IATSS FORUM

GUNUNG PALUNG NATIONAL PARK: A MOVE TOWARDS SUSTAINABLE & RESILIENT COMMUNITY

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To
REach
A
SUstainable &
Resilient
Earth

Team **TREASURE** is one of the three groups for the Group Study of the 55th IATSS Forum Batch. Treasure does not only refer to money nor gold. It's more than that. It's something that we value and long to have. The treasure that we are referring to is something that we want to pass on to the next generation... our forest.

We believe that the forest will not only enrich our lives in many ways but is essential for all the living creatures. Deforestation and an imbalance ecosystem lead to adverse effects on human lives. We should protect our natural resources not only for ourselves but also for the future generation.

TREASURE aims to reach a sustainable and resilient earth. We call for change in every community. We will advocate this first at the Gunung Palung National Park, West Borneo, Indonesia. We will call for behavioural change for the illegal loggers, we want to create a program that would help support them in having an alternative livelihood resulting to zero illegal logging problem in the area.

ACKNOWLEDGEMENTS

We wish to extend our sincere gratitude and appreciation to our Work Place, who gave us chance to attend this IATSS Forum. Special thanks to our IASTSS Forum Committee Japan & Our Country & Staff.

We would also like to extend our sincere and appreciation to our entire Professors for their advice, knowledge and experiences for my life.

We would like to acknowledge to all our group member.

Executive Summary

Deforestation is a man-made environmental degradation that continues to happen in the world in an alarming rate. Between 1990 and 2015, the world lost 129 million ha of forest. This equals the land area of Malaysia, Singapore, Brunei, Philippines, Vietnam, and Laos combined together. Deforestation comes in many forms and one of them is unsustainable logging for timber. Economic needs have always been a major reason of illegal logging by the local community.

This report discussed an alternative solution to illegal logging in the tropical forest of Gunung Palung National Park (GPNP), West Borneo, Indonesia. GPNP is one of the most biodiverse tropical forest in the world, which serves as home to over 2,500 critically endangered orangutans and watershed to more than 65,000 people who live surround it.

From the data gathered by a local NGO named Alam Sehat Lestari (ASRI), we found out that there are approximately 180 remaining illegal loggers on-site. In 2015, ASRI has started a program to provide alternative livelihoods to 10 loggers in one village and is planning to scale up the program to reach all the remaining loggers in the area. This report discussed what ASRI should continue doing and could improve in order to scale up the program.

We proposed one project that we call "Chainsaw Buyback". The project objective is to provide alternative livelihoods to illegal loggers so that they have more source of income besides logging. By having viable non-timber business, we expect to see decline in logging activities, down to a point that those loggers are ready to give up their chainsaws and become successful entrepreneur.

Our recommendations were to facilitate entrepreneurship training to the loggers to start new business, give stimulus funds, offer bigger loan for business expansion, give consultation along the process, and offer ultimate reward for giving up their chainsaw. This report discussed 6 strategies to implement the project, which include: (1) radical listening, (2) training and facilitation in family entrepreneurship, (3) loan and reward system, (4) regular meeting, (5) marketing, publication, and media, and (6) partnership with other stakeholders. The project timeline is 3 years, with the total budget of $ 93144.

The prime goal of all these efforts is to create sustainable community in the area. Our definition of a sustainable community is one that has resilience and harmony in social, economic, and environmental aspects in the current situation and also the future. This report also discussed the mobilization of available resources in order to achieve sustainable community. This encompasses: people, material, money, information, technology, and culture. Involvement of different stakeholders were also considered. This comprises the roles of: government, NGO, local community, media, academic, and business sector.

This case study has been a great learning experience for all the group members. Take-home messages from each participant were also included in the report to be applied in their own countries.

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CHAPTER 1
INTRODUCTION AND BACKGROUND

1.1 Introduction and background

The concept of sustainable development has been around since the 1980s. The idea at first only covered the issues related to the environment, as time passed by, it developed to a broader perspective. The focus shifted to economic, social and environmental development.

The ASEAN Community has opened great opportunities among the member countries. The integration covers the political-security community, economic community and socio-cultural community. The approach of the integration would strengthen programs covered in sustainable development.

The countries under this community are currently experiencing challenges. This includes issues on population, availability of resources, economic growth, trade, disparities on income, etc. One major problem that the world is facing is climate change. This entail issues on food security, production bases and price competitiveness.

The ASEAN region covers 3% of the total land area of earth. The territorial waters cover an area about three times larger than the land area. If the member countries combined their population, this would be about 8.8% of the world's population. Last year, the combined nominal GDP of the member countries had grown to more than 2.8 trillion USD. If the ASEAN region would be treated as one entity, it would rank as the seventh largest economy in the world.

In order to solve the problems and minimize the impact of the mistakes done in the previous generation, the whole ASEAN community will need to have the same goal. This is to move towards a sustainable and resilient community.

1.2 Definition of Sustainable Community

A sustainable community is one that has resilience and harmony in social, economic, and environmental aspects in the current situation and also the future. In order to achieve a sustainable community, it needs careful planning on available resources to look for integrated solutions and involvement from all related stakeholders. Every resources available should be taken into consideration in planning and implementation process.

