SHARING DATA SHARING STORIES

The portrait toward self-reliant community
Bingkai Indonesia

Supported by:

Global Environment Facility-Small Grants Programme (UNDP)

SHARING STORIES

SHARING DATA
AUTHORS
Ery Damayanti
P. Raja Siregar
Sofyan “Eyanks”
Februanty Suyatiningsih
Nindito Setyono
Tatang Elmy Wibowo
Ina Nisrina Has
Nissa Wargadipura

EDITOR
Reza Mustafa

LAYOUT
Ade Kurniawan

PHOTO CONTRIBUTORS
Fajar Kuncoro
Ery Damayanti
Raja Siregar
Sofyan “Eyanks”

STORIES
Sharing Data
Sharing Stories
The twenty years journey of GEF SGP Indonesia has resulted in many stories that can be harvested and spread as collective lesson learn. These stories have been written down and made as a book. Twelve stories have been written down and made as a book. These stories are expected to give a whole picture of GEF SGP program in Indonesia. It is about a comprehensive picture on local initiatives expected to contribute and give impact to the world.

Along the journey of this nation's development, the participatory monitoring and outcome evaluation were conducted provide more in depth space to overlook the journey of GEF SGP. The participatory monitoring and outcome evaluation resulted through Global Environment Facility Small Grant Program (GEF-SGP), create – connect – collaborate – and change the world. Thus, the motto of GEF SGP contribute and give impact to the world. This series of stories is expected to become a communal learning media and to inspire community, non-governmental organizations, government or donor institution in considering the presence of dynamics within community. The greater expectation is to have the management of livelihood resources to be more fair and just. To put and manifest ecological justice with gender perspective can be part and manifest part of these stories. Thus, the motto of GEF SGP as stated in Terasmitra (the collection of local initiatives of GEF SGP Indonesia partners), create – connect – collaborate – and change the world is not a mere phrase.

Jakarta, January 2016

Catharina Dwihastarini
Coordinator of GEF SGP Indonesia
Table of Content

From Nagging to Tempting

Conserving Seed, Manifesting Self-Reliance

From Tadas Paddy to INDIGO VERA

Restoring Springs, Missing Wood

Salim, the Forest Explorer

Protecting the Tree of Life

CRISIS AND POTENTIAL OF LOCAL FOOD

The River is not a Trash Can!

Women Spirit in Saving Forest (GOMA)

33

Conserving Forest

Mangrove the Savior, Mangrove Benefiting

From Tadas Paddy to INDIGO VERA

Bakan (Mangrove) Reading House

Kek Saren, The Savior of Karang (Coral Reef)

1

THE STRUGGLE RECOVERING COASTAL

SUMATRA TO JAVA,
COASTAL RECOVERING
THE STRUGGLE
TO JAVA,
SUMATRA
Sarang is the name of a small island in Kelurahan Sekanak Raya, Belakang Padang sub-district, Batam city, administratively. Sarang Island is located in the border of international waters, facing Singapore directly. In the 1960–1980s, this island along with other area nearby is coastal area with fairly complete ecosystem and in a good natural condition. Mangrove, sea grass, and coral reef create marine ecosystem that are able to support the main livelihood of the local people. Most of the people live as fishermen. The condition of good marine ecosystem is proven to influence people's livelihood. They don't have to go far to find fish. Added by the strategic geographical location and supported by the beauty of nature, the place is considered as marine destination visited by many tourists.

However, after the 1980s, the condition of natural ecosystem supporting the sustainability of fisheries and tourism has declined. It is caused by the unsustainable fisheries practices and the development of unplanned settlement. The condition of good marine ecosystem is proven to influence people's livelihood. They don't have to go far to find fish. Added by the strategic geographical location and supported by the beauty of nature, the place is considered as marine destination visited by many tourists.
The harvesting of coral reef as decoration and cutting down of mangrove as raw material for coal to be marketed to Singapore and Malaysia, have made the ecosystem of Sarang Island under threat. Coral reef and mangrove were the most severe impacted ecosystems. This was exacerbated by the development of settlement above the sea, resulting in the mounting of domestic waste in waters. The decreasing quality of ecosystem has made the people find hardships in fulfilling the needs of their life. This worse condition forced the fishermen to put their fishing tools in waters, quite far from Sarang Island.

Due to the loss and the hardships induced by nature degradation, in 2009, several people in Sarang Island initiated a group working for coral reef cultivation. With the help of Yayasan Gema Lingkungan Indonesia (YGLI) whom has carried out previous research and community development, then in the same year, Sarang KBK (Coral Reef Transplantation Group) was established.
The established group carries out various activities geared to restore their environment and to increase the economy of the local community. Community awareness on the importance of mangrove, coral reef and sea grass has increased due to the activities of mangrove, coral reef and sea grass conservation. The knowledge of the importance of mangrove, coral reef and sea grass has helped to change community behavior and attitudes. Nowadays, the activities of mangrove, coral reef and sea grass conservation have reduced activities that lead to destruction of mangrove, coral reef and sea grass. The activities of mangrove, coral reef and sea grass conservation have not only helped to preserve the environment but have also increased the economy of the local community.

Currently, the head of the local RT (neighborhood unit) said, "People have started to feel the benefit of preserving the environment." According to the head of the local RT, the activities of mangrove, coral reef and sea grass conservation have changed community behavior and attitudes. Nowadays, activities that lead to destruction of the environment, such as fish bombing, reef harvesting and mangrove cutting, have not been practiced anymore. This achievement is only an initial step because some of the activities have not been fully carried out. The designation of protection areas for mangrove, coral reef and sea grass accompanied by the drafting of management regulations are some of the hindered activities. The preparation of facilities and education-tourism infrastructures in Mecan Island has not been fully carried out, but the activities that have been carried out by KBK Sarang have been able to be carried out.

The establishment of KBK Sarang is a response to the increasing community awareness of the importance of natural resources to support their livelihood. The formation of KBK Sarang is a response to the increasing community awareness of the importance of natural resources to support their livelihood. The establishment of KBK Sarang is a response to the increasing community awareness of the importance of natural resources to support their livelihood. The establishment of KBK Sarang is a response to the increasing community awareness of the importance of natural resources to support their livelihood.
The success of the program is the decrease of mortality in setting.

The effort of marine protection area being initiated is also important. However, several activities have been optimal as well. The supporting facilities such as resting area or cleaning area for tourists after visiting the island are not adequate yet.

Mecan and Layang island actually have been chosen as location of tourism development because the environmental condition and tourism potential possessed in both areas can attract tourists. In those islands, KBK Sarang has developed sea park made of reef transplants. The activity can be replicated or adopted by other marine tourism developers in other areas. Specifically, they can ask during a meeting or disseminate the creation of reef transplantation park in those areas.

Related with other obstacles, until the present time, KBK Sarang has not carried out any meetings to designate coral reef, sea grass and mangrove protection area. This has led to the undesirable expectation for the activity. In facing this fact, approaches to the community and local government need to be enhanced as well. This will be the process that will lead to the creation of tourism area designated according to the needs of the community and local government.

Beside several obstacles being faced currently, KBK Sarang is also facing several others. The halt of program in setting up marine protection area is like the decrease of motor in setting.
Percut village is a village located in the east coast, Deli Serdang district, North Sumatra. This village is often passed by Ismail when he did community empowerment in the neighboring villages. Throughout 2012, when he became the Head of PILAR Foundation, Ismail made some time to stop over or even to visit the area in purpose for several times. From the visits, Ismail felt necessary to do something for the people in the village who mostly live as fishermen.

Crossing Percut village that can be reached by cruising along the river to the coast filled with mangrove and swamp, Ismail made some time to stop over or even to visit the area in purpose for several times. From the visits, Ismail felt necessary to do something for the people in the village who mostly live as fishermen.

Based from the visits as well, Ismail concluded that there should be an attempt to support children in their early childhood in the village. Ismail saw that children's spare time in Percut village can be directed to activities that have more quality than playing around. Therefore, Ismail concluded that there should be an attempt to support children in their early childhood in the village. Ismail saw that children's spare time in Percut village can be directed to activities that have more quality than playing around.

