
CenRaPS Journal of Social Sciences

International Indexed & Refereed

ISSN: 2687-2226 (Online)

<https://cenraps.org/journal/>



Original Article

doi.org/10.46291/cenraps.v4i2.82

‘Land Pricing Model’ to rediscover the past land Business in Archaeology: Perspective of Ancient Samatata of Bengal

Md. Obaidur Rahman

Post Graduate Student, Department of Archaeology, Comilla University, Cumilla, Bangladesh

Email: mor.singair@gmail.com

Mohammad Mahmudul Hasan Khan

Assistant Professor Dr., Department of Archaeology, Comilla University, Cumilla, Bangladesh

Email: smkhanju@gmail.com

Abstract:

The focus point of this study is to find out land business system with money and comparing between Ancient periods (6th to 12th century CE) of Samatata with present through a newly proposed „Land Pricing Model. Its associated element will be analysis here are comparative land price of past and present, economic sector of land, minimum market price of land, pricing method and other comparative facts. To achieve the research objectives this study follows both of qualitative and quantitative research approach. Data is collected from various sectors such as archaeological sites, Library, Internet, Sub-registry office, surroundings of archaeological sites and so on. Topic of this study demand a multidisciplinary approach and it followed here by implementing mathematical formula, principles of business studies knowledge, Land law, Economics etc. carefully. This study conducts a comparative analysis of the economic sector of the land, economic condition of Ancient period, land pricing method, land measurement system, material value of the land and rulers controlling over the land.

Keywords: Pricing method, Land Business, Samatata, Bangladesh

1. Introduction

Samatata is a descriptive rather than ethnic term for an ancient territorial unit in south-eastern Bengal. Samatata was a unique entity that had been known and recognized from the period of Samudragupta (4th CE), with the earliest reference being found in the Allahabad Prashasti (Chowdhury, 2021). Previously published research and books on Samatata economic

condition showed just overview of whole Bengal economic condition not deep or sector based where do not understand sector and area based specific economic condition of the Samatata (Islam, 2017, p.73; Roy, 1949, p.173; Majumdar, 1913, p. 642). Where only agricultural system and land value is huge different (Bailey, 2015, p. 152–3, cited in Bell et. all, 2022) from one region to another there never can explain similarly whole Bengal's Economic history sufficiently together. Therefore it needs to divide the Bengal region in different micro part like *Samatata*. following research aims and goals and goals should be segmented with brief economic factor like land business, agriculture, production, exchange rate, business rate of different products, trade route, land measurement system etc.

2. Aims and Objectives of the research

According to research design and headline aims and objectives of this research are given below:

1. Proposing, “Land Pricing Model” to rediscover ancient land business.
2. Discovering image of Samatata land business between 6th to 12th century CE

3. Research Methodology

All the data collected in this research were deep explained and comparing in field and post field work by doing repeatedly field work and library research. Therefore it can be said that it is followed Archaeological, social science and mixed research method. Data is interpreted from primary and secondary data sources with a full observation, analysis and synthesis way. Facts related to mathematics and other disciplines have been analyzed in direct collaboration with academics from various disciplines.

4. Land Business in Archaeology

It is not clearly known when land business actually started in ancient societies. It may even be the first work on such ideas related to land business but it highly requires a deep study. May be land business was not same as present but artifact some time shows many things that we never understand all at once we can assume just observing it for a long time. Through previous literature reviews so far we can see that previous study was just decipher and simple analysis of archaeological inscriptions about land grants but no price rate of that land and compare with present. To know the land business information, land market price and comparing them to present is impossible without relatively explanation between archaeological evidences and present location, price through an extensive field work. In this model it divided into 7 steps as

below which could follow to discover unknown land business system of the past. The “Land Pricing Model” will be described below in details.

5. Private Land Ownership

Land Business only possible when it would be private property, without private ownership land business is possible. Some historians show that there was no private land ownership and land rights in ancient historical period all were only under King's kingdom (Islam, 2017, p. 176). Neale (1962) claimed as “*It cannot be said with any accuracy whether the king was actually the owner of the land*”. On the other hand Band-Powell (1892) said “*In a sense it was a proprietor and the intermediary was its agent but, “the state never let land competitively or interfered in its management”*” (cited in Ray, 1996, p. 221). The land system in India up to Independence was a mixture of occupancy rights and revenue obligations which varied from State to State (Ray, 1996). In this research found that even though the King has sovereignty but people also have the private land ownership of land and wealth. Private ownership justification also found in *Manusmriti* the Hindu religious text of ancient India (Bandyopadhyay, 1993). Another religious text named *Saduktikarnamrita* also reflected the then economic history. Through the script of Samatata Inscription of *Vainyagupta* (504 CE) known as there was donated 247 *Dronavapas* property to 22 people by purchasing first from others. Donated of all that land some were sold and some were donated to king by them (Samaddar, 2018, p. 53-163). “*Buying and selling of the property by cash payment undoubtedly prove individual ownership right over the land* (Islam, 2017, 73-94, Chakravarti, 2018, p.130)”. In case of agricultural farming this individual property rights gives varieties information about Agricultural production. If Individual land property rights exist then over that land should have liberation of production and tax and duty will be discriminated. According to above explanation of scholars it can be assumed that in Ancient period there were individual property rights.

6. Demand, Material Value of Land and purpose of Use

In the term of economics, if there is a demand, there is a supply, and the supply of a commodity is what makes its business stand (Marshall, 1879, p.91-93, 158). So It's a common matter that there was demand of land which made land's market value. It can be seen in the *Samata* copper plates that land was not bought and sold or donated at one place but small parcels were bought and sold and donated from different places. No village had a sufficient amount of land readily available at once. That is why Loknath's (After 6th century CE) Tripura inscriptions are supposed to cut forests and demolish villages. There was so much demand that sometimes

even the required land was not available. As a result, it is seen that there was a huge demand for land (Majumdar, 1913, p.193-195, Basak, 1919, p.39, Bhattacharya, 1930, p.41).

According to analysis of land use, land touched people and various aspects of land easily can understand the value of land. Different inscriptions found from Samatata and its indication about type of land, copperplates mainly indicates three type of land- *Vastu, Ksetra and Khila* but is more than that (Islam, 2017, p.101) and present and past economic sector connection are given below in table.