CHAPTER 2
Sustainable Community Design Diagram & Resource Management

2.1   Sustainable Community Design Diagram
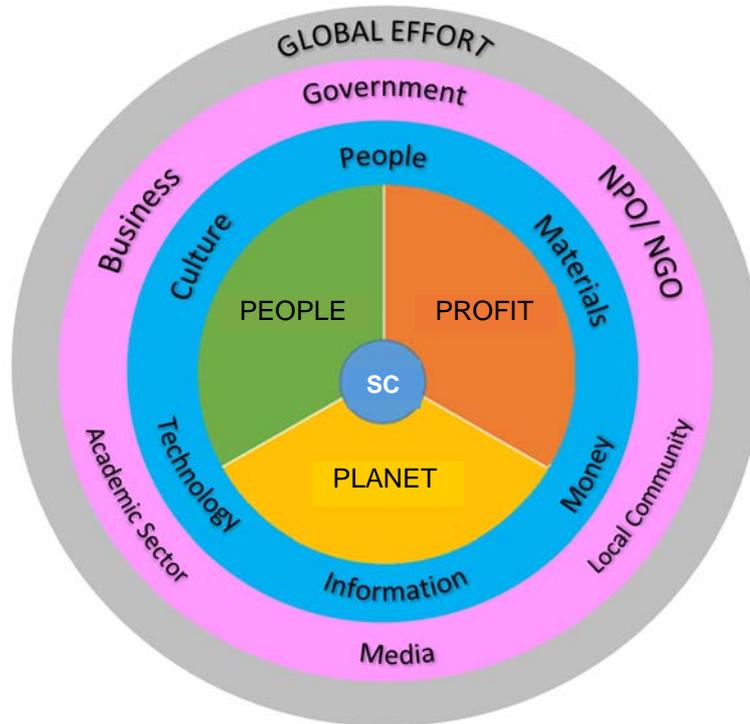
Figure 1: Sustainable Community Design Diagram

The above diagram indicates the perspectives in creating a sustainable community. The core layer includes the three main spheres that become the orientation in developing a sustainable community, which are the people, planet, and profit. All of the three aspects have equal size. This means that there should be a balance among the social, environmental, and economic aspects in order to develop a sustainable community. Available resources, stakeholders, and global effort should be directed towards these three in a harmonious manner in order to attain sustainability and resilience.

People. The prime concern in developing sustainable community is the social wellbeing. Protection, happiness, and fulfilling people's current needs are very important. The effort should focus on both the current and future generations.

Profit. This alludes to economic viability. In order to sustain one community, solid income sources should be present through viable businesses or job opportunities. These sources of livelihood can be created by managing available resources or focusing on uniqueness of one area.

Planet refers to environmental aspect, in which the principle of sustainable resources management should be applied. Renewable resources should be used within a renewable range, non-renewable resources within the speed by which substitution is developed, and waste and pollution should be managed within the range of natural absorption capacity.

The second layer of the diagram speaks of available resources within the community. Mobilization of available resources will be discussed on the next chapter.

The third layer touches on the stakeholders involved in creating resilient and sustainable community. The diagram illustrates them in one circle which shows how important it is to have harmonious relationship among stakeholders. Action by different stakeholders could complement each other in order to fulfil the needs of the community.

The last layer is global effort. We, citizens of earth, all are connected. Creating sustainable community in one area should not be at the expense of other community in different part of the world. We have to help each other and be aware of other people situation. The global community should work hand in hand in creating a better world for all.

2.2   Resources Management

2.2.1 People

Local people must always play the central role in every effort toward a sustainable community. Involvement of the community is the utmost important factor to ensure the success of any sustainable community project or initiatives. Local people must participate and be involved fully since the beginning of its process. People's needs, desires, motivation, identity should be integrated and taken into consideration, in balance with environmental aspect of the surrounding landscapes.

People empowerment and proper education is highly important to create a healthy and resilient community. Combination of formal education and local knowledge will help the community to live more sustainably. In general, formal education will create good quality human resources and thus better living of a community. In specific case such as disaster, it could prepare the community to face emergency situation and its recovery process after. While local or indigenous knowledge usually focus on the uniqueness of a culture or society. This knowledge is passed from generation to generation, usually by word of mouth and cultural rituals, and has been the basis for agriculture, food preparation, health care, conservation and the wide range of other activities.

Toward a sustainable community, wellness of one community should always be taken into consideration besides economic aspect. Their happiness and health condition are actually their basic needs. Thus access to affordable healthcare and effort to improve public health and wellness are very important.

Community bonding leads to greater level of trust, which is an essential lubricant for effective social relations. When people know each other well, people tend to help each other. This behaviour based on good community bonding will be a huge help especially in difficult situation like disaster, where government or any outside help alone could solely help the community. In other words, bonding is essential in applying complementary principle in the community. This means that when people can do it, people should do it themselves. Only when people cannot do it, then the government should do it. The more self-reliant a community is, the more sustainable it would be.

2.2.2 Material resources

Material resources must be managed sustainably. The principle of sustainable economy should be practiced in order to achieve a sustainable community. Renewable resources should be used within a renewable range, non-renewable resources within the speed by which substitution is developed, and waste and pollution should be managed within the range of natural absorption capacity. Also, a sustainable way to manage material resources is one that focus

on both the present and the future, so that the consumption for today's generation is not at the expense of the future generation.

Furthermore, material resources could also be mobilized in a way that promotes the uniqueness of one area. Creating market demand based on their uniqueness—such as culture, tradition, nature, historic background, etc.—could contribute to more income generation to the people.