Therefore, Ismail decided to make it concrete by initiating the creation of a reading house as learning and playing house for the children after their school hour. The learning process is free from formal rules. The learning and playing house for the children after their school hour is free from formal rules. The learning process is free from formal rules. The learning and playing house for the children after their school hour is free from formal rules. The learning process is free from formal rules. Therefore, Ismail concluded that there should be an attempt to support children in their early childhood in the village. Ismail saw that children's spare time in Percut village can be directed to activities that have more quality than playing around. Therefore, Ismail decided to make it concrete by initiating the creation of a reading house as learning and playing house for the children after their school hour. The learning process is free from formal rules. The learning and playing house for the children after their school hour is free from formal rules. The learning process is free from formal rules.

By: Raja Shereer

Reading House
Bakau (Mangrove)
Ismail idea was then conveyed to several people who have school-age children. To the parents, Ismail expressed the idea of the space needed for children in their spare time after school in a more quality time. It took a while to ensure the people to buy into the idea. Thankfully, one of the people in Percut village spare his empty house to be used as such place.

That was the beginning of how Ismail realized his idea. He started to teach children of Percut village outside their school hour. He helped early children who have hardship during reading and writing by using visualization method. This learning activity is all started independently by the people.

Slowly but surely, Ismail's activity started to gain people's attention. They feel the benefit of reading house for the children. Other people start to encourage their children to take part. Some female teachers in primary school in Percut Village even often visit and spare their time to teach along. Further on, several youth in the village start to mobilize the reading house, one of them is a university student in Medan city, who becomes the daily administrator of this reading house.

The reading house then is developed through supports from various parties. One retail shopping-network in Indonesia provides computer and internet connection to the house. Other party provides numbers of books.

Ismail perceives the reading house as not only a media to provide education for the children in the village. But it is also a potential as the center of community activity. According to Ismail, a reading house is supposed to become the media for local people to discuss urgent matters happening in their area. It can also be a place for parents to discuss their children's education.

The reading house then is developed through supports from various parties. One retail shopping-network in Indonesia provides computer and internet connection to the house. Other party provides numbers of books.

Ismail perceives the reading house as not only a media to provide education for the children in the village. But it is also potential as the center of community activity. According to Ismail, a reading house is supposed to become the media for local people to discuss urgent matters happening in their area. It can also be a place for parents to discuss their children's education.

For the past years, mangrove was cut down to be made as wood or for the whole local people. The destruction of mangrove is an environmental matter that should be taken of particular attention. It is an environmental destruction that is happening in the area of mangrove destruction along the east coast. Ismail, from Percut Village, is going to take action to stop this destruction. He wants to protect the mangrove area as it is an important ecosystem for the area.

In the past, some part of the mangrove in the area once was a location of shrimp ponds. However, the attack of disease in the era of 90ies has made the ponds in the village being left and some of people became wood collectors and coal suppliers for commercial need. The mangrove area is threatened by several people opening the mangrove to be made shrimp ponds. The area is supposed to be protected according to the law of Indonesia but is not enforced.

Ismail then was conveyed to several people who have school-age children. To the parents, Ismail expressed the idea of the space needed for children in their spare time after school in a more quality time. It took a while to ensure the people to buy into the idea. Thankfully, one of the people in Percut village spare his empty house to be used as such place.

That was the beginning of how Ismail realized his idea. He started to teach children of Percut village outside their school hour. He helped early children who have hardship during reading and writing by using visualization method. This learning activity is all started independently by the people.

Slowly but surely, Ismail's activity started to gain people's attention. They feel the benefit of reading house for the children. Other people start to encourage their children to take part. Some female teachers in primary school in Percut Village even often visit and spare their time to teach along. Further on, several youth in the village start to mobilize the reading house, one of them is a university student in Medan city, who becomes the daily administrator of this reading house.

The reading house then is developed through supports from various parties. One retail shopping-network in Indonesia provides computer and internet connection to the house. Other party provides numbers of books.

Ismail perceives the reading house as not only a media to provide education for the children in the village. But it is also potential as the center of community activity. According to Ismail, a reading house is supposed to become the media for local people to discuss urgent matters happening in their area. It can also be a place for parents to discuss their children's education.
The mangrove in the area is also part of global biodiversity area. It is a place for migrant birds with conservation status. Some of them are birds migrating from Europe. Having threat to the mangrove forest in that village, Ismail and his friends in PILAR foundation think that the reading house should be positioned as media to discuss environmental problems. Ismail realizes that the trust gain by PILAR from the people through reading house has become a capital to do mangrove conservation campaign in the east coast of North Sumatra. Especially for the remaining mangrove forest in Percut village.

They started to engage a number of youth and fishermen to discuss. Local people are directed to be the first subjects to support the change of natural resource management in their own environment. From these activities, the first reading house initiated by Ismail later is known more with the name of "Bakau (literally translated as mangrove) Reading House". In the period of 2011-2012, PILAR Foundation and the people engaged in the planting of 30 thousand mangrove seedlings through support from RARE and Open University. Those seedlings are provided by the people and some are contributions from PILAR Foundation. In the period of 2012-2014, PILAR Foundation and the people engaged in the planting of 30 thousand mangrove seedlings through support from GEF-Small. PILAR got funding support from GEF-Small Grant Program to carry out education, training, discussion for the youth and fishermen group, especially for children and the youth, the alumni of the training are supported through reading house has provided conservation education for children and the youth.

Conservation training and group discussion with the young people is carried out to reach students in term of environmental education. It is a great way to reach students in term of conservation education. Mobile library is carried out to share their knowledge with the children and the youth, the alumni of the training are supported through reading house has provided conservation education for children and the youth. The alumni of the training are supported through reading house has provided conservation education for children and the youth.
Conservation for students, institutions and broader people. This nursery area will also be an education center of mangrove rehabilitation and mangrove restoration. However, in the medium, the nursery is not only to provide source of seedlings, but to enhance the growth of seedlings if the nursery is done with the success of growing race reaches to more than 97%. PILAR Foundation perceives the growth of the seedlings is very promising.

The youth are trained to be able to design conservation action and formulate their role in the conservation action of mangrove ecosystem in the coastal area of Percut village. This activity is carried out on regular basis. Several other activities such as training, environmental education and conservation are more or less have been done. They have managed to hold exhibitions and educations for school age children in the neighboring village. They have enabled to hold exhibitions and educations for school age children in the village by the local youth and fishermen overall. They have enabled to hold exhibitions and educations for school age children in the village.

Currently, Bakau Reading House in Percut village is almost managed by the local youth and fishermen overall. They have enabled to hold exhibitions and educations for school age children in the village. They have enabled to hold exhibitions and educations for school age children in the village.

Meanwhile, the activities to manage nursery and nurseries are still continue to be able to design conservation action for students, institutions and broader people. This nursery area will also be an education center of mangrove rehabilitation and mangrove restoration. However, in the medium, the nursery is not only to provide source of seedlings, but to enhance the growth of seedlings if the nursery is done with the success of growing race reaches to more than 97%. PILAR Foundation perceives the growth of the seedlings is very promising.
Funding support from GEF-SGP PILAR is also used to develop activity to increase sources of livelihood. Among others is building pilot of fish farming in water channel or in natural pond in the middle of mangrove forest. The pilot of fish farming is constructed as learning media for fishermen on the use of land sustainably and integrated growth of crabs and fishes surrounded by nets as fences.

The growth of crabs and fishes is observed and recorded in a daily monitoring table by member of group who is involved in the management of this pilot. There is only one plot of pond being constructed so far, however this silvofishery has given profit for involved members.

The development of Bakau Reading House in Percut village has made it to be chosen as one of the six creative and recreational community reading places (TBM, Taman Bacaan Masyarakat). It has accepted award from the Ministry of Education of the Republic of Indonesia, considered as one of the six creative and recreational community reading places (TBM, Taman Bacaan Masyarakat). It has accepted award from the Ministry of Education of the Republic of Indonesia.
Sea would be the first thing comes into mind when we hear the word coastal. Later in our mind we also think of beach, fishermen boats, salt, heat and probably several kind of plants such as mangrove, pandanus, and other types of coastal plants. The characteristics of that coastal are so on the contrary to rice. Making coastal area as a place to cultivate rice sounds like farfetched if it is not impossible. The question is, can rice grow in coastal area?

