

Creating a Sustainable Conservation Approach in Papua New Guinea: A key tool for Biodiversity Conservation Management, Climate Change Mitigation and Socioeconomic Development for Forest Developing Countries

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Abstract

Climate change effect is a global concern. It is affecting the local communities at large. The love for money is the root cause for the increasing socioeconomic, political and environmental problems around the world. Government, Conservation Groups and Organization, Institution and Researchers are promoting the name climate change. The Global Climate Change Goals and Mission are *to “empower individuals and their communities to engage in solutions to climate change”*. Is this achievable within Papua New Guinea context? Creating a Sustainable Conservation Approach is a key tool for Biodiversity Conservation Management, Climate Change Mitigation and Socioeconomic Development for Forest Developing Countries like Papua New Guinea”. A case study for Mauberema Ecotourism and Conservation Area in Simbu Province, Papua New Guinea is presented here. The potential and challenges presented here require a dedicated and committed team of players from all levels, from the top Government level down to the community and individual level to work together to achieve effectively a sustainable conservation approach and address many socioeconomic and environmental problems in Papua New Guinea and the world at large.

Key Words: Sustainable Conservation Approach, Climate Change Mitigation, Socioeconomic Development and Forest Developing Countries

Introduction

The biggest crisis facing humanity is climate change. The global change in earth average temperature has resulted in many environmental, socio-economical and geopolitical problems around the world (Wired 2018). One of the many key tools to climate change mitigation is through conservation of the world remaining tropical forest and its biodiversity. However, there is obvious relationship between sustainable use of natural resource, conservation and development in developing region (Fitzgerald 1994). Subsequently, in Papua New Guinea (PNG), conservation offers many challenges when considering intrinsic value of natural resources within the conservation area. Many rural and indigenous people in developing regions of the world depend on flora and fauna for food and income (Robinson & Redford 1991). Consequently the need for food and money has caused many environmental damages and resulted in many socioeconomic and political problems in PNG today. Creating a sustainable conservation approach is a key tool for biodiversity conservation and management, climate change mitigation and socioeconomic development for forest developing countries, especially PNG. Therefore, social investment in community based organization and local community conservation center is important in linking environmental and social benefit to the community while protecting the natural environment and as well addressing many socioeconomic problems affecting the rural community (Big Society Capital 2018).

Review of Mauberema Ecotourism and Conservation Area

Mauberema ecotourism and conservation is a proposed conservation area .It is managed by the Mauberema Ecotourism, Nature Conservation, Education, Research and Training Center (MENCERTC), a subsidiary center of Baie Helpim Baie Association (BHBA). BHBA is a community based organization currently registered under the Investment Promotion Authority of Papua New Guinea (PNG IPA) with the object to develop the human resource of people of Baie clan through community partnership and self-reliance by engaging in various community development projects. Mauberema is the name of the forest. The area is owned by the people of Dinogebai and Okebai clan of Tabare Local Level Government (LLG), Sinesine Yongomul District in Simbu Province, collectively known as the Mauberema community. It has estimated

population of 5000 people. The community has involved in various community development projects through the existence of their community based organization such as, culture and ecotourism, farming, fishery and conservation and reforestation project. The advantages of biodiversity conservation, ecotourism and the preservation of natural and cultural heritage for posterity are widely acknowledged in its benefits (Soltau & Brockington 2004). Thus MENCERTC conservation program envisions a sustainable, healthy and resilient environment in the Mauberema community which supports the area's unique biodiversity, human communities, nature and culture with a primarily aim to protect the forest with its diverse flora and fauna, maintain the scenic and recreational values of its natural heritage, culture and the environment and promote culture and nature based education, research and training in collaboration through partnership with organization and institution in the province, PNG and abroad . This in return will support sustainable livelihood for the local people through all its sustainable community development project and income generating activities.

Location

Mauberema ecotourism and conservation area is located in the Sinesine Yongomulge District of Simbu Province, PNG, along the Bismarck range next to the Highlands Highway that links the Highlands regions of PNG. The closest town is Kundiawa which is 4 kilometers away that has its shopping centres, airport, BSP bank local market and government offices. Other neighboring town includes Goroka and Jiwaka which travelling by PMV coaster buses can make it always possible. The site is situated 1900m -2400m above sea level and is rises from just a few meters leaving the main Okuk Highway. Located south east of Mt Wilhelm that is 4950 metres above sea level. The site is located in the equatorial region that has approximately latitude of 6° 05' south of equator and the longitude of 145° 03' east of the Prime Meridian in reference to Nilbure. In terms of directions to other nearby well known places, the MENCERTC site is located South East of the Simbu provincial town, Kundiawa and west of Chuave and Goroka which is the town to Eastern Highlands Province.

