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COMPARATIVE STUDY OF ON THE ACHIEVEMENTS OF KING BADON AND KING MINDON ON AGRICULTURE

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ABSTRACT

As the basic economy of Myanmar during the Konbaung Period was agriculture, Myanmar kings attempted to make continuously to improve it. To improve the agricultural section, the kings issued several orders concerning the agriculture. Besides, kings hold the royal ploughing ceremony for encouraging agricultural sector. Important Myanmar granaries such as Kyaukse (Kokhayaing) and Salin (Minbu Six Kayaing) are located in dry zone and used irrigation system for cultivation. Thus, to get sufficient water for irrigation, kings ordered to build the new irrigation canals and to renovate the existing ones. This paper examines how King Badon (1782-1819) and Mindon (1852-1878) tried to improve the agriculture by using royal orders and compare the accomplishments of both kings on agricultural sector.

Keywords: Konbaung Period, King Badon, King Mindon

The main livelihood of the people during Konbaung Period was agriculture. The local people did cultivation only for the domestic consumption till the early Konbaung Period. In Lower Myanmar, since sufficient rainfall was available for agriculture, agriculture was done efficiently. In Upper Myanmar, no sufficient rainfall was available for cultivation, so the irrigation system was used. For irrigation, dams, water tanks and canals were dug in the dry zone areas in Central Myanmar. The main regions for irrigated cultivation were Kyauk-se, Minbu-Salin, Madaya and Shwebo regions. Irrigated cultivation was also done in Taungdwin, Meikhtila and Yamethin. The Nine Ledwin Districts, where irrigated cultivation thrived well during the reign of Myanmar Kings was also known as the granary of Myanmar. Since water tanks, dams and canals were important for the agriculture, the life blood of the country, the kings of Konbaung Dynasty issued royal orders for the convenience of cultivation, so dams, water tanks and canals were very important for agriculture.

New water tanks were built, while old ones were repaired. In the reign of some kings, no interest was shown in building water tanks; because of the lack of political stability or because of fighting back the foreign invasions, no construction of water tanks in the reign of those kings. However King Badon and King Mindon gave priority to agriculture.

In 1796, during King Badon's reign, the King marched to Meikhtila in four military retinues, and he ordered the building of Meikhtila Lake as a dam. ⁴ On 6th waning of Nayon, ME 1150, King Badon made a visit to Aungpinle Lake, held a ploughing ceremony in the east of Aungpinle Village, allotted 2550 tars ⁵to the subjects, and ordered then to make a water tanks.

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² Dr Toe Hla ,*Lè-yar Myay Thet-ka-rit-twe-htè-ka Tha-maing* (History from the Farmland Mortgage), Yangon, Shwe Mintha Press, 2014,p.295 (Henceforth: Toe Hla, 2014)

³ Dr Toe Hla *,Shae Myanmar-min-to Ti-sauk-khe-thaw Se-muaung-mya* (Canals and dams constructed during the reign of Myanmar Kings),Part.II, Salin (Minbu) Kyauk-khayaing Se- myaung Thamaing (Irrigation History of Le- Salin (Minbu) Kyauk-khayaing), Yangon, Sein- yaung-so Sarpay, 2016, p.80 (Henceforth: Toe Hla, 2015)

⁴ *Thu-thaw-dhi-ta Maha Yazawingyi* (Thu-thaw-dhi-ta Chronicle), Vol. 5 & 6, (ed) Sayagyi U Bi, SayaThein, SayaKo Ba Kyaw, Yangon, Yah Pye Bookhouse, 2015, pp.60,72-73 (Henceforth: *Thu-thaw-dhi-ta*,2015)

⁵ One Tar = 7 Taung

Again, on 13 March 1784, the Nandar Lake was built. The kings with a foresight gave priority to agriculture for the sufficient food supply.

During King Badon's reign, the dams in Nine Ledwin Districts, figuratively known as the granary of Myanmar, were renovated. In those districts, while there were water tanks built in King Anawrahta's reign, there were other water tanks built in the reign of other kings. The water tanks built during King Anawrahta's reign were-

Along the Pan-laung River, the dams were (1) the Kyee-me Dam (2)the Nga-naing-the Dam (3) the Pyaung-pyar Dam (4) the Kin-tar Dam

Along the Zawgyi River, the Dams were:

(1) the Na-tet Dam (2) the Kun-se Dam and (3) the Nga-pyaung.