Table-1: Land type and economic sector affiliation mentioned in Inscription

SL	Land type in Inscription	Present concept of that land type
01	<i>Nala Bhumi</i>	Cultivated land
02	<i>Tikara Bhumi</i>	Mound land
03	<i>Bastu Tikara</i>	Residential house land
04	<i>Griha Tikara</i>	Abode land
05	<i>Chatana Tikara</i>	Cultivable land
06	<i>Chira Khil Bhumi</i>	Ever wild land
07	<i>Bya Bhumi</i>	Mixed land
08	<i>Ti Bhumi</i>	Mound land
09	<i>Ba Ti</i>	Livable land
10	<i>Gri Ti</i>	House building suitable land
11	<i>Cha Ti</i>	Cultivable land
12	<i>Mu Ti</i>	Uncultivable land
13	<i>Go Charan Bhumi</i>	Cow pasture land
14	Damn*	Damn, City protection from food and Agriculture
15	Reservoir*	Reservoir, Agricultural land
16	Cultivable land *	Cultivable land, Agricultural land
17	<i>Khila Bhumi</i>	Uncultivable land, Agricultural land
18	<i>Khetra</i>	Agricultural land
19	<i>Gung</i>	River, Fisheries land
20	<i>Pushkuroni</i>	Pond, Fisheries land
21	<i>Boiddakhetra</i>	Medicinal land, Herbal land
22	<i>Khetra</i>	Agricultural land

23	<i>Bil</i>	Big reservoir, Fisheries land
24	<i>Aranya</i>	Forest land, Agricultural land
25	<i>Kanamatika Pahar</i>	Hilly land
26	<i>Deva Parvata</i>	Mountain surrounded land
27	<i>Jhopajhara</i>	Less dense than deep forest
28	<i>Ail</i>	Aisle, Farming land divider
29	<i>Godhani Bhumi</i>	Unknown, not translated yet
30	Khata	Like a dug hole
31	Hole-Khad	Hole land
32	Craggy land*	Craggy land
33	Vastu	Residential land

(Source: Islam, 2017: 101; Samaddar, 2018: 45)

7. Land Business: Intermediary (Land Tenure) and Trade of Business Group

In Ancient period businessmen were free to business. So in the light of the above argument it is ensured that the merchants in Samatata could do business freely and along with the king and religious beliefs the merchants could also donate to the temples with their portraits i.e. the merchants had a high level of civic status (Islam, 2017, p.73-90, Samaddar, 2018, p. 65). Therefore, where there was an independent merchant class, it was possible to start any type of business venture independently. Hence it is possible to start land business like modern real estate business. Nowadays, middlemen are often seen in buying and selling land, even in today's free and independent times, intermediaries or arbitration are needed or emerged then in land transactions (Marshal, 1879, p. 214-7; Mukhopadhyay, 1919, p. 123), but during the subjugated monarchy, when people feared and respected the king, brokers and intermediaries were very common at that time. Evidence of that can be found in some testimonies.

An inscription dated 91/184 Gupta mentions that a piece of land in Samatata was owned and sold by a *Shresthi*, which is the earliest mention of any *Shresthi* position in Samatata. Nagar Shresthi is a merchant. Damodorpur Inscriptions-5 of Gupta AD to 224 mentions *Nagarshresthi* as a major merchant. However, *Nagar Shresthi* is not an ordinary merchant; he is a wealthy merchant or investor (Chakravarti, 2018: 162).

What can be the purpose of selling the land? There is no information that the mentioned term '*Nagarshresthi*' sold the land due to deficiency. Then why the land may have been sold. An investigation into the cause found no evidence. Since no evidence is available from the past,

it can be said that in the light of present times and general considerations, it is possible to assume that there was a land trading system which was a source of income for the mercantile community because they have the ability to buy any land at any time in various ways. Moreover, Ranvir Chakravarti also sheds light on land donation as business information from a relative perspective. He said thus “*It has been demonstrated as a methodological counterpoint, that land grants too contained important insights on trade though their principal focus would be on the rural sector (Chakravarti, 2018: 166)*”. So it can be said that this land buying and selling is the business information of the urban nobles or merchant community.

In this inscription, there was only one word about sale but it is said that after getting the ownership of the land, he sold it again. Two things can be inferred from this, one is that he bought the land at a low price and sold it at a high price or received a gift and sold it. Again, no intention of sale is mentioned in it, so it may be that the land was sold because it was profitable to buy and sell it.

Another reason for buying and selling land in the copperplate evidence of land purchase cited here is may be the middleman of the land purchase. As it didn't mention any reason for sale (Islam, 2017, p.78). Therefore, it can be assumed that in the economy of Samatata, the merchant community had a position as an intermediary in land trading and land buying and selling.

8. Land Measurement system and Price

There was no uniformity in the existing methods of land measurement, pricing, tenure, and so on throughout Bengal. In the Gupta period land measurement unit were - *Kulyavyapa*, *Dronabapa*, *Adhadhabapa*. Another unit mentioned in Gunaighara copperplate is *Pataka* (Sircar, 1983 b, c; p.65; Islam, 2017, 73-90; Samaddar, 2018, p. 53-163). It is difficult to convert or compare the land measurement system found in the inscriptions to the modern land measurement system, but DC Sircar and SK Maity have prepared two comparative tables with the modern land measurement units (cited in Chakravarti, 2018). According to modern land measurement units we know that, one Acre = 3.025 Bigha; one Bigha is equal to 33 Decimal Lands.

Table-2: Comparison between Ancient and Modern Land Measurement Units.

