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MANDALAY ECONOMY IN TRANSITION(1859-1877)

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Abstract

Ratanabon City is well known as Mandalay City. It was founded by King Mindon soon after he ascended to the Amarapura Throne in 1852. Many obstacles were ahead of him during his reign. Myanmar was defeated in the second war with the British the result of which was that lower Myanmar was ceded to the latter. It was indeed, a great loss to Myanmar King for rich food supply of rice, salted fish, fish paste and salt all of which were essential to Myanmar daily diet. The first and foremost reform to be carried out was to lessen its dependence for rice on lower Myanmar. The second was to introduce coinage system to become easier in economic transactions and taxations. And the third was the introduction of economic monopoly system and that of tax farming in inter-regional trade. People could see in this period change in agriculture, change in monetary system and change in trade all of which had never been practiced. For these changes in economic performances to be successfully implemented, King Mindon had an efficient, enthusiastic and zealous Heir Apparent popularly known as Prince Kanaung who was very much interested in all-round development of the kingdom to match with, or supersede the British imperialists so that they could be driven out and regain lost territories. For these reasons, reforms were introduced and carried out in the kingdom to become materialized. In brief this research paper is intended to treat the following three major points: on agriculture; on monetary system and on trade.

Key words: Agrarian Reforms, Reclamations, Tenants Recruited, New Crops, Coinage System

Historical Background

Many old city-states and dynasties appeared and disappeared times and again in the Ayeyawady Plain. Civilizations are seen as a cyclical order of rise, collapse and disintegration. Mandalay was the last royal capital city of the *Kon-baung* Dynasty. It is located in central Myanmar. It is also the second largest city next to Yangon. Its historical developments are very interesting to study as the last and still surviving cultural centre of Myanmar traditional arts and crafts which are being maintained as a legacy of the past glories handed down from the Bagan Period.

Myanmar history began to appear approximately in the 3rd Century BC with the founding of a city-state in Kyauk-se District. It is so far the oldest one ever excavated by the Myanmar Archeological Department in Myanmar. It being located in the vicinity of old *Pinle* City is given the name after *Pinle*. The founders were assigned to *Pyu* people as the finds unearthed were very similar to the *Pyu* artifacts, *Pyu* cremation customs and the so-called *Pyu* coins. The city wall was in circular shape like that of the *Sriksetra* City, the last city of the *Pyu* people. Other old *Pyu* cities were

Beikthano (1 century BC- 5 Century AD) in Taung-dwin-gyi Township, Hanlin (1 -6century AD) in Wet-let Township and *Sriksetra* (AD 4-9 century) in Pyay Township (Toe Hla, 2014), all of which bore very similar artifacts, identical customs and coins. That is why they were contributed to *Pyu* civilization.

After the fall of second Ava the *Kon-baung* Dynasty came into being in AD 1752; the founder was U Aung Zeya popularly known as Alaung Min-tara-gyi (1752-1760). He was recognized as the founder of the 3rd Myanmar Empire. It was the last dynasty in Myanmar history. The fall of it was due to the aggressions of the British imperialists.

During the reign of King Mindon, the second last king of the *Kon-baung* Dynasty, Myanmar territories had been shrunk to nearly a half. Lower Myanmar had been occupied by the British.. The boundary line between Upper Myanmar and Lower Myanmar ran straight from Myede in the west to Taung-ngu in the east to include the Nin-gyan Forest in their newly occupied region. Thus, Myanmar king and people suffered economically and politically. Myanmar's rich food supply region was robbed of them. Rice, fish paste, salted fish, salt which are most essential cooking ingredients of Myanmar's daily diet were the main export items of lower country to upper country.

Population in the Region

Myanmar had no census taking practice. But statements of headmen and various chiefs of social status service groups in relation with their hereditary office, their jurisdiction, households under their charge, their rights and responsibilities, etc. were made and recorded in *parabaiks* or on palm leaves and kept them in the golden archives in the Court. Such records were called *Sittan* (inquest) records. There were *Sittan* records of *Taiks*—a kind of administrative unit, the size of which varied. Sa-gaing was located in the Northern *Taik*. The table of *Taiks* and residents that belonged to the *Kon-baung* Period is shown as follows:

Table 1: Population of Natives and Aliens in *Taiks*

<i>Taik</i>	Native <i>Athi</i>	Alien	Total
Northern <i>Taik</i>	2595	5049	7644
Twin-thin <i>Taik</i>	1670	4029	5699
Ma-ha-dan <i>Taik</i>	2075	2609	4684
Hsin-che <i>Taik</i>	790	1791	2581
Total	7130	13478	20608

Sources: *Parabaik* 732, National Library

Most of these *Taiks* are found located in between the two rivers, Ayeyawady and Chindwin; it is also found that they were located along the western banks of the above-said rivers. King Mindon took much interest in these *Taiks* because he wanted to expand cultivation areas in them for paddy rice and other cash crops.

Land Use in Sagaing Township

Before going further, it is necessary to know the land use of the region in those days. Generally speaking a village had many types of land, to wit: land under cultivation, reserved land, virgin land, pasture land and forest land. A villager had the right to reclaim land for cultivation. One could acquire land by clearing as many patches as he could.