During King Badon's reign, a list of the dams was made. The study of the dam sit-tans show that the Kyee-me Dam provided water supply to over 70,000 *pes* the Nga-naing-the, over 40,000 *pes*, the Pyaung-pyar, over 70,000 *Pes*, the Kin-tar, over 60,000 *Pes*, the Na-tet, over 30,000*Pes*, the Kun-se, over 7000 *Pes* and the Nga- pyaung, over 4000pes⁷. The Tamoke Canal in Nine Districts of Kyaukse provided water supply to over 5000 *pes*, and the irrigated fields of Kyauk-taw, and other irrigated paddy lands, as mentioned in the inscriptions. The Nine Districts of Kyaukse, figuratively called the granary of the country, had 800,000 *Pes* of paddy land for cultivation. In the royal order dated 15 September 1787 during King Badon's reign:

The canals of the royal dam in the South Nine Districts have been damaged, which affect the local economy. The queen, princes, officers shall appoint the officer and clerk of Kyaukse as supervisors in repairing the dams and canals by assigning the cultivators of irrigated cultivation to the labour.⁹

In the Southern Nine Districts, among group inservices were settled. They were to contribute labour to repair the dams and canals under the supervision of the officer and clerk of Kyaukse since these inservices had been making use of the irrigated water. In the royal order dated 10 December 1806:

Since the canal of Myaung –son in the Nine Districts of Kyauksehas gone shallow, the local people of Ye-thauk, Tabetswe, Tet-myaw and Ma-taung-ta villages were called for the repair of the canals by the in-charges, but they refused, saying the canals were in-charge of the golden city territory. The land surveyor and clerk made a report, and the order shall be followed for the repair of the canals, since they have been making use of the irrigated water. ¹⁰

This royal order stated that, when the canals were damaged, those who made use of the canal water were to repair the canals order the supervision of the in-charge, no- matter the location of the dam was far. In other words, those using the canal water were responsible for repairing the canal. The royal orders issued during King Badon's reign imply that the king did repairing the canals without a break. It was also instructed that those who had shirked from the duty of contributing labour to the repair of the canals and water tanks were not allowed to do irrigated cultivation. The royal order dated 22 July 1806 reads:

In Mekhaya Township, the royal canals such as Min-ve, Kun- se, Tamoke,

⁸ Dr Toe Hla ,*Shae Myanmar-min-to Ti-sauk-khe-thaw Se-muaung-mya* (Canals and dams constructed during the reign of Myanmar Kings), Part.I, *Le-dwin Koekhayaing* (Kyaukse) *Thamaing* (History of Le-dwin Koekhayaing (Kyaukse), Yangon, Thin Sarpay, 2015, p.203 (Henceforth: Toe Hla, 2015)

⁹ *The Royal Orders of Burma (A.D.1598-1885)*, Edited, compiled, translated and annotated with long preface by Dr. Than Tun, Part.IV (A.D 1782-1787), Kyoto, The Center of Southeast Asia Studies, Kyoto University, 1986, p.355 (Henceforth: *ROB*, IV, 1986)

The Royal Orders of Burma (A.D.1598-1885), Edited, compiled, translated and annotated with long preface by Dr. Than Tun, Part. V (A.D 1788-1806), Kyoto, The Center of Southeast Asia Studies, Kyoto University, 1986, p.1046 (Henceforth: ROB, V, 1986)

⁶ U Maung Maung Tin, *Konbaung-set Mahar Yarzawintawgyi* (The Great Chronicle of Konbaung Dynasty), Vol.II, Yangon, Yar Pye Bookhouse, 2004,p.59 (Henceforth: Maung Maung Tin,2004b)

⁷ Pho Kyaw San, *Myanma Lè-yar Si-pwa-yae Sittan* (Inquest of Myanmar agro economy during 1044-1885), Yangon, Yamonnar Press, 1968,pp. Appendices: 40-53 (Henceforth: Pho KyawSan,1968)

Myaung-son and Zee-taw are now damaged. So the officer to Kyaukse kept alert to the villages of irrigated cultivation in Nine Districts of Kyaukse, but there are those who shirk from contributing labour in repairing the canals, sothose who fail to contribute their labour shall be prohibitedfrom doing irrigated cultivation; those who have contributed their labour shall continue cultivation as before. The Daing Wun shall supervise the repairs of the canals and water tanks. ¹¹

It is noted that, despite the king's priority on agricultural work, if the cultivators were negligent in the duties, and failed to follow the royal orders, they were not allowed to do cultivation. In repairing the canals, the officer assigned duty by the king was to do supervision. So it is obvious how much the king had prioritized agriculture.

