# **Local People Opinion on Urbanization and its impact for Lake Conservation:**

A Case Study of Aung Pin Le Lake, Mandalay, Myanmar Swe Zin Oo and the Environmental Studies Students<sup>1</sup> and Khin Naing Myint<sup>2</sup>

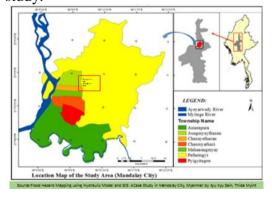
### **Abstract**

The research paper examines the Local Peoples Opinion on Urbanization and its impact for Lake Conservation. The study Area was renovated during last Myanmar Kingdom for the beautiful and green scenario and the area was 2.28 square kilometers. At that time the people from this area had not seen the "sea" naturally, so that the people named it "Aung Pin Le" (means sea of success). So, the natural environment is always chassis due to the activities human environment. Moreover, major agent for conserves environment always depends on the local people of that particular area. Applying our educational knowledge in real life, to improve our wisdom on environmental conservation, maintain the History of Aung Pin Le, conservation and protecting and preserving areas. From this research paper, many positive and negative outcomes have been obtained. But mostly were positive outcomes. It is realized that how much local wisdoms effect on environmental conservation. Moreover, it was clearly known that the usefulness of Aung Pin Le lake from its official historical background. It caused to improve the experiences, knowledge, skills of management, communication with people and it has been confident. There is a saying that "Unity is strength", so it is well noticed the value of unity.

Keywords: local peoples, communication, management, environmental conservation, unity, people attitude.

## Introduction

The study Area was renovated during last Myanmar Kingdom for the beautiful and green scenario and the area was 2.28 square kilometers. At that time the people from this area had not seen the "sea" naturally, so that the people named it "Aung Pin Le" (sea of success). Since 1993, the Government of Mandalay city started to expand in order to avoid the breaking out of careless fire in the city. As a result, more than 7 villages are occupied including this lake area. For the urban growth, various infrastructures have been implanted throughout this area and consequently the value of land has been increased for at least 3 times. Many farmers have converted their livelihoods brokers, trader, etc. after selling out their plots. Especially due to the completion of Theik Pan Road (101st Street), the lake area has been reduced. Nowadays only one tenth of its original area is left out. However the local people have enjoyed the result of urbanization process. Moreover, they are not yet aware of the danger of diminishing the lake entirely. Therefore this is the major research problem for this study.



Former Aung pin le Lake Area (Aungbinle Tank in The Kônbaung Period)

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# **Aim and Objectives**

By applying the educational knowledge in real life;

The main aim is to analyze the attitudes of one Myanmar community on the conservation and protecting and preserving their environs.

The objectives of the research paper are:

To promote the local people's wisdom on environmental conservation,

To understand and maintain the history and value of Aung Pin Le lake,

# Methodology

First, the researchers and the students considered about the Applying Local Wisdom for Environmental Conservation. And then the study area was defined, Aung Pin Le lake and prepared the questions for interviewing method. Local survey, reading the related articles, books about the study area in the library of University of Mandalay and decided the plans. The researchers were separated into groups. The Environmental Studies specialized students are thirty and the leader teachers participated in the field trip. On August 15th, the physical situation of the Aung Pin Le Area was observed with the permission of the Chairperson of the area. With his aids, the interviewing process with the villagers about the Aung Pin Le Lake was introduced and number of knowledge was collected. It was a lake dug only for irrigation agriculture. It was dug by the King Min Shinsaw in Bagan Era. As the lake was as wide as the sea, that's why it was locally named "Aung Pin Le". It could supply water to the cultivated lands by three important canals. Thirty thousand acres of field were dependent on the lake water. After the third Anglo-Myanmar war, British drained water out and filled the lake water to the fields for rice cultivation. So, Aung Pin Le Lake was turned into wetland for rice cultivations. And during 27 years, Mandalay city urbanization took place by occupying its nearby villages from Amarapura and Patheingyi townships. The earthen roads were paved across the Aung Pin Le area and houses were built around the lake. Mandalay Regional Authorities substituted the lake with a small one for the deity of the lake, "Aung Pin Le Bo Bo Gyi". After collecting the concerned information, the researchers discussed the opinion about the action, attitude and wisdom of local people regarding the lake. On August 17th, the field survey was conducted to the study area and much information had been acquired. The detail information about agriculture and livestock were collected. Regarding the local people's wisdom on the lake, the local people answered clearly and their cooperation was appreciated. According to their response, there was less interest in the conservation lake. Their responses showed that they mainly satisfied the development of their area due to the urbanization of Mandalay City. They didn't care much even if the lake is diminished in one day.