In Brebes, the question is answered simply. There is a pilot project of rice cultivation in coastal area by local farmers. The name is tadas paddy. Tadas means that it is resistant to the impact of sea water. The farmers started to plant tadas paddy on land equipped by the land belonging to Nurcholis and Sukadi, of 3,500 m² and 7,000 m² respectively. There are 9 paddy varieties being planted in the pilot project through the network from Indramayu. The farmers were able to develop 5 varieties which are bun, kaba, luba, daso dan jasmin.

The average harvest reached by using ubinan method, the average harvest reaches 5 tons per hectare.
to 5 tons per hectare. Then from the harvest, tadas paddy cultivation is being developed in several locations that got the impact of intrusion (the movement of saline water into freshwater aquifers) in 6 different locations. There are 12 varieties of paddy being planted: bun, kaba, luba, daso, sirapat siwangi, jasmin, simerak, siburung, impara 4, rangbo, and simelati. However, 50% of them are failed because they can't thrive in the soil high salinity. Only 50% of them can be found that can thrive in the soil high salinity. Only 6 of them are considered successful. This has erased the image of coastal that once was considered not suitable for paddy cultivation. The stage of paddy cultivation in this coastal area is considered successful by the farmers by using organic systems. The seed of this variety is being cultivated by the farmers using organic systems.
other commodities. Although compared to other type of paddies, the glucose rate of tadas paddy is actually lower. The no-solvency to the obstacles of pasca harvest has made the cultivation of tadas paddy just stopped.

There are actually positive ideas coming from the farmers themselves aside to the pasca harvest obstacles. The organic cultivation process of tadas paddy has been adopted by the farmers in Brebes to cultivate other plants, especially indigo vera (locally known as: tom). It is a wild plant growing in the coastal area and can be processed into a paste which is fairly an easy process. In training, the elementary school children of SD Pandansari are invited to draw back from the plant process. It is Tatang Elmi Wibowo, a partner from Bingkai Indonesia who has batik business and introduces the method to process indigo vera into a paste which is then used as batik dye for local community. From this introduction, the unknown potential of indigo vera is being utilized by local people. People enthusiasm to utilize the potential of plant that usually grows wild in their area has made Bingkai Indonesia to take initiative of training for local people in processing indigo vera into paste.

In training, the elementary school children of SD Pandansari are taught to process indigo vera into paste which is fairly an easy process. In training, the elementary school children of SD Pandansari are invited to draw back from the plant process. It is Tatang Elmi Wibowo, a partner from Bingkai Indonesia who has batik business and introduces the method to process indigo vera into a paste which is then used as batik dye for local community. From this introduction, the unknown potential of indigo vera is being utilized by local people. People enthusiasm to utilize the potential of plant that usually grows wild in their area has made Bingkai Indonesia to take initiative of training for local people in processing indigo vera into paste.

In training, the elementary school children of SD Pandansari are taught to process indigo vera into paste which is fairly an easy process. In training, the elementary school children of SD Pandansari are invited to draw back from the plant process. It is Tatang Elmi Wibowo, a partner from Bingkai Indonesia who has batik business and introduces the method to process indigo vera into a paste which is then used as batik dye for local community. From this introduction, the unknown potential of indigo vera is being utilized by local people. People enthusiasm to utilize the potential of plant that usually grows wild in their area has made Bingkai Indonesia to take initiative of training for local people in processing indigo vera into paste.

In training, the elementary school children of SD Pandansari are taught to process indigo vera into paste which is fairly an easy process. In training, the elementary school children of SD Pandansari are invited to draw back from the plant process. It is Tatang Elmi Wibowo, a partner from Bingkai Indonesia who has batik business and introduces the method to process indigo vera into a paste which is then used as batik dye for local community. From this introduction, the unknown potential of indigo vera is being utilized by local people. People enthusiasm to utilize the potential of plant that usually grows wild in their area has made Bingkai Indonesia to take initiative of training for local people in processing indigo vera into paste.

In training, the elementary school children of SD Pandansari are taught to process indigo vera into paste which is fairly an easy process. In training, the elementary school children of SD Pandansari are invited to draw back from the plant process. It is Tatang Elmi Wibowo, a partner from Bingkai Indonesia who has batik business and introduces the method to process indigo vera into a paste which is then used as batik dye for local community. From this introduction, the unknown potential of indigo vera is being utilized by local people. People enthusiasm to utilize the potential of plant that usually grows wild in their area has made Bingkai Indonesia to take initiative of training for local people in processing indigo vera into paste.
Have you ever heard the news on shrimp prices skyrocketing in the 90ies? Yes, by that time, shrimp was like the most favorite commodity. The price skyrocketed within short time in the market. Because of the appeal from the fantastic price of shrimp, coastal people especially in Mangkang, Semarang, and Central Java started to encroach mangrove forest that was once lived in the coast directly changed into shrimp ponds to meet market demand. However, that doesn’t last long. The shrimp pond turned down drastically by that time. Shrimp price then went down drastically. By that time, shrimp ponds started to be abandoned. People didn’t care for them anymore. People’s economic status to diminish because of the market price. People’s life in the area was also in a disordery. The hardship due to the unfavorable market price replaced by the unproductive shrimp ponds. The mangrove forest that was once acted as abrasion barrier has already gone, and coastal people especially in Mangkang, Semarang, and Central Java started to encroach mangrove forest. The threat of abrasion that people realized made the people realize that the threat of abrasion can’t be resolved by money coming from the shrimps’ business. This reality slapped them and made them revive. Mangkang people started to join hands planting their mangrove again. The mangrove being the most favorite commodity. The price skyrocketed within short time in the market. Because of the appeal from the fantastic price of shrimp.
planted are Rhizophora mucronata, Rhizophora apiculata, Avicennia marina, Sorensenia alba, Bruguiera gymnorrhiza. These seedlings were planted along Mangkang coast.

Mangrove forest is now healthy as before. Mangrove that was once being replaced by shrimp ponds, turned out to have more added value for the people, either from ecological or economic point of view. Mangrove forest acts as protector of abrasion for Mangkang area. Meanwhile, from the economic perspective, mangrove fruits from the Avicennia marina and Bruguiera gymnorrhiza types can be processed into crackers. Economic value within mangrove is not only in the fruits. Dead mangrove seedlings can have economic value by processing them into natural batik dye. The availability of abundant natural dye makes people to not look for chemical dye anymore. It can be used into natural ink, dye the batik, or even natural food colouring. The business of batik dye processing initiated by Mangkang people has become one of the attempts for mangrove conservation campaigns.

Yet, for printed batik, though it can't be used fully for hand-painted batik, these products can be processed into natural batik dye. The availability of abundant natural dye makes people to not look for chemical dye anymore. It can be used into natural ink, dye the batik, or even natural food colouring. The business of batik dye processing initiated by Mangkang people has become one of the attempts for mangrove conservation campaigns.
Printed batik motives are based on mangrove conservation, such as pedada, soreneratia, api-api dan avicennia motives. This effort has proven to increase people's economic. However, the government is being negligent to the conservation potential initiated by Mangkang people. The geographical location seems to be the reason for no commitment in giving any supports.

Live still goes on anyway. With or without government support, Mangkang people keep being self-reliant. They still run their batik business, process the natural batik dye, having raw material from the conservation of mangrove forest they have managed themselves.
Engkabang, which is how the Dayak Iban tribe in West Kalimantan refers to tengkawang. It is a type of shorea wood from dipterocarpaceae family. The composition of some Latin words meaning "fruit with two wings". Tengkawang (ilipe nut) fruit has a unique shape. If they are ripe, they will fall from the trees and hover like a helicopter because the wings are located at the top. But there are also some species that produce fruit with more than two wings, or only one wing and some even with no wings at all. The presence of trees that reproduce through the seeds of the fruit falling to the ground makes the river banks are not vulnerable to landslides. It also prevents the overflow of water from river into the village. Tengkawang is a perennial plant for the Dayak. Tengkawang tree is known as the tree of life. The Dayak community has used tengkawang fruit for various purposes of their lives. Over generations, Dayak community has used tengkawang fruit for cooking needs, be it as food seasoning or processed traditionally as medicinal potion.