Formal Description of the Site

Mauberema is a proposed combination of ecotourism and nature conservation area. The area is yet to be registered under the Conservation Environment Protection Authority (CEPA) of PNG

The area is located around 1900-2400 meters above sea level and thus has a significant forest that is rarely found in other similar zones of entire Papua New Guinea. The area is yet to be mapped hence topography mapping and landscaping will be done via Google Positioning System (GPS) or GIS. Manual area measurement cannot be done due to the terrain topography formed by the growing limestone cliffs and caves. Biodiversity assessment is an ongoing process that needs interested individuals for documenting the flora and fauna species and also describing the undescribed species. This will help backup the ethno biological knowledge of plants, animals and fungi species area which were well documented. Local community expert in traditional ecological knowledge will be engaged in identification of several plants, animal and fungi species with necessary descriptions in terms of social, medical or cultural use is when needed.

Type of Protected Area

The type of protected area established is basically a proposed Ecotourism & Nature Conservation Area in which currently establishment is still underway. This initiative solely serves the main purpose of preserving the fading cultures and the disappearing natural forest in which all the necessities for living are usually derived from for use.

Tenure

The Mauberema initiative can be sustained throughout life depending on the master management team that can work cooperatively and harmoniously with the people and thus sharing the common interest of conserving the forest and uphold their fading cultures. The current management team is currently on full swing towards the site erecting and establishment of the project. The management team is very determinate to achieve what they are doing which within their hearts they cry for conservation of nature and culture uphold all through their life time and will be maintained from generation to the next.

Gazettal Information

As part of registering Mauberema as the ecotourism and conservation area, the management team is still in the process of registering the area under the Conservation Environment Protection Authority (CEPA) as establishment is underway to be considered legally as a conservation area by the state organization approval.

Area in Which Conservation Covers

The entire proposed conservation area is yet to be figured due to no proper survey on the parameter enclosing the site. It does cover some rough kilometers strata from the main highway up towards the range summit which is thus lengthy for a day walk and observations. However, extensions can be made to the neighboring forest area own by other clans through legal negotiations may result in a bigger area of conservation status.

Additional Notes

The MENCERTC initiative was planned towards the end of 2016 in December as part of my Masters of Biology research project titled: *“Rapid Biodiversity Survey of Mauberema Forest; A Proposal for Conservation of Wildlife, Natural Heritage Preservation and Ethno Documentation of Plant, Animal and Mushroom Species of Dinogebai and Hokebai Area of Tabare LLG, Sinesine Yongomulge, Simbu Province, Papua New Guinea”*. Traditional ecological knowledge of all plants, animals and fungi of the area were well documented with engagement of three local community experts to relate the descriptions and names of the species in local language to match them with the international known species. Any new species identified is obviously a bonus to the area.

Reason/Purpose for Declaration

The sole purpose of the MENCERTC to be in placed was based on the underlying ideas of preserving the dying and fading unique cultures of the Mauberema community and the whole province of Simbu and conserving the disappearing nature that supports the community both directly and indirectly. As stated by its own project name, Mauberema Ecotourism and Nature Conservation Education, Research & Training Centre, the ecotourism covers the cultural heritage of the people awaiting exposure to tourists both international and local for media attraction to the outside world. The conservation concealment the disappearing forest through forest fragmenting due to gardening and overharvesting in which it housed the materials for the peoples’ cultural attires and tools and the abundance of the rare floral and faunal species which are yet to be identified and documented. Under research category, this is a best site for studies in which it has a bonus of still yet to discover floral and faunal species which are both rare and endemic to the

area. Education career for most students in the field of both nature and cultural conservation can be accomplished with much firsthand information available. Training in field biology and the field courses will be very paramount in such a site where the taste of thick jungle is felt. The use of GPS and GIS will be of superlative essential need and expose to such nature will teach the importance of these applications.