Repairing the canals, water tanks and dams contributed greatly towards agriculture, and brought benefits to the people living in the irrigated regions. For instance, in 1856, during King Mindon's reign, after the Meikhtila Lake had been repaired, there was a four time increase of the population. ¹²

In the royal order issued on 24 October 1811, during King Badon's reign: The water sluice from the Nandar Lake shall be placed under the incharge of Aungpinle Lamaing officer. The water sluice from the Nandar Lake is to be opened with the permission of the Lamaing Officer.¹³

According to the royal order, the water supply was not permitted to be used as one liked in irrigated villages, but only with the permission of the officer concerned. So the kings who promoted the role agriculture issued orders for the development of agriculture with no wastage in all aspects.

During King Badon's reign, a royal order was issued to grow full areas of paddy land in order to ensure sufficient provisions of rice for the soldiers. The royal order reads as follows:

Danyawaddy, Rammawady, Dwarawaddy towns and villages are wide in land and plentiful in water and, are busy in the royal services. To have ready supply of the provisions, the officer of Dhanyawaddy, Mingyi Kyaw Htin and Taungoo Town officer shall organize the local people to grow more paddy for a higher yield. No cultivable land must be left unsown in towns and villages for providing provisions for the armed forces. The officers of Dhannyawaddy, Rammawaddy, Dwarawaddy, Megawaddy and Taungoo shall start preparing now.¹⁴

It is known that the town officers concerned were to organize the local people of many royal services to grow more rice.

When King Mindon ascended the throne, he had already lost Lower Myanmar which produced rich supply of rice and paid the maximum of revenues development of the country. Since the country's economy was agriculture-based, priority was given for the betterment of the agriculture and a high yield of paddy. Like King Badon, also in King Mindon's reign, building and repairs the canals, water tanks and dams were made, which were necessary for agriculture.

Durng King Mindon's reign, on 26 September, 1853, money was issued for the repair of the Maha Nandar Lake, the Yinmar Lake, the Gyo-gyar Lake, the Sin- kut, the Katu-kalan and the Palaing Lakes in Yadanar Theinkha Township. The repair was made under the supervision of Minister Thadoe Mingyi Maha Minhla Kyawthu, and the group of inservices using the water supply from the lakes contributed their labour. Similarly, in the royal order issued on 24 August, 1854, the Tamoke-so Lake, which was built by the kings of preceding periods, and which, being ruined, could not give much water supply to the irrigated paddy

¹² *ROB*,V,1986, 525

¹¹ ROB, V, 1986, 932

¹³*ROB*, VII, 1988, 245

¹⁴ *ROB*,VII,1988,306

¹⁵ U Maung Maung Tin, *Konbaung Set Mahar Yarzawintawgyi* (The Great Chronicle of Konbaung Dynasty), Vol.2, Yangon, Yarpyae Offset, 2004,pp.122-23 (Henceforth: Maung Maung Tin, 2004)

lands, was to be repaired

under the Let-we *Win-hmu* Mye-du *Myosa Mingyi* Maha Min Hla Khaung for the everlasting preservation. ¹⁶Again, during King Mindon's reign, the Pu-zun Lake (the ordination lake) was in ruins, so it was repaired according to the King's royal order by the crown prince in 1854. In that same year, the Si-taw Lake of Yadanar Theinkha was ruined, so Magwe *Myosa Wungyi* Thadoe Mingyi Maha Minhla Thihathu was ordered to maintain the lake. ¹⁷Similarly, the Interior Officer Wetmasut *Myosa Mingyi* Maha Abbaya was ordered to repair the ruined Palaing Lake, and the order mentioned that the expenses would be paid by the king. ¹⁸ After repairing the ruined lakes and water tanks, King Mindon made promotion of agriculture in all aspects. During King Mindon's reign, royal orders were issued to prevent disputes over the paddy lands and to ensure cultivating peacefully. The royal order issued on 24 March, 1853 reads:

The princes, queen and officers and group inservices shall not put pressure on the ancestral lands belonging to the poor people in various towns and villages in the country on the excuse of royal orders, nor take possession of the paddy lands of the poor, the owner of the paddy lands of ancestral inheritance shall make it clear in submitting reports to the Hluttaw, and to cultivation with the permission of the king. ¹⁹

According to the royal orders, the king had obviously given protection to the peasants. In the royal order dated 28 June, 1854:

There have been disputes over the paddy land among the poor people in the country, and since the monsoon is coming in, the disputes cases shall be accepted but may not be interrogated, until after the harvest. Cultivation shall continue.²⁰

Also in the royal order dated 6 June 1855:

It is the monsoon, and it is time for cultivation. The poor peasants and group inservices in various regions of the country are engaged in disputes over the paddy lands, and the cultivation is affected. The officers of the East Office, West Office, Court of Justice and distant towns and villages shall accept the paddy land disputes, but do not deal with the cases. The disputes shall be settled only after the crops have been reaped²¹

According to the royal order, since it was the time for cultivation, no paddy land disputes were to be settled, but the cases would be settled only after the harvest. If the paddy disputes were tried during the cultivation season, peasants would not have time to do cultivation. So the royal order showed that the king had taken measures for the convenience of the local people and for preventing the slow progress of agriculture.

During King Mindon's reign, while measures were taken for the high yield of paddy by repairing canals and water tanks, new canals and water tanks were also built. In order to do cultivation in the surrounding areas of the royal moat, Yadanar Nadi Canal was built in 1862; the Dingar Canal was dug in 1862-63; the canal of the Mu River running from the Myin-Khwar Hill, Mye-du Region to the Maha Nandar Lake, Shwebo Region was again repaired in 1864: the local towns people in Mye-du Region, Shwebo were ordered to dig a new canal

²⁰ *ROB*,IX,1989,382

¹⁶ Maung Maung Tin, 2004, 152

¹⁷ Maung Maung Tin, 2004, 153

¹⁸ The Royal Orders of Burma (A.D.1598-1885), Edited, compiled, translated and annotated with long preface by Dr. Than Tun, Part .IX (A.D 1853-1885), Kyoto, The Center of Southeast Asia Studies, Kyoto University, 1989, p.390 (Henceforth: *ROB*, IX, 1989)

¹⁹ *ROB*,IV,1986,932

²¹ ROB,IX,1989,411

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from the Maha Nandar Lake to theside of Sagaing. While support was given to agriculture by repairing the canals and water tanks, agricultural loans were issued to the peasants to purchase cattle and seeds for the convenience of agriculture. ²³

Like the Nine Kyaukse Districts, another region to rely upon in agriculture for the country was the Six Minbu Districts. Geographically, the regions had good soil for cultivation. Since the regions are located in the Dry Zone, irrigation was done by getting the water supply from canals and water tanks for paddy cultivation. In six Minbu Districts, there were no reservoirs for cultivation like Kyaukse, water supply was obtained from the Salin Creek, Mone Creek, Mann Creek and the above- mentioned canals. In the Six Minbu Districts there were Karakat *Myaung* Kulamya *Myaung*, Kon *Myaung*, Kokka *Myaung*, Kyon Saik *Myaung*, Kyaunk-sit- *Myaung*, *Kyuntae Myaung*, Khetgaung *Myaung*, Kyein *Myaung*, Chopyit-*Myaung*, Khaing Myaung, Sakyaw Myaung, Siti Myaung, Sè-kan Myaung, Zawa Myaung, Zidaw- Myaung, Nyaung-Kyit Myaung, Nyaung-Kyatp-Myaung, Nyaung-si Myaung, Tapwin Myaung, Htan-lain-Myaung, Hniwa Myaung, Pin-zaung Myaung, Pyatauk- Myaung, Pyinmyaing, Pok Myaung, Marakan Myaung, Miphura Myaung, Moemayo

Myaung, Minhlyin Myaung, Mingala Myaung, Myaungmakyin Myaung, Yamakaw-Myaung, Shwe Myaung, Shasha Myaung, Lulinthi-Myaung, Thanyin Myaung and Aukhlain Myaung.