A list of land use in AD 1877 is tabulated as follows:

Table II: Land Utilization in AD 1877 (in Pe—1 Pe=1.77 acres)

No.	Name of Village	Land under cultivation	Swamp area	Village and Monastery Area
1	Aung-tha	760	66	213
2	Ba-gyi	1527	300	103
3	Bya-tin	223.5	-	29
4	Di-Pe-yin-gyi	809.25	600	25
5	Hti-laing Bon-gyi	600	427	40
6	Khet-kha I	643	350	10
7	Khet-kha II	355	130	20
8	Kya-khat	313	9	16
9	Kyauk-se-gon	399	100	29
10	Kyauk-phyu-kan	1075	-	-
11	Le-gyi	2600.75	2222	39
12	Le-ti	690.75	467	55
13	Ma-tu	437	-	-
14	Maung-daung	224.5	50	16
15	Mon-nyo	148.5	1000	4
16	Nga-ta-yaw	1170	731	37
17	Nga-myin-si	200.75	-	16
18	Nyaung-gon	415	206	17
19	Ohn-daw	617.25	220	59
20	Pa-khan	35	3	9
21	Pe-khwe	637.75	-	27
22	Pyi-daw-tha	1189	140	23
23	Sa-gyin	233.75	-	10
24	Sa-mon	395.75	10	24-25
25	Te-gyi	20.5	-	3
26	Ye-dwin-gaung	1187	700	16
27	Ye-ton	323	1	-
28	Ywa-thit-kyi	65.5	-	17
29	Za-yat-taw	1000	220	5

Source: *Parabaik MSS*, No.194, BSPD (Buddha Sasana Propagation Department Library Collections)

Landownership

All People had the right to own land if he could clear any virgin land or forest land as many as he could. But Under sustainable economy we see that land under cultivation was more numerous than cultivators. It was more economical to work as tenant rather than as a Peasant proprietor by clearing virgin land or forest land.

All land in the kingdom was owned by the King as he was an arbiter of life. People could own land nominally. Landownership varied in the kingdom, to wit:

1. *La-maing Mye*—Land owned by King and Queen
2. *Wuttagan Mye*—Land owned by religious institutions

3. *Aya-daw Mye*—Land owned by the state
4. *Pugglika Mye*—Land owned by People (U Tin, 1965)

Private land could be divided into at least four types. The first is called *bo-ba-baingmye*—Ancestral land. The second, *Dama-u-cha mye*—reclaimed land by clearing forest with a heavy knife; third *ngwe-we ngwe-baingmye*—land acquired by means purchase or mortgage and *min-pe-mye*—land received by grant. People owned cultivation lands by such means.

Differences are seen between the sustainable agriculture and commercial (cash crop growing) agriculture. Traditionally cultivation was carried out only for sustainability of a family; but good yield with few surplus could be expected when rainfall was in time and good enough. There were distinctive features in relation with cash crop economy. These features were as follows:

1. The tenant's life seemed to be more secured;
2. Cultivator had to grow the crops demanded;
3. Price of crop was fixed by the merchant.

Paddy rice

Paddy rice is a staple crop of Myanmar People since time immemorial. It has, therefore, been the essential crop both for consumption and export. Lower Myanmar was in olden days a major rice growing region. And no other crops were ever grown up to the annexation of Myanmar by the British. On the contrary, Upper Myanmar was a suitable place for all other crops. There were also paddy growing areas where irrigation was accessible. Myanmar kings constructed tanks, weirs and canals to irrigate paddy cultivation. There were three major rice growing areas in Upper Myanmar; they were the Kyaukse District (known in olden days as *Le-dwinko-khayaing*—Nine Districts of Paddy-growing Regions) or *Le-dwin Hse-ta-khayaing*—Eleven Districts of Paddy-growing Region); the Taungbyon District—Present day Mandalay, Madaya and Patheingyi Townships; the Minbu-chaukhayaing—Six Districts of Minbu, the centre of which was Salin Town. (Furnival, 1957). In the *Kon-baung* Period, the Mu Valley or the Shwebo District had also become a major paddy growing region. But they could not feed the People of central Myanmar.

King Mindon ascended the throne of Amarapura by overthrowing King Bagan, while the country was being engaged in the second war with the British in AD 1852. No sooner Prince Mindon became king, than the lower Myanmar was annexed by the British without any treaty concluded. In the first Anglo-Myanmar War in 1824-26, two littoral provinces of Rakhine and Taninthayi were ceded to the British in compliance with the Yandabo Treaty of 1826. In AD 1852 Lower Myanmar was lost again. Thus, Myanmar became a landlocked country and lost its sea routes to outside world. Moreover, the People of Upper Myanmar lost their rice granary of Lower Myanmar. The King and People were so much concerned for the loss of Lower Myanmar. Rice production of up-country could not feed all mouths of its People.

King Mindon, therefore, had but to carry out reforms for survival of his kingdom and People. There was no other way. Historians focus their study of King Mindon's reforms on the military build-up. He introduced many reforms—a reform for administration; a reform for agriculture; a reform for monetary system; a reform for trade; a reform for communication; a reform for education; a reform for taxation and revenue; a reform for judiciary and so forth. His priority for changes was given to such reform plans as economy and military.

For sufficiency of rice the king executed his irrigation plans and networks to water rice fields. He repaired old lakes and weirs. He dug more new canals, renovating old ones without demanding corveelabour from the People. These rice growing areas consisted of the Kyauk-se District, Madaya District, Mandalay Capital and its environs, Meiktila District, Salin District, Shwe-bo District, Taung-dwin-gyi District, Thazi District, the Upper Chindwin District, etc. Thus the rice growing areas could have produced more rice ever than before. Depending for rice on Lower Myanmar could have been reduced to a greater extent.

The king also introduced new crops and thus he could have changed an aged old self-sufficient agriculture by substituting a commercial agriculture. The king encouraged all his royal tenants to produce as much they could by giving them some incentives for their surpluses. The king also provided them not only with seeds but also with advanced cash or loans. Furthermore the king organized a group with new agrarian workers selected from his various service groups. They were settled in Kyauk-se District and in Sagaing and Shwe-bo Townships to work on the newly reclaimed lands. Thus, he could have reduced the burden of reliance for rice on lower Myanmar or British Myanmar.