Information Sources

Ethno-botanical Knowledge

In this area, there are three local experts subjected in ethno-biological description of species. Through field observation, there is a more to discovery species to be found under the protected area of MENCERTC. This implies across both the plant and animal diversity including bryophytes, fungi and the pteridophytes. Most of the species are only endemic to the area but undescribed ethno-biologically. Common plant species such as the summit dwelling higher trees locally known as the *yoba* are well known for its tough heart wood made of sclerenchymatous cells that makes it the strongest tree and thus the red color of the xylem tissues in which makes the *yoba* distinct to other similar species. Most of the smaller shrubs were even undescribed by the local experts but traditional uses may be known at some point of practice. Some of the pteridophytes are described as *karkar*, *doremi*, *algane* and *kovagele* are described ethno-biologically but majority of the orchidaceae was new to the expert for description ethno-botanically. The common birds were *kenel*, *nimbungkinamara*, *kul* and *sinemile* which all serve great importance to the nature and the human in the ecosystem. Significant admiralty of the headdress worn by Simbu women comes from the *sinemile*.

Biodiversity Survey and Monitoring

So far due to its recent establishment, no proper biodiversity survey as being carried out to be aware of the biodiversity status under the MENCERTC protection. Though a rough random - sample taking of variety of plant species, some animals like frogs and birds speculation was done by the University of Goroka, Biogeography and Biodiversity students as part of student assessment on field observation on species richness within the area was done. It was at least regarded as species rich in terms of both animals and plants including fungi and bryophytes. After a proper biodiversity assay, proper monitoring will be accustomed to monitor the

movement of invasive species and also to describe the undescribed species which are only endemic to the area.

Conservation Environment Protection Authority (CEPA) Files

The MENCERTC current management team is currently working towards the registration of the area under the Conservation Environment Protection Authority (CEPA). This will be recognition of the state as the area of nature and cultural protection. The management team is looking into the main criteria in which the CEPA gives to any initiative like MENCERTC who is in the interest of environment conservation. Currently MENCERTC is partnering with the Partner with Melanesia (PwM) Inc. of PNG in the Mauberema Conservation and Reforestation project

Identifying social, economic and ecological requirement and consideration

Social

Community awareness is done pointing out the importance of the forest correlation with ecotourism. Upon fair understanding in nature and its usefulness, all community members have full understanding of the project and its significance and agree with the initiative and pledge full support and collaboration. The main landowners of the Mauberema forest are the people Dinogebai & Okebai people of Tabare LLG, Sinesine Yongomulge District in Simbu Province. Only some part of the forest is owned by other nearby community which will be negotiated in the future. Ownership and management of the conservation area is mainly the responsibility of the entire community. Currently, there is no well-defined landownership and benefits sharing protocol but there is plan to have it in place once the conservation area is fully registered. MENCERTC management is working hard to build trust and confidence within the community members toward the project by creating an effective leadership and management system or structure in command or control of the project within the community by engaging the youths (Young men & women) as they are foundation of the community who take sole responsibilities of the project. There are also plans to build more partnership with other organization and institution (Both Government & NGO) who share the common interest and goals of the Mauberema ecotourism and conservation project. Creating partnership is the foot stone of long lasting project contract which may greatly lead to prosperity. As stated by its own project name, Mauberema Ecotourism & Nature Conservation Education, Research and Training Centre can

definitely develop good relationships with the nearest tertiary institution, The University of Goroka in which students, as part of their research work, can visit through field trips and interviews with local people. This may also allow a greater connection with other sister universities and other tertiary institutions who have interest in cultural and nature conservation researches. Increasing a step to government organization, non-government organization (NGO) and asking collaboration will induce strong bonds of partnership that may greatly effective in conserving the nature rather fragmenting it every year at an alarming rate. Building strong relationships can only be effective if the partners of MENCERTC share its common interest in conserving the culture and nature to achieve its goals and mission in the future.

Economic

Though the entire Highlands region is said to be the coffee producers, it is very sad indeed to see limited coffee trees in the Mauberema community. Only few people owns coffee garden. There is no source of income for many Mauberema community members. Many rely on subsistence gardening for daily living for centuries. Gardens precede much of the flat lands of entire Simbu Province. Most planted in the gardens are sweet potato, cassava, cabbages of all kinds, onions, corns and other vegetables. Sugarcane is planted both around the house yard and also in the garden. Pigs are husbanded within the village and nourished with food scraps or sometimes left alone to dig for worms. Once sold, the price is at reasonable point according to the demand and its significance to the people. A cultivated crop which serves a great importance and value amongst the Mauberema people is the pandanus tree. Pandanus nuts are the good source of income and socio-cultural livelihood for the Mauberema people when in season. The Mauberema people have the largest pandanus plantation in the entire Sinesine Yongomulge District and whole of Simbu province plus including the whole highlands region. However, it bears its nut seasonally that is once every year that which hardly sustain the life of the people throughout the year. Mauberema community is also partnering with PNG Fresh Produce Development Agency (FPDA) with commercial potatoes farming. Subjected to the limestone the pH of the soil is optimum for potato growth thus result in good yield during harvest. For the start, 20 discarded bags of potato seedlings were supplied by the FPDA and the communities have already planted them. Apart from planting crops, the community is also subjected to fish farming. They also involve in commercial fish farming as registered member of Simbu Inland Farmers' Cooperative