2.2.3 Money

As a principle, financial resources should always be managed where money is not wasted for any unsustainable practices. Financial resources should be directed to help business or effort that could generate income sustainably in the community. Government effort in supporting diversified income resources as in One Village One Product (OVOP) movement in Oita Prefecture is one of the examples. Supporting the community to have secondary skills to generate side income is also another way to create a resilient community economically.

Moreover, proper tax implementation by the government is also needed. A good taxation system should create an environment whereas businesses who apply good sustainable principles are supported, and those who don't will be taxed higher. For example, business in wind and solar energy (renewable resources) should get lower tax than business in coal and mining (non-renewable resources).

2.2.4 Information

Knowledge sharing plays a crucial role in order for communities to be sustainable. It is essential to pass on the information to the next generation. A good knowledge sharing management needs to be placed in the community, this would serve as their data bank—documentation of their history, culture and process. Moreover, communities need to learn from their experiences, may it be a good or a bad one, but without proper documentation, such experiences would be in vain and will not be passed on to the next generation.

Learning from experience is vital for growth. A community, together with their stakeholders, should always find ways to grow and be resilient. For it to withstand any changes brought about by external factors such as calamities, emergencies, or globalization, research and development should always take place to tackle challenges in the future.

2.2.5 Culture

Culture is the identity of a community. Therefore it is very important to preserve tradition from generation to generation. People have to be proud of their own tradition. The community, starting from the children, needs to be aware of their own culture. Thus they will be the successor of the tradition and culture their parents preserve.

Outsiders' point of view is important as well. Exposure to other communities' culture makes people aware and value what they have and do in their own culture. This also expands people's creativity and knowledge. Therefore it allows people to innovate their culture in the modern context.

2.2.6 Technology

In the modern world, change is inevitable. In order to keep up with the changes, new technology should take place. It should enhance the people's quality of life and is accessible to all. Furthermore, technology should be environmental friendly, it should help meet the needs of the community without sacrificing the resources of the next generation.

2.3 The Stakeholders

The community's resilience and sustainability lie in the hands of the stakeholders. Each one should work hand in hand and maintain a harmonious relationship. Their strategies and actions should complement each other so that the community will benefit including the future generations.

2.3.1 Government

Government plays a major role in creating sustainable community. It has the power to create the system, enforce the law, regulate the business sector, and boost public education, etc. in order to foster sustainability of one community.

Law enforcement by the government often is pivotal in creating a better society. Once it is poor, then all other factors could also not succeed. But once law enforcement is put in place, then other things would likely follow for the good of all. Creating fair law by considering social, environmental, and economical aspects is very important.

In relationship with its own people, government should always provide listening ears to the people's real needs. Without proper listening to the community, whatever projects would likely fail.

In business sector, one of government roles is to create a good business environment. This would allow corporates to create job opportunities to the people and thus boost the economy. Above profits, government should also form a system that would ensure that people's interests are above all else.

In case of emergency, government should be able to do an immediate response. Complicated bureaucracy should not be a stumbling block to secure people's primary needs.

2.3.2 Non- Profit Organization (NPOs) or Non- Governmental Organization (NGOs)

NPOs and NGOs has always played a unique role in pushing for sustainable of the community. They serve as the "middle man" between the community and the other party. Such organizations usually work together with the community and is able to see and assess their needs. Their functions helps the community because they have the capacity and are capable to do what the community cannot. They sometimes become the community's voice, especially when they are not heard by the government.

Organizations as such are able to fill in the gap of what the government cannot provide. They see what is needed because they work closely with the community and they listen to them. They simply complement the plans, regulations and laws that the government already have.

Moreover, they are able to promote and educate the local community to be self-dependent. Communities usually have a problem with profitability, people

usually don't make any effort because they need to have livelihood. They would invest their time and effort on something that can put food on their table. NGOs and NPOs, since they have the knowledge, skills and expertise on such issues, they are able to educate and convince the community that their efforts will not be in vain. They serve as the driving force for the community but at the same time, they don't want them to be dependent on what they can provide, they only focus on building their capacity and competence.

NGOs/ NPOs should always see that a sustainable community sits on the foundation of self-reliance. The concept of independence covers the need for self-help, mutual-help (among the neighbouring community) and participation of the indigenous people. Self-reliance encourages the people to use local initiatives, their abilities and their own resources to improve their condition. Community that able to fully utilize their own available resources and technology will be able to sustain longer.

Furthermore, they also serve as watch dogs. In cases when regulations or processes are already in place, the NPOs and NGOs help in making sure that such is followed, people are aware of its existence and are able to use it for the benefit of the community.

2.3.3 Business Sector

The business sector roles are to represent and promote a healthy business environment, achieve and recognize leadership roles and cooperate with the state in the economic and social activities. It is important for this sector to have partnership with the other stakeholders, making sure that they maintain a healthy business environment and accelerate the pace for economic development.

Businesses should provide skills and knowledge (best practices) to the local community. Providing intermediary services for the formation of business joint ventures and trade promotion between foreign and local entrepreneurs by business matchmaking to developed economy and consultancy services in matters relating to economic, industrial, legal and environmental affairs and increasing capacity to engage on labour and employment issues.

Business sector needs to promote foreign capital, appropriate technology, managerial skills and access to international markets to fulfil social and economic. It is our belief that foreign direct investment can play a vital role in the sustainable development of the country.

PPP - The term "public–private partnership" describes a range of possible relationships among public and private entities. PPP involves a contract between a public sector authority and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project.