According to S K Maity				
SL	Ancient Unit	Modern Unit (Acre)	Modern Unit (<i>Bigha</i>)	Modern Unit (Decimal)
01	1 Dronavyap	1.50744	4.56	150.48
02	1 Kulyavyap	12.562-15.868	38-48	1254-1584
03	1 Pataka	62.809-79.339	190-240	6270-7920
According to D C Sircar				
01	1 Dronavyap	5.289-6.612	16-20	528-660
01	1 Kulyavyap	42.314-52.893	128-160	4224-5280
03	1 Pataka	211.570-264.463	640-800	21120-26400

It is seen (Table-2) that if it is possible to find out the measurement of the land according to this measurements, then the work of searching any existing location will be easy to find. Where it will be possible to estimate very easily, after the discovery of a place, exactly how far it's boundaries may be around it. As a result of increasing land grabbing and urbanization, all the land is occupied by different people and has been mixed with residential properties and used land. For example, the recent excavation of the Nateshwar Buddha vihara complex shows that most of the site is buried under the ground of the neighboring houses, that is, even though these lands are the property of the ancient Buddha vihara, they have once been occupied by people. As a result, 4 to 5 surveys and excavations are required to uncover one part of it (Lelin and Rahman, 2022).

However, due to the lack of comparison between past and present units, even after having written evidence, yet it is difficult to know how far its boundaries actually. So it is impossible to know without finding artifacts through excavation, which is time-consuming, expensive and damaging to uncover the site. Since we often know it's place of origin and its area through inscriptions. Therefore, through this it is possible to find out the original position and its boundaries of any place. For example, *Bhavadeva* Vihara, now known as Shalvan Vihara, is mentioned in several inscriptions regarding *Pernaton* where King *Bhavadeva and Anandadeva* (750-800 CE) donated land. Here is the amount and mention of that land. Now if the place of this land and the place where the inscription is obtained are the same, then it can be assumed that one of the places is the boundary of Shalvan Vihara. Then it will be possible to find out the actual boundaries of Nateswar Vihara that is there more or not? So it is clear that if a correlation can be formed with past and present measurement systems, the initial search will not be as

complicated as before and not have to remain groping in the dark, the fine search can be easy and it will save both time and money.

Land was once measured linearly with a pair of rods. *Vijayasena's* Barrackpore Inscription mentions a scale for measuring land with a rod called *Samattiya Nala*. Similarly another unit is *Brashavsankara Nal*, where *Vrshabhsankara* is a title of *Vijayasena* (Sircar, 1983 a & c, p. 41-68; Samaddar, 2018. p. 53-163). So it can be assumed that *Vrshabhsankara Nala* method is named after the name of great king *Vijayasena* (1097-1158 CE) and it was popular method the then.

Land measurement system is a very important thing in agriculture. Various types of *Nala* (Narrow bamboo sticks) are used even in modern times. Land is measured with these *Nala*. For example, a type of *Nala* (bj) is used to sell rice seedlings in, especially Munshiganj Manikganj, Tangail, and Narsingdi districts around Dhaka.

One *Qora* paddy *hali* (paddy seedling) is equal to one *Nala* (bj) of seven and a half cubits length equal to the number of seedlings in the area. May be this *Nala* system is going on since ancient times. Its modern state has changed a lot. Besides, another type of method for land measurement is the chain method which is also used for government land measurement in sub registry office.

9. Ancient and Modern Pricing Method of Land

In the modern market system, the value of land is determined based on area-wise demand for land and its development. The price of land in the capital area is not the same as in the district towns and not so much in the suburbs or suburbs in normal cities. Again same city but different purchase price in different *mauzas*. But one more thing is that the price of a land is fixed according to the market price fixed by the government. However, the price of the land can rise above government fixed price according to the needs and exceptions of the land owner. It happens in most cases. The total market price fixed by the government is determined by the local sub-registry office after analyzing various criteria on the local market system. Below is the local market price list of *mauzas* in Sadar south Upazila of Cumilla (Source: Sadar south Sub Registry Office, Cumilla). Section 5(2) of the Rules relating to determination of market value under the Minimum Market Value of Property Rules, 2010 is set out here.

(2) *Member-Secretary of the Committee every 2 (two) years in determining the market value from 1st January to 31st December of the first year and from 1st January to 31st October of the second year on the basis of the value of the Suf-Kabala (clear sell-deeds) deeds registered in the respective sub-registry area on the basis of the concerned class. A list of average prices*

shall be prepared and submitted for the consideration of the Committee by 15th of November of the second year.

Here it is seen that the market value of the property is roughly the average market value of the sellers' purchase and sale price hence it is an acceptable value. By comparing the market value of that time, it is possible to know the money value of the Ancient period.

It should be noted that here the latest market value of the property of the People's Republic of Bangladesh for the year 2016, 2017-18 is highlighted because the Government of Bangladesh issued a circular (cwiC) dated 30-20-2020 its memorandum No- No./Registration-4(AD)/445(506) {wbA/†iwRtkvt-4(Xvtwet)/445(506)}. By this circular government announced that the country's economy has contracted due to the global Corona epidemic, the general market price made in 2017-18 will be applicable for the next 2 years i.e. 2021 and 22. In that sense, the market price list is used here. Below is a list of market value fixed for 40 *Mauzas* from Cumilla Sadar South Sub-Registry Office as per Amendment 2015 of Public Property Market Value Rules 2010 in the People's Republic of Bangladesh –