Association Limited, a counterpart agency of PNG National Fisher Authority (NFA). Fish farming is well administered for alternate protein consumption rather than hunting in the forest and disturbing the nature. As thus, this initiative as such a community project after full establishment can slightly or even directly change the people's living standard because currently, it obvious that people still rely on the forest to sustain their living like; cutting trees for houses and even collecting leaves for traditional cooking (*Mumu*). With the establishment of BHBA and MENCERTC, various project groups were identified and established within the Mauberema community such as farming group, fishery group, culture group and ecotourism and conservation group where the community members engaged in those various project group to make a living out of it while preserving and protecting their natural environment.

Ecological

By walking through less than a quarter of the entire forest really determines the species diversity of the forest in terms of flora and fauna. Diverse species of plants and animals are found in the Mauberema forest. Some of those are only endemic to the area and many are listed under the International Union Nature Conservation (IUNC) list of endangered species. Many Bird of Paradise species can be heard or seen in the forest. Most common one was seen on the range summit which is locally called the *sinemile* and its feathers are used for sensing and dancing decorations. Other animals such as cassowaries, wild dogs, and varieties of frog species, cuscus, tree kangaroo, other birds and even bats from caves are present. The tiniest frog, size of a fingertip is very common during rainy days. It can be found attached leaves, twigs or stones. When croaking, it produces a whistling sound and thus its throat swells. Cuscus droppings are very common on forest floor which determines there abundance. Other animals trail marks were also visible such as wild dogs and many more. Ethnobiological knowledge of all plants, animals and fungi of the area is well documented by local community expert, who knows detail names of many of the endemic plants, animals and fungi with respective significance to the locality for consumption. There is still great need of a complete biodiversity assessment of the forest area which can advocate the species richness rather putting the significant site to mediocre. This is potential site for new scientific discoveries. Not any biodiversity survey is conducted in this part of the forest located along 2100-2400m gradient above sea level. Due to many area and places surrounding the forest being used for gardening, many animals migrate into Mauberema forest to

find new shelter, resulting in over-time accumulation of species richness of both plants and animals. It's evident that new animal species never seen before in the Mauberema forest were now heard and seen.

Cultural and Nature

The Mauberema community in Simbu Province is culturally diverse in terms of its traditional attire, singsongs and dancing. The people share a strong relationship with the nature in which most of their costumes worn during cultural events were prepared from the natural forest. Headdresses in which most of the women wear that sway to and fro admiringly is usually plucked from a bird of paradise species locally named *sinemile*. *Sinemile* is common in the Mauberema forest range summit in which they fly from tree to tree. The men bows and arrows are made from bamboo also found in the forest. Spears are made from the certain *Arecaceae* plants that also grow wild in the forest. Types of cooking were done as what their ancestors have did in their time in which it is sustain. Mumu is very common in cooking big animals like pig, cassowary and goats for big feasts or events. Roasting and smoking on fire is still on practice though pots have been introduced. *Kaukau* and other staple foods are roasted that retains its original taste while fresh. Singsing are composed based on enchantment, legends and also animal sounds and stories. Dances are done based on behavior of humans during war between tribes or animals' steps. All the traditional knowledge of the past are usually taught through mother to daughter and father to son linking the generations though formal education have greater influence. The Mauberema community is richly diverse with cultural display and artifacts perfect for cultural tourism attraction. Many of their cultural displays such as the Mauberema Masalai (Spirit), Bai Culture Group are the highlight in many cultural shows within the Papua New Guinea. Recent survey (Dama, 2018) identifies many ecotourism activities and classification such as Agrotourism, Cultural Ecotourism, Endangered Wildlife Ecotourism and Adventure Ecotourism perfect for ecotourism promotion for the Mauberema ecotourism and conservation area. There are many natural heritage sites and cultural values and displays perfect for ecotourism promotion. There are high mountain spot for great viewing of the entire Simbu province. You can enjoy mountain climbing and real taste of trekking along the great Bismarck range. There are magnificent water fall and large water reservoir caves. Some caves are huge

enough to cater for more than 100 people inside. Located in the Mauberema forest are several bats cave, ancestral burial caves and many more unexplored caves yet to be explored.