By: Ipy Damayanti

LIFE

Protecting the Tree of
Today tengkawang is known as one of the raw materials for butter, energy replacing kerosene. Tengkawang can also be processed into one source of alternative products, pharmaceuticals and lubricants. While on the other hand, tengkawang oil is also used as an ingredient for cosmetic (frizz oil) and high-value foods such as processed chocolates. Today tengkawang is classified in red meranti wood type.

Tengkawang is favored by many forest animals. Old tengkawang tree that was no longer productive can be used for timber. In the world of wood, tengkawang trunks, tengkawang fruits, tengkawang seeds are highly nutritious and are
The multi-use of tengkawang doesn’t guarantee the rise of its prestige. Even many of tengkawang forests are now being sold by the community sold to companies and converted into oil palm plantation. The slow productivity is often used as a reason to sell the land in which tengkawang grows. It is undeniable though that people cannot make harvesting tengkawang fruits as livelihood because they cannot do it annually.

This reality makes the expansion of palm oil becomes more solid. Ancestral lands of the Dayak people where the trees of tengkawang usually grow are becoming increasingly eroded. The use of tengkawang oil in the community is also becoming rare because they buy processed palm oil for everyday purposes. This is not just happening on the Dayak community but also occurs in almost all villages in Indonesia. Those who previously use and process oil from their own land such as coconut oil have converted. Basically keeping the existence of tengkawang is not only ecologically important but will also maintain the tradition of the Dayak that has been there for hundreds of years.

Several types of tengkawang remain conserving. Several types of tengkawang remain protected and maintained amidst the expansion of palm oil. To keep the existence of tengkawang such as its dry beans and oil which can be sold in Malaysia, their access is much better and the access is closer in Malaysia, the oil is later used for various purposes of commercial products. The production of tengkawang such as its dry beans and oil which can be sold in Malaysia, their access is much better and the access is closer in Malaysia, the oil is later used for various purposes of commercial products. The production of tengkawang such as its dry beans and oil which can be sold in Malaysia, their access is much better and the access is closer in Malaysia, the oil is later used for various purposes of commercial products.

Program: Tengkawang Utilization (illipe nut) through Extraction, Research and Market of Tengkawang Oil to Increase Community Livelihood and to Protect Forest Area around the Sentarum Lake National Park.

Institution: Komunitas Tengkawang

In order to keep the trees from being cut down, the residents have planted several types of tengkawang, which are kept and maintained in the land where the trees of tengkawang usually grow. The residents continue to use the trees and extract the oil and beans from them for their own needs.

The issues being faced by some of remaining Dayaks who are still holding to their ancestral tree of life whose increasingly threatened should get better attention from the government. It is necessary to protect and conserve the forests where tengkawang grows. The slow productivity is often used as a reason to sell the land in which tengkawang grows. It is undeniable though that the land in which tengkawang grows is not only ecologically important but also maintains the tradition of the Dayak that has been there for hundreds of years.

This reality makes the expansion of palm oil becomes more solid. Ancestral lands of the Dayak people where the trees of tengkawang usually grow are becoming increasingly eroded. The use of tengkawang oil in the community is also becoming rare because they buy processed palm oil for everyday purposes. This is not just happening on the Dayak community but also occurs in almost all villages in Indonesia. Those who previously use and process oil from their own land such as coconut oil have converted.
with his father in law while hunting. explore Mount Tajam protected forest is originated from his exploration in the forest. His knowledge about Mount Tajam is from his exploration mount Tajam protected forest while carrying a gun. He liked to shoot birds, deer and antelopes. Our car entered a road located in between white pepper garden (locally called: sahang), pineapple garden, and vegetables garden in Batu Mentas region in the foot of Mount Tajam. Most of the roads to our destination were made of dirt roads, really challenging to be passed by vehicle during rainy season. Batu Mentas is taken from the name of the river that flows in the area of Mount Tajam protected forest, it is located in the buffer zone of Mount Tajam protected forests about 30 km from Tanjungpandan city in Belitung Island. This region is included in the administrate area of Badau District which is famous for white pepper and nutmeg. Some people also work in oil palm plantations located around this area. The region is an edutourist location, with natural biodiversity.

A few years ago, a young man called Salman, often explored Mount Tajam protected forest in the oil palm plantations located around Batu Mentas. His knowledge about Mount Tajam is originated from his exploration with his father in law while hunting. The setting sun greeted us when our car entered the road located in between white pepper garden and pineapple garden. And the road is named after Mount Tajam. By: Fiy Darmawijianto

The Forest Explorer: Salman
Previously, Salman used to work as a traditional tin miner, or famously called locally as ‘kerja kolong’ (literally translated as working in the burrow) because he would be working in the mine underground. Realizing the risk of his job, Salman started to focus in taking care of his fruits garden inherited from his parents, while continuing his hobby to explore the forest. According to him, he just wanted to walk around the forest and climbed the mountain, without hunting any animals. He also said, even though the area had many animals, the place was not suitable for tourism, so he continued to be active in the forest as an elephant monitor. However, the area became a real destination for the local community, and many people come every day to explore the forest and take pictures.
Salman is the only local person working in Batu Mentas. His family lives in Kelekak Datuk village, not far from Batu Mentas. His love for the forest made him know about things inside the forest in detail. In the past, when he often went to the forest, he could sense the presence of Tarsier from its smell which likes the smell of urine, and at night he could see the reflection from noticeable Tarsiers’ eyes. This animal likes to stay under lush leaves of relatively not tall tree, probably about as tall as the eye level of an adult. In the past, the community considered Tarsier as bad luck or known as ghost monkey, so they would often be killed during encounters.

When Salman took us to go inside the forest around Batu Mentas river, he pointed out a big colony of bees’ nest. Salman fluently explained that the tree used by the colony is called pao tree. The fruit is similar to sapodilla. According to him, how the bees choose its nest do not depend on the type of the tree but on the presence of gap within the tree, referred as renak in local language. This gap is often intentionally made by the forest honey farmers to invite bees making nest. If the wood being used is from the same tree, it is called sambitan. Meanwhile if the wood being used is from another tree, it is called sunggaran.

As a person who often harvests honey, Salman explained the way to approach colony without the risk of being stung. According to him, the most effective way is to bring a torch that’s already on fire for quite a while and retaining smoke. This smoke is the one that would protect us from bees’ sting.

Salman’s figure is a hub between Batu Mentas and the surrounding people. Even some of the nutmeg and pineapple farmers whom we met during our exploration in the forest and around his garden is quite known by the people. From his exploration in the forest and around his garden, Salman is quite known by the people. His family is a hub between damu farmers and the surrounding people.
Salman think the presence of Batu Mentas and its conservation-oriented program has been accepted well by the community. The presence of tourists is expected to help boosting the community's economy, either by shopping directly from the farmer, and by buying local arts such as mats made of pandan.

However, the process towards that direction was still far ahead, because these tourists don't make buying decisions to buy local products. One of the reasons is because there is no display or demonstration of how the products are made. Salman hopes that his presence not only maintains the good relationship between Batu Mentas and the people, but also makes Batu Mentas creatively start making tarsiers creative start making tarsiers creative. shrimp and plant products, with even the handicrafts there. One of the reasons is because there is no display or demonstration of how the products are made. Salman hopes that his presence not only maintains the good relationship between Batu Mentas and the people, but also makes Batu Mentas creatively start making tarsiers creative start making tarsiers creative.
We never ever imagined that the earthquake in Jogja in 2006 did not only take a lot of casualties and material possessions, but after the springs have dried up due to earthquake, it also took away spring sources. This happened in Semoyo village, Patuk Sub-district, Mount Kidul. Most of the springs in this region become dry, especially during dry season. Before earthquake these wells become dry, especially during dry season. The people's wells are the same as the springs. However, before earthquake, there was no water discharge from the springs. This condition became dry, there is no water discharge from the springs. Most of the springs in Semoyo village were surrounded by agricultural land and livestock. The effect of the die spring has caused the change of underground water flow in the Semiyo karst region.

Before earthquake, Semoyo village was surrounded by 25 springs. Even nine among those are spread in the settlement, becoming the most vital springs by 25 springs. Even nine among those are spread in the settlement, becoming the most vital springs. Before earthquake, Semoyo village was surrounded by 25 springs. Even nine among those are spread in the settlement, becoming the most vital springs.