কুমিল্লা সিটি কর্পোরেশনের অন্তর্ভুক্ত মৌজাসমূহ ৪-

ক্রমিক নং	মৌজার নাম ও জে.এল নং	কুমিল্লা সিটি কর্পোরেশন	নাম	চেনা	ডিগি	বাগান	পুকুর পাড়	খিল পাহাড়	বশত বাড়ী	জেবা/পুকুর	সোকল ডিগি	মন্তব্য
০১	কফুরা-২৯০	মৌজা সম্পন্ন এলাকা	৪,০৮,৮৭৩	৩,৭০,৩২৩	৩,০৬,০০৩	৩,০৫,৮২৫	৩,০৫,৮২৫	৩,০৫,৮২৫	১০,০০০	২০,২২২	৩,০৫,৮২৫	
০২	সালমানপুর-২৫৬	মৌজা সম্পন্ন এলাকা	২,৮৪,৮৭৫	২,৮৩০১৫	২,৬৮,২৫৩	২,৫০,০০০	২,৫০,০০০	২,৫০,০০০	৪,৮৪,৫৪৫	৪,১৭০		
০৩	চাঁদিনী-২৫২/১	মৌজা সম্পন্ন এলাকা	৪,০২,২৩৮	৩,৩৪,৭৮৩	৪,০৮,৭১৫	৩,৫৭,১৪৩	২,৮৬,৫৯৯	২,৮৬,৫৯৯	৩,৬২,৩৫৮	২,৭১,৯১২	১১,০০,০০০	
০৪	জয়পুর-২৭৭	মৌজা সম্পন্ন এলাকা	১,৪৭,৪১৭	১,৪৫,৮৪২	৪,৭৮,৮৬৫	৪,৭২,২২২	৪,৭২,২২২	৪,৭২,২২২	১,৯৯,৬৪২	৮৬,৮২৩		
০৫	বাতাবাড়িয়া-২৫২	মৌজা সম্পন্ন এলাকা	৩,৩৬,২২৭	৩,৩৫,১৭২	৮,০৫৭	৭,০০০	৭,০০০	৭,০০০	৫৫,৩৫৫	৯১,৩৭৫		
০৬	আশ্রাফপুর-২৯৩	মৌজা সম্পন্ন এলাকা	৭,৪৯,১৫৭	৭,০১,৪৩০	১৫,২১,৩০৩	৮,০৫,০২৭	৮,০৫,০২৭	৮,০৫,০২৭	১২,৬৭,০৪৭	৮,১০,০০০		
০৭	আসানিয়া-২৮৮	মৌজা সম্পন্ন এলাকা	৪,৬৩,৬৩৭	৪,৫২,৩৭০	১,৫৬,৬৬৬	১,৫৬,৭৫০	১,৫৬,৭৫০	১,৫৬,৭৫০	২,০০,০০০	৫,০০০		
০৮	শ্রীকান্তপুর-২৭৩	মৌজা সম্পন্ন এলাকা	৩,৪৫,৩০৭	৩,৩৬,৫৯৬	৬,৯১,৭০৭	৬,৭৬,৪৬৭	৬,৭৬,৪৬৭	৬,৭৬,৪৬৭	৪,৮৫,৩৪৫	৪,৮৫,৩৪৫		
০৯	উত্তর হামপুর-২৭২	মৌজা সম্পন্ন এলাকা	২,৩৫,১৬৬	২,৩০,৪৯২	৬,২৪,৪৪২	৫,৫৭,৯৯৪	৫,৫৭,৯৯৪	৫,৫৭,৯৯৪	১১,৬৬,৯২৫	৩,৬৬,৪৮৪		
১০	দৈয়ারা-২৫৭/৯	মৌজা সম্পন্ন এলাকা	৪,৪৭,৫৩৮	৪,৩৬,১২৮	২,৮১,৩৬৫	২,০৭,৪৬৯	২,০৮,০০০	২,০৭,৪৬৯	৪,৬৪,৮১৮	৩,৬২,৭২৪		
১১	শ্যাকতলা-২৮৭	মৌজা সম্পন্ন এলাকা	২,৯৯,০৪০	২,৫০,৩২০	৭,৫০,৮২২	৬,৩৯,৮২৫	৬,৩৯,৮২৫	৬,৩৯,৮২৫	৮,১৪,১১৭	৮,৩৫,৩৩৫		
১২	হামনাগর-২৮৯	মৌজা সম্পন্ন এলাকা	৩,১৪,৫৩৫	২,৬২,০০০	৩,৫০০	৩,৫০০	৩,৫০০	৩,৫০০	৫,০০০	৫,৫০০		
১৩	হামপুর-৩৯	মৌজা সম্পন্ন এলাকা	৩,৬৪,৮৫০	৩,৫৭,২৮৪	৮,৬৪,৯০৭	৫,৫০,০০০	৫,৫০,০০০	৫,৫০,০০০	৭,২৫,৪১২	২,৮৩,৩৩৩	৫,৫০,০০০	
১৪	দর হামনাগর-৪৭	মৌজা সম্পন্ন এলাকা	৪,০২,৬৫৭	৩,৬৩,৯৬৭	৪,৬৬,৬৬৭	৬৫,৫৭৩	৬৫,৫৭৩	৬৫,৫৭৩	১,০৫,৮৪৫	১,১৫,৭৯০		
১৫	ফিরোজপুর-৪৮	মৌজা সম্পন্ন এলাকা	৩,১৭,৩৯২	৫০,০০০	১৫,১৪২	৪,০০০	৪,০০০	৪,০০০	৫,০০০	৩,০০০		