Corporate Social Responsibility should be integrated in the businesses. There is an increasing demand on corporations to take their environmental and

social responsibilities seriously. They should plan activities for knowledge sharing to promote sustainable development.

Businesses should win the trust of the people by thinking not only of profit but also what is beneficial to the community. They should respect the law, environment and the people. On the resources, they should always consider what is renewable, what is within the allowable range of substitution and absorption capacity.

2.3.4 Local Community

Harmony among people in the community ought to be cultivated and maintained. Having the sense of family and loyalty would encourage people to help each other especially in times of difficulties, hence it will create more resilient and self-reliant community.

In order to be self-reliant and independent, people need to be trained and well-equipped based on specific needs of the area. Education or training could be conducted by different stakeholders in order to do so. This would make one community stronger and even to a point they could help other community in facing challenges.

2.3.5 Media

The power of the media lies in its capacity to influence how people think and act. Roles of media in achieving sustainable community can be divided into three sections based on its impact:

- Governance Impact: Media improves government by monitoring the actions of those in power and alerting the public to corruption or abuse of trust. Witnessing and reporting issues lead to lower corruption levels. Access to information helps citizens hold their government accountable. Media improves government responsiveness by giving a voice to the people.
- Economic Impact: Media improves the economy by providing information from academic sector, which could help people to make decisions and thus improves economic stability. Media enhances political coordination in the development of sound economic policy.
- Social Impact: Media catalyses positive changes in society by providing information that could influence public opinion. Media could increase public awareness and drive changes in behaviour across social issues.

2.3.6 Academic Sector

Roles of experts could help community reach its full potential. They could give education and capacity building so that one community could strengthen their skills, acquire knowledge, and develop proper attitude and values. Experts could also do monitoring and evaluation to assure that any program remain beneficial to the community and sustainable for the future generation. Research

and development by specialists should also be conducted to serve as the think-tank in order to solve problems and tackle challenges in the future. These all will help the community to grow and have broader mind-set.

2.4   Global Effort

Though the mind-set of sustainable community development may lead to orientation only on the local level, it is important to remember that we all are connected as a global community. Developing sustainability on one community, should not be at the expense of other community. We should think of the global impact, but act on the local level. For example, Malaysia's problem with illegal logging is not only Malaysia's problem. It is because there's a demand from other countries of woods. In order to solve that kind of problem, global awareness of that issue is important and we, in different countries, should work hand in hand as global community to tackle it. Global effort also means that our interconnectedness should break all barrier that keep us from achieving a better planet for all.

Sharing session by the ex-loggers from the different province to the community on their success story can be a good motivator and initiator to the young generation to think outside the box on how to generate income for their family in the future.

CHAPTER 3
The Case Study

3.1   Case Study

Project title   :   Chainsaw Buyback
Objective   :   To provide alternative livelihoods to illegal loggers
Location   :   Gunung Palung National Park, West Borneo, Indonesia
Background   :

Gunung Palung National Park (GPNP), a 108,000 hectare tropical rainforest located in West Borneo, Indonesia, serves as watershed and livelihood sources to more than 65,000 people who live surround it. GPNP is one of Indonesia's most biodiverse parks; it is home to over 190 species of birds and 35 species of mammals, including 2,500 orangutans, the Borneo white-bearded gibbon, clouded leopard, sun bear, pangolin and the bearded pig. The park protects several types of ecosystems including mangrove forests, swamp and peatland forests, and lowland and montane rain forests.

Extensive efforts have been made to protect the areas surrounding the GPNP. A local NGO, Yayasan Alam Sehat Lestari (ASRI) has operated health and conservation programs for the local community since 2007, during which the number of active logging households declined from an estimated 1350 to 450 households between 2007 and 2012. ASRI's illegal logging monitors estimate that there are roughly 180 individuals actively logging inside the Park, which represents an incredible decline in illegal logging. At this point, the ASRI staff knows each of the remaining loggers personally and is working to find solutions that are tailored to each logger's needs.

In 2015, the ASRI staff approached 14 loggers in the village where its office is located, if they'd be willing to participate in a program that would help transition them to an alternative livelihood. After hours of chatting over sweet coffee, the ASRI team better understood the challenges faced by this particular group of loggers. From the 10 loggers who expressed interest in the program, a baseline socioeconomic survey was conducted, showing several key findings:
- 92% of loggers and 77% of their wives only have an elementary school level education
- Average monthly household income of $270, which ranges from $63-500
- Average monthly household expenditure of $290; economic pressure from big ticket incidental expenditures ranging from $200-5,000 like home repairs, health care and holidays
- Average household size of 5.2 individuals, ranges from 3-9 individuals
- Land ownership is very low; only 18% loggers legally own farmland or fruit gardens and only 18% have space to raise livestock

- Although logging is the primarily occupation for all participants, 82% loggers have side jobs as fishermen, chicken farmers or daily wage laborers
- 100% of logging households own at least one motorbike. Ownership of electronic goods is also high; 50%++ participants own TVs, refrigerators, gas stoves and electric rice cookers.

For many, their monthly expenditures are higher than their income. When it comes to health care, which drives up household expenditures (up to $5,000 per month for some), it's no wonder why they turn to logging for fast cash to support their families. The survey had another interesting finding: 82% of the loggers already had side jobs that had the potential to be improved and scaled-up.

As such, ASRI launched a family entrepreneurship training to focus on micro-enterprise development for the 10 loggers and their wives. They all gathered together to receive training in entrepreneurship for starting new livelihoods. They plan to open restaurants, coffee shops, car washes, become chicken farmers, fishermen, and barber.