By: Windiyo Setyono

Missing Wood.
Pershing Springs,
These livestock are not well taken care which made their sales values became low. This condition, then triggered people altogether to sell their woods in exchange for water to supply their need for 4-6 months during dry season. This has exacerbated the situation. Therefore, some of community member who realized about this bad condition took the initiative to make 5 infiltration wells in the location of the old springs. At that time, location of the well is still determined using a traditional way (ilmu titen), by guessing the well's location that would be not far from the old spring and based on the old stories from the elders.

Besides making infiltration wells, the local community also planted trees by terracing. However, location of terracing was determined only based on their knowledge without considering the benefit and long term area management. This condition went on until 2012.

On 2013, Arupa Foundation along with Serikat Petani Pembaharu (SPP, farmers union) outreached for Semoyo’s local people to think about spring’s management. Dried springs are expected to return to their springs management. Thus springs are expected to return to their previous role from the old spring and based on the old stories from the elders. This condition is an exacerbation of the situation. Therefore, some livestock are not well taken care which made their sales values become low.

From these efforts, the people in Semoyo village came to an agreement in protecting springs. The map of springs distribution in Semoyo village would be able to inform the community in doing management and protection activities around springs area. Besides, terracing was also constructed to decrease erosion and blocked water to be absorbed into soil. The making of rolak also helped to maintain top soils and land structure from the flow of rain water. Rolak was constructed to collect and direct rain water from critical area into infiltration wells. The making of rolak was constructed to handle erosion. Rolak was constructed to repair wells circular to handel erosion. Rolak was constructed to repair wells circular to handle erosion. Rolak was constructed to repair wells circular to handle erosion. Rolak was constructed to repair wells circular to handle erosion.

These livestock are not well taken care which made their sales values become low.
The efforts being done by the people were then followed by developing another 10 infiltration wells in springs area of Semoyo village. A year after the development (2014), these wells could provide most of the water needed during dry season. Not only by developing infiltration wells, the people of Semoyo village also planted trees such as banyan trees, fruits plants like durian and soursop fruit in the spring area and around them. These were carried out as efforts to restore springs and to protect them from destruction.

However, unfortunately the people in Semoyo village still have the culture of cutting trees down whenever there was a need to do so. They would cut trees down when there was a wedding party, circumcision party, the beginning of school for children, and for Eid. Responding to this culture, SPP (Serikat Petani) Semoyo village together with Radio Kayu company from Temanggung have cooperated with Agro Kayu company from Taman Negara to make sustainable certified wood of private forests. They began to make sustainable certified wood of private forests with privilege forest management unit that have received certification. They have cooperated with Radio Kayu company from Taman Negara to make sustainable certified wood of private forests.

These initiatives have increased the local economy because of selling raw crops produced in Semoyo village. Farmers have learned to process local produce from bananas and cassava, and sell them for larger income. This method was already considered not enough because of selling raw crops would only result in small income. To overcome this, some farmers began to plant productive plants under forest trees. They planted productive plants under forest trees. However, this area was also taken initiative to practice intercropping in the forest where these also were taken initiative to practice intercropping in the forest. As a result of this culture, the farmers in Semoyo village realized the effect of 2006 earthquake, the farmers in Semoyo village have done with that kind of pattern. The people in Semoyo village have done with that kind of pattern. Even though most of the water needs have been fulfilled nowadays, the people in Semoyo village still have the culture of cutting trees down. They would cut trees down when there was a need to do so. They would cut trees down when there was a wedding party, circumcision party, the beginning of school for children, and for Eid. Responding to this culture, SPP (Serikat Petani) Semoyo village together with Radio Kayu company from Temanggung have cooperated with Agro Kayu company from Taman Negara to make sustainable certified wood of private forests with privilege forest management unit that have received certification. They have cooperated with Radio Kayu company from Taman Negara to make sustainable certified wood of private forests.

These initiatives have increased the local economy because of selling raw crops produced in Semoyo village. Farmers have learned to process local produce from bananas and cassava, and sell them for larger income. This method was already considered not enough because of selling raw crops would only result in small income. To overcome this, some farmers began to plant productive plants under forest trees. They planted productive plants under forest trees. However, this area was also taken initiative to practice intercropping in the forest where these also were taken initiative to practice intercropping in the forest. As a result of this culture, the farmers in Semoyo village realized the effect of 2006 earthquake, the farmers in Semoyo village have done with that kind of pattern. The people in Semoyo village have done with that kind of pattern. Even though most of the water needs have been fulfilled nowadays, the people in Semoyo village still have the culture of cutting trees down. They would cut trees down when there was a need to do so. They would cut trees down when there was a wedding party, circumcision party, the beginning of school for children, and for Eid. Responding to this culture, SPP (Serikat Petani) Semoyo village together with Radio Kayu company from Temanggung have cooperated with Agro Kayu company from Taman Negara to make sustainable certified wood of private forests with privilege forest management unit that have received certification. They have cooperated with Radio Kayu company from Taman Negara to make sustainable certified wood of private forests.

These initiatives have increased the local economy because of selling raw crops produced in Semoyo village. Farmers have learned to process local produce from bananas and cassava, and sell them for larger income. This method was already considered not enough because of selling raw crops would only result in small income. To overcome this, some farmers began to plant productive plants under forest trees. They planted productive plants under forest trees. However, this area was also taken initiative to practice intercropping in the forest where these also were taken initiative to practice intercropping in the forest. As a result of this culture, the farmers in Semoyo village realized the effect of 2006 earthquake, the farmers in Semoyo village have done with that kind of pattern. The people in Semoyo village have done with that kind of pattern. Even though most of the water needs have been fulfilled nowadays, the people in Semoyo village still have the culture of cutting trees down. They would cut trees down when there was a need to do so. They would cut trees down when there was a wedding party, circumcision party, the beginning of school for children, and for Eid. Responding to this culture, SPP (Serikat Petani) Semoyo village together with Radio Kayu company from Temanggung have cooperated with Agro Kayu company from Taman Negara to make sustainable certified wood of private forests with privilege forest management unit that have received certification. They have cooperated with Radio Kayu company from Taman Negara to make sustainable certified wood of private forests.
Pembaharu has developed a micro financial organization (LKM) which is called forest bank. This financial organization gives loan to trees' owners in private forest. People’s needs of monetary would be fulfilled by forest bank, as long as they would guarantee their trees to the micro financial organization. Community is expected to postpone the logging before its time. These trees which have been protected in private forest of Semoyo Village would grow big naturally and be more useful. They will support a great deal to spring conservation effort in the area. The forest wood would not disappear like mist. Springs would be more invigorating.

Program: Conservation of private forest through women based soil and water conservation
Institution: Arupa
Her name is Istiqomah. A middle age woman who lives in Sukomakmur, Magelang, Central Java. As strong as the meaning of her name, she started conservation in Temanggung, Central Java by planting Bioma tree. This conservation effort has begun out of her concern when she saw mountains have been converted to agricultural land. Istiqomah saw many forests being converted to agricultural land and dominated planted by vegetables which would be vulnerable to landslide during rainy season. Therefore, she had the initiative to do conservation even though she has faced a lot of hindrances. The most difficult obstacle faced by Istiqomah when she started her conservation effort reasons were not good for growing in their agricultural land were not good for agricultural land. The understanding of Temanggung people that trees growing in their agricultural land were not good for growing in their agricultural land were not good for agricultural land was the most difficult obstacle faced by Istiqomah when she started her conservation effort.

First, especially by asking her husband to join her. Despite the hindrances, she started this effort within her family to do conservation even though she has faced a lot of hindrances. Therefore, she had the initiative to do conservation even though she has faced a lot of hindrances. Despite the hindrances, she started this effort within her family to do conservation even though she has faced a lot of hindrances. Therefore, she had the initiative to do conservation even though she has faced a lot of hindrances.

By: Irang Emmy Winobro

**Forest**

Women Spirit in Saving
conservation in barren land, that planting trees would not affect their vegetables. Slowly but sure, her effort to convince her husband was successful. In Temanggung, most of the people were not without good reasons. In Taman Agro, most of the people were not working. Good reasons. In Temanggung, most of the people were working. Good reasons. In Temanggung, most of the people were not working. Good reasons. In Temanggung, most of the people were not working. Good reasons. In Temanggung, most of the people were not working. Good reasons. In Temanggung, most of the people were not working. Good reasons. In Temanggung, most of the people were not working. Good reasons. In Temanggung, most of the people were not working. Good reasons.