ক্রমিক নং	মৌজার নাম ও জে.এল নং	কুমিল্লা সিটি কর্পোরেশন	নাম	চেনা	ডিগি	বাগান	পুকুর পাড়	খিল পাহাড়	বশত বাড়ী	জেবা/পুকুর	সোকল ডিগি	মন্তব্য
১২১	কক দুর্গাপুর-১০৮	মৌজা সম্পন্ন এলাকা	২,৬৩,৮৯৩	২,৫২,০৮২	১,২২,৫০০	১,২২,৫০০	১,২২,৫০০	১,২২,৫০০	২,৫৭,৮৯৫	১,০০,০০০		
১২২	জিওর বাঘাড়া-৪৬	মৌজা সম্পন্ন এলাকা	৬,৬৭,৪৯২	৬,১১,৬৬০	৩,৫৭,১৪২	৩,৫০০	৩,৫০০	৩,৫০০	৪,৫০০	২,২৫০		
১২৩	মনিপুর-২৫৪/৪	মৌজা সম্পন্ন এলাকা	২,০৫,১৫৮	২,০৪,৭৭৫	২,২০,০৫৪	২,০৯,৭৮০	২,০৯,৭৮০	২,০৯,৭৮০	৬,২৫,০০০	২,৫০০		
১২৪	লালামাই পাড়া-১১০	মৌজা সম্পন্ন এলাকা	১,৫৯,১৩৫	১,৩৭,৮৫৮	১,৮০,৫৫৩	১,৪০,১৯৮	১,৪০,১৯৮	১,৪০,১৯৮	১,৪১,৭২২	৫,৪৬,৯২২	৩,৬৬,২৫০	
১২৫	নোয়াখামা-৩৬৯	মৌজা সম্পন্ন এলাকা	১,০২,৪৯৫	১,০০,০০০	৬৯,৫৯২	৩৬,২৮৫	৩৬,২৮৫	৩৬,২৮৫	৪,০০,০০০	২,৪০৯		
১২৬	পাটালকুঠি-৩৭৫/১	মৌজা সম্পন্ন এলাকা	৮৬,৫৯৩	৮৩,৭৫০	১৬,০২০	১৫,২০৮	১৫,২০৮	১৫,২০৮	৬০,০০০	৫০,০০০		
১২৭	উত্তর হামপুর-২৯৫	মৌজা সম্পন্ন এলাকা	৪,৬৬,১৭০	৪,৬৪,৮৩০	৮,৭৫,০০০	৩,০০,৭৫০	৩,০০,৭৫০	৩,০০,৭৫০	২,৫৫,০০০	৭,৫০০		
১২৮	দাখিন হামপুর-২৯৬/১	মৌজা সম্পন্ন এলাকা	৩,০৬,৪০৭	২,১৯,৮৩৯	৩,০৭,০৭৫	৩,০৭,০৭৫	২,৬৬,১৭০	২,৬৬,১৭০	৭,৫০০	১		
১২৯	ধনীপুর-৩২৬	মৌজা সম্পন্ন এলাকা	৭৫,৬১৫	৭২,৯৭২	৮৫,৭১৪	৮৪,৪২২	৮৫,০০০	৮৪,৪২২	১৭,৫০০	৪,২৮৬		
১৩০	বাহুবল-৩২৬/১	মৌজা সম্পন্ন এলাকা	৫,৮৮,৮০৩	৫,৬২,৫০০	৮৯,৯৯২	৮৬,২০৩	৮৬,২০৩	৮৬,২০৩	১,৩৫,৮৩৩	১,৪৫,৮		
১৩১	দুর্গাপুর-৩২৫	মৌজা সম্পন্ন এলাকা	৪০,০০০	৩৯,৭১৮	১,০০,৬৪৬	১,০০,০০০	১,০০,০০০	১,০০,০০০	৪৪,২৬৫	৫১,০০০		
১৩২	গোলাপখন্দ-৩৪৭	মৌজা সম্পন্ন এলাকা	৮৪,২২২	৭৬,৩৩৫	৫১,৭৪৬	৫,৭৪৬	৫,৭৪৬	৫,৭৪৬	৭১,৮১৮	১,৪২,০০০		
১৩৩	উত্তর হামপুর-২৯৮	মৌজা সম্পন্ন এলাকা	২,২৪,১৪৫	২,১৯,১৭০	২,২০,৪১৩	১,৬৬,৭৫৩	১,৬৬,৭৫৩	১,৬৬,৭৫৩	৪৭,০৪৮	৪৭,১১৫		
১৩৪	মৌজাখাপুর-৩১৯/১	মৌজা সম্পন্ন এলাকা	১,৬৪,৯৪৩	১,৬৪,২৭৫	৬,৪৪৪	৪,৫০০	৪,৫০০	৪,৫০০	৫,৫৫৫	১,৮৩,৩৩৩		
১৩৫	ধনপুর-৩৭০	মৌজা সম্পন্ন এলাকা	৫৫,৫২২	৪২,২২২	৮০,০০০	৭৭,০০০	৭৭,২২২	৭৭,০০০	৫,৫০০	১,৬৬০		
১৩৬	দুর্গাপুর-৩৬১	মৌজা সম্পন্ন এলাকা	১,৬০,৭৭৬	১,৫৮,১৭৪	১,৩০,২০০	১,৩০,২০০	১,৩০,২০০	১,৩০,২০০	২,৮৩,৪৮৭	৩,৩৭,৫০০	৮,৫০,০০০	
১৩৭	জারাপাড়া-৩২৩	মৌজা সম্পন্ন এলাকা	৩৫,৪৬৭	৩৪,৯০৫	৭১,৬৬৬	৭১,৪২৮	৭১,৪২৮	৭১,৪২৮	৭১,০০০	২,৪৫,০০০	৭৬,৯২৩	
১৩৮	দুর্গাপুর-৩২২	মৌজা সম্পন্ন এলাকা	৮৩,৬৫০	৮৩,৫৩০	৩,৬৭৫	৩,৬৭৫	৩,৬৭৫	৩,৬৭৫				
১৩৯	হামপুর-৩৪৯/১	মৌজা সম্পন্ন এলাকা	২,২৬,৫৩০	২,০০,০০০	১,০০,০০০	১,০০,০০০	১,০০,০০০	১,০০,০০০				
১৪০	মাটিয়া-৩৪৮	মৌজা সম্পন্ন এলাকা	৭৯,০১৯	৭৪,৫২৭	১,৩৬,৩২২	১,২২,৩৫৫	১,২২,৩৫৫	১,২২,৩৫৫				

Figure-1 & 2: Total purchase price of 20 mauzas land in Comilla as determined by the government

The analogy here is that of the Ancient inscriptions discussed earlier in the Para on private ownership of land, where private ownership and the right to sell were attested. Sometime King himself someone common people purchased and sold (Table-3) their land in an average rate which indicate there were a legal practice of determining the minimum Market Price of Land otherwise the sale price of the land would have been different in each case but surprisingly it has an uniformity of market price that prove the Minimum Market Price of Land. The name of *Pustapala* (Record Keeper) can find in the copperplates of Samatata which is actually dedicated to land record, registry (Islam, 2017, p.77). Comparing between Ancient *Pustapala* and present sub-register office, it is clear that both of the offices purpose is same. So land price was fixed by King`s court and controlled by *Pustapala*.

Another issue of concern is, King *Vainyagupta* (504 CE) purchased and donated a total of 247 *Dronas* of land in 31 blocks from 51 owners by purchasing from 22 and donating from 9 through issuing his Samata/Dhaka copperplate. The king himself donated 120 *Dronas* of land in *Tarlachanda* village but the price is not mentioned in the copperplate (Islam, 2017, p. 90, Samaddar, 2018, p. 53-163). Here concerning issue is the King himself purchasing the land in a price rate first (Davies & Bhattacharya 2019) and the free businessmen also selling them following that price that means the King as a ruler fixing a Minimum Market Price from his court by himself. There is also a similarity with modern Minimum Market Price of Property act.

Who knows, maybe we have retained this method from ancient times through our ancestors genetically connection of brain without our conscious knowledge.

