same group of students

continued to highlight the impact of deforestation. *"Also, because people cut trees in the forest, the protection of the soil by the trees is affected and there is increased soil erosion and so the quality of the soil decreases and we can't use that soil anymore – to improve it again costs a lot of money."*

The knowledge of the students that were met in Vietnam highlighted the depth of their understanding of issues. They were able to connect excessive fertiliser use in plantations to the deterioration of the riparian ecosystems. This level of knowledge shows how clearly the often spoken reason by adults for not including children's voices because they do not understand the issues at hand to be a fallacy. The extent to which they understand the environment around them and how they advocate for a more responsible role to be taken shows how important it is to invest in the learning of children. It is their future that they wish to have a say in.

Chemicals from agriculture production in the water when coupled with the changes to the flow and increased salinity of the delta area in Southern Vietnam due to dams leaves the ecosystems in the river facing drastic changes. Pollution of the main river reduces the numbers and quality of the fish caught. Changes to the levels of salinity in the river mean that salty water and species that live in salt water invade so causing an ecological imbalance and fishing and agricultural production are reduced.

Interviews with students in Southern Vietnam highlighted that farmers produce a lot of harmful chemical run-off when they raise cattle or grow fruit trees and that the chemical fertilisers are used in such levels that they pollute the river. They shared that the government says that nitrate levels are too high resulting in increases in dead fish every year. They underscored this by saying that farmers

use a lot of fertiliser in the soil, to grow cash crops such as sugar cane, durian, jackfruit, coffee and tea resulting in the run-off from chemical application being washed into the river.

Interviews with communities living in houseboats on the Dong Nai River in October 2018 said that, *“5 months ago, the pollution in the river caused 1,500 tonnes of fish raised in cages in the water in the river community causing damage totalling over 10 billion dong”*.

There have been some solutions found in a bid to protect the bio-diversity around the river. However, some people still cut down trees to sell or burn the wood to make charcoal. According to the students interviewed, information has been shared amongst target communities using methods such as students telling their family and those around them about how important the environment is and the importance of maintaining the bio-diversity balance. Further changes during the implementation period of the OROL project saw a new law for protecting the environment and to help protect the rivers. The impact of climate change has seen major issues and now the increased levels of salinity in the estuary has caused crop yields to be reduced. Other on-going issues include the dumping of waste materials from sugarcane processing into the river and mango peel which has not been treated is also washed into the river during periods of heavy rain creating polluted water and air.

Students met with by the Secretariat of OROL shared that farmers have to change their cultivation system. *“They use of a lot of chemicals that damaged the environment as well as the air and river, so they have to change.”* The students went on to state, *“they need to shift to biological manure and reduce the use of insecticides to reduce the toxic products that are washed into the river”*. They said that it is now being done but it is slow to change. In addition, it was said that in Ho Chi Minh City the use of herbicide to clear weeds has been halted.



Environmental protection activity, Vietnam.
Image Source: Wasana, 2017

There are on-going needs that are faced by partners in Vietnam and the country partner conducted activities to raise awareness among students in targeted schools. Some activities included tree planting, presentations on ecological child rights, climate change and bio-diversity. River Watch Groups produced creative

materials and media pieces to raise awareness on environmental protection among other students to improve their fellow students understanding of the difficulties faced in their communities, to help enact change and protect their rights.

The case studies from Indonesia, Lao PDR, Cambodia and Vietnam all have a common theme. People, ideas and products arrive in communities before they are fully informed as to what they are or what will happen to their immediate environment. The promise of extra income is not always the driving force that shapes the world of communities in these areas. In each case, there has been damage caused to the natural environment which may have been mitigated had community member had a say in what was happening to their community. In Lao, the plantations have been for growing produce that will be used outside the area, in Indonesia, the Orang Rimba do not have use for palm oil products, in Vietnam the chemical spill was caused by companies that are not making products for the immediate communities, in Cambodia, the agricultural products are to support the food for urban populations. Each example is showing that these changes have effectively been imposed on communities. Their requirements for access to the natural environment have been relegated to a less vital status by the works that have been moved into their communities. As populations become increasingly urbanised it is likely that this process will be continued and possibly exacerbated further as the need to support the urban populations requires increased land for production and export sales for profits.



Ta-oi, Lao PDR.
Image Source: Wasana, 2016

Chapter 7



Flooding in Datu Montawal along national highway in January .
Image source: IMAN, 2017

Economic development and infrastructure

Chapter 7

Economic development and infrastructure

As projects such as dams, mines, and plantations continue to impact on the lives of people in rural areas across South-East Asia there is a subsequent and on-going shift towards people moving to cities. Urban growth has been witnessed in almost all areas where the OROL project has been implemented with changes to the demographics of communities and gaps in the traditional or culturally transmitted knowledge being created. This self-exacerbating conundrum is being played out throughout the region. As people move to urban areas there are further investments in businesses and developments made to increase the efficiency of those operations. This in turn leads to a need for more energy to be supplied so there need to be additional investments in power plants or dams as well as mass production of food. The damage to the natural environment that is often created by these resources serves to drive people away from their original communities and to seek employment in towns and cities, thus weakening the pool of people available to support protection of the natural environment. This in turn allows for further investments and programmes to be developed which continues to exacerbate the problems. Blaming governments and businesses is the easy solution but they are not the only drivers in this situation. The other major contributor is people with their desires for material goods, for income to pay for things for their family or to try and secure their future in a stable way. These shifts in the ways of life and the new experiences that people can gain for their lives are a normal part of life. Everyone has the right to access goods, services and products to which others in the world can have, in the same way that rural and indigenous communities have the right of access to things related to their way of life and culture. It is vital to look at examples of how these changes are being played out across South-East Asia and to be aware of the role of social norms, economic drivers, materialistic aspirations and the wish to provide a more stable economic platform for one's family than they had provided by their own parents.

Cambodia

On the road between Svay Rieng and the Vietnamese border huge industrial factory complexes have been built with South Korean, Chinese and Vietnamese investments. Workers congregate along the side of the roads to buy food and drinks after work whilst trucks carrying raw materials or goods hurtle down the road throwing up dust and placing people's safety at risk. Around five kilometres from the border down a side road is the access route to a community forest area. This small patch of forest is dwarfed by the factory and industrial complexes along the nearby road and the two bio-diversity conservation areas that have been set-up are only 64.97 hectares in size, yet the government has been pressuring civil society and communities to give up the land to turn it into a waste water treatment plant. This is in spite of the fact that there are huge areas of land available elsewhere. This issue first arose in 2003 but discussions with staff members of Santi Sena Organisation highlighted that the issue has now returned and there is a need to fight to protect this small piece of protected forest.