The names of the above-mentioned canals were extracted from the paddy land mortgage contracts (Thetkayit). The water supply system in these districts of Minbu was feeding water supply from the main canal to the paddy lands via small branches of canals.²⁵

Each canal was incharge of a canal incharge (Myaung saw). In times of repair, the instruction of the local chiefs and the influential *Sangha*s were followed. In the Six Districts of Minbu, there were not only the above-mentioned canals but also paddy lands irrigated from the lakes. What was noteworthy was that, among the Six Districts of Minbu, Saku Town grew *Byat* paddy which was served to the king.

In order to develop the sector of agriculture, canals, lakes and water tanks were repaired; new ones were built; and agricultural loans were also issued. But that was not enough. The peasants also needed to follow the tradition in religious beliefs by propitiating the respective guardian spirits for the sake of favourable weather conditions. In the royal order dated 16 August 1783:

To bring good rainfall and a high yield of crops and high revenues, the guardian spirits of the rain and the wind shall be invited and paid obeisance by the people; Parita texts shall be recited; offertories shall be made after consulting the astrologers²⁷

Since Myanmar relied on agriculture, the king gave priority to agriculture, as proved by the royal ploughing ceremony. It was in the month of *Nayon* that such a ceremony was held. The Brahmins suggested the auspicious day for the ceremony. When the day was fixed, the *Hluttaw* summoned the *Lamaing* Officer who was responsible for preparing the site for the king's ploughing. The path from the royal palace to the ploughing site was made even, and covered with sand; along the path the white washed bamboo matting fence was erected. The land for the plough must be well

ploughed, with white washed bamboo matting fence with a banana stem adorned with flowers at each corner. Water must be already, supplied into the field. The skilled archers must

²² Daw Myint Myint Than, Daw ,"*Mindon-min Let-htet Ok- choke-ye-nint Si-pwar-Yay A-chay-a-nay*" (Administration and economic conditions during the reign of King Mindon), *Literature and Social Science Journal*, Vol.2, no.3, 1969,p.82 (Henceforth: Myint Myint Than, 1969)

²³ Myint Myint Than, 1969,81

²⁴ Salin Thugaung, No.9,10,11, 16, 19,20,21,24, 134, 227,240,261, 294, 300, 352, 353,501, *Parabaik* MS, Daw Ohn Kyi 's Collections

²⁵ Toe Hla, 2016, 98

²⁶ Toe Hla, 2016, 90-91

²⁷ *ROB*,IV,1986,272

stand by around the field so as to shoot down any stray bird or evil-omen bird. Facing the paddy land for the plough, a temporary royal palace was built. Three days before the royal ploughing ceremony, in the surrounding area, public entertainment shows were staged. The whole village, including the poor, were allowed to enjoy the show, with no restrictions.²⁸

Since the Royal Ploughing Ceremony was held in the outskirts area of the royal city, four types of the army were stationed for the security of the king. Since the day break on the auspicious day of the ceremony, soldiers armed with swords surrounded the field in four directions, in kneeling position. Then, behind them, stood the soldiers armed with spears. Then, they were guarded around with a line of gunner. Then, around them was the army of war elephants, and the cavalry in all directions. Such four types of the royal army were stationed because during King Hsinphyushin, the king doing the ploughing during the ceremony was raided by the Ohn-baung Lord, all in a sudden, and was shotdead.²⁹

In the morning, when the royal drum was struck one, the king left the royal ceremony. He was dressed military uniform. The king's army was in the middle of the retinue: six troops before and six troops behind. On the palanguin carried by over 40 palaquin carriers was the king in the costume of the king of the celestials. After the palanquin followed the retinue of queens, ministers, officers, senior princes, middle-ranking princes, cavalry incharge princes, and royal sons, all dressed in military uniform.

When the king arrived at the paddy field for the royal ploughing, the diamond orchestra and the emerald orchestra played the auspicious music, welcoming the king. The king, with his queens, had to wait for the auspicious time for going into the paddy field for the plough in the temporary royal palace. At the auspicious hour, the king went into the muddy field. On his left and right were the ministers of the *Hluttaw*, officers, majors and generals also doing the plough. After the king followed the prince and cavalry incharge princes. After them waited the rich men and lords. As the king's

plough started to move, the ploughs of the ministers and princes, including the Lamaing officer awaiting, slowly moved their ploughs forward commencing the royal ploughing ceremony. The two white umbrellas on the left and right were worm so as to prevent sunlight on the king at work. As the golden plough was moved by the king, the orchestras on the left and right side played the song in praise of the royal ploughing ceremony. As the king completed the ceremony, the queens and the concubines had to go into the field, while the *Lamaing* around the royal field sang in entertainment. At that time, the senior queen awarded the best singer and the best dancer withprices.³⁰

On 16 June 1853, during King Mindon's reign, the royal ploughing ceremony was held. It is assumed that such a ceremony was meant to develop the agriculture. In other words, the king went into the paddy fields and demonstrated the ploughing ceremoniously to spur up the peasants' spirit in cultivation.