Again, as a common price was determined by the agreement of the king and the royal court at that time, a common market price of land is determined through a legal system. So it appears that there is a similarity in determining the value of land in both the cases.

10. Single Pricing of Numerous Assets

The market price of Samatata in the Ancient period and the current local market price have changed the value of money over time. However, this study suggests a higher level of research to be able to compare how much that has happened. Some researcher developed following approach for the selling of numerous assets for a single price at any moment throughout the sample period, which is based on a hedonic pricing model

$$Payment_i = \sum_j \sum_k \beta_{jk} Year_j Asset_type_k + u_i$$

“Where year dummy variables j are interacted with the asset-type quantity variables k so that the parameter estimates, β_{jk} , can be interpreted as the prices per unit of that type of asset k during year j . Some transactions involved only one asset, whereas others included several assets, and the approach that we use will separate out the contribution of each individual asset to the overall price (Bell et al 2022, p. 6)”. Even more they suggested using actual value of an asset price to know land price of ancient time (Bell et al 2022, p. 8).

Therefore, through this research it could be found price fluctuation from ancient to present time. It is possible to find out the detailed business system of that period by conducting in depth study about past economic activity. For example, land purchase and sale related transaction, daily *haat*-market, household goods transactions, foreign trade, use of currency in trade, foreign currency transactions, inter-*Janapada*¹ commercial transactions, exchange practices etc. type marketing and trade transactions related information are available in Samatata archaeological records, especially in copperplates (Alam 2011, p.15-35; Ghosh, p. 1-16, 2019, Bhattacharya, 1933, p. 282-89). There were many waves of migrations into Bengal from the prehistoric period (Jha, 2014; Siddiq & Habib, 2017). Migration and inter racial acculturation prolonged to medieval period by Turkic descendants also happened through commercial transaction (Khan et al., 2022, p.11). So much commercial and marketing information is available here, so it can be assumed that the profit, loss and interest rate of these transactions will also be able to find out. However, this requires further in-depth research and study on the proposed concepts in this research paper.

11. Comparison between past and present price of land

Scholars claimed that Shalvan Vihara and its surrounding is the historical center of Samatata based on inscription of that time (Rashid, 2008p. 85, 160; Narayan, 2008, p. 61; Jha 1988, p.49). Vihara is called as University of that period in various archaeological reviews. There was a '*Mahabhogashram*' institution with a total of 8 viharas which was a '*bhuvanbismay*' or wonder of the world (Gupta, 1979). It is very similar to present Mainamati area because there are also about 8 and more viharas around it.

Therefore, it can be said that this Shalvan Vihara and the neighboring viharas are the '*Mahabhogashram*' and 28 *patakas* of land has been donated to this *Bhogashrama* which is adjacent to the pond and the highway. Therefore, this land may have been farmed and fished in

¹ The Janapadas were monarchies and kingdoms of the Vedic period c. 1500-600 BCE on the Indian subcontinent

ponds. However, during the excavation, several agricultural equipment and tools were found at various places of Samatata including Shalvan Vihara (Rashid, 2008).

Comparing between Information found in the list (Figures 1, 2) and evidences found about shalvan Vihara and its surrounding places present location of that places likely to be included present Viharas like Salmanpur-256, North Bagmara-46, and Lalmai Pahar- 110 *Mauza* because the Viharas are mainly located within it and the purchase price of that land is mentioned in Vainyagupta's (504 CE) Dhaka copperplate. Again, Vainyagupta's Gunaighara copperplate has been found in *Devidwar* area very close to this area (Zakaria, 1984, p. 24, 37; Rashid, 2008 p. 182, 209). Although the copperplate is found at *Devidwara*, but there is no way to know whether it is its primary context or secondary context. Whatever the initial location of the copperplate, there is evidence of similarity of some of the names of the places mentioned in it with some of the places of present day Salmanpur-256 *Mauza*. For example, in the second part of *Gunaighar* copperplate, twenty-eight *Dronas* of land in the west of '*Rajvihara Kshetra*' has not yet been found in any Vihara named as such. Now *Raj Vihara* is sometimes used to denote the name of a big place or prestigious place with prefix Raj. In that case, if it is used in that sense, it may also refer to *Bhavadeva Vihara* as it is the largest and most shining vihara so far discovered in the region. This name has come again as a place around *Uttar Mandal*. Another name found '*Vihara Talbhumi*' (*wenvi Zjf-wg* in bengali meaning *Talbhumi means lower or corner part of a prominent area like Shahartoli-kniZj* in English suburbs, downtown etc.) what is this *Vihara Talbhoomi*? If this is also consider semantically, then it can be understood that it is also meant to be a place around some Vihara or downtown or lowest part of a prominent Vihara.

Again, these two are of the same regime and ruled by the same ruler, so their position should not be too far apart. Yet another third copperplate has been found in *Shalvan Vihara* at the lowest strata. In that case, the comparative analysis of these 3 inscriptions indicates that whatever the finding spot, their location was nearby and that place was in the vicinity of *Shalvan Vihara* i.e. *Raja Bhavadeva Vihara*. *Deva parvata* was the center of Samatata and it was near Lalambi a forest and lalmai hill track is identified as *Devaparvata* (Rashid, 2015). Therefore, according to the information found in the list of *Mauzas* of this land in modern times and according to the written evidence and the location of the present Viharas, there is a possibility that the places around the *Deva Parvata* and Viharas of Samatata are included in the *Mauza* area of Salmanpur-256, North Bagmara-46, and Lalmai Pahar-110.

Though Vainyagupta's (504 BCE) Samatata/Dhaka Copperplate, King purchased and donated a total of 247 *Dronas* of land in 31 blocks from 51 owners by purchasing from 22 and

donating from 9 (Samaddar, 2018, p. 53-163). Below is the list of purchased lands out of which the sale price of the land is mentioned here:

Table-3: Estimates of Average Land Sale Prices in the Ancient Age.