Sagaing and Shwe-bo Districts are located in between the Ayeyawady and the Chindwin Rivers. The Mu River flows in the middle of these two rivers, in parallel to them from north to south and empties its water into the Ayeyawady River. Thus the Mu Valley has since the *Kon-baung* Period become a major rice growing area. There are also islands in the Ayeyawady and fertile inundated lands along its bank. On them rice and other crops including vegetables were largely grown. Thus new economic activities were carried out in Mandalay and Sagaing Regions. The following points should be considered and discussed.

1. Newly recruited cultivators were settled in Sagaing;
2. Reclamation of land for cultivation was carried out;
3. New crops were introduced;
4. Agro-based mills were set up in Sagaing and Mandalay;(One indigo factory was built and manufactured in Sagaing)
5. Attempt to exploit mineral resources in Sagaing Hills was made; and
6. Iron smelting industry was set up in Sagaing.

Why King Mindon chose and made Sagaing Township a special economic zone is a major subject of this discussion in the agrarian sector. King Mindon might have a preconceived thought that all lost territories, especially the deltaic region and the Sittaung Valley annexed in the second war, might be regained by means of either amicable relations or redemption. Throughout his reign King Mindon adopted and practiced an appeasement policy in relation with the British. But the king's appeasement policy did not work at all.

King Mindon was eager to introduce reforms in the agricultural sector, especially for rice to meet the need of the People. His base was made at Sagaing. New crops were grown in and around Sagaing—on islands, in inundated areas and on dry lands. All new crops were not for home consumption but for export to British lower Myanmar. Since then commercial agriculture came about in place of self-sufficient agriculture. Thus Myanmar came to know the importance of cash crop economy. They could convert their aged old self-sufficient economy into cash crop economy. Myanmar's customers were Lower British Myanmar and China.

Reforms in Agricultural Sector

In the royal economic zone of Sagaing, there were many villages that implemented the royal reforms. The villagers were responsible for growing export crops demanded by the British merchants and agents of the king. Records show that there were 51 villages that involved in cultivation of new crops. They worked under supervision of the royal agents. These villages should be mentioned here; they are(in alphabetical order):

ung-tha (*Parabaik MSS*, No. 508, BSPD)
 Badu (*Parabaik MSS*, No.279, BSPD)
 Ba-gyi (*Parabaik MSS*, No. 508, BSPD)
 Bauk-ma(*Parabaik MSS*, No. 307, BSPD)
 Bya-tin(*Parabaik MSS*, No. 194, BSPD)
 Bye-da-yaw(*Parabaik MSS*, No. 508, BSPD)
 Di-Pe-yin-gwe(*Parabaik MSS*, No. 508, BSPD)
 Hsin-mye (*Parabaik MSS*, No. 279, BSPD)
 Hswan-gyet (*Parabaik MSS*, No. 307, BSPD)
 Hti-laing (*Parabaik MSS*, No. 279, BSPD)
 Khet-kha(*Parabaik MSS*, No. 279, BSPD)
 Kon (*Parabaik MSS*, BSPD, No. 279)
 Kon-gyi (*Parabaik MSS*, No. 279, BSPD)
 Kya-khat (*Parabaik MSS*, No. 279, BSPD)
 Kyauk-phyu-kan (*Parabaik MSS*, No. 197, BSPD)
 Kyauk-se-gon (*Parabaik MSS*, No. 508, BSPD)
 Kywe-lu (*Parabaik MSS*, No. 307, BSPD)
 Le-gyi (*Parabaik MSS*, No. 508, BSPD)
 Let-loke (*Parabaik MSS*, No. 307, BSPD)
 Let-pan (*Parabaik MSS*, No. 279, BSPD)
 Lin-ti (*Parabaik MSS*, No. 194, BSPD)
 Ma-gyi-zin (*Parabaik MSS*, No. 279, BSPD)
 Ma-tu (*Parabaik MSS*, No. 194, BSPD)
 Ma-u-bin Le-ywa (*Parabaik MSS*, No.307, BSPD)
 Maung-daung (*Parabaik MSS*, No. 508, BSPD)
 Min-gun (*Parabaik MSS*, No. 279, BSPD)
 Mon-nyo (*Parabaik MSS*, No. 279, BSPD)
 Myin-mhwe (*Parabaik MSS*, No. 508, BSPD)
 Nga-myin-yin Se-Ywa (*Parabaik MSS*, No. 508, BSPD)
 Nga-ta-yaw (*Parabaik MSS*, No. 508, BSPD)
 Nwa-che-kyun (*Parabaik MSS*, No. 279, BSPD)
 Nyaung-bin-si (*Parabaik MSS*, No. 508, BSPD)
 Nyaung-bin-zin (*Parabaik MSS*, No. 307, BSPD)
 Nyaung-gon (*Parabaik MSS*, No. 194, BSPD)
 Ohn-daw (*Parabaik MSS*, No. 508, BSPD)
 Pa-khan (*Parabaik MSS*, No. 194, BSPD)
 Pe-ga-doe(*Parabaik MSS*, No.307, BSPD)
 Pe-khwe (*Parabaik MSS*, No. 508, BSPD)