To make an overall view, according to the royal orders on agriculture, issued during the reign of King Badon and King Mindon, two of the kings of Konbaung Dynasty, priority was given to the development of agriculture, repair and maintenance of canals, water tanks and lakes for peace and development of the nation. Moreover, the royal order and laws protecting the peasants' paddy lands were also issued. Since agriculture was the main form of livelihood for the people, the king himself held the royal ploughing ceremony in a grand manner to arouse the people' spirit to work harder in cultivation.

³⁰ Mya Kaytu, 2011,156,158

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²⁸ Mya Kay Tu, *Nan-da-le-hmat-tan* (Records of Royal Customs), Second Printing, Yangon, Duwan Press, 2010,pp.150-151Henceforth: Mya Kay Tu, 2010)

²⁹ Pho Kyaw San, 1968,73

References

Primary Sources

Parabaiks

Salin Thugaung, *Parabaik* (Manuscript) No.9,10,11, 16, 19,20,21,24, 134, 227,240,261, 294, 300, 352, 353,501, Daw Ohn Kyi 's Collections

Royal Orders

The Royal Orders of Burma (A.D.1598-1885), Edited, compiled, translated and annotated with long preface by Dr. Than Tun, Part.IV (A.D 1782-1787), Kyoto, The Center of Southeast Asia Studies, Kyoto University, 1986

The Royal Orders of Burma (A.D.1598-1885), Edited, compiled, translated and annotated with long preface by Dr. Than Tun, Part. V (A.D 1788-1806), Kyoto, The Center of Southeast Asia Studies, Kyoto University, 1986

The Royal Orders of Burma (A.D.1598-1885), Edited, compiled, translated and annotated with long preface by Dr. Than Tun, Part .IX (A.D 1853-1885), Kyoto, The Center of Southeast Asia Studies, Kyoto University, 1989

Secondary Sources

Published Books in Myanmar

Maung Maung Tin,U, Konbaung-set Mahar Yarzawintawgyi (The Great Chronicle of Konbaung Dynasty), Vol.II, Yangon, Yar Pye Bookhouse, 2004

Mya Kay Tu, Nan-da-le-hmat-tan (Records of Royal Customs), Second Printing, Yangon, Duwan Press, 2010

Pho Kyaw San, *MyanmaLè-yar Si-pwa-yae Sittan*(Inquest of Myanmar agro economy during 1044-1885), Yangon, Yamonnar Press, 1968

Thu-thaw-dhi-ta MahaYazawingyi (Thu-thaw-dhi-ta Chronicle), Vol. 5 & 6, (ed) Sayagyi U Bi, SayaThein, SayaKo Ba Kyaw, Yangon, Yah Pye Bookhouse, 2015

Toe Hla ,Dr, *Lè-yar MyayThet-ka-rit-twe-htè-ka Tha-maing* (History from the Farmland Mortgage), Yangon, ShweMintha Press, 2014

-----, *Shae Myanmar-min-to Ti-sauk-khe-thaw Se-muaung-mya* (Canals and dams constructed during the reign of Myanmar Kings), Part.I, *Le-dwin Koekhayaing (Kyaukse) Thamaing* (History of Le-dwin Koekhayaing (Kyaukse), Yangon, Thin Sarpay, 2015

------, *Shae Myanmar-min-to Ti-sauk-khe-thaw Se-muaung-mya* (Canals and dams constructed during the reign of Myanmar Kings), Part.II, *Salin (Minbu) Kyauk-khayaing Se-myaung Thamaing* (Irrigation History Salin (Minbu) Kyauk-khayaing), Yangon, Sein-yaung-so Sarpay, 2016

Journal

Myint Myint Than, Daw ,"*Mindon-min Let-htet Ok- choke-ye-nint Si-pwar-Yay A-chay-a- nay* (Administration and economic conditions during the reign of King Mindon), Literature and Social Science Journal, Vol.2,No.3,1969