S L	Land Name (Sanskrit to English)	Quantity of land (Dronavyap)	Total Price (Dinara+Masha)	Per unit price (Dinara)	Per Dinara Sold land (Dronavap)
01	<i>Jakkanshati</i>	40	4	1/10	10
02	<i>Jakkanshati</i>	15	1 <i>Dinara</i> & 8 <i>Masha</i>	Undetermined	undetermined
03	<i>Jakkanshati</i>	15	1 <i>Dinara</i> & 8 <i>Masha</i>	Undetermined	undetermined
04	<i>Payonatana</i>	10	1	1/10	10
05	<i>Payonatana</i>	20	2	1/10	10
06	<i>Ulug Ucchayika</i>	20	2	1/10	10
07	<i>Jakkanshati</i>	30	3	1/10	10
08	<i>Jakkanshati</i>	20	2	1/10	10
09	<i>Jakkanshati</i>	40	4	1/10	10
10	<i>Poronchoshaka</i>	40	4	1/10	10
11	<i>Nognapattochchali ka</i>	80	8	1/10	10
12	<i>Nognapattochchali ka</i>	20	2	1/10	10
13	<i>Urchondo-chhalika</i>	40	4	1/10	10
14	<i>Tugrochchhalika</i>	60	6	1/10	10
15	<i>Tugrochchhalika</i>	90	30	1/10	10
16	<i>Mormet</i>	Land with 4 house	18	Undetermined	Undetermined
17	<i>Khoddo-mottonochchhalika</i>	80	8	1/10	10
18	<i>Perobkati</i>	100	20	1/5 (lowest)	5 (lowest)

19	<i>Godhanika</i>	40	4	1/10	10
20	<i>Ketogptotachchali ka</i>	60	6	1/10	10
21	<i>Ketogptotachchali ka</i>	40	4	1/10	10
22	<i>Ketogptotachchali ka</i>	100	10	1/10	10
Total/Average		Total 247 & Land with 4 houses	Total 134 <i>Dinara</i> 16 <i>Masha</i>	Average 1/10	Average 10

(Modified from Samaddar, 2018: 57)

It can be seen (Table-3) that on an average 10 *drona* (*Dronavyap*) of land was sold at the price of 1 *Dinara*. Again the modern and current measurements of the land as per the earlier mentioned proposal of DC Sircar and SK Maity have been mentioned. As such, the measurement of land and the value of land with the present time are highlighted as follows- According to Calculation of SK Maity (Table-3), One *Drona* = 150.48 decimal as he proposed (Chakravarti, 2018). Again, the price of 10 *dronavyap/Drona* land is 1 dinar or 10.150.48 = 1504.8 Decimal of land is worth 1 dinar.

So therefore, 1504.8 decimal land value = 1 dinar

1 decimal land value = 1/1504.8 dinars or 0.00066454014 dinars.

Again, the present value of 10 *drona* or 1504.8 decimal of land is 1504.8284875 = 428679900 taka. So the value of 1 dinar during the period of Ancient *Vainyagupta* = Present value of 42, 86, 79,900 taka (forty two crore and eighty six lakh and seventy nine and nine hundred taka).

Or the value of one decimal of the land in the period of *Vainyagupta* (504 CE) in the Ancient Samatata is equal to 0.00066454014 *dinars* and the present price of land in a certain Mauza Salmanpur Mauza is 284875 taka.

Table-4: Early-Medieval and Present Value of Land in the Eastern Mandal of Samatata.

According to S K Maity			
Ancient Position	Relative Position To Current Mauza	According to Ancient land price current per decimal land price (<i>Dinara</i>)	Per decimal land price in current unit (Taka)
Eastern Mandal of Samatata	According to Salmanpur-256 Mauza	0.00066454014	284875 Taka
Eastern Mandal of Samatata	According to Lalmai-110 Mauza	0.00066454014	159138 Taka

12. Conclusion

The above mentioned 7-steps land pricing model helps to understand the ancient land business in detail. It is possible to know about the land business of any place by adding or subtracting any step of this model in the same way or from place to place. Every country in the world has a system of land pricing method. This study has shown that it existed in ancient Bengal and in Ancient and medieval England too. So it can be applicable to many places in the world. In the study Samatata region of Bengal is selected as a sample to justify this model. After completing this model it is proved that it is applicable. This study concludes that long long times have gone but in some aspects of economic history has a deep similarities yet. After completing this research huge similarities of land business system between modern and Ancient period of Samatata and present Mainamati area have come out. This study identified Ancient places over modern Mouza mapping system. The study also found land price and tried to calculate the minimum land price, pricing method has a similarities to present. It recommends that if a deeper analysis could run, it is possible to know many more unknown economic history of Samatata.

References:

1. Alam, A. (2011). Geographical Basis of Cultural and Economic Aspects of Early Bengal from the 5th to the 13th Centuries AD, PhD. thesis, Department of Economics, Jawaharlal Nehru University, India
2. Bandopadyay, R. D. (1324 Bangla). *Bangalir Itihas (History of Bengal)*, Dej Publications, Kolikata (In Bengali).

3. Bandyopadhyay, R. (1993). *Land System in India: A Historical Review*, p. A149-A155, Vol. 28, No. 52, Economic and Political Weekly.
4. Bell, A. R., Brooks, C. & Killick, H. (2022). *The first real estate bubble? Land prices and rents in medieval England c. 1300–1500*, Research in International Business and Finance, Science Direct, Elsevier. Retrieved from: <https://doi.org/10.1016/j.ribaf.2022.101700>
5. Bhattacharya, D. C. (1930). *A Newly Discovered Copperplate from Tipperah*, Indian Historical Quarterly, Delhi.
6. Bhattacharya, D. C. (1933). The Mainamati Copperplate of Ranavankamalla Harikeladeva (111 Saka), p. 282-89, Indian Historical Quarterly, Delhi.
7. Basak, R. G. (1919). Tipperah Copperplate grant of Lokanatha: the 44th Year, Epigraphia Indica (XV), Archaeological Survey of India, Delhi.
8. Chowdhury, A. M. (2021). Samatata, S. & Jamal, A. A. (eds.) *Banglapedia: National Encyclopedia of Bangladesh*, (2nd Ed.). Dhaka, BD: Asiatic Society of Bangladesh (Accessed on 07/08/2022).
9. Davies J. R. & Bhattacharya S. (2019). *'Land Holding, the Recording of Property Transfer and the Formation of Kingdoms: The Comparative experience of Medieval Scotland and Bengal'*, University of Calcutta and University of Glasgow. ISBN: 978-0-85261-950-6.
10. Ghosh, S. (2019). *Crossings and contacts across the Bay of Bengal: a connected history of ports in early South and Southeast Asia*. Journal of the Indian Ocean Region, p. 1–16. doi:10.1080/19480881.2019.1640577
11. Islam, K. (2017). *Economic History of Bengal (C. 400 - 1200 A.D.)*, Thesis paper, ProQuest LLC, University of London.
12. Jha, N. (1988), *Feudal Social Formation in Early India*, p. 49, South Asia Books.
13. Khan, M. M. H., Habib A. & Siddiq A. B. (2022). *Turkic Acculturation and the Emergence of Bengali Identity*, Cenraps Journal of Social Sciences, Volume 4, Issue 1, 2022, 1-17
14. Lelin, N. A., & Mostafizur S. (2012). *Pray 1 Hajar 100 Bochor Ager Vikrampurur Sthaponar Sondhan Lav*, (About one thousand and Hundred years old structure found in Vikrampur, Desk Report, Vikrampurur Khobor. Retrieved from: <https://rb.gy/ugmioi>, 8/9/2022 (In Bengali).