Pyi-daw-tha (*Parabaik MSS*, No. 508, BSPD)
 Sa-gyin (*Parabaik MSS*, No. 279, BSPD)
 Sa-mon (*Parabaik MSS*, No. 279, BSPD)
 Sha-yaung (*Parabaik MSS*, No. 279, BSPD)
 Si-ti (*Parabaik MSS*, No. 307, BSPD)
 Taing-gyi (*Parabaik MSS*, No. 307, BSPD)
 Taung-yin (*Parabaik MSS*, No. 279, BSPD)
 Tha-byu (*Parabaik MSS*, No. 307, BSPD)
 Tin-deik (*Parabaik MSS*, No. 279, BSPD)
 Ye-dwin-gaungs (*Parabaik MSS*, No. 279, BSPD)
 Ywa-htaung (*Parabaik MSS*, No. 279, BSPD)
 Ywa-thit-kyi (*Parabaik MSS*, No. 508, BSPD)
 Za-yat-taw (*Parabaik MSS*, No. 508, BSPD)

Pilot Projects were firstly introduced in these villages. The villagers grew new crops introduced by the king for export to British Myanmar; and all agricultural products except rice were collected by the royal agents for export to China and British Myanmar. These new crops consisted of jute, wheat, indigo, sugar cane, etc. In Myanmar jute was not known previously; it was not an edible crop; its fibre is useful for making sacks to contain rice. Wheat was also a new crop. It is called in Myanmar *Kala-zaba* (lit. Indian/European paddy rice). It was grown to export lower Myanmar for Europeans and Indians. Wheat is a staple crop of the world except Southeast Asia. It was an alien to Myanmar People before the reign of King Mindon.

Indigo is a small plant that is used in Myanmar to dye clothes as it produces dark blue colour. Indigo was largely and wildly grown along the river banks. An indigo production mill was built in Sagaing. There is a village in Yasagyo Township by the name of Me-gon (lit. indigo mound) where indigo plants grew wildly. And a quarter in Pakokku by the name of Me-oh-dan (lit. indigo boiling pots in line) is a place where indigo dyeing business had once been prospered.

King Badon organized a service group for producing sugar from sugar cane juice. For this purpose sugar cane was largely grown in Kyaukse District. And three different racial groups were organized to produce sugar; these groups were Myanmar, Hindustani and Chinese whom were assigned to boil sugar. Sugar by boiling sugar cane juice was produced only in the *Kon-baung* Period, especially in the reign of King Badon (1782-1819) (Toe Hla, 2015).

Because of royal monopoly of the agricultural products, all cultivators lost their freedom in work. They had to accept advanced money for their crops or other farm products to surrender after harvest. For them an advanced payment of cash or loan was meant a sort of bondage; unless they could settle the amount due in time they would be arrested and molested. In one promissory note a farmer of Ma-u-bin Village had stated in the presence of the village abbot that after harvest he would endow a Person who was given an island as a fief with certain amount of hems or fibres in bundle, the length of which was 3. 7 ft. If otherwise, he would accept any kind of punishment imposed on him. (*Parabaik MSS*, No. 36(D) , BSPD).

Peasants and farmers out of the royal agricultural zones cultivated their traditional crops still applying primitive methods. But when cash crop economy boomed, royal agents forced them to grow more cash crops. Thus tensions between Peasants and royal agents took place in many a region away from the capital. Rural monks mostly sided from their village folks. The king then issued an edict that cultivators could grow any crop as they liked; that price of crops could be fixed by

themselves; and that royal agents and servicemen could not molest them. Then the king granted cultivation lands to his royal boatmen and they were compelled to cultivate cash crops.

Rice Cultivation was First Priority

The king ordered that all Myo-wuns—Town Chiefs(Mayors) and local chiefs had to take list of cultivation lands in their respective jurisdictions (*Parabaik MSS*, Nos. 40, 109, 122, 123, 139, 164, 174, 226, BSPD). In their lists already submitted there consisted of rice fields, located in Sagaing Township.(*Parabaik MSS*, No. 223, BSPD) Unhealthy rice fields or failure of crops due to drought-hit were also listed.(*Parabaik MSS*, No. 237, BSPD) For their failure of crops, farmers were exempted from taxation. Those who were settled in Sagaing Township were granted land for dwelling and cultivation.(*Parabaik MSS*, Nos. 60, 172, 174, BSPD) Localchiefs of t he township were responsible for cultivation of paddy in crown lands. (*Parabaik MSS*, No. 128, BSPD) It is also found that the crown lands in Sagaing yielded 4433 bushets of paddy rice in AD 1878,(*Parabaik MSS*, No 129, BSPD) Price of paddy rice in that year was 70 kyats Per 100 bushets (*Parabaik MSS*, No. 129, BSPD) Monthly supply for servicemen was made in paddy rice. (*Parabaik MSS*, No.207, BSPD)

In Sagaing there were state lands or crown lands under cultivation by royal servicemen. (*Parabaik MSS*, No 210, BSPD) Royal gardens were also there. In them were grown fruit bearing trees. Some plots of land in the royal garden of Sagaing were grown paddy by order of the king. Other crown lands in the township were also turned into paddy fields under the charge of *Myo-wun*. By seeing these activities, one can notice how much the king was concerned paddy rice.

Table III: Leased Paddy Lands (1881)(in Pe)

Location	Land under cultivation (in Pe)	Leased Land (in Pe)	Tenant
Nga-ta-yaw (Thaung-dan-shi Island)	14;25	14;25	Thaung-tin
HsinMye (Tha-mon-za Island)	10.00	10.00	Boatmen
Nat-tha-mi (Fairy) Island	11.00	11.00	
Mo-gyo (Thander bolt) Island	5.00	5.00	
Ywa-thit-kyi	14.00	14.00	
Mo-gyo (Thander bolt) Island	75.75	75.75	Hin-tha
Nat-tha-mi(Fairy) Island	262.25	262.25	Boatmen
Total	412.25	412.25	

Source: *Parabaik MSS*, No. 270, BSPD

In Myanmar history kings were recognized as arbiter of the life of People or subjects and lord of earth. All lands in the country were owned by the sovereign. He was a real owner of land whereas the People were just nominal owners. Kings collected taxes from the People. Basically the king collected from Peasants and farmers only land rent, which he tenanted to People. Of the crown land numbering 195 Pe (341.25 acres) located in Bye-ta-yaw Village, 22 Pe (38.5 acres) were paddy

lands (*Parabaik* No,303, BSPD) Local chiefs used to estimate the yield of paddy lands before harvest in order to collect paddy payable by tenants to landowners. See the following table.