The proliferation of factories and industrial complexes is the new reality for the communities in this area along the Cambodia and Vietnam border. Interviews with youths in Svay Rieng showed that the immediate opportunity for employment and income is favoured above remaining in school or attending university. It was shared during discussions that youths who are not old enough to qualify for identity cards are purchasing them with false information to make themselves appear to be older than they are, so that they can work. This has been linked to the need to pay for loans taken out as the demand for goods and materials and the pressure to acquire them enters into the semi-rural communities in Cambodia. The need for making payments on the loans has been seen to drive people to send their children to work in factories. This has engendered a situation whereby youths are not completing their education and so committees in villages are missing a significant part of their citizens and mostly older people remain, often looking after their grandchildren, in due course. This shift in the social dynamics in rural communities is not specific to Cambodia but is present throughout South-East Asia. This means that the right of children to attend school and thus have options for their future is being reduced by the need to find income to support the family.

The rate of change to the lives of people in Svay Rieng has meant that there are problems for people to adapt to the new aspects of their lives. Interviews there showed that more consumer goods and packaged goods have led to people throwing waste along the roads or in the fields due to the lack of understanding of the impact. Factories have been said to be producing pollution and causing

Road in Bavet, Svay Rieng, Cambodia
Image Source: Wasana, 2019



problems for the ecology of the area, with both water and air pollution prevalent. This is impacting to the health of people living near factories. Factories are supposed to treat the waste and waste water but it was shared that, *“corruption is rife and thus business owners just pay... so, they can do as they like”*. The

factory waste has been seen to impact negatively to the bio-diversity in the rivers and the scale and pace of the growth of the industrial sector means that as factories and employment removes people from their communities and brings them to the urban environment there is an automatic reduction in the number of people who are in villages and thus able to protect their environment. CSOs are keen to investigate alternative business models to try and protect the bio-diversity in the area.

Indonesia

Indonesia has also seen massive shifts in the demographics for a number of years. Aside from the government planning for encouraging migration of people from Java to other parts of the archipelago more localised migration happens whereby people from rural, semi-rural and semi-urban areas have been moving to cities. In the more rural areas outside of the city discussions with youths in semi-rural areas provided further insights into the impact of urbanisation and the ‘development’ of societies which is happening in all parts of South-East Asia.

In Ciwaluh village next to the Cisadene River in discussions between Secretariat and youths, it was said that children in the village are from poor families. As such they have to go to work in factories near the village to support their families. The majority of the workers are female because social constructs have meant that there is an understanding that women and girls are more diligent in the work that they do. Waste from factories and businesses as well as sand mining have been said to be a major issue affecting the environment. In this area, local businesses include a tofu production plant and a tannery. Both of these businesses produce large quantities of waste, and the management of waste is problematic as, according to the interviewees, corruption is an issue, whereby it is easier to pay the relevant persons in the government than to ensure responsible business management and operations. Further discussions in

Indonesia cited another issue. It was said that *“the slaughterhouse (to kill chickens) is located near the river. In addition, the river is polluted by sewage and it creates a bad smell. In the past people used to get fish from this river but now they can't get fish from here anymore.”* Further interviews elicited additional information on the types of problems with waste management from businesses and factories. One respondent shared that *“every week about ten big bundles of foam waste is just thrown onto the riverbank and burnt, leading to toxic fumes affecting the environment.”* Youths made a film about this practice but they were not able to show it as people did not want them to highlight this issue of burning rubbish. These discussions additionally provided information which showed that factories have particularly poor management of waste, but when they are asked about how they will improve the situation people give the politically correct answer that they like what the youth do and they have a plan to improve the management of the waste. Youths have said that this is frustrating as they wish to bring the community back to life. This shows how the adults are failing the younger generations by not enabling them to have a voice regarding the places where they live and their right to live in a clean environment.

In Depok, on the outskirts of Jakarta there has been an initiative to protect the river from pollution and waste. The area under a bridge was a place where local garbage collectors stored what they had found, this has now been turned into a community area, where activities to learn about the nearby riparian ecology are provided. Discussions with youths showed the lack of systems to meet the needs of the rapidly expanding population. It was said that the areas upstream used to be cassava and corn fields but in 2001 it was turned into a housing estate. The increasing number of inhabitants has meant that systems to collect waste and garbage that is produced by businesses and homes are not used, even though they are in place. Whilst discussing these issues with the youths in Depok, a woman stopped her motorcycle and threw dirty nappies from the bridge into the river. The river is just seen as a place to throw waste as it will be taken away downstream. There is no recognition of the impact. It is a case of the waste is out of sight and therefore out of mind. The lack of understanding of the impact of such actions is a major challenge for people in the communities who wish to protect the environment in which they live. A discussion with a youth beneficiary in Indonesia highlighted the extent of the problem of household waste, *“I want other people to know that taking care of waste responsibly is important because I notice that there is so much trash in Indonesia. Just one example, I went to collect trash from Cipacang and I counted trash from a few houses, I got the data that if we count how many trashes we use per day, we will see that we use about two tonnes of plastic per year.”*

Moreover, discussions by the Secretariat with youth from Sumatra highlighted the lack of involvement of people whose lives will be affected by the push for

development. Outsiders came to the area of the Orang Rimba claiming that they were just there to check the soil and they had a plan to use it to make bricks however there were rumours abound that they were prospecting for gold. The forest communities found a machine that was to be used for this and so they broke it as a last resort as they had no other way of showing that they were against this. The Orang Rimba wish to have a road for access to outside their area, but when Orang Rimba want to get out of the forest, they have to use the road that passes through private land. They have to pay every time they want to use that road to get out of the forest. So, they need to grow rubber trees to sell rubber to make some income just in order to get out of the forest sometimes. This is compounded further by the fact that the government just comes and gives them hand-outs, thus trapping them in a cycle of dependency.

The challenges faced by communities in Indonesia can be summarised by the following quote that was provided for the Secretariat by a youth leader from the Orang Rimba community, *"People from outside don't understand us. Life from outside is changing to modernisation and we have to adapt from the changes. We are the one who have to change but we are the one who lose our cultures."*

Myanmar

The development of the road and infrastructure projects in Karen State have affected communities in areas around Hpa-an, where they shared in interviews that major construction works have been affecting their lives and the environment around them. Evidence provided in discussions with villagers in Hpa-an showed that their lands are facing damage from numerous sources. Communities' rights to practice their traditional forms of livelihoods have become eroded as the space where they live has been increasingly affected and damaged by external projects. The construction projects in the area have meant that rivers are diverted which has led to floods in their village which mean that they are unable to plant and grow rice. The flood water has also been seen to be contaminated with mud and other waste making the water unusable for consumption. Accompanying this issue which is common in the rainy season, the dry season brings increased amounts of dust and particulate matter and noise pollution from the construction works and the increased traffic in the village as the construction company vehicles drive through the village kicking up huge amounts of dust. This causes food to become covered in dirt and dust and the water to clean it is contaminated, leaving people at increased risk of having their health affected by this construction project. There have been no provisions made for the affected communities and it has been seen that the drive to provide for the increasing energy needs and supporting infrastructure for economic development in Myanmar has meant that the communities where the programmes will be operating are those who will be affected most negatively.