Spiritual

There is still a close relationship between the people and their belief in the existence of the forest and cave owners. The existence of this invisible beings have develop great respect to Mauberema people in the course of looking after the nature, thus for people to do whatever to the nature, acknowledgement of their presence should be done before anything as respect. That will build a good relationship with the nature keepers which may prevent harm in the future. Back to the community, Christian fellowships are common. Comes Saturday, the Sabbath Keepers keep the day holy with thus their rituals exercised. Sunday worshippers have their church services as usual in their respective Church Buildings. Denomination like Seventh Day Adventist (SDA), Pentecostal Church, United Church and Christian Life Centre (CLC) are very common.

Strength, Weakness, Opportunities, Threats = SWAT Analysis

Strength

The MENCERTC is starting to flourish like a planted seed in a fertile soil. Though as stated by the project manager, Kalne, “we are still using the bush material; we’re still depending on the forest. But as time goes by when you come back, you’ll be surprise to see foot path rather than bush track”. Such words portray the determinacy within the management board and as they gain the support from the rest of the community members; together they can move forward with the project rather staying stagnant. The power to workforce thus comes from the community when funds are yet to be made. The resources are there in which building facilities can be erected upon harvesting under a sustainable practice. Most of the youngsters are available in terms of human resource work force. The University of Goroka students under Biogeography and Biodiversity course can make a good effective team to a step forward in the MENCERTC establishment and sustainability.

Weakness

Despite the many outlined strengths and opportunities which set the footstone of MENCERTC, there are also weaknesses that can create hiccups along the way. Familiar one is the tradition of teaching younger generation on the values and norms of life against the influence of western culture. This is not only in Tabare LLG specifically the Bai clan, but an issue nationwide in which obviously most of the cultural heritage within the country are in dynamic under the strong influence of western culture. Most of the kids are sent to schools for formal education, but limited time is spent with their parents and grandparents for traditional teachings. Today, most young people see it as boring telling stories with older people. This is where the gap is between a two different generation. Filling the gap is something in which the younger generation should consider in order to uphold the fading cultures. In terms of ethno-botanical knowledge, just few experts can describe the traditional names of the species found but not to the fullest. Maybe if you ask a child about a rare plant definitely, the child will run to his or her grandparent for identification. This is the greatest problem across the country. We are weak to stand up against the effect of western cultures.

Opportunities

As such initiative is concern, regarding ecotourism and nature conservation; there is a great opportunity in building a strong relationship with universities for students' field studies. Fortunately, a month old relationship has been created between The University of Goroka and the MENCERTC which is a privilege for the research oriented students and benefit to the Dinima community. According to observation done on the site, there are very significant sites that are paramount for tourist stone climbing as such that one the camp was set for the first visitation. Mountain trekking towards the Kiaumuve the range summit including the entire range will definitely put a person in the taste of real Kokoda trail. Cave exploring is one of the most significant mountaineering activities which will put any tourist in suspense of meeting what is ahead. There are about four major caves found which are now legally under the MENCERTC protection. Starting from the first cave locally named Dinima Mul which is the first to encounter when hiking leaving the Okuk highway, then a bit further up the mountain leaving Dinima Mul,

position the Mave Mul in which the first camping site was established. Ilala Mul is the third cave, found few distance away from the Mave Mul as moving up the mountain. The Ilala cave is the home of swift birds locally called the *ilala*. The very largest cave found in the area is known as the Igalmena Mul which is very pleasant and significant with its nearby waterfall that drops into a dead end in which all the streams disappears into a great water reservoir located some great distance down to nowhere. This water reservoir supply can cater for the whole Tabare LLG. This cave runs deep into the water reservoir and is a home to the nocturnal flying foxes. They only come out if disturbed by sounds.