Table IV: Estimated Outturn of Royal Lands in Sa-mon Village(1879)

Tenant	Yield (Estimated)	Pe	Tenancy Rate
Nga Kun and wife, Mi Bon Tha	60		
Nga Kywet and wife, Mi Hein	20		
Nga Bo and wife, Mi O Za	40		
Nga Shan and wife, Mi Ba	30		
Nga Shwe Dun and wife, Mi Hti	27		
Nga Lin and wife, Mi So	45		
Total	222		
(Land) Confiscated from Nga Le Pyi		5	25
Confiscated from Na Ni (Ex-Town Clerk)		1	5
Confiscated from Nga Yeik		1	5
Total		7	35

Source: *Parabaik MSS*, No. 309, BSPD

Irrigation

In Sagaing Division there are many man-made lakes, weirs and canals for irrigation. Some of them were built since the Bagan Period. Some were dug under patronage of kings, some by local People either collectively or individually. These irrigations were not as large as in Kyauk-se or as in Salin. As administrative records show the following lakes were dug by kings:

Gyo-gya Lake
 Hsin-gut Lake
 Ka-du Lake
 Maha Nanda Lake
 Pa-laing Lake and
 Yin-ta Lake.

Kings constructed these lakes for the welfare of People or for sufficiency of rice in the region. One can find the records of these lakes in their inscriptions which were set up at each lake by donor-kings. We also come across other small lakes (kan in Myanmar) dug by the community or by individuals. They are:

In-daing-min Kan—lake (*Parabaik MSS*, No. 573, BSPD)
 Kyaung-phyuKan (*Parabaik MSS*, No. 1264, BSPD)
 Lin-ma-lo Kan (*Parabaik MSS*, No. 573, BSPD)
 Min Kan (*Parabaik MSS*, No. 573, BSPD)
 Me-no Kan (*Parabaik MSS*, No. 573, BSPD)
 Myaung Kan (*Parabaik MSS*, No. 573, BSPD)
 Myin-the Kan (*Parabaik MSS*, No. 573, BSPD)
 Ottama-yit Kan (*Parabaik MSS*, No. 231, BSPD)
 Pin-ta Kan (*Parabaik MSS*, No. 573, BSPD)

Because of the attempts made by King Mindon for sufficiency of paddy rice his agricultural reforms were successful. The increase of paddy lands with accessibility to irrigation yielded many more paddy rice. Dependency for rice on Lower Myanmar had become decreased year by year. It indicates that King Mindon's agrarian reforms were successful. See the following table.

Table V: Import of Rice from Lower Myanmar

Year	Tonage	Price(in Ks)
1867-68	100,465	2,430,000
1868-69	74,500	2,437,000
1870-71	96,307	3,582,332
1871-72	57,123	1,680,094
1872-73	26,655	62,234
1873-74	24,718	60,431

Source: Toe Hla, 2008

Land Reclamation

Increase of population or a change from sustainable economy to cash crop economy naturally made rural People to reclaim new plots of land for more cultivation and more crop surplus. Changes in economy in the later *Kon-baung* Period had been taking place under the leadership of the king and his aristocrats. To cultivate more land for more crops and for more cash. In the country both export and import were gripped by the king. Reclamation of land was made by him to a greater extent to acquire more profit from agriculture. Because the king wanted to modernize his country in order to match his counterpart, the British. In Ywa Si Village the king ordered in AD 1868-69 to reclaim 1000 *Pe* of land for sesame cultivation. All high ranking officials had to take responsibility for economic development in the country. King Thibaw followed suit soon after his accession to the throne of Mandalay Court.

Table VI: Reclamation of Land(1878)

Location	Land to be Reclaimed	Land Reclaimed	Yield Estimated
Sesame Land below Kyauk-phyuKan	132	57	1890
Glebe Land in Sa-gyin Village	-	10	250
Wheat Land below Myin-the Kan	-	118	2950
Wheat Land in Te-gyi Village	-	-	-
Wheat Land in Ba-du Village	-	30	750
Wheat Land below Min Kan(in Badu)	-	54	1350

Source: *Parabaik MSS*, No.253, BSPD

Under the reclamation programme many more new lands in Sagaing Township could have been grown new cash crops in 1878. Agricultural loans amounting to Ks 13678.5 were paid to cultivators. New tenants numbering 125 were employed in farms. A memorandum of expenditure on agriculture is found as follows:

Charges paid to workers	6000
Tilling Cost	3000
Cost of buying Seeds	4500
Reclamation charges	178.5
Total	13678.5 (Parabaik MSS, No. 253, BSPD)

Villages that majorly grew sesame in the reclaimed lands were 26 in number, consisting of Aung-tha, Ba-gyi, Bye-ta-yaw, Di-Pe-yin-gyi, Hsaing-haing, Hti-laing, Kon, Kyauk-se, Le-gyi, Maung-daung, Myin-hmwe, Nga-myin-yin Hse-ywa, Nga-ta-ywa, Nwa-che Island, Nyaung-bin-zin, Nyaung-gon, Ohn-daw, Pe-khwe, Pyi-daw-tha, Sa-mon, Shin-byu Shin-hla, Te-gyi, Wa-chet, Ywa-haung, Ywa-thit-kyi, Za-yat-taw. All these (26) villages are located a little far away from the river where no alluvial land was available. Only ya (dry cultivation) prevailed. In such areas sesame cultivation was a distinct feature. They traditionally grew sesame for home consumption. However, since the second half of King Mindon's reign they largely cultivated sesame not only for home consumption but for export also. King Mindon bought sesame by prepaid system (*Parabaik* MSS, No. 253, BSPD).