This training included the development of business plans for each household and distribution of start-up funds of roughly $330 to each household. With these funds, the households have invested in their new enterprises. Only once these enterprises are operational and profitable will the loggers be willing to give up their chainsaws.

We also made it mandatory for the loggers' wives to attend the training, and some even brought their small children. In several cases, the logger ultimately decided that his new livelihood would be working together with his wife to build a family business. Each logging household signed an *ikrar,* which is a special type of contract in which one vows to do something for the rest of their lives. In this "family entrepreneurship" *ikrar*, they vow to conserve and protect the forest and to commit to their new family enterprise.

The results from the first-round of "entrepreneurs" is encouraging: 60% of the participants have stopped logging entirely. 40% of participants still log occasionally while they wait for their businesses to become profitable.

The overall vision for this project is that the GPNP landscape's natural resources would not be segregated from human economic activities, but strengthened by an economic and social system that celebrates the tangible and intangible benefits of this intact forest ecosystem.

3.2.1 Resources Management

In dealing with illegal logging problem, we had thought through how available resources should be managed in order to create sustainable community.

Here are some thoughts on resources management and stakeholders involvement related to it.

People

It is highly important to raise people awareness on the importance of forest and the negative impacts of deforestation. This could be done through various education forms. For example, we could invite people to attend regular community meetings. Through presentation, talk show, conversation, and other interesting activities, people could acquire knowledge about environmental issues and be encouraged to keep the forest for their own and their children's sake. Regular meetings could also increase bonding among community members.

One interesting activity that could be done by the community is to plant trees together. Their direct involvement in the activity is important to build the sense of ownership of forests. Moreover, this move will even be more powerful if it is done in loggers' family. Children of loggers could persuade their parents to stop logging for their own sake, and this approach by children could be effective.

We also have to listen carefully to people's real needs and act based on what we hear. In the context of economy as the major driver of illegal logging, loggers should be empowered to have alternative livelihood according to what business they want to start. This side income if supported, could later be the main source of income, so that they could leave their logging job.

Material

The uniqueness of the area lies in its forest. Therefore promoting the beauty of the forest itself could be the starting point to mobilize any other available resources. This forest is one of the richest in its biodiversity compare to all other tropical forests in the world. This could be a selling point to a tourism industry. For example, conducting an eco-tour in the forest and its surrounding villages could attract tourists to come to the area, and thus is beneficial economically to the local community.

Forest can also provide us fruits, nuts, vegetables, water, medicinal plants, etc. Business in eco-friendly and non-timber forest products (NTFP) should be encouraged among the logging community. NTFP such as rattan, honey, fruits, etc. from the forest could be a good alternative income for the people. Moreover, if those products could be packaged with attractive design, then the value will also be higher.

Available and unique goods could also become commodities of local businesses. This will create more income sources to the residents. In order to maintain the viability of the business, people should also be encouraged to buy local products from this local shops.

Technology

Usage of technology should be directed into one that is more sustainable to the forest. Development on alternative woods could be a solution. Instead of using wood to build house and make furniture, we should shift to use more eco-friendly material which do not harm the forest. The academic sector could also help by doing research and developing such technology.

Apart from that, technology can also be used to maximize people's businesses. For example, we can provide hand tractor to make farming more efficient, or a modern packaging machine to help business in local food and beverages, etc.

Culture

Cultivating sustainable habits and practices in one community is needed to manage natural resources effectively. For example, when having a wedding, instead of cutting trees to make a new wedding stage, the couple can outsource it by renting from the wedding planner or previous couple from the same community. They also can think for the alternative material to build the wedding stage such as metal or any other materials to make the stage. This will also support the NTFP (Non Timber Forest Product) initiatives.

The local belief that recognizes the importance of forest should always be promoted. There's a local wisdom which believes that people will get sick if they cut down trees. This wisdom should be passed through every generation in the family starting from the children. Putting local wisdom into creative media, such as a comic or a poster, will also be helpful to keep people's awareness about forest.

Introducing local culture as a package in eco-tourism is also a selling point in tourism industry in the area. Providing tourists with hands-on cultural experience with the local community could make them appreciate both the forest and the people at the same time. This initiative is a win to the three sustainable community aspects which are social, environmental, and economic at the same time.

Money

Adding value to tourism industry would encourage people to give more money to the forest. Certain percentage of the income would be used to direct effort forest planting or exotic animal preservation. For examples, every one dollar from a ticket purchased, one tree will be planted and thus giving more food sources for wild orangutans. This campaign we believe will help in generating enough fund for the community to help sustain the forest situation.

Besides tourism, other non-timber industry should also be introduced and supported. NTFP business could be an alternative source of income to the community. The government or other private stakeholders (like bank or NGO) could support financially to improve NTFP business. Media could also involve to promote this initiative.

Information

Deforestation have devastating impact to human and nature. Diseases, flood, loss of medicinal sources, climate change, loss of habitat and biodiversity, animal extinction, etc. are terrible effects of losing forests. Information about these issues should be widely spread from the local unto international levels to raise global awareness in order to tackle the problem together. This role could be taken by various stakeholders, such as the media, government, and NGOs.

At the local level, distributing educational information could be delivered through school curriculum for students. Getting early exposure on the importance forest and how to preserve it will create a proper mind-set to live in harmony with the nature.