Another example of the issues faced by communities was given about the investment for the highway from Myawaddy on the Thailand border through to Yangon which is supported by the ADB (see chapter four). It was made clear that this is contentious for people along its route. The people whose livelihoods depend on selling foraged or farmed items along the side of the former road cannot manage any more due to the on-going construction. The dust and air pollution means that people do not wish to buy the things that they have collected or grown, thus dramatically affecting their ability to provide income for their families. There have been no plans to consider their needs alongside the development of trade links with Thailand, and beyond across into Lao PDR and Vietnam, (the route of the proposed Asia Highway).

Flooding in Hpa-an.

Image Source: KESAN, 2019.



Alongside these ASEAN level plans other infrastructure projects that are being developed in Myanmar have also been problematic for communities. Areas that are previous sites of conflict between ethnic groups and government forces are now the focus on development projects. In further interviews and discussions with villagers from Myanmar information was shared that the government has sanctioned funding for a road in some of these areas but villagers are suspicious of the motives behind this plan. Other road construction projects have been cited to have been implemented in a problematic manner. The road from Thailand to Dawai (the site of a planned deep-sea port on the east coast of the gulf or Martaban in Southern Myanmar) was said to have been constructed by simply clear cutting huge swathes of forest leaving the areas next to the road degraded and denuded.

The Philippines

The partners in the Philippines shared information to the Secretariat during project visit that as access routes were developed in southern Mindanao around forty years ago, there have been various infrastructure projects put in place. Works have also been done to safeguard some communities from these changes. Bulad was the first Barangay (village administrative area) that was impacted by flooding every year. In 1980, the government decided to build a highway through

the area. A cement channel was constructed to allow the water that previously flooded the area to be diverted away from the highway. This solution created more problems as all that resulted was the water instead flowed to the farmlands of people who live along the river and people needed to re-build their houses to avoid flood water and others were forced to change their work. Other problems include that the flood water also mixed with the irrigation system water for domestic use so, villagers had to use dirty water in the households.



A cement channel on the river.
Image Source: Wasana, 2016.

In this area, IMAN works on issues related to erosion in watershed areas, mining in upstream areas, flooding and supporting communities that have been affected by centralised planning. Discussions with IMAN, the partner working under OROL in the area also highlighted the construction of a cut off channel to divert water in times of high rainfall in the neighbouring province. This was reported to be a national government programme.

There was no consultation with local communities and it has increased problems for the communities downstream in the river. It was shared that it is owned and exists for the benefit of a small group of people who do not care about the impact on communities in different provinces and the destruction of their livelihoods.

Other discussions with IMAN highlighted the energy projects that are blighting the communities near Kabacan. To meet the energy needs of the population in Mindanao in the Southern Philippines coal is still used despite the resolutions halting the operation of several plants on the island. To the south of Kabacan near the Rio Grande River the community lives in the shadow of the power plant which had been instructed to stop by the government. Despite the community's proximity to the plant they live without electricity and they have received no compensation for the impact on their lives. Community members were known to be against the operation of the plant and had pushed for the plant to be shut down. The community members were then attacked by the private army of the company killing several people, including an eight year old boy.

Vietnam

Ho Chi Minh City is a bustling, vibrant city of around eight million inhabitants. Located on land in the lower reaches of the Sai Gon and Dong Nai Rivers it is the

industrial and economic powerhouse of the Vietnamese economy. the city has swollen in numbers over the past few decades the need to provide employment, services and power for companies and for the millions of people who live there whilst preserving the ecological balance of the environment has been a major challenge for the Vietnamese government. The shift in the lifestyles of the Vietnamese can be seen concentrated into this urban environment.

Discussions with tdh Germany staff in Vietnam showed that there has been a dash for cash experienced in recent times as government policy has led to the opening up of Vietnam to investors, international trade as well as tourism. This dash for cash has been a major influencing factor in the choices that have been made that have caused negative impacts to the natural environment. People living in the huge metropolis of the city have become removed from the natural environment. This has led to the current situation where people are not aware of the impact of their actions on the natural environment. Interviews with people living in the city and nearby areas brought information forward that shows people throw garbage into the streets to be collected later or into rivers.

As the city grew and central areas became increasingly populous the government initiated a policy of relocating factories to suburban areas. This policy has been implemented under an, at times, loose policy framework and it was reported that the suburban areas are now polluted. Factories release waste materials and waste water into the rivers causing massive changes to the chemical balance of the river creating negative consequences for the ecology of the rivers. Interviewees in schools in the area carried out during project evaluation shared that there is a law protecting the river but it seems to only exist in theory and changes are made very slowly. The case of the Vendan Company which produces a Mono-Sodium Glutamate product was releasing waste water directly into the river. Only after a year of filing complaints with the government was action taken and it was found that the water filtration equipment in the factory was just for show and that the waste water was flowing directly into the river.

This law and the government policy therein are to ensure the protection of the rivers and therefore the prohibition of the establishment of new factories along the rivers. These businesses are required to move to industrial zones. However, the factories and their importance to the economy



Students in the school in front of Sai Gon River.
Image Source: Wasana, 2016.

mean that there are strong networks between business owners and government actors, which mean that the incentives to move are not sufficient for the factories to do so quickly.

For city dwellers the toxic smoke, polluted water and soil contamination is commonplace now. Children are growing up in an environment that is unhealthy and as such their rights are infringed. Air pollution was said to be a major issue in the city, with traffic exhaust and construction dust and particulate matter causing breathing problems for people. Students at schools in Ho Chi Minh City pointed to the open burning of waste on the streets. Another student stated that her home and the school are close to a small river and every day there are bad smells emanating from the river. As the population increases more and more waste is produced and more waste water is released into the city's waterways. Another student shared that before there were fish in the river, now there is just trash. This student shared that it makes it hard for her to study, yet the only solution that has been proposed is to cover the river and make it into a channel that runs under the street.