Jute

Jute was not known to Myanmar prior to Mandalay Period. It is called *paik-hsan- hlyaw* (ယုကုဖုဂ်ဟေဝုမု) by Myanmar; its literal meaning is cash hemp. Jute is not an edible plant; its hems are useful in making sacks to contain rice for export. Except cotton, there was no cash crop ever grown in Myanmar. During the reign of King Mindon who introduced agrarian reforms, jute was grown in Sagaing Township. Trade with lower Myanmar flourished in this Period ever than before. British merchants wanted to buy all available crops from Mandalay. By demand of the British merchants King Mindon introduced jute and wheat cultivation in Sagaing Township with prepaid system to farmers. It was grown for want of hems or fibres for sack producing mills in Lower Myanmar. The king purchased all of the jute grown in Sagaing. The king himself let his servicemen grow jute and wheat in reclaimed lands by providing them with seed and advanced money.

Unlike a ruler, King Mindon did a business. He was a sole merchant who purchased all crops grown in these districts. British merchants had to buy crops and all other commodities from the king's agents. The king collected all jutes from jute farmers. The king provided his servicemen certain number of plots of land located in Sagaing Township for jute cultivation (*Parabaik* MSS, No. 36, BSPD). They were originally royal boatmen but some were selected and assigned to jute cultivation. Jute farmers who took advanced cash had to surrender bale of hems to the creditor due to them after harvest. There is a list with the names of jute farmers, their jute growing *Pes* and hems produced.

Table VII : Jute growing area and hems surrendered

Farmer	Cultivation Land(in <i>Pe</i>)	Seed (in Basket)	Hems (in bale)
Headman of Elephant Tending Island	1.5	0.75	140
Helmsman of Te-gyi	2.0	1.00	240
Assistant of Htauk-ma Village	2.0	1.00	104
Land surveyor of Nat-tha-mi Island	2.0	1.00	220
Land surveyor of Nwa-che Island	2.0	1.00	60
Headman of Pe-khwe	1.5	0.75	150
Bye-ta-yaw	1.0	5.00	90
Helmsman of Ma-u-bin	4.0	2.00	440
Land surveyor of Myo-gyo	2.0	1.00	225
Helmsman of Mya Pan Boat Village	1.5	0.75	150
Assist. Headman of Tha-byu Village	2.0	1.00	200
Total	21.5	10.75	2019

Source: *Parabaik* MSS, No. 36 and 197, BSPD

When jute was introduced in central Myanmar is vague. But the earliest information as evidence shows is AD 1869. In one document a contract was made between royal agents and villagers in the presence the village abbot, agreeing that the agents would buy 100 viss of standardized quality of hemsps at the rate of Ks, 40. The standardized length of hemp must be 4 ft long. Hemsps of inferior quality would be bought at the rate of Ks 35 (*Parabaik MSS, No. 197, BSPD*).

Royal agents collected in 1870 jutes from farmers amounting to 768.5 viss (*Parabaik MSS, No. 197, BSPD*). Indeed, Myanmar did not use jute in any form. They grew it only for cash. They grew it by order of the king. People of Lower Myanmar grew plenty of paddy, largely for cash. They needed sacks made of jute. In Lower Myanmar jute could not be grown due to its heavy rains. Therefore, they tried to introduce jute cultivation in Upper Myanmar, providing farmers with seeds and loans or prepaid money; and it met success.

Wheat

Wheat is not Myanmar native crop. It was not known to Myanmar up to Mandalay Period. When it was introduced some Myanmar in some regions call it *Kala Zaba* (lit. Indian or European Paddy). But most People call it Gyon—presumably an Indian word for wheat. Myanmar did not know wheat before it was introduced in the reign of King Mindon.

Upper Myanmar landscape changed with a vast cultivation of jute and wheat lands. Wheat was grown in Upper Myanmar for aliens of Lower Myanmar. Wheat was the most demanding crop for cultivation in Upper Myanmar. Sagaing had become a major region for wheat cultivation since its introduction as a cash crop. Wheat was the staple crop of the Europeans and Indians.

Wheat was grown and sold by prepaid system. Royal agents came to villages at least twice a year. First time was to deliver either advanced cash or seeds to Peasants and farmers. They made contracts with farmers for delivery of crops after harvest. And the second time was to collect wheat from farmers after harvest. Agents used to jot down everything he encountered in the village. It was his work to note down the cash delivery and amount of crops he received as land rent or tenancy rate in detail. As a record shows, agents collected 26381 baskets of wheat. Of them 22035 Baskets were shipped to Mandalay by steamer; the rest was kept in local granaries under watch of an agent and 1000 baskets was deducted as tax to the royal granary. (*Parabaik MSS, No. 37, BSPD*) A list of wheat prepared by headmen of Ba-du, Sa-gyin and Sa-ye is as follows:

Table VIII: Expenditure of Money prepaid to farmers for Wheat

Village	Paid(in basket)	To be paid (in basket)	Cash (in Kyat)
Sa-ye headman paid cash for wheat			450
Ba-du headman paid for land rent	268	382	
Sa-gyin Headman paid for land rent	25		
Paid for wheat			60
Ba-dy headman paid		100	
Sa-ye headman paid		50	
Balance of previous year		100	
Estimated cost of seed for 1878		450	
Total	293	1082	510

Source: *Parabaik MSS, No. 252, BSPD*

Royal agents collected in 1870 jutes from farmers amounting to 768.5 viss. (*Parabaik MSS*, No. 197, BSPD) Indeed, Myanmar did not use jute in any form. They grew it only for cash. They grew it by order of the king. People of Lower Myanmar grew paddy largely for cash. They needed sacks made of jute. In Lower Myanmar jute could not be grown due to its heavy rains. Therefore, they tried to introduce jute cultivation in Upper Myanmar, providing farmers with seeds and loans or prepaid money; and it met success.