Threats

Though the MENCERTC project may seem effectively flourishing day after day but as time passes and there is no proper negotiation of land entitlements, this automatically leads to land disputes and can eventually bring tribal fights. As a result, the current status of MENCERTC can be demolished by the opposing tribes' men. If new buildings will be erected, then these buildings can be subjected as a victim of arson. All these threats can arise only if no proper negotiations are done between clans owning portion of the forest under MENCERTC conservation apart from the Bai clans. There is an under lying fact that the entire Tabare LLG depend much on the forest that grows on top of their limestone. The rest of the vegetation is just bare grasslands form by ongoing agricultural activities resulting in forest fragmentation. With this point on forest fragmentation, if other neighbouring clans to Bai clan do not share the common interest of ecotourism and nature conservation, then portion of the forest own by other clans connecting the MENCERTC can be destroyed through overharvesting of both flora and fauna species. This results in forest fragmenting and definitely will have negative impacts on the rest of the forest in which MENCERTC is currently trying to conserve. Thus, where will the cultural heritage of Bai clan be if the forest somehow disappears? The community should understand the inter-relationship and inter-dependency between them and their nature.

Articulate Social, Economic, Cultural, Ecological and Management Goal

Social Goal

As per the MENCERTC Project is concern, there are certain distinctive goals that is to be accomplished by the mindset of the project management team under the directorship of the co-founder Moses Kerry under the social aspect of the entire community and the Project. The project essentially focuses on the full potential of mainly youths in which most are staying at home with some fair ideas on the importance of forest destruction and the act of conservation and the fading cultures. This will also create a strong relationship through partnership with organisations both government and non-government (NGO) including the most important tertiary institutions subjected to field studies and researches. At such, MENCERTC is bound to have strong healthy relationship through partnerships with as many organisations which have similar interest.

Economic Goal

With this MENCERTC fully established in future it will be a regard as the sustainable revenue earning strategy when exposed or marketed to the outside world including both the local and international tourist and also the Universities within Papua New Guinea including other tertiary institutions. The site is ideal for effective research work with pleasant taste of nature. As usual payment of visit and sightseeing is of significant add ins as the revenue for the project's sustainability and thus the beneficiaries. Professionalism is then needed in this field to utilise the revenue earn from every visit in terms of economics and accountability.

Cultural Goal

The MENCERTC exclusively, as stated by its name is trying to anticipate the significant step of preserving the fading cultures in which the Western culture is prevailing with dominating effect on the current lifestyle of the entire community and is also faced throughout Papua New Guinea. From the people's perspective in which especially mothers a concern very much on their cultures that is their day to day norms and values and thus they have to at least taught their sons and daughters rather seeing it evaporate into nothing. Therefore the goal in which involves the

cultural aspects is to uphold the cultural heritage of the Bai clan including the neighbouring clans of the entire Tabare LLG upon interest.

Ecological Goal

Biologically, as being observed the most of the area surrounded this particular MENCERTC site are prone to formation of grassland habitats. This particular area though formed above a large area of limestone, a diverse forest precedes the ranges connecting the entire Owen Stanley Range. As a bonus, there in the forest is dominated by both rare and endemic floral and faunal species in which some of them maybe in the list of International Union of Conservation of Nature (IUCN) and many are still to be described. With this nature sovereignty it is an elegant initiative taken by Moses Kerry to change it to a proposed conservation site. At this point, this forest serves to lodge the diverse flora and fauna species for field studies and tourist speculation. As this conservation is concern, the plant and animal diversity will be left reserved rather harming them directly as well as indirectly.

Management Goal

The current management team carries the maiden work load to sustain the MENCERTC project against any opposing challenges or barriers encountered towards the full establishment. At times, community member may disperse all about living work behind and be carried away with personal matters while still much work can be left incomplete. It is then the sole responsibility of the management keep the work force intact. After full establishment the management team must work together to keep MENCERTC in pace at every 24 hour clock, year after year in a natural-biological, economic, cultural and social well managed and sustainable organization.

Conclusion & Recommendation

Mauberema ecotourism and conservation area is the highlight of ecotourism & conservation projects in the Simbu province and Papua New Guinea as a whole, basically because it offers many social benefits directly to community members who are the resource owner through the understanding and establishment of their own community based organization (BHBA) and their own subsidiary Centre (MENCERTC) . BHBA is there to achieved and delivered all the community development project in the Mauberema community while MENCERTC will provide all the technical assistance and management needed for the entire project. This is a way forward to sustainability developing and managing our own conservation project and as well as other

community development project and thus addressing many of our socioeconomic and environmental problem affecting our rural community and the society at large. This is call for more partnership and support from the Government and non-government organization, institution, donor agency both national and international for a collaborative effort in sustainably managing and solving many of society socioeconomic problems through conservation or any other rural community development project.

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