The FA which is the OROL project partner in Vietnam has worked with schools and education departments to ensure that there is improved understanding of these issues and the following quote from one student interviewed in a school in Dong Nai. *“People that do not look after the environment are killing themselves. Factories make products and release their waste into the rivers and fish die. Those people who destroy the forests and plant species for paper production kill the animals of the forest and the people.”*

Another student shared her view on the situation faced by the residents of Ho Chi Minh. *“The impact of throwing trash in the river is it may block the water pipe and water cannot flow well and this makes flood after rain. Sometimes the level of water is up to my knees. Another issue is about the smell that may indirectly decrease the number of tourists. The direct impact coming from the smell of trash is related to diseases such as mosquito borne ones. Putting trash into the river damages aquaculture and people and fish die and people lose their job and income.”*

FA has helped to alleviate the issues by ensuring that children in target schools have sound understanding of the issues and the interviews with school-children demonstrated outstanding knowledge of the causes and effects of the policy that has seen economic development placed ahead of social development and the well-being of the population as a whole. Staff from FA and tdh Germany in Vietnam also shared that the Vietnamese government has also seen the problems created and has developed policies that include re-thinking plastic and formed

partnerships with the United Kingdom Business Association; the electronics company Philipps and its own Department of the Environment to develop plans to move away from the current model where excessive waste and pollution is having a negative impact on the people in the city and the natural environment.

In all the themes explored in the past few chapters it has been seen how there have been development programmes that have not always prioritised the best interests of community members and youths. In all cases the country partners have achieved moderate levels of success in slowing down or sometimes stopping the programmes, but there is an abiding issue at stake here that has been overlooked by planners and policy makers. This is the rights of children to have a secure life, which was first introduced in chapter one when looking at the meaning of ecological in a child rights context. Children should have the right to life including basic health care, education as well as clean food and water supply. The rights of children should be respected when government and other actors enable actions to be taken under their watch that damage or destroy the environment. These actions deprive children of the right to utilise resources and live in areas with untainted ecosystems rich in bio-diversity and it is the formulation and enforcement of the laws and regulations that protect the environment that needs to be given foremost consideration. This is especially important when the well-being of both the natural environment and future generations is at stake. The concept of ecological child rights shows how there is an interdependence of environmental and child rights protection. Therefore, it is logical that damage to the environment will exacerbate damage to the rights of future generations. Yet there is still a denial or a lack of political will all over the world to make these issues into ones of primary concern for policymakers and business strategists. This is an attitude that has to change to avoid letting down the ever-growing youth populations of the countries in the region and beyond.

As the arguments and cases for and against the existence of climate change are deliberated in universities, think-tanks, government policy planning meetings and social media around the world, it is important to pin down the topic into real terms. Talking with people whose lives have been affected and visiting places where the impact of 'development' projects can be seen clearly gives a much clearer indication of what is happening to the world around us. Academic discussions about inter and peri-glacial periods and natural fluctuations in the Earth's temperature and carefully edited statistical models showing that human impact on changes to the Earth's temperature is negligible do little for the protection of the rights of people who may never have the chance to go to high school, let alone university. It is these people who will feel the impact of any changes more severely.

To alleviate the difficulties that are felt now and will continue to be felt by future generations, the OROL project has supported some initiatives that demonstrate good practice and can serve as lessons in how to be more inclusive in national development planning. These will be examined in the next chapter before moving on to look at what needs to be changed to enable a paradigm shift to be made that will enhance the protection of the rights of children and youths and assist in improving protection of the natural environment.



Drought in Cambodia.

Image source: <http://www.asianews.it>, 2019

Water pollution from fish farming in Dong Nai River, Vietnam.
Image source: Ermanno, 2016



Conflict in Karen State,
Myanmar.

Image source: KESAN, 2016

Chapter 8



Youth Campaign on ECR, Cambodia. Image source: Santi Sena, 2016

**Sharing good practices and success stories
of OROL project partners in South-East Asia**

Chapter 8

Sharing good practices and success stories of OROL project partners in South-East Asia

The previous chapter has advocated clearly for a new paradigm in how the rights of all stakeholders need to be considered seriously and on an equal footing with shareholders. This can on one hand sound utopian and on the other completely unfeasible due to the need to compromise on so many levels that no workable solutions can be realised. Yet, the work of partners through the OROL project and in many other aspects of their work has allowed for a broader and more inclusive approach to be taken. These are still only incremental steps and the type of government reform required to include environmental preservation as a key priority in national development is likely to still be many years away.

The huge level of engagement with youths in OROL and other programmes in the region is a method that requires a significant amount of credit to be given to civil society actors and stakeholders. They are the ones who will live in this future that is being created. The investing in this new wave of people with new ideas and who have not yet become conditioned to tried and tested ways of reinforcing bad habits is a logical way to try and break the downward spiral that has been created. It is only this type of shift that can ensure changes can be made that support the preservation of bio-diversity and that breaks the cycle that has been created by way of centuries of wasteful developmental planning where each generation proclaims to have the right to use the world for their own personal benefit.

It is through this cooperation with youths and the connections between government, private sector and civil society which were examined in the previous chapter that examples of success in each OROL project country can be provided. It is these examples that show how incremental changes can be made, that changes to laws and regulations can be made and that education is key to youth empowerment in terms of forming a responsible and inclusive path to development.

The first example of good practice that will be shown is the work by OROL and partners in Lao PDR. Whilst issues in Lao PDR have been covered in the chapters in this book, the work of ACD has not featured prominently. This is not due to the weaknesses in what has been achieved but more due to where the project activities have been run. The communities in Lao PDR where OROL has been implemented by ACD are not in areas where mega-dams are constructed, nor where mining activities are prevalent and it is very rural. However, the collaboration that has been developed between partners there holds many signs of the potential of true public, government and private cooperation.

Lao PDR

Delivering success in any venture in Lao PDR requires the support of the government. ACD is registered with the Lao PDR government and all of its activities and projects are subject to approval by the relevant authorities. Venturing outside of the prescribed areas of intervention will not engender positive support from government officials. Visitors to the project locations, including the author, require a formality meeting to be held with the local government leader before going to any project locations. The purpose of the visit and the role of the visitors are clarified and permission to access the project locations requires agreement from these government actors.

Working with schools requires permission, the nature and content of activities is scrutinized, supporting community members with relevant information requires permission as well. This may seem cumbersome to some observers but the close relationships with the government have reaped rewards for the communities and ACD in Lao PDR. They have taken time to develop these relationships and simply by being transparent and honest about the nature and purpose of their activities and delivering good quality results from what they engage in has enabled them to have a strong working relationship with community members and government officials alike.

An example of the type of success can be seen in the nearby town where there is the government owned and run local. Here members of River Watch Groups and local resource persons provide information by radio to over ten thousand people across the district and into rural and isolated communities around the area. Rules and regulations related to the natural environment are among the topics which also take in public health information and present stories about the risks of making business deals for land use with outsiders and business representatives. While this can also suggest an element of tight state controls it also, and more valuably has helped people to become aware of their rights and





Radio broadcasting station by RWG in Lao PDR.
Image Source: ACED, 2018.

the need to improve protection of the environment as times change and access to 'disposable waste' and packaging increases. This level of involvement of the government as the lead actor with popular and civil society support has enabled business exploitation to be curtailed. Subsequently changes in regulations around dredging for sand and gravel in the local rivers have been put in place, whereby there are limits to what and how much can be taken.