Logging community could also learn from neighbouring areas which have similar geographical and socioeconomic situation but succeed in stop doing illegal logging. There must be lessons they could learn and apply to their own villages. Such information sharing could be facilitated by local NGO or government. Local media like radio could also broadcast some success stories to inspire more people quit their logging job.

3.2.1   Enhanced Strategies

Radical Listening

We have a process that is called radical listening. It is listening with love as community identifies their needs and solutions. The intention is to follow through on what they say – or connect them to people who can. It is radical because it subverts the normal power structure that usually exercises top-down approach in seeking solutions. Through radical listening, better solutions are found, trust is built, and the community is also empowered to find solutions for their own need. People will actually do a solution they come up with.

In this process, we would also conduct baseline survey to better understand the socioeconomic situation of the target group before starting any project. Then after project completion an end line survey will be conducted to measure the progress of the participants.

Training and Facilitation in Entrepreneurship

After getting to know each logger interest in their new business, a training in entrepreneurship would be held to help them develop their business plan. This training also includes financial management in family. Since this business would become a family enterprise, involvement of the loggers' wives is compulsory and important, as well as a part of women empowerment in the family and society.

Stakeholders from the academic, business and government sector will be tapped. The non-profit organization that would be implementing this project could either hire a consultant, get a volunteer whose expert in micro-enterprises, or get one from partnership with government or other organization.

Trainings on specific skills like dress making, baking, hair cutting, etc. will be organized. This aims to help the people be equipped depending on the field of business that they would want to cover. This will be in collaboration with the government, specifically, the department concerned on labour and employment.

Any activities related to improvement of skills and knowledge should be done together with the community leaders. Since the experts will be engaged in a short term basis, the community leaders will be trained so that they can run the program even when the experts' contracts ends. This is part of local community empowerment. This also ensures the sustainability of the program without being dependent to outsiders.

During the training, options on business opportunities in the area should be discussed. Participants could be encouraged to do business in non-timber forest products (NTFP) and eco-friendly goods if they are interested. Focusing on the specialty of the area, which is the forest itself with its biodiversity, the loggers could initiate tourism industry. The fact that they leave logging for tourism

industry will bring a very unique feature in their new business. As the starting point they could also be trained as tour guides at the existing tourism agency. Their expert knowledge about the forest they hike everyday would make them excellent tour guides.

Other business idea in renting tent and stage might also be profitable in the area. Wedding and other community ceremonial events often need people to cut down fresh woods from the forest to build stage and tent. This unsustainable approach definitely consumes a lot of time and energy to those people who want to celebrate their joyful day. Therefore tent rental might be a potential business and saving the forest at the same time.

After conducting training, routine visit and facilitation are needed to help grow their new businesses. By doing so, ASRI could monitor their business progress and provide technical assistance as needed.

Loan and Reward System

As stimulus fund to start new business, ASRI gave $330 to each logger household after the training. Although cash was given, this was not an easy money. We made sure that the money was spent wisely and for their business purpose by assisting them in purchasing items and checking on their budget and expenses. Along the way, if they need more money to expand their businesses, ASRI could give a bigger loan with low interest rate.

The final goal of this approach is to buyback the loggers' chainsaws. Giving up chainsaw serves an ultimate symbol of their commitment to leave their old job as loggers and become entrepreneurs. ASRI would offer valuable rewards for whoever ready to give up their chainsaws. The rewards could vary based on the needs of each family. These might include buying new technology that could boost their businesses (e.g. new fishing equipment for fishermen, hairdressing chair for barber, modern food packaging system for cake business, etc.). ASRI could also offer lower price to access healthcare in ASRI hospital, or provide scholarship in forestry or conservation field to their kids. Concrete form of rewards would again be discussed through the radical listening process with the loggers.

3.2.2 New Strategies

Regular Meetings

Regular meetings will serve as the venue for education, consultation, brain storming of activities, and knowledge sharing. The illegal loggers will be educated together with their families. Initial approach involves making sure that they are aware of the effects of the illegal logging on a local and global level. It intends to open their eyes to other livelihood options. It will assure them that support is there, that someone is there to listen and to guide them all throughout the change in behaviour.

After getting what the people's needs in order to give up their chainsaw, the regular meetings will be a venue for the community to consult with specialists in the field of entrepreneurship, environment and health. The stakeholders from the government, business and academic sector can be tapped for such meetings. Other activities to be captured by this strategy is sharing of success stories from people that given up their chainsaws, challenges encountered in the change of livelihood, and activities that will make the community bond to develop a close, interpersonal relationship. An example of a bonding activity is tree planting, this will help in making the illegal loggers aware of the environment. It will give them a sense of ownership to the forest, protecting it from any harm and making sure it will be available for the next generation.

The main objective is to use this channel in order to understand people's beliefs, values, and needs. It intends to engage the community and provide venue for listening, proposition of solutions or options and sharing of ideas. It aims to improve lives by helping each other. This serves as a good venue for behaviour (change in attitude) and social change (change as one unit).

Marketing, Publication and Media

Marketing, publication and media strategy intends to make use of the gathered information to encourage people to be involved. The advocacy that it calls for is behavioural change. The current community surrounding the national park has a good working relationship with the local media and can provide free advertising to the community. Features to be covered includes the success stories of the community loggers that completely turned away from illegal logging and free advertising for the new businesses.

The government has the capacity to create an environment that promotes products from different communities such as trade shows or exhibitions. Since part of the business' success is from consumer knowledge, such activities will help promote their cause and at the same time the products that the family entrepreneurs are selling. This will promote healthy competition and encourage the communities to learn from each other on how to improve their products and their business strategies.