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produce anything on your land?" asked many of the people."

"How come you planted that would not produ
started to realize the importance of land conservation, another
hindrance came from their husband, who refused and still hold the
previous thinking.
To convince the men in her village, Istiqomah along with other
women who started to be aware of the importance of conservation
did study comparison to Dieng, East Java. Dieng is a plantation
region that has done forest conservation around agricultural land
region that has done forest conservation around agricultural land
which did not damage any vegetables in the area. In this study
women who started to be aware of the importance of conservation
previousthinkings.
started to realize the importance of land conservation, another

Institution: Bioma
Program: Development of Productive Economy Units and Alternative
Energy in Micro Economic Organization based on Conservation in
Potorono Mountains and Mount Sumbing area.
Cikapundung is a river that divides Bandung city. Along this river you would see some settlement and business center. One of the settlements crossed by Cikapundung river was Taman Sari sector which was located in the center of Bandung city.

Just like many other rivers in Indonesia, Cikapundung's condition was not far different. People's stigma that consider river as a waste bin. People are perceived as a more economical way, People are those were the practical thought of most people. And the river would be clean again.

"Well if there was a flood, all the waste would flow down the river, so it's easy to clean up."

This practice of people's stigma has made the river to be polluted with solid and liquid waste. People have been used to throw rubbish into the river as a place to dump waste. This is what made the river condition was not far different from the rest of Indonesia's rivers. Just like many other rivers in Indonesia.

Cikapundung river was Taman Sari sector which was located in the center of Bandung city. Along this river, you would see some settlements and business center. Cikapundung is a river that divides Bandung city.

By: Sofyan "Fyniks"

The River is not a Trash
For common people, the indicators of bad river could be expressed simply. There is no longer variation of fish species was one proof of a bad river’s condition. The color and smell became other indicators which cause parents to forbid their children to bathe in the river. While long ago, river is a fun play area for them when they were young. Another indicators of how the river has been polluted was the floating of all kinds of materials such as plastic bags, plastic bottles or even spring beds. The cleaning of all kinds of materials such as plastic bags, plastic bottles that cause parents to forbid their children to bathe in the river. which cause parents to forbid their children to bathe in the river. The color and smell became other indicators of how the river’s condition. The cleaning of all kinds of materials such as plastic bags, plastic bottles, or even spring beds. For common people, the indicators of bad river could be expressed.
Program implementation in Taman Sari was not tied with donor’s project, in this case GEF. Greenaration along with Komunitas Kuya 13 and the people of Taman Sari sat together mapping all the problems related to waste management there. From problems’ mapping, activities that can be supported by GEF project were then assessed and agreed upon. Meanwhile, activities that could not be supported would not mean that they could not be done. Together, seeking for support from other parties. Whereas the most important support was from the community themselves.

Komunitas Kuya 13 was one of the examples of how willing the people who lived along the banks of Cikapundung river, Taman Sari–Bandung Wetan in managing the river. Their interest through real actions in managing river was not motivated by presence of project or Governmental program. They were motivated because of their concern of Cikapundung condition as part of their own lives. The river which should be a patio and part of a garden, has sadly, the opposite condition.

The presence of Komunitas Kuya 13 became an unseparated part of Waste Management Project for Biodiversity (MASUK RT) which was carried out by Greeneration with the support from GEF-SGP. Biodiversity was not only understood by Komunitas Kuya 13 and Greeneration, but also by the community around the river. The entrance of the MASUK RT program by Greeneration Indonesia gave a more diverse nuance toward environmental management around the community. Garbage was not only getting picked up from the inappropriate places and put back, but now also processed and developed. For some people, garbage has even become their livelihood.

Despite the success of the MASUK RT program, there was still a lot of work that needed to be done. The awareness and synergy in managing the river was not enough. The problem of waste management was still hampered by problems, integrated river management was still not balanced by the presence of varied existing activities. The activities were not able to balance the various existing problems, so that the river condition was still not improved. The presence of Komunitas Kuya 13 was one of the examples of how willing the people who lived along the banks of Cikapundung river in managing the river.

However, even though these communities were concerned about the river, they were also concerned about their livelihood. People, especially those who live near the river, have adapted to collecting garbage as a way to earn a living. This is why the presence of Komunitas Kuya 13 was important in promoting waste management in the area. The river should be a patio and part of the garden, and not a dumpsite.

The problem of waste management in the area was still hampered by the administrative system through a system of regional autonomy. Their existence still could not face a weak legal enforcement and people’s awareness who still consider the river as their backyard or waste bin.

Program implementation in Taman Sari was not tied with donor’s project, in this case GEF. Greenaration along with Komunitas Kuya 13 and the people of Taman Sari sat together mapping all the problems related to waste management there. From problems’ mapping, activities that can be supported by GEF project were then assessed and agreed upon. Meanwhile, activities that could not be supported would not mean that they could not be done. Together, seeking for support from other parties. Whereas the most important support was from the community themselves.

Komunitas Kuya 13 was one of the examples of how willing the people who lived along the banks of Cikapundung river, Taman Sari–Bandung Wetan in managing the river. Their interest through real actions in managing river was not motivated by presence of project or Governmental program. They were motivated because of their concern of Cikapundung condition as part of their own lives. The river which should be a patio and part of a garden, has sadly, the opposite condition.

The presence of Komunitas Kuya 13 became an unseparated part of Waste Management Project for Biodiversity (MASUK RT) which was carried out by Greeneration with the support from GEF-SGP. Biodiversity was not only understood by Komunitas Kuya 13 and Greeneration, but also by the community around the river. The entrance of the MASUK RT program by Greeneration Indonesia gave a more diverse nuance toward environmental management around the community. Garbage was not only getting picked up from the inappropriate places and put back, but now also processed and developed. For some people, garbage has even become their livelihood.

Despite the success of the MASUK RT program, there was still a lot of work that needed to be done. The awareness and synergy in managing the river was not enough. The problem of waste management was still hampered by problems, integrated river management was still not balanced by the presence of varied existing activities. The activities were not able to balance the various existing problems, so that the river condition was still not improved. The presence of Komunitas Kuya 13 was one of the examples of how willing the people who lived along the banks of Cikapundung river in managing the river.
inseparable part with people’s life. It would be a part of livelihoods, playground, a tourist place and sources of income for the people. Synergy of community program with project initiated by outside party, same perceptions and objectives as well as transparency became keys of how project to empower people could reach the joint goal. Community programs which could not be supported as a whole would not be an obstacle. The program initiator would not run away to find another support source according to the expectation and the needs of the people.

Link with administrative village (kelurahan) or local government and the needs of the people. A key of how project to empower people could reach the joint goal. Community programs which could not be supported as a whole would not be an obstacle. The program initiator would not run away to find another source of support according to the expectation and the needs of the people. Synergy of community program with project initiated by outside party.
Sered is a village in Madukara Sub-district, Banjarnegara District, Central Java. Sered village was located in sub area of watershed. Tulis has a hilly topography with steep slope of 60% of the village area. This condition makes Sered village as an area prone to flood and landslides. Part of the village is topographically with steep slope of 60% of the village located in sub area of watershed. This has a hilly and rugged terrain. Sered village was located in Madukara Sub-district, Central Java, Banjarnegara District. Aware of the limitation of the village condition, Soetarno, the Head of Sered village made an initiative to develop cultivation of cassava. The community wondered to see their Head planted his land with cassava. Though there were many other people in Indonesia at this time, including the people in Sered village, rice has been the main food source for most of the people. "Were there no more rice to be eaten, Mr.?” asked them to Soetarno.

"There were no more rice to be eaten, Mr.?” asked them to Soetarno. Even though there were many other food sources that could be consumed, however lack of knowledge caused many tubers vegetation haven't been used as food. One of them is cassava, which was one of the solutions in the middle of food crisis that had happened this time. Rice has been the main food source for most of the people in Indonesia at this time. It had not yet addressed by the government to be planted by the community.
This idea was developed by Serayu women group in Sered Village. Furthermore, the development of cassava flour was also intended as a form of response to climate change that could be seen. Members of Serayu women group understood that to respond to climate change, they have to start from their own area. The development of cassava flour into Mocaf flour was initiated as the most appropriate innovation to be applied at Sered Village.