15. Majumdar, R. C. (1352 Bangla). *Bangladesher Itihas Prachin Yug First Part (History of Bengal Ancient Period vol-1)*, General Printers and Publishers Private Ltd., 119, Dharmatala Street, Kolkata-13 (In Bengali).
16. Majumdar, S. (2015). *Agrarian Society in Ancient Bengal*, Social Scientist, 43(5/6), 11–27. <http://www.jstor.org/stable/24642344>
17. Mukhopadhyay, S. K. (1919). *Adimadya O Madyayuger Bharat (India in Ancient and Medieval period)*, Rawat Publications, Gopinath Garden, Jaipur, India (In Bengali).
18. Marshall, A. & Marshall, P. (1879). *Economics of Industry*, Acmillan and Co.London
19. Majumdar, R. C. (1913). *History of Bengal Hindu Period, Vol-1*, University of Dacca,
20. Narayana, J. D., Translated Dey. G. S. (2008). *Adi Bharat (Early India)*, p. 61, Progressive Publishers, Calcutta (In Bengali).
21. Paul, S. (2018). ‘*Monetary History of Pre-Islamic Bengal*’ under the auspices of the *Centre for Social Sciences and Humanities*, UGC-UPE Project, University of Calcutta.
22. Rashid, M. H. (19 Jan 2015). *Devaparvata*, S. & Jamal, A. A. (eds.). *Banglapedia: National Encyclopedia of Bangladesh*, (2nd Ed.). Dhaka, BD: Asiatic Society of Bangladesh (Accessed on 12/03/2022), Retrieved from: <https://rb.gy/fitcgg>
23. Rashid M. H. (1979). *The City and Environs, Mainamati Devparvata*, (ed. ABM Hussain), Bangladesh Asiatic Society, Dhaka.
24. Roy, R. (1356 Bangla (1949). *History of Bengal Early period*, Dej Publicationm Kolkata, India. (In Bengali)
25. Ray, S. K. (1996). *Land System And Its Reforms In India*, Indian Journal of Agricultural Economics, Vol. 51, No. 1 and 2.
26. Rashid, M. H. (2008). *The Early History of South-East Bengal In the Light of Archaeological Material*, Itihas Academy, Dhaka.
27. Sharma, R. S (1996). *Prachin Bharater Samajik a Orthonoitik Itihas (Social and Economic History of Ancient India)*, p. 26, Orient Blackswan Private Limited, Orient Longman, Calcutta (In Bengali).
28. Shastri, H.P (2008, 3rd Ed.2017). *Buddha Dharma (Buddha Religion)*, Nabayuga Prokashoni, Banglabazar, Dhaka (In Bengali).
29. Shahnawaz, A. K. M (2018). *Banglar Sanskritik Oitihya (Cultural Heritage of Bengal)*, p. 148-49, Novel Publising house, Dhaka (In Bengali).
30. Shahnawaz, A. K. M. (2003). *Daksin Asiar Itihas 1526 Khristabdo Porzonjto (History of south Asia till 1526 CE)*, Protik Prokashona Sangstha, Dhaka (In Bengali).

31. Samaddar, R. P. (2018). *Samataer Protnolipimala (Inscriptions of Samatata)*, Centre for Archaeology and Heritage Research, Bangladesh (CAHR) Dhaka (In Bengali).
32. Sengupta, P. K. (1962). *Dharma Dorshan (Religious Philosophy)*, Banerjee Publishers, Kolokata, India (In Bengali) (In Bengali).
33. Sircar, D. C. (1973). *Epigraphic Discoveries in East Pakistan*, Sanskrit College Calcutta.
34. Siddiq, A. B. & Habib, A. (2017). *The formation of Bengal Civilization: A glimpse on the socio-cultural assimilations through political progressions in Bengal Delta*. Artuklu Human and Social Science Journal, 2(2), 1-12.
35. Sharma, R. S. (1984). *Indian Feudalism*, Social Scientist Journal, Vol.12, No.2.
36. Sircar, D. C. (1959-60). *Epigraphia Indica, Vol- XXXIII*, Archaeological survey of India, New Delhi.
37. Sircar, D. C. (1983a). *Select Inscriptions Bearing on Indian History and Civilization (II)*, p. 40,41Matilal Banarasidas, Delhi.
38. Sircar, D. C. (1983b). *Select Inscriptions Bearing on Indian History and Civilization (III)*, p. 40,41Matilal Banarasidas, Delhi.
39. Sircar, D. C. (1983 c). *Select Inscriptions Bearing on Indian History and Civilization (XXV)*, p. 40,41Matilal Banarasidas, Delhi
40. Sircar, D.C. (1951). *Copper plate Inscription of King Bhabadeva of Devaparvata*, Journal of the Asiatic society Letters Volume XVII, Asiatic Society, Calcutta
41. Zakaria, A. K. M. (1984). *Bangladesher Protno Sampad (Archaeological Resource of Bangladesh)*, Bangladesh Shilpakala Academy, Dhaka (In Bengali)