Tie-ups with other stakeholders can also be maximized in promoting the alternative livelihood, an example of such is the "Sail Selat Karimata" on October this year. This is an international event that is organized by the government. This will be a good channel in promoting the awareness of illegal logging's effects to the environment, the current problem encountered by the community, the advocacy to change and how others can take part on the radical change.

Another venue for marketing the products are small spaces in non-profit organizations/ non-government organizations. The hospital tied up with ASRI will be used to set up a small stall featuring various products from the family's alternative livelihood.

A live map will be created and maintained by the community, this will plot all the current businesses around the community. An expert on strategically distributing the types of businesses and assessing their location will be employed in a short term contract to help the community on working on the map. It will be located where it is accessible to the tourists and the community.

The above strategies will lead the community and other stakeholders towards the cause for behavioural change. It will eventually lead to having alternative livelihood and completely turning away from illegal logging.

4.1.6 Partnership

Teamwork and collaboration can bring mutual benefits to the stakeholders. When we talk about sustainable community and the approaches that people can take to be able to use their resources for livelihood, we always need to find what's unique in the community, we need to see their strength and help them realize how special it is and build on a strategy for business opportunities using their unique resource. Training on entrepreneurship will help them build their capacity using their uniqueness and this would be done through collaboration with the government, academic and business sector.

Another stakeholder that can be tapped are the rural banks through special loan agreements. The current non-profit organization/ non-government organization has good working relationship with the local bank and can collaborate in creating a special package for those that are willing to make the change. The loan agreement will also be partnered with a "Buyback Savings Account" this would teach them in being good stewards of money.

Partnership with other companies can also create job opportunities for the community. The project will be able to help these companies in being socially responsible through the chainsaw project implementation. They can help in various ways such us fund raising, training provision and other activities that is beneficial to the environment and the wellness of the members of the community.

3.3 Global Effort

As we breathe the same air, there should be no border for us in contributing to sustain our one shared planet. We should have global collaboration across countries to help one another. In this particular program, we could have partnership with other organizations from different countries to create more opportunities to the people and thus preserve the rainforest. This partnership could take a form of conducting research, giving scholarship to local students, training, etc. in the field of forestry and community development. We should also work together to raise global awareness not to buy unsustainable timber products.

We will call for volunteer experts to come and contribute their skills to the project. Their expertise will definitely expand the capacity of local people to live more economically, socially, and environmentally sustainable.

3.4 Time Line / Budget Plan

Date of Preparation: June, 2016

	1st Year	2nd Year	3rd Year
Title			
I. Overhead cost is 20% of total project (A) + (B) + (C)+(D) = 15524 USD	3324	5400	6800
A. Radical Listening a. Meeting and Identifies their needs and wants			
B. Training and Facilitation a. Awareness Training b. Entrepreneurship Training c. Encourage to do business			
C. Regular Meeting a. Venue for education, consultation, brain storming sessions and knowledge sharing.			
D. Marketing, Publication, Media a. Local media b. Trade shows, Exhibitions and International Event b. Live map			
II. Loan and reward system a. $ 330 per loggers for the alternative livelihoods b. $ 1000 loan for the alternative livelihood c. $ 1500 for reward system and loan	4620	14000	21000
III. Consultant / Expert and Staff a. $ 800 monthly per expert for 3 years b. 200 monthly per local staff for 3 year	9600 2400	9600 2400	9600 2400
IV. Refreshing project for 2 year		1000	1000
Total (I) + (II) + (III)	**19944**	**32400**	**40800**

Table 1: Time Line / Budget Plan

Overhead cost will be used for expenses, training, advertisement, meeting, office supplies, information and other community activities for the project. We will give training for awareness such as education / technical / information. Meeting will be one time per month.

According to our 3 year project plan, Budget will be $ 93144 (1st Year: 19944 USD, 2nd Year: 32400USD, 3rd year 40800)

For this project, Budget will be use as follow;

1st year	;	$ 19944 for loggers, Expert & staff salary and Overhead cost
2nd Year	;	$ 32400 including Loan, reward system & lend Money to success story of loggers and overhead cost
3rd Year	;	$ 40800 including Loan, reward system & lend Money to success Story of loggers, Expert fees, local staff fees and including overhead cost for the plan and retreat project.

CHAPTER 4
POSTSCRIPT & CONCLUSION

5.1   POSTSCRIPT

5.1.1 Lessons and Challenges

Collaborations are usually confronted with challenges. But once the team overcomes these, the goals are not only met but it will give a chance for all to grow personally and professionally.

The challenge in diversity. Our group had different working styles, way of thinking and professional experiences. We come from different cultural, social and professional backgrounds. English is not our native language. Communicating ideas in our second language was sometimes not easy. Although everyone had bright ideas, we had to be patient and mindful enough to really grasp the message and put it on the table.

Our approach was to always show respect, to be responsible and to build good relationships. We took time to get to know each other by taking a personality test, it helped us get to know who we are as an individual and as a team player. It helped us understand each other by knowing our strengths and weaknesses. We made a conscious effort to listen and participate actively and made sure to provide feedbacks in a timely manner. The study group united us through our diversity.

The time-constraint. Time is very limited, especially with many other responsibilities that we have. We had to manage our time well first by defining each of the team members' role, prioritizing our tasks, dividing these among us, and setting a strict but realistic deadlines.