This type of achievement demonstrates how there can be actions put in place that do make a difference.

The successes in Lao PDR have in part been possible to the fact that the work has been focused on a small area with a concerted effort to support the communities in their actions. The scale has meant that the voice of community members and children alike have a channel to persons in the community with decision making responsibilities.

The next case study concerns the work of the partners in the Philippines. By contrast they are working across the island of Mindanao in locations hundreds of kilometres apart. Yet the similarities of success with government are echoed in this example as well.

The Philippines

Mindanao in the south of the Philippines is an island that has witnessed the growth of exploitative industry and violence over the past few decades. The population at times has been squeezed into difficult scenarios by business interests and as seen earlier clandestine tactics to ensure that businesses, in some cases, are able to continue operating. There is a degree of freedom for political activism and protest in the Philippines that is not commonly seen in other parts of South-East Asia. This political engagement and the power of the youth voice is a path to open channels for communities to have a voice. Whilst some sections, including some universities of Philippine society view protests and activism negatively it has become an essential channel for the voice of youth in the Philippines. In stark contrast to Lao PDR open dissent regarding government policies is possible in the Philippines. As a result, the role taken by civil society organisations to support this type of action with activities for drama

and creative arts associated with environmental protection is invaluable. Coupled with the access to social media and engagement of like-minded or interested individuals there has been an on-going gathering together of interested individuals. These youth groups contain impressive individuals who have lobbied central government ministers and worked at international conferences and helped to bring a voice to youths across the whole region, through their work with international youth forums.

Other success in the Philippines is related to the ways that communities and Local Government Units in Mindanao have mustered support for resolutions and government rulings on quarrying/mining/coal fire and disaster response. An example of such achievements can be found in the Bangsamoro Organic Law (BOL) document provided for the author by IMAN. In article thirteen, section three, the law calls for, *“sustainable development through the proper conservation, utilisation and development of natural resources...include measures for environmental justice and governance, as well as the reduction of the vulnerability of women and marginalised groups to climate change and variability.”* This type of resolution provides a framework for action and reinforces the rights of affected community members to have a say in the issues that affect them and their lives.

Indonesia

Indonesia's vast size and huge population means that it is difficult for people on opposite sides of the country to share about what problems they face and how they manage them and then as a result, how they learn from each other. RMI has organised numerous training sessions, workshops and green camps for youths from all over the Indonesian archipelago to meet and exchange ideas on issues affecting them. The staff members of the organisation are adept at using alternative education techniques and running learning sessions that have built genuine connections between people from different parts of the country. They have developed this learning further by running exchanges and exposure trips. Youths from urban areas have stayed with rural and indigenous communities and learned about their ways of life and people from isolated communities have come to towns and cities to meet and learn about life for the urban youths. Whilst carrying out research in Indonesia interviews with youths at a workshop highlighted this positive aspect of RMI's work.

Further evidence of the positive impact of engagement of community members and provision of support for them is shown in the following case-study. In the upstream areas of the Cisadane River in Ciwaluh village, there is a programme that is implemented by RMI known in Indonesian as, “Rute Pendidikan Lingkungan” which equates to REPLING (Environmental Education Route) in

English. In the village of Ciwaluh they hold learning sessions with youths, for example from Jakarta. These sessions aim to increase the participants' knowledge and awareness that relate to two things. The first one is related to the importance of upstream area ecologically, for instance, the water catchment area, and the importance of it not becoming degraded. The second message is based around personal motivation: to stand for their village's existence. The group here has been fighting for their village's existence in the midst of on-going mega development projects carried out in the neighbourhood. A resort-based tourism development project conducted by sister company of PT MNC Land, namely PT. Lido Nirwana Parahyangan, has projected to remove this village in twenty years. It also means removal of the lush and agricultural life that the villagers have maintained since 1943. 'Genocide of the whole sub-district,' said a local government official once. Their idea was to develop an eco-tourism project surrounded by the agroforestry area managed by villagers and conservation forest area managed by the Gede Pangrango National Park authority. The area contains waterfalls, that are accessible from Chiwaluh village, and they also grow various plants such as paddy and cash crops such as coffee and cardamom.



Clear water of Cisadane River flows from the water spring, making clean water available for the villagers. This shows how community action using education as a resource can help to raise questions about the choices being made by businesses.

In addition, RMI has observed since 2009 that youths are often not provided with adequate and high quality capacity building programmes, especially in relation to natural management. They have lost the interest in and the connection to their lands, paddy fields and agroforestry gardens whilst these activities and issues are still the centre of their lives. This disconnection has made them less aware of the situation of their village.

So, by using environmental education RMI has given opportunities for their urban youths to be involved in the project. Together with the rural based youths, these individuals learn to be a REPLING facilitator, which also means that they learn about the land ownership situation and the impact of them. This is shown

by the following quote from one participant, *“Now I understand what was discussed on agrarian subject at the university. I learn more during my involvement with the struggle over access to land with young people in Ciwaluh in few days compared to one-semester class of the same subject at the university”*.⁸

This appropriate methodology is supported further by another example of success from RMI. Their work with legislative bodies in Indonesia has helped with changes to ‘customary law’ (adat) that helps protect indigenous people’s rights of access to their land and rights over what happens to it. Whilst this has not resolved all the issues faced in Indonesia it represents how CSOs can help to bridge the gap between the isolated populations of a country and the central government.

Cambodia

The successes in Cambodia have some of their own distinct features. The achievements of Santi Sena Organisation and its staff as with many of the achievements of partners cannot be attributed solely to the OROL projects, but they are impressive. The town of Svay Rieng has been presented in this book already

but whilst it is a rapidly growing urban area the surrounding countryside is flat and agricultural, with scattered settlements and villages gradually becoming less and less populous and dense the further away from the town that is travelled. The almost ubiquitous Buddhist population still centres large amounts of its community life at or through functions at the community temples. Monks hold a revered role in society and are consulted in almost all community affairs. Temples provide a focal point for sharing information with community members and engaging them in activities related to the preservation of the natural environment. The River Watch Group members attend fish-releasing ceremonies and share information about their work with people. The range of community members from villagers through to police and government department officials helps to ensure that diverse parts of the communities are able to learn about conservation whilst carrying out rituals related to the practices in their faith.



Fishery's Day.
Image Source: Santi Sena, 2016

⁸ Information from Tillah Mardha and Rahman Fahmi, factsheet topic: Environmental Education and the Existence of Ciwaluh village.