Wheat was bought by agents at the rate of Ks 180 Per 100 (*Parabaik MSS*, No. 252, BSPD). But later on, wheat price gradually fell. The price of wheat in 1877-78 was Ks 80 Per 100 baskets. (*Parabaik MSS*, No. 37, BSPD) The yield became poor in accord with the fall of price. Wheat farmers could not pay crops due to them. They therefore paid back the loan. In 1878 reclamation of land was made in Sagaing Township under the supervision of the *Myo-wun*—Chief Administrator of the Town and *Htaung-hmu*—Chief Constable. How many reclaimed lands were brought under cultivation will be seen in the following table:

Table IX: Land Reclamation Scheme Implemented By *Myo-wun* and *Htaung-hmu*

Location	Land(in Pe)	Yield
State Land in Sa-gyin Village	10	250
Wheat land near Te-gyi reclaimed by <i>Myo-wun</i>	50	1250
Wheat land near Min Kan reclaimed by Chief Constable	54	1350
Wheat land near Myaung Kan of Ba-du Village	30	750
Wheat land near Myin-the Kan	118	2950
Total	262	6550

Source: *Parabaik MSS*, No. 253, BSPD

Expenditure of Ks 1367.5 for wages fees in reclaiming land was granted by the king (*Parabaik MSS*, No. 253, BSPD). Almost all wheat farmers were either crown predial slaves or tenants or paid labourers. In one royal edit issued in AD.1878 reveals that 125 paid workers were appointed as seasonal workers to cultivate wheat and sesame. Each of them was allotted 4 *Pes* of land for cultivation of wheat and sesame. Seeds were also sold to them at the rate of Ks 10 for 12 baskets of wheat and Ks 30 for 6 baskets of sesame seeds. Paid cultivators got Ks 4 for tillage fee and Ks 6 Per month. They were hired for six months to work in the royal farms. (*Parabaik MSS*, No. 110, BSPD) In AD 1877, the king ordered that all rain-fed paddy lands numbering 1500 *Pes* (2625 acres) in Ywa-htaung Village area were grown wheat and sesame as their prices rose up (*Parabaik MSS*, No. 174, BSPD). Rotation of crops came to be known to cultivators. The township could have sold 26380 baskets of wheat in AD 1877.

Variety of Beans

As variety of beans were included in export items, they were largely grown on islands in the Ayeyarwady River and on other inundated areas along the rivers and streams. Beans and Peas were grown and consumed since the Bagan Period. One can come across variety of beans in Bagan Inscriptions. King Mindon made a focus on growing variety of beans in his agrarian reforms. In and around Mandalay and Sagaing Townships the king let his predial slaves as well as tenants and Peasant proprietors grow variety of beans on inundated areas located between Mandalay and Sagaing, providing them with advanced cash and seeds. (*Parabaik MSS*, No. 37 BSPD) Alluvial soil is suitable for growing beans and vegetables. All beans and Peas were collected by royal agents at different prices in accord with the types of beans and Peas. In one document, it is found that 51578 baskets of variety of beans and 1354 baskets of gram were collected from farmers in Sagaing

Township. (*Parabaik MSS*, Nos. 188 and 220, BSPD) King Thibaw followed suit. He also bought variety of beans from farmers for export. Royal gents bought 3945 baskets of beans and Peas in AD 1878 soon after his accession to the throne. (*Parabaik MSS*, No. 243, BSPD)

Apart from paddy rice, cotton, sesame, jute, and variety of beans there were other crops grown in this region. They were corn (Indian millet), indigo plants, and other crops suitable for dry cultivation. The king had agents appointed to collect export crops. Among the agents aliens were also included; they rendered their service in agrarian reform sectors. One was worthy of note; he was an Indian by the name of Ali Mulla; he was a customs officer in Mandalay. He collected grams (yellow split beans) for export to Lower Myanmar. (*Parabaik MSS*, , No. 252, BSPD)

A Monetary Reform

It would be inappropriate to leave out Myanmar Traditional monetary system. Myanmar People did not use silver coins in their economic transactions. They preferred barter system to buying and selling with some metal as medium of exchange. They used throughout their history silver lumps or ingots or bars cut off and weighed to get a required amount in business transactions. The standardized quality of silver was called Ywet-ni—red leaf, which was a ten Percent alloyed silver. Debased silver money was not allowed to use in buying and selling. Being lack of standardized silver coinage system, a broker or an assayer had to be present in all business transactions to assay the quality of paid silver.