Motivation. The life that we have in the forum is far different from the life that we are used to. It involves major adjustment in lifestyles and it was not easy for us to balance our lives. Sometimes people get sick, stressed, depressed and demotivated. This affects the person's productivity. We were able to overcome this challenge. What is good with our team is that during the initial stages of the group discussions, we defined our mission and objective for creating the project. We based our study on real issues in an area and we all wanted to create a project that we know someone can implement in their community. The level of effort that we had to work on this was different, we were willing to work an extra mile because of the benefits that it can give in a community. Our team never forgets to encourage each other by developing short term "wins." This helped everyone feel that they are able to contribute.

<u>Empowerment.</u> We never defined who the leader was in our team, the environment that we had encouraged everyone to share their knowledge and be open to ideas. It has taught us that a leader is not always in the front line. The most important role of the leader is to be a driving force of his or her team. He or she is able to inspire everyone in the team. Also, he or she is able to empower each of the team members, making them participate actively and be the best that they can be. It makes everyone feel that there is support and trust. It creates a safe and healthy environment beneficial to the whole team.

5.2   Our Takeaways from the IATSS Forum Program

5.2.1   MONIC – INDONESIA

The discussion process has made me think comprehensively about designing sustainable community from many different angles and perspectives. This was helpful for my work. I will definitely apply the concept and framework in designing programs for sustainable community in the area of Gunung Palung National Park, West Borneo, Indonesia.

5.2.2 JAI – LAOS

I think the outcome of our project which will be appropriate to apply in Laos. Especially, in recent years the Government of Lao PDR has done well in building an effective law enforcement program. The government must take an action to response the issue of the illegal logging. The enforcement of the legal framework is often not easy, but this seizure is a clear demonstration of the Government's commitment to combat illegal logging. This is critical for sustainable forest management. Although Laos still have various challenges to solve and as we have realized those problems, it will be solved under the government strong action.

5.2.3   DANI – MALAYSIA

Malaysia rapid urbanisation is a common phenomenon when industrialization program is adopted by the government to promote modernisation and economic development of the country. However, rapid urbanisation without strong urban governance through urban and regional policies and economic incentives to decentralise development will result with primate city problems and regional imbalance issues. In the case of Malaysia, apart from the long terms perspective plan such as Outline Perspective Plans, the Five Year National development plans help to monitor and correct the imbalance development fairly successfully. The problems in Malaysia are more unique due to its rural urban and also ethnic polarisation and economic disparity. Both of these problems need to be corrected to ensure racial harmony and regional prosperity. From the project proposal, there are few solution that might help my country in dealing with problems. Media involvement in getting the right mind-set and constantly involvement by the stakeholders in supporting the implementation of National

Physical Plan 2005 and National Urbanization Policies 2005 will further enhanced the urban development of Malaysia in a more orderly manner by establishment of an efficient, equitable and sustainable national spatial framework to guide the overall development of the country towards achieving quality living environment and developed nation by 2020.

5.2.4   THIDA – MYANMAR

Two Biggest disaster in Myanmar

1.   **In 2008**, the Nargis cyclone hit Myanmar on 2nd and 3rd May. Such kind of calamity was of unprecedented intensity in our history. Actually that was a bad situation. Even though, our people tried to promote our community. After the disaster that we know, we need more knowledge and skills, capacity building training for community development field.

In 2015, Floods and mud slides in States and Divisional Regions of Myanmar in July & August. We had lessons learn from Nargis cyclone to prevent damages from disaster. But when we faced with flood and mud slides, we understand that we still have many challenges to recovery in our community after disaster like health care especially in rural areas. We still need to give awareness of growing species on the firm that has affected by flooding for farmers. Especially, infrastructures are main challenges in the community. We need more knowledge and skills, capacity building training for community development field. Our people should learn more initiatives for our community development.

5.2.5   WIZ – PHILIPPINES

The Philippines currently suffers from environmental degradation. The increase in population, loss of agricultural lands, deforestation, pollution and other abuses in the environment worsens our situation. A call for change is needed. The study done would help my country in 2 ways. First, direct application of the project based on our problem in areas where there is deforestation, for example, the Ipo watershed in Norzgaray, Bulacan. The alternative livelihood to be offered would differ depending on the profile of the area to be studied. Second would be the application of the method by which we were able to come up with the program. This includes, studying the community, defining what sustainability is, mobilizing the resources, focusing on equity and considering the importance of the community and stakeholders' involvement.

5.2.6 AMY – VIETNAM

Our project can be applied in Vietnam. In my country, we are facing the problem of deforestation. Forest coverage was decreasing tremendously. Primitive forest was close to non-existent. More and more plants and animals becoming extinct. As we already pointed out in our group study, we need the involment of all stake holders, especially local residents. We should them to have sustainable likelyhood, develop their sense of ownership, stricken the law…

Besides, the method by which we were come up with can be applied in sea-protection. For exxample, in early April, large quantities of fish washed up dead near the Vung Ang Economic Zone in Ha Tinh Province. The disaster stretched 200 kilometers along the central Vietnamese coast resulting in the death of more than 70 tons of sea fish and 35 tons of farm-raised fish. Wastewater illegally released by the Formosa Steel plant through drainage pipes was the main reason for the mass fish deaths in four coastal provinces of Vietnam.

As working in media sector, regarding the things I learned, I will contribute to raise awareness of the viewers in sustain the community. Step by step, I hope that, somehow, people will have a wider thought about this important issue.