RWGs meeting in Cambodia.
Image Source: Wasana, 2016

Furthermore, two radio stations have been set up in Svay Rieng which have monks as presenters. They share about the relationship of 'dhamma' to the care of the natural environment, how care of the water and riparian resources in the communities around Svay Rieng are under certain laws, such as

those regarding illegal fishing including using chemicals and electricity to kill fish. Interviews with monks who work on the radio stations shared in an interview that the radio station broadcasts to over 70,000 people in Svay Rieng Province and nearby areas, demonstrating the reach and potential for people to learn about their own and their environments well-being.

Santi Sena has worked with youths in the area for a number of years and built up year upon year active groups of volunteers in schools, universities and in CSOs. One staff member of the organisation is a former River Watch Group member who had done an internship and later gone on to be a staff member. Students at the university voiced an interest in working in water management or with NGOs. Students at school shared their experiences with students in younger years and in their communities leading to more people being interested to join activities in the future. This approach of sustaining interest over a number of years and enabling people to learn about issues affecting them as well as helping some to find a vocation in life related to their interests is commendable. It is an example of excellent practice and ensures that the longer-term impact of the efforts by OROL and Santi Sena will be more than the sum of the parts.

So, Cambodia has shown that a separate resource in the community can be used due to its inherent neutrality in Cambodia. Whether one is a leader in the government, an influential and powerful business person or a villager it is possible for all of them to meet at the same temple. This community focal point created by this element of Cambodian society in Svay Rieng helps to show that a new dynamic can be added to how the rights of all parties are upheld and respected in the face of development. This aspect enables the lessons that can be taken from Cambodia to be applied to the existing paradigms of economic focused development planning.



Vietnam

In Vietnam, the work has made huge investments in children. The partner FA has worked through the education ministry to gain access to engage students at schools across the districts where they work. These students are largely in semi-urban or urban environments. The waterways around them are not safe for use and they live in many cases in the vibrant, bustling city of Ho Chi Minh. They see the congestion and subsequent traffic pollution; they see the crowded banks of the rivers with industries and smell the unpleasant odours emanating from them. The world they experience does not match with the world that their parents or grand-parents have told them about where the streets were quieter, where the water was clean in the city and there were not piles of litter that built up by day only to be cleaned by at night or washed away in rains. These youths in Vietnam know what their world should look like.

Their teachers, the NGOs such as FA that have supported them and the government have enabled environmental issues to form a more established part of the curriculum and extra-curricular activities at schools. Students in schools have an outstanding level of understanding of the causes and impacts of poor industrial and agricultural practices. They know what they are doing is right and it is their future that they are taking responsibility for. This level of understanding by primary school children shows clearly the successes of schools, NGOs and government permission to run events and activities. This type of work by NGOs has played a part in the changes in the Vietnamese government's planning on plastic use and waste. It was shared in discussions with tdh Germany staff in Vietnam that the government has developed a partnership with the United Kingdom Business Association and Philipps Electrics. Recognition of the value of the work of NGOs by the government is underlined by the award given to tdh Germany in Vietnam for their work. Influencing government policy in Vietnam is not an option for NGOs and civil society, but the role they have taken to work with departments of the government and to help them to adhere to their own rules and regulations show that there can be changes made. The shifts made by the Vietnamese government demonstrate that there is openness to a more responsible policy towards the country and its environment and this is a positive signal.



River Watch Groups in Vietnam were sharing information to other students.

Image Source: FA, 2016

Myanmar

Given the nature of changes in Myanmar and the struggles faced by the people throughout the country it is difficult for success stories like those in other countries to be highlighted. So many issues are on-going and long-term. However, this does not mean that KESAN and partners in Myanmar have not achieved positive outcomes from their work. Actual concrete results have been achieved in relation to forcing delays with the coal fired power plant in Karen State due to the strong networks and collaboration among NGOs and local communities.

On top of this, a clear area of good practice has been the development of networks of action groups along the courses of the Salween. Using youth groups and actors from Karen State, Shan State, Kayah State, and Mon State (amongst others) has enabled the whole narrative along the Salween to be working off the same page. Concerns about downstream areas can be shared with people living in upstream areas. This type of approach is essential for helping the ecosystems along river and policy choices that will affect it are considered along its full length. Furthermore, the work on video productions and campaigns to educate local people has been proven to be valuable and the success of this can be seen in the number of people who attended the 14th March International Rivers Day event has increased every year.

The difficulties to bring community member's voices to the attention of central government have been seen to be problematic for target communities under OROL in Myanmar. However, KESAN has supported villagers to be able to write letters and to have a voice in developing articles which have been sent to government or media outlets. The way to use language and the use of clear facts about the impact of the planned works as well as understanding of laws and regulations of the government have enabled people to speak out. The impact of this has been that there is much greater awareness in the cities in Myanmar of the challenges faced by rural communities.

A further example of how there have been positive advances in Myanmar is the relationship that has been developed with the Mon State parliament. Representatives of the government have been able to bring issues related to the projects in Karen State to the central government. Whilst this party is only small, it represents good practice by civil society and government actors alike and should be used to help recognize the value of building such relationships.



14th March event next to Salween River, Myanmar.
Image source: KESAN, 2016.



Fish Conservation and ceremony, Thailand.
Image source: ACED, 2018.

Thailand

Recognition must also be given to the partner in Thailand for its work with communities. Whilst the outcomes of the work were small in scale they supported awareness amongst communities and helped youths to build a better understanding of environmental protection and their rights associated with it. The work and connections with local government fisheries departments and local authorities to help connect what they are doing with the communities to the provincial level administration is a positive approach and has potential to be developed in ways that other country partners in OROL have managed.

All country partners have demonstrated how their local knowledge has been vital in ensuring that community members and indigenous people in South-East Asia have had a voice to support their negotiations with industry and governments. The regional aspects of the OROL project also brought together a broader framework for highlighting and comparing issues across nations in the region. A further positive outcome of the OROL project that should be highlighted is the success that has been brought about by bringing together stakeholders and beneficiaries from across the region to common events. Youth forums within the project and especially, the ASEAN Civil Society Conference/ ASEAN People's Forum (ACSC/APF) attended by project partners have helped to connect the narrative at local level on the ground related to dams, mining, power stations, plantations and intrusive infrastructure programmes to the regional level. This type of multi-level cooperation when used well can help to shape the narrative for the future of improved cooperation to ensure environmental and rights protection in South-East Asia.



ACSC/APF 2018 in Singapore.



ACSC/APF 2017 in the Philippines.



ACSC/APF 2019 in Bangkok



ACSC/APF 2019 in Bangkok

Chapter 9



Tree plantation in Vietnam .
Image source: FA, 2016

Calling for a new and more inclusive paradigm

Chapter 9

Calling for a new and more inclusive paradigm

Development in South-East Asia has predominantly focused on economic growth as an indicator of progress. Whilst the economy of a country does provide an insight into whether there have been changes to the lives of a country's population it does not provide the whole picture. As the cost of living increases the relative amount of money needed to live logically increases. Thus, increases in GDP can be related to the growth of a small number of large business enterprises and do not provide an insight into the wealth differential that exists in a country.