# **Historical Background of Aung Pin Le Lake**

Aung Pin Le Lake (Aungbinlè Tank) is said to have been constructed by King Min Shinsaw in 1151 A.D. It was renovated by King Bodawpaya in 1788 A.D. The Kônbaungzet gives the dimensions of the bund with the height 37'5 feet, breadth at bottom 105 feet, breadth at surface 21 feet, and the length of the bund as just over five miles from Kandwin-Sèdaw Village to the foot of Mandalay Hill. The distance was measured from the famous *nat*-shrine of Sinbyushin of Ava on the east of Aungbinlè Village. The tank was filled from the Kyunwun Weir and Myaungmadaw Canal and by a stream which originates from the Nwala hill over a waterfall. In the earlier years of King Mindôn's reign the Nanda and Aungbinlè Tanks were connected, and when the King constructed roads from Mandalay to Yankintaung (Yankin Hill), so that he had to negotiate with the local farmers and he allotted a certain amount of land for the agriculture between the northern and southern irrigation systems. The resulted Aungbinlè Lake was about three miles across. After the foundation of Mandalay

City, it was mainly used to feed the moat which was the main source of water supply for the town and for the palace and its surroundings. The remaining water was used for irrigation agriculture. It was renovated during last Myanmar Kingdom. "Aung Pin Le" means Sea of success. The area was 2.28 square kilometers at that time in 1890 – British Government neglected the famous history of Aung Pin Le Lake. In 1991- the Central Government demarked the agricultural fields with (25.57 acres). Since 1993, various infrastructures have been implanted throughout this area more than seven villages are included in this lake area. In 1993-94, some rural area was redefined as urban residential land and named as Thayetkone Ward of Mandalay City till date. Finally, the former Aung Pin Le Lake area was occupied in Mandalay Urban Area. Nowadays, only one tenth of its original area is left out.

## **Finding and Discussion**

The study Area was renovated during last Myanmar Kingdom for the beautiful and green scenario and the area was 2.28 square kilometers. The people from upper Myanmar had never seen the actual "sea", so that the people named it "Aung Pin Le" (means "sea of success"). Since 1993, the Government of Mandalay city started to expand in order to avoid the breaking out of careless fire in the centre of the city.

Since 1993, the number of households and the number of people have being increased in this newly urban establishment. There are also people of many ethnic backgrounds, including aliens, Chinese and Moslem Malays. Each ethnic group is resided in groups. They located their houses near the lake. People came from nearby area are engaged in agriculture and fishery.

Local residents can earn enough money for their families from the area's abundant resources like agricultural land and ponds. Most of the people in these communities earn their living by different fishes. The broad inland plain area was suitable for agriculture. Although most of the people in these communities were farmers, they caught fish for daily consumption and for commercial purposes. Problems began to emerge regarding agriculture and fishing in 1993. Their livelihood caused water pollution, turbidity and sedimentation. The loss of nutrients led to reduction of suitable feeding grounds for aquatic animals. As a result of the alteration of the environment, the number of aquatic animals and agriculture land was substantially reduced and destroyed in the lake area. As a result, local people had to try to change their economic activities. Some local people who had ever moved away from the villages in searching new jobs came back to their families and started another economic activity again. Social problems also began to occur within Aung Pin Le Lake area. To solve this problem, the Environmental Resources Conservation Group (NGO) decided to take matters by setting up regional government to define as the protected area. Members of the group spent time, money and other resources to protect the natural resources of the lake.





Plate – Recent situation of Aung Pin Le Lake

The Second Year Environmental Studies Students in 2018 studied the area for collecting data, analyzing data, designing the project plan, conducting public consultation according to the project plan, initiating the plan into action, and evaluating and monitoring

the plan. In the research outline, the students and teachers from the Department of Geography and Environmental Studies (University of Mandalay) participated for the field check and also led for the discussion. The Monk, the Chairperson and the Head of 10-houses from that village have involved to find out the historical record, explained and shared the information, guided the way for field checking, served the food and fruits. During the discussions, they described friendly about the changing pattern of economic activities, promoting a social system in which the community members learnt from their experiences and local wisdom, and creating a sustainable economic system that provides sufficiency for the people of the community. Community based Living style and its goals concentrated on environmental protection and community development is tried to establish.

Local people want to be managed as an atural resources and organized a group to promote learning for resources conservation, and a group for an eco-tourism. Regarding a community enterprise management system: they have a local product marketing management group, a group for public health management system: a group to promote sustainable agricultural practices and a group to grow herbal medicine plants, and a capital management system group to create a saving fund for Aung Pin Le Lake to support the principles of the environmental plan.

### Conclusion

Local wisdom of the people at the present time was applied for the conservation, recovery, adaptation to the disaster, and innovation in Aung Pin Le Lake. They also explained to preserve local wisdom as the traditions and customs in order to recover, upgrade local wisdom, so that it can be applied to the sustainable situation, and to improve new local wisdom by sharing knowledge with the concerned authority and NGOs. The case of Aung Pin Le Lake suggests not only that local wisdom is centered to people's way of life but also it involves ethics and moral values. Local wisdom in the study area can be observed in the traditional ways of life according to their occupations, relationships within communities, and religious beliefs and practices, and serves to promote an honesty and sustainable use of natural resources. For this reason, development policies should not much encourage to the local people not to be more urbanized and to maintain, enrich, and articulate their traditional wisdom and to suggest them to apply for the balanced management of local resources and economic development.

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