King Badon tried to introduce silver coins in the kingdom. He knew the necessity and benefit of the use of silver coins in the society. Rakhine had ever used silver coins in its history. When he occupied Rakhine he kept the use of coins there as before. He also minted or struck coins in Rakhine with his symbol of two fish on one side (obverse) and his accession date on the other side (reverse). He bought a minting machine from India the help of two British envoys Michael Symes and Hiram Cox to mint or strike coins for his People. (Richard, 1928, Hiram Cox, 1823) He minted coins in about the third week of July, 1797. The new coins were issued to the public for use on 20 July 1797 (Hiram Cox, 1823). But his attempt failed because People did not accept his coins. (Tin, 1976)

But it was successful when King Mindon minted silver coins and issued them to the People. It was because everything changed. The British issued coins in Lower Myanmar. To trade with the People of Lower Myanmar, the People of Upper Myanmar had but to accept their coins. For this reason King Mindon minted silver coins in consistency with the British counterpart except symbols and date. Symbols used on his coins are the Shwe-pyi-so Bird—the Common iora and Peacock. Either the Common iora or Peacock was embossed on one face (obverse) and accession date on the other face (reverse). Because of King Mindon's coinage system, trade with Lower Myanmar and internal trade or domestic trade also prospered to a greater extent. Indeed, king Mindon's monetary system was accepted by People Peacefully. Monetary reform was successful.

Conclusion

Developments in economic sector are witnessed in the environs of Mandalay, Kyauk-se and Sagaing under King Mindon's reign. Sagaing had become a special economic zone for implementation of agriculture where cash crops were largely grown. It was done there because Sagaing was located in the vicinity of Capital City of Mandalay, and because there were plenty of virgin lands to be reclaimed and brought under cultivation. The king granted loans to farmers and introduced new crops to them for cultivation. He also bought crops by prepaid system. Moreover,

farmers were provided with seeds. Several hundred servicemen were recruited into farming groups. Crop rotations and mixed crops cultivation were carried out by farmers. So, unless any disaster including drought came about, agrarian economy in Sagaing Township would surely prosper gradually. In brief, it can be concluded that King Mindon's agrarian reform to grow more cash crops widely could have been implemented in his reign. But after his death, social unrest took place and servicemen left their homes for Lower Myanmar due to political unrest. The country seemed to be nearly collapsed.

Thank You

References

Primary Sources

Contemporary records were written in *parabaiks* and then some are copied on palm leaves which are thought more durable than *parabaiks*. Unlike printed books *parabaiks* have no pagination. They are folded in zigzag way like an accord on folds. Moreover they had hardly titles as they were used as a note book. Most of the *parabaiks* referred in this research are kept in the Buddha *Sasana* Propagation Department Library, Kaba Aye, Yangon. Fortunately enough, it has collected many records of King Mindon's Agricultural reforms carried out in Sagaing. The Buddha *Sasana* Propagation Department will be referred to as BSPD.

Buddha *Sasana* Propagation Department Library Collections.

Parabaik MSS, Buddha *Sasana* Propagation Department Library, (Henceforth: BSPD)

Parabaik MSS, No 36(D) , BSPD

Parabaik MSS, No 37, BSPD

Parabaik MSS, No 40, BSPD

Parabaik MSS, No 60 , BSPD

Parabaik MSS, No 109, BSPD

Parabaik MSS, No 110, BSPD

Parabaik MSS, No 122, BSPD

Parabaik MSS, No 123, BSPD

Parabaik MSS, No 128 , BSPD

Parabaik MSS, No 129, BSPD

Parabaik MSS, No 139, BSPD

Parabaik MSS, No 164 , BSPD

Parabaik MSS, No 172, BSPD

Parabaik MSS, No 174, BSPD

Parabaik MSS, No 188, BSPD

Parabaik MSS, No 194, BSPD

Parabaik MSS, No 207, BSPD

Parabaik MSS, No 210, BSPD

Parabaik MSS, No 220, BSPD

Parabaik MSS, No 223, BSPD

Parabaik MSS, No 226, BSPD

Parabaik MSS, No 231, BSPD

Parabaik MSS, No 237, BSPD

Parabaik MSS, No 243, BSPD

Parabaik MSS, No 252, BSPD

Parabaik MSS, No 270, BSPD

Parabaik MSS, No 279, BSPD

Parabaik MSS, No 303, BSPD

Parabaik MSS, No 307, BSPD

Parabaik MSS, No 309, BSPD

Parabaik MSS, No 508, BSPD

Parabaik MSS, No 573, BSPD

Parabaik MSS, No 1264, National Library Collection.(Hence forth, NLC)

Published Books in English

Furnival, 1957, *An Introduction to Political Economy of Burma*, Rangoon, Peoples' Literature Committee & House, 8-12

Hiram Cox, 1823, *Journal of a Residence of the Burmhan Empire and More Particularly at the Court of Amarapoorah*, London, John Warren, MDCCCXXI, 130

Sir Richard C, Temple, 1928, "Currency and Coinage Among the Burmese", *Indian Antiquary*, LVII, 13-14

Published Books in Myanmar

Tin, U, 1965, *Myanmar Min Ok-choke-pon Sar-tan-hnint Bow-daw-Pha-yaei Ra-za-that-khaw A-meint-taw-tan-gyi* (Paper on Administration System of Myanmar Kings and Decrees of King Bodawphaya), Vol.II, Yangon, Central Press, 153-159

-----, 1976, *Myanmar Min Ok-choke-pon Sar-tan-hnint Bow-daw-Pha-yaei Ra-za-that-khaw A-meint-taw-tan-gyi* (Paper on Administration System of Myanmar Kings and Decrees of King Bodawphaya), Vol.IV, Yangon, Central Press, 86

Toe Hla,Dr., 2008, *A-laung-min-ta-ya-gyi- ei Kon-baung Shwe-pyi* (Konbaung Dynasty of King Alaungmintaya), Yangon, A-lin-kar-wut-yi Press, 144

-----, 2015, *Old Weirs and Canals Built by Myanmar Kings*(Mgan-ma Sè-myaungtha-maing), Yangon, Sein-yaung-so Sape, 14, 334-336