Mocaf flour is an alternative to substitute wheat flour, produced from cassava that has been modified by fermentation. This flour can reduce wheat consumption about 20-30% and it can be produced cassava flour similar to wheat flour. It could be a mixture of wheat flour of 30%-100% and it can reduce wheat flour consumption by 20-30%.

The fermentation process produces a different texture compared to ordinary cassava flour. The secret key to making Mocaf flour lies on the fermentation process. This process produces a different texture compared to ordinary cassava flour. The fermentation process produces a different texture compared to ordinary cassava flour.

Compared to the regular cassava flour or gaplek flour, Mocaf flour has a better appearance that is: whiter, softer, and no frowzy. The fermentation process produces a different texture compared to ordinary cassava flour. Meanwhile, gaplek flour is made from cassava that has been peeled, cut into pieces, washed, dried, and then ground into flour. From cassava that has been peeled, cut into pieces, and washed, gaplek flour is made. The difference between Mocaf flour and gaplek flour lies on the fermentation process. This process produces a different texture compared to ordinary cassava flour.
According to literature, dissolved fiber in mocaf flour is higher than gaplek flour. Its calcium content is higher than rice/wheat and the oligosaccharide, the cause of flatulence has been hydrolyzed. This flour has the potential of swelling power equivalent to wheat type II (middle protein level). Its digestive power is also higher than gaplek.

MOCAF nutrients content are: Dry Material: 87.99%, Water content: 12.01%, Ash content: 1.44%, Organic material: 98.56%, Crude Fiber: 2.39%, Crude Fat: 0.83%, Crude Protein: 3.42%.

Cassave lier, which is considered toxic, now can be processed into a better quality of tapioca flour compared to regular cassava flour. "This is one of the example of the way public should respond to something terrible that could be useful. From cassave lier to be addressed the current food crisis. Not just by complaining but trying to make something that could be useful."

Institution: Serayu Dua
Program: Utilization of Cassava Lier (toxic cassava) to a food product substituting wheat flour and herbal material based on women in Sub Tulis Watershed.

Institution: Serayu Dua
Program: Utilization of Cassava Lier (toxic cassava) to a food product substituting wheat flour and herbal material based on women in Sub Tulis Watershed.

According to literature, dissolved fiber in mocaf flour is higher than gaplek flour. Its calcium content is higher than rice/wheat and the oligosaccharide, the cause of flatulence has been hydrolyzed. This flour has the potential of swelling power equivalent to wheat type II (middle protein level). Its digestive power is also higher than gaplek.
Chemical fertilizer and pesticide is one of the results of the family's need for fresh food. The paddy field has been planted without any chemical fertilizer and pesticide, no longer using any chemical fertilizer and pesticide. The green and yellowish color of the paddy field here is seen and cool temperature. Amidst the buildings, the paddy field makes the area has a beautiful scenery.

Through her social media account, Nissa Wargadipura tried to reach at least 4,973 of her friends' network to manifest the importance of self-reliance in a more concrete sense. If each of her friends had 1,000 other friends, then a total of 4,973,000 people could access the campaign carried out by the manager of this Ath-Thaariq Ecological Pesantren (Islamic School), which is among Mount Papandayan, Mount Guntur, and Mount Cikurai that makes the area has beautiful scenery and cool temperature. Among its buildings, there are green and yellowish color of paddy field that is seen and cool temperature. Amidst the buildings, the paddy field makes the area has a beautiful scenery.

By: Sofia "F"anks

Manifesting Self-Reliance

Conserving Seed
Less than 500 square meter.

As it is in fact, land ownership for farmers in Java Island at this time is not all of very brisk assets than they did not have a bargaining value have this. According to them, the most fundamental production instrument for farmers when they did not have farmers from villages to villages. Practicing self-reliance in the real meaning became the goal of this activist’s couple, Nissa Wargadipura and Kang Ibang, her husband. Beforehand, both of them are the founder and mobilizer of Syarikat Petani Pasundan (SPP). Dealing and have interest in environmental protection. Both of them are the founder and mobilizer of SPP. Activists couple, Nissa Wargadipura and Kang Ibang, her husband. Practicing self-reliance in the real meaning became the goal of this.

Dry leaves, fruits skin even manure are processed into fertilizer, fish ponds, diverse medicinal plant and different kind of food crops from an activity carried by Ath-Thaariq Ecological Pesantren. Dealing and have interest in environmental protection. Both of them are the founder and mobilizer of SPP. Activists couple, Nissa Wargadipura and Kang Ibang, her husband. Practicing self-reliance in the real meaning became the goal of this.

This idea was an option as media to actualize of what has been fought for through advocacy for farmers rights and organizing farmers for通過 advocacy for farmers rights and organizing farmers. According to them, land is the most fundamental production instrument for farmers when they did not have this very brisk assets than they did not have a bargaining value have this. According to them, the most fundamental production instrument for farmers when they did not have farmers from villages to villages. Practicing self-reliance in the real meaning became the goal of this activist’s couple, Nissa Wargadipura and Kang Ibang, her husband. Beforehand, both of them are the founder and mobilizer of Syarikat Petani Pasundan (SPP). Dealing and have interest in environmental protection. Both of them are the founder and mobilizer of SPP. Activists couple, Nissa Wargadipura and Kang Ibang, her husband. Practicing self-reliance in the real meaning became the goal of this.

This idea was an option as media to actualize of what has been fought for through advocate for farmers rights and organizing farmers from village to village. According to them, land is the most fundamental production instrument for farmers when they did not have this very brisk assets than they did not have a bargaining value have this. According to them, the most fundamental production instrument for farmers when they did not have farmers from villages to villages. Practicing self-reliance in the real meaning became the goal of this activist’s couple, Nissa Wargadipura and Kang Ibang, her husband. Beforehand, both of them are the founder and mobilizer of Syarikat Petani Pasundan (SPP). Dealing and have interest in environmental protection. Both of them are the founder and mobilizer of SPP. Activists couple, Nissa Wargadipura and Kang Ibang, her husband. Practicing self-reliance in the real meaning became the goal of this.

This idea was an option as media to actualize of what has been fought for through advocate for farmers rights and organizing farmers from village to village. According to them, land is the most fundamental production instrument for farmers when they did not have this very brisk assets than they did not have a bargaining value have this. According to them, the most fundamental production instrument for farmers when they did not have farmers from villages to villages. Practicing self-reliance in the real meaning became the goal of this activist’s couple, Nissa Wargadipura and Kang Ibang, her husband. Beforehand, both of them are the founder and mobilizer of Syarikat Petani Pasundan (SPP). Dealing and have interest in environmental protection. Both of them are the founder and mobilizer of SPP. Activists couple, Nissa Wargadipura and Kang Ibang, her husband. Practicing self-reliance in the real meaning became the goal of this.
Nissa has an opinion that the lack of land ownership is in line with the bad image of a farmer perceived by the people. Because of this bad image, farmer is placed as if low class. Parents’ encouragement to their children to go to college so they could work in the office and not working as farmer anymore, for example, require them to sell their productive asset (their land) to pay for the education. This is exacerbated with the tendency to sell land just to meet consumptive needs, or even to change profession to become a motorcycle taxi. This low image of a farmer would continue to plunge if there were no efforts to honor this position and role. Because of that, Teh, an intimate call for Nissa Wargadipura along with her husband, Kang Ibang, have the initiative to campaign about the noble position and role of farmers in the community where they are. The main theme of the campaign is to honor farmer, which is carried out through Quran reciting or ecological education that they managed.

To become a farmer does not mean they will become part of the low class community. Farmers would not be lacking of resources. Therefore, dependency experienced by the farmers has to be broken, besides maintaining the land, also the existence and availability of seeds are indispensable. The burden of the farmer is not only the farm activity, but also the family needs that have to be fulfilled. The seeds that have been developed recently, which claim to be superior seeds that have been developed recently, which claim to be superior to the old seeds. To break this dependency, it has to start from seeds. The ecological education started to collect local seeds and cultivate seeds that have been developed recently. The farmers have to be trained to take care of the seeds, not just the land. This support from GEF is also to build the capacity of the people to take care of the seeds, besides maintaining the land, also the existence and availability of seeds.