Governments across the region are faced with providing for the needs of the population and maintaining economic stability to ensure they continue to meet these needs. As a result, government planning is often connected to corporate planning. The two mutually support each other and provide an illusion (which has been seen to be false) that there will be an automatic trickle down of finances throughout the population. This assumption is in part based on the idea that all members of a country's population priority is able to get richer, to acquire more material goods and to gain employment, which from the government perspective feeds funding into the taxation system of the country. Government and private partnerships are thus seen, by these actors as the most relevant method to bring about changes that meet the demands of the ever-growing population.

It has been seen that South-East Asia has vast potential for resource extraction, hydropower and food and energy production and that this potential for driving the economy has been harnessed by incumbent governments across the region over the past few decades. Governments have spent years building up critical assets that are vital in supporting their economies and meeting the demands of their populations. A central feature of these changes to the nations in South-East Asia has been that the benefits of these development projects are for the national benefit. Furthermore, it appears that any negative impacts of the programmes which have been put in place are offset sufficiently by the economic potential that the programmes bring. This approach has undoubtedly brought massive transformations to the landscape and infrastructure of all the nations where OROL has been implemented. Telecommunications and air transportation services have mushroomed during the past few years, infrastructure projects allow for access to areas and untapped markets. All of these changes have been essential in helping the overall prosperity of South-East Asian nations.

A further dynamic that has helped with the development of regional cooperation on trade has been the planning of ASEAN. The three pillars of ASEAN are the Political security community; economic community and socio-cultural community have helped to enable the 2016 ASEAN Economic Community to flourish across borders. Migrant workers from across South-East Asia are working or running businesses in other nations in the region. As referenced earlier, businesses have moved from country to country to take advantage of the cheaper labour costs, such as with garment factories in Mae Sot, in the west of Thailand moving from employing migrant workers from Myanmar and relocating to Cambodia where overheads for business were cheaper. This focus on economic transformation has thus encompassed the entire region.

This transformation experienced by South-East Asia is helped by changes in the dynamics of the global economy. Chinese investment in business and government economic development projects cannot be ignored but the markets for goods and produce from South-East Asia is more aligned to true global economic pathways rather than just regional or East Asian ones.

This sheer range of produce used and consumed by billions of people around the world helps us to understand the inter-connected nature of the global economy. Whilst it is easy to find examples of energy plants being built far from the mega-cities that they support and to use this information to find fault in a country's development planning, it is essential to remember that almost everyone on the planet is complicit in the use of products that have been made in areas that were bio-diversity zones supporting complex ecosystems. This does not mean that people who use such products are inherently bad, but it may show that the choices that they make are driven by cost and availability over responsible sourcing and purchasing.

This evidence does not mean that prioritising the growth of the economy in decision making is misplaced. It does however show that there are wide-ranging aspects to the businesses and how they link into global economics. This in turn enables it to be seen that there is potential for adjustment to be made to the ways that these priorities are decided upon. As has been shown, dams, mines and power stations, large-scale plantation agriculture and infrastructure projects have created strains on affected communities with their right to exist and practice their culture being questioned and more importantly the bio-diversity and ecology of their worlds has been irrevocably altered. The businesses are leasing land and establishing plantations for chemical fed, large-scale food production. As such serve to subsume the countries in the region to being governed by business deals that favour increased expansion of trade into the South-East Asia.

Dams and especially small-scale check dams are highly valuable in supporting water management, small-scale breeding of fish and seasonally influenced changes to bacterial growth rates in areas where minor flooding occurs. Mines produce resources that enable modern societies to flourish and economies to grow. Plantations ensure food security for urban and rural populations across nations and regions and improved infrastructure has allowed for greater ranges of products and services to become available to people located further from the urban cores that exist. Yet if these themes are examined from a regional perspective the benefits for the nations where works are implemented it can be seen how these positives associated with these types of development projects are not necessarily being approached with national benefit and citizen's best interests at heart.

Hydropower projects in Lao PDR and Myanmar have been seen to be built with international investment and for the export of electricity to neighbouring countries. In the Philippines, the mining issues are linked to the geo-political positioning of governments. Discussions with Gitib staff highlighted that communities are involved in direct action against the mining of nickel in Mindanao by Chinese companies.

So, the question engendered by this type of approach is whether or for how long it can be expected that the natural environment can continue to sustain these continually expanding business models without damaging consequences occurring? Are we to continue until all people live in cities and the countryside becomes simply a business resource? Are we to continue until massive and sustained damage to ecosystems, waterways and soils renders them worthless? Is the point when we are all surrounded by concrete and using plastic and battery power machines to manage every aspect of our lives when we can all be happy? Is this the mastery of one's environment that humans wish to attain?

The answer to all of these questions for most people would be negative. So, what makes people lose sight of the future when they are consumed by the present? Population rates in almost all countries in the world are growing annually. The global population is steadily increasing and so more food will need to be produced, more energy will need to be made, more clean water will be needed to sustain life, so again the question of why are people not considering their role in the world arises.

The lives of indigenous and rural communities are usually intertwined with their immediate natural environment. The distances between the sources of food and things they use in their lives and to use the Marxian term, "the means of production" are short. If rains failed, people learnt to find alternative food or to employ coping mechanisms for storing food. The direct relationship between the

environmental conditions and the availability of food was and still is inherently clear. As populations have moved away from their traditional lifestyles and forms of livelihoods there has been a stretching of the distance between people and the means of production. To provide food in markets in cities requires complex networks of logistics support across the country or even region, and agents to support these networks. By stretching the distances between where food or other produce comes from and where it is consumed or used a level of separation allows for a repackaging of the understanding of the produce being consumed. In this model, there is no need to consider whether things have been ethically sourced. For instance, roses are hugely popular as gifts for the celebration of St. Valentine's Day and they are sent all over the world from plantations in Thailand (and other countries, for example Kenya). Yet plantations where they are grown are tended, in some cases, by illegal workers and children and the simple act of growing them has led to damage to the soil in upland areas. This environmental damage and the labour abuse associated with it are never considered when people receive their roses on Valentine's Day.

As economic growth has taken over the development narrative there are increasingly more and more cases that show that people's lives are changing. Evidence collected in researching this book has shown how riparian communities are no longer able to access the rivers in ways that they used to. Rivers which have become polluted have, in the case of Jakarta and Ho Chi Minh City been paved over with canals and waterways becoming pathways and roads. The out of site and out of mind attitude again prevails. Children in Ho Chi Minh City spoke about the bad smells that come from the waterways in the city, yet changes to these situations are slow to come about.

Dams that are constructed throughout the region have been said to be planned and developed by companies and governments containing bureaucrats, engineers and technocrats. As with dams, EIAs for mines and power stations, plantations and infrastructure projects have become nothing more than formalities that are ticked off in a checklist. It is not often that EIA's result in the dismissal of large-scale projects that have been pre-decided to be in the national interest.

The examples and information in this book show that this approach is not beneficial for all groups of the population. Throughout chapters four to seven there have been examples provided of the ways that communities have been empowered to take action that supports their rights and their ways of life from being impacted upon negatively by government and private sector led development projects. This is because people in these examples, rightly so, still value the relevance of their traditional systems and ways of life. Their identity

and supporting culture is completely linked to the natural environment around them. Communities are well aware of the need to adapt and adjust in the face of changes that impact their lives, and this forms a part of the development of what is understood to be culture, but when these are done in ways that cannot be fully comprehended there begin to be problems.

The key element in these difficulties that are faced is the pace of change in South-East Asia. It is this pace that has served to cause infringements of the rights of communities to continue to practice their traditional ways of life. Communities have been seen to misunderstand why the environment has changed or why the crops have failed. This gap in knowledge impacts negatively to the constructions of identity and understanding of the world in these communities and leads to an increased sense of desperation. The OROL projects have worked with communities to understand why these changes have been happening and it has worked to help them adapt and use their cultural livelihoods as a basis for advocating for changes to the way that programmes are implemented. This gap in their understanding has been filled (at least in part) by the activities and initiatives that are implemented under OROL and the work of country partners. This is vital as the development of a country is multi-faceted and cannot be reduced to figures on a balance sheet.

Where government and private sector collaboration leads to improved economic figures it fails to recognise, as a general rule, the needs of smaller, isolated or minority communities. When government initiatives work with CSOs alone, there can be a risk of over-discussing issues and the bureaucratic nature of governments not being incentivised to a sufficient level to see useful changes, or there can be misunderstandings between the two sides. When civil society and the private sector are engaged in projects, there can be a danger that the form of support will be token efforts that are framed as Corporate Social Responsibility (CSR) programmes. These piecemeal initiatives are often reduced to being lip-service to the real needs of the community. This is because they do not lead to changes in the companies' actions. Examples can be small-scale support for community actions or providing token awards for the work that is done, but these do not link to improved environmental practice and improved recognition of community members' rights.

To consider how development programmes are to be used for true national benefit for all members of the society there is a need to look at how these three sets of actors work on an equal footing. Governments are central to any planning and they provide legislative frameworks for development. People's views and their needs to maintain their traditional livelihoods and culture are channelled through CSOs and the investment and training and economic growth comes through the tripartite collaboration (between government, civil society and the private sector) that would be engendered by this approach.

By not taking this approach it can be seen how the rights of communities are not always upheld. Education has been shown to be essential in supporting the rights of community members facing problems from destructive development programmes. This is education about the natural environment, education about their culture, education about their rights and how to realise them and more importantly educating all stakeholders about the rights of the other. In Myanmar, the partners are not against using water resources, but small-scale hydropower projects are favoured over mega-dams, or in Indonesia it has been seen that the Orang Rimba face an uncertain future yet they are faced with being recipients of government hand-outs rather than being able to access the outside world by way of the roads being constructed in their area. In Lao PDR, communities are in favour of using the resources around them to help bring economic development, but not to the extent that their resources are stripped and gone forever. In all of these cases it is clear that the education of and involvement of government actors is vital to ensure that people's voices are heard.

Furthermore, working with children and youths has enabled OROL to connect with schools, and support activities at school. Again, the education system has been central to helping children and youth adapt to the harmful practices employed around them. Children are the future and this approach of supporting the new generations to be empowered with networks and information is the only way that a critical mass of people will be created who know what needs to be done to ensure their rights are upheld.

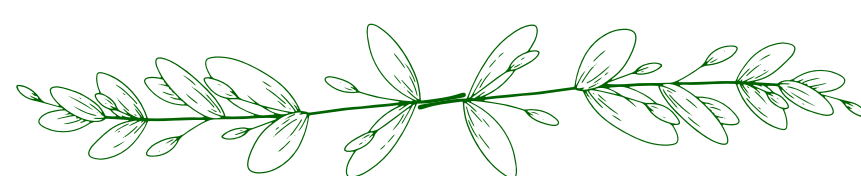
This approach of favouring education of all stakeholders enables community members to voice their rights and concerns regarding how these rights may be affected. It enables government actors to heed the issues that are problematic for the communities that they represent. Finally, it can assist companies to make informed decisions about how the impact of their business programmes affects the environment and peoples where they are situated. However, solutions to the issues are just not this simple to arrive at.

Structures of governments, as seen in Cambodia, Myanmar and Indonesia mean that enacting change so that programmes do not negatively impact on rural and indigenous community members' lives can be problematic. Centralised government departments use their incumbent representatives at the state or village level as mouthpieces to direct planning, but these representatives do not allow information to be passed along the chain of command to central government. In other cases, these government actors are not always open to considering the views of children due to social factors and out-dated norms. So, whilst governments have to play a central role in coordinating between business and the communities in their countries there are structural factors at play here.

If governments wish to ensure the preservation of the natural environment and the cultures in their nations, there need to be wholesale structural changes that enable community checks and balances to be in place. EIAs need to be carried out with participation by the community members that will be affected, town hall discussion around matters affecting local communities need to be managed to allow all stakeholders to work towards consensus on the nature of the changes that will come to their lives. There has to be a more inclusive model used.

This is unfortunately idealistic at this moment in time and bringing about any changes in this equation requires long-term solutions. The education of community members and investing in youths and children to help build a more aware population in the future can help to enact change in the current situation. However, there is another major problem which will prevail if inclusive development planning is not developed. This is the problem of corruption. Corruption exists in almost every corner of the world from favourable contract awards or using shell and proxy companies to avoid adherence to regulations on taxation through to small 'fines' at police checkpoints, examples of corrupt or questionable financial practice are prevalent in this world. This is why inclusive participation and education are essential in counteracting the potential for abuse of rights or damage to the natural environment.

So as the path to development is continued along and the trend of increased urbanisation continues, it is vital to consider and re-package what is deemed to be needed and prioritised. Urban populations need to be educated on the impact of the changes that are happening to their country. Links between rural and urban populations need to be nurtured with understanding of each being important to support inclusive development planning. The country partners working on the OROL project have made some outstanding contributions to this shift in perspective and the outcomes of their work in protecting the natural environment and educating about and helping to realise the rights of children and youths across South-East Asia. It can only continue if there are further investments made in youth and if people listen to their concerns about the world they will live in and provide for their children in and if people ensure that they are active stakeholders in their futures.



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