By GEF support, the ecological school started to collect and cultivate local seeds. It is also to uncover various seeds from the field and to honor the farmers. Farmers would not be lacking of resources.
not affect the sustainability of seeds’ conservation program and environment management for farmer’s self-reliance. This has been proven from the expansion of the movement that started from the suburb of Garut city. Exchange of seeds and seedlings have been done by many parties. One of them is with Mining Advocacy Network in the form of seed terminal. The products of ecological pesantren such as herbs, seeds and seedlings have been available in some places.

Profit is not the main goal. The growing awareness to provide its own food and even medicines from local plants was more important. To provide healthy food could have an impact on increasing community quality of life. Therefore self-reliance could gradually be realized, whether in the rural or urban area.

Currently, the ecological school of Ath-Thariq Pesantren continues to carry out ecological activities that support farmers’ self-reliance. They also shared information about their activities through their ecological pesantren blog; http://pesantrenekologi.blogspot.co.id. They also shared information about their activities through their ecological pesantren blog; http://pesantrenekologi.blogspot.co.id.

In some places, pesantren such as herbs, seeds and seedlings have been available. The products of ecological network in the form of seeds terminal. The products of ecological network in the form of seeds terminal. These have proven from the expansion of the movement that started from the suburb of Garut city. Exchange of seeds and seedlings have been done by many parties. One of them is with Mining Advocacy Network. This has been proven from the expansion of the movement that started from the suburb of Garut city. Exchange of seeds and seedlings have been done by many parties. One of them is with Mining Advocacy Network.

Program: Strengthening, Restoring and Appreciating Biodiversity
In the era of colonialism, pesantren expanded its functions. Pesantren became the basis of national defense against the colonist to gain independence. As an institution that guides moral and cultural justice through pesantren mostly uses cultural (tarbawiyyah) functions, which give signs that social (ilmiyyah) functions, religious (diniyyah) functions, and educational functions were also performed. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process.

Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process.

Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process. Pesantren had a role also in all kinds of fields, directly related to pesantren's activities or outside of it, starting from an effort to educate people, Pesantren had an important role in the history of education in the country and contributed significantly to this process.
the consequence of non-cooperative attitude toward the colonist, pesantren has actively involved in doing movements against the Dutch. The community counted on their expectation for freedom through the pesantren struggles. At this moment, Indonesia is facing continuous multi crisis era. Our economic-politic system has changed the face and condition of social, ecological and economic environment.

Excessive development policies in many regions have caused dehumanization, poverty and impoverishment, including damage in social-ecological order. At the same time, community empowerment’s practices also adopted a financial economical system that actually kills community’s power systematically. This was caused by the no connection between community’s empowerment with production-consumption base and energy materials in the community. Economic globalization is the commander of this continuous damage. The form of agreement for free trade lead by WTO, World Trade Organization, has created a liberalization of trade will destroy economic base and energy materials in the community. The community’s empowerment with production-consumption base and energy materials in the community has been lost by the global system. Globalization purposely also destroys and neglects biodiversity, social-ecological order, and economic environment. Our planet earth is facing continuous multi crisis era. Our common struggle is to make sure that the exercise of non-cooperative attitude toward the colonist
The aforementioned background encouraged the birth of Ath Thaariq Pesantren. It is the pesantren which was used as a place to resist the global system which would not favor the working class. It is also a learning place without borders which encourages the restoration of social-ecological and economic destruction. Simple movements are encouraged by the recovery of their environment, which is useful for the community and productivity. They are able to solve social problems and have a higher self-awareness. They have a different direction of meaning where they have independence and a whole new direction to build human dignity toward a liberating education system. These goals are manifested by implementing "liberating education" to build human dignity toward a better direction.

The aforementioned goals are manifested by implementing "liberating education" system to build human dignity toward a better direction. The comprehensive education system will then transform their knowledge into practical knowledge. The ideology of this pesantren is dedicated to educate and produce female leaders who will become leaders of their community. They will transform their knowledge into practical knowledge and translate their knowledge into action. They will transform their knowledge into practical knowledge by implementing "liberating education" system to build human dignity toward a better direction.

The aforementioned goals are manifested by implementing "liberating education" system to build human dignity toward a better direction. The comprehensive education system will then transform their knowledge into practical knowledge. The ideology of this pesantren is dedicated to educate and produce female leaders who will become leaders of their community. They will transform their knowledge into practical knowledge and translate their knowledge into action. They will transform their knowledge into practical knowledge by implementing "liberating education" system to build human dignity toward a better direction.

Globalization

The aforementioned goals are manifested by implementing "liberating education" system to build human dignity toward a better direction. The comprehensive education system will then transform their knowledge into practical knowledge. The ideology of this pesantren is dedicated to educate and produce female leaders who will become leaders of their community. They will transform their knowledge into practical knowledge and translate their knowledge into action. They will transform their knowledge into practical knowledge by implementing "liberating education" system to build human dignity toward a better direction.

The aforementioned goals are manifested by implementing "liberating education" system to build human dignity toward a better direction. The comprehensive education system will then transform their knowledge into practical knowledge. The ideology of this pesantren is dedicated to educate and produce female leaders who will become leaders of their community. They will transform their knowledge into practical knowledge and translate their knowledge into action. They will transform their knowledge into practical knowledge by implementing "liberating education" system to build human dignity toward a better direction.
Resistance could be implemented in any shape, such as: maintaining local culture like gotong royong (cooperation) and self-reliance. This was a movement opposing individualism, individual competition, both were the impact of free market. Every student is encouraged to work hard, creative, innovative, and to think critically especially in the field of agricultural production and local farm. These are attempts to make them get used to be more independence, having no dependence to outside products which are not necessarily benefiting their future.

Pesantren always emphasize education that is based on local resources. Because, at this time, it is very difficult to produce food all over the world, either because of climate change or competition of land use for food and various other needs, or use of food resources as bio-energy source. Ath Thaariq Pesantren educates its students to consume variety of foods, not just rice as carbohydrate’s source, but also corn, taro, wild yam, cassava and breadfruit. Indonesia is very rich, we have a wide range of local food to cover our food demand in the country. Seventy seven of carbohydrates plants species available are recorded. Meanwhile, the government is relying on rice and imported wheat. Protein intake from local beans, local vegetables along with local fruits are likewise. All are self-produced, because local products are more resilient, environmentally friendly and safe for health.

By promoting natural concept, this pesantren is hoping to be an example of self-localization movement, an expression of resistance, which seeks to do and fulfill every finding on education that is based on local resources, without depending on imported material. By doing this, they are seeking to be independent, with no dependence on outside products which are not necessarily benefiting their future.

Pesantren Ath Thaariq also becomes a part of ‘self-localization’ movement. By promoting natural concept, this pesantren is hoping to be an educational model that seeks to develop education naturally. Learning from all beings in the universe. Nature becomes the study place, as a media and teaching material, and as an object lesson. Educational method implemented here is the form of easy methods, ranging from games, fun discussion, the discussion of yellow book, and lessons from the Koran that are not burdensome, relaxed and lessons from the Koran that are not burdensome. Educational method implemented here is the form of easy methods, ranging from games, fun discussion, the discussion of yellow book, and lessons from the Koran that are not burdensome. Educational method implemented here is the form of easy methods, ranging from games, fun discussion, the discussion of yellow book, and lessons from the Koran that are not burdensome. Educational method implemented here is the form of easy methods, ranging from games, fun discussion, the discussion of yellow book, and lessons from the Koran that are not burdensome. Educational method implemented here is the form of easy methods, ranging from games, fun discussion, the discussion of yellow book, and lessons from the Koran that are not burdensome. Educational method implemented here is the form of easy methods, ranging from games, fun discussion, the discussion of yellow book, and lessons from the Koran that are not burdensome.
Pesantren Ath Thaariq would like to show that the simplest activity being carried out every day can help restore our declining planet. Don't delay any longer. It's time for everybody to take part in their own way and as soon as possible. Making sure all people use social ecological and economical saving paradigm that favors to all people. Let us start from what we can do, hopefully. By being carried out every day, can help restore our declining planet. The future, they become a creative adult with a positive soul.

By Nissa Wargadipura

Head of Ecological Ath Thaariq Pesantren Garut

Institution: Pesantren Ath-Thariq
Program: Strengthening, Restoring and Appreciating Biodiversity.