

Socio-archaeological Space in the Irrigation Associated with Palipbothana and Suburbs of North Central Dry Zone in Sri Lanka

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The process of systematically managing water in the natural environment and using it for human society's various functions, mainly agriculture, is commonly referred to as the waste industry. It is essential to identify how the irrigation's origins took place concerning human society and the spaces that influenced it. Irrigation can remember as a process born out of the people's needs and gradually developed because of them. Accordingly, it is essential to identify irrigation's underlying causes and development in ancient human societies and the social activism underlying the emergence of various fields in irrigation.

One of Sri Lanka's key features are located close to natural waterways known as rivers or streams and in more remote valley areas. It confirmed the prevalence of contemporary early and late Brahmin inscriptions (IC. vol. i, 197; IC. vol. ii, 1983). The irrigation schemes based on the tank and the anicut can identify the necessary work to nourish the land remote from the valley. Accordingly, what can place in the ancient Sri Lankan society is not a river valley civilization but an irrigated one. Irrigation is considered a fundamental investment in this society. This irrigation-based civilization's distinguishing feature is developing technologies that can utilize water from natural waterways in major or sub-valleys using irrigation strategies.

Location

Palipbothana village is situated in the Kahatagasdigiliya divisional secretariat division in the Anuradhapura District of the North Central Province in Sri Lanka. It is located in a dry zone environment; this area has a slightly higher altitude than the surrounding areas. This area is situated in an inter-valley zone bordering the Kuda Oya sub valley of Moraoya to the east and the Kandara Oya sub valley of Malwathu Oya to the west.

Access to the Irrigation

Identify the socio-archaeological space that contributed to irrigation development in the Palipbothana and suburban regions; it is necessary to study the region's settlement from the Proto-historical period. It is clear that by the Proto-historic period when the most organized ancient settlements found in Sri Lanka, people were turning to areas where their

needs could meet. The emergence of a subsistence economy based on animal husbandry and limited agriculture is the main feature of this period (Senaviratne, 1984). Accordingly, the shift towards an environment-based system of meaning has taken place at this stage. It seems that the Proto-historic people of this country have focused on creating permanent settlements in areas that are suitable for their activities and where their needs can quickly meet. The Proto-Early Iron Age culture of Sri Lanka dates back to approximately 1000 BC - 300 BC (Paranavitana, 1956; Indrapala, 1969; Begly, 1981; Deraniyagala, 1992; Senaviratne, 1996; Withanachci, Mendis 2017; Mendis, 2019).

Proto-historic cemeteries can use as vital evidence to uncover information about the current population expansion. The distribution of megalithic cemeteries clarifies that the Proto-historical settlements in Sri Lanka mainly located along the dry zone river valleys (Senaviratne, 1984). This area that belongs to an inter-valley region has a dry climate and soil suitable for cultivation. The ability to engage in artificial agriculture effectively with artificial irrigation due to the prolonged dry weather in the area can be considered the main reason for expanding settlements. Most of the evidence of megalithic cemeteries uncovered is the location within a radius of approximately 40 km from the centre of the Palipbothana study area. Gurugalhinna, Thammennagodella, Wadigawewa, Rambewa, Kok-ebe, Divulwewa, Siyambalawewa, Paluketuwewa, Gal Andakatuwa, Parangiyawadiya, Oluwewa, Thimbiriwewa, Mawathawewa, Maradanmaduwa, Wahalkada, Digampathaya and several other places are familiar.

It can be assumed that the ancestors of the Proto-historic people who established settlements in these areas were concerned about the topography and used temporary ridges and dams to cross the waterways to obtain water for agricultural lands. However, due to the gradual increase in population, the irrigation system was not adequate. The plains may have used small ridges and highlands to collect rainwater for agricultural purposes to cover small streams active during the rainy season. It appears that there was an extensive settlement pattern in this inter-valley region during the Proto-historical period. It can be determined by the scatter pattern of the megalithic cemeteries in the suburbs that represent that era. It appears that these settlements may have functioned as micro-settlements. Micro-rural settlements' location may also focus on the availability of suitable soil patterns for agriculture, the possibility of adapting irrigation systems for agriculture and other needs, and the landscape in which essential irrigation can build.

Initial Stage

The end of the Proto-historical period is considered to be the beginning of the early historical period. Seneviratne points out that this is another developmental moment in Proto-historical culture itself (1996: 279). This condition is also a key feature of continuous social evolution. Contemporary inscriptions are the primary source of information about this period. The pre-Brahmi inscriptions of this period reveal a great deal of information about the social expansion of the society at that time, the social structure of the time and their role. What is unique about these inscriptions is that they reveal many facts about ethnic groups, their titles and functions that seem in this country's historical sources.

There are about 85 pre-Brahmi inscriptions in the area around the study area. It shows that the region has been one of the people's fascinating parts since the Proto-historical and early historical periods. These inscriptions reveal information about the groups that led the process of building and maintaining settlements. Gunawardena states that titles such as '*Parumaka, Gamika, Gamani and Gapathi*' indicate a hierarchical status in society and explain the current socio-political situation (1978: 261; 1981: 133-154).

Early Brahmi inscriptions in the area confirm that a group of people named *Parumaka* took the lead in this area's social stratification. Seneviratne has stated that the inscriptions related to the *Parumakas* show a more excellent distribution in the ancient cemeteries (1989: 114). Thus, it can be concluded that the origin of the *Parumakas* dates back to the Proto-historical period. It can be assumed that the *Parumakas* mentioned in the early and late Brahmi cave inscriptions found at Handagala near the Palipbothana Megalithic Burial site are the ancestral leaders of the Proto-historical indigenous people who inhabited those areas (IC. vol. I: Nos. 120, 125, 127, 130, 131, 133a, 1125, 1126, 1127, 1130, 1132, 1134, 1136, 1138 and 1140). The Handagala early-Brahmi cave inscriptions state that the *Bathas* were also considerably widespread in the area (ibid: 121, 123, 126, 128, 129 and 132). It is clear from this stratification that a complex social structure consisting of different ethnic groups formed. This social structure may have contributed to the founding irrigation and the gradually evolving developed society.

Erakapi village mentioned in the Nattukkanda inscription as some of the regional districts of this inter-valley region from the first century BC is located in the north's north sub-district (IC. vol. i: No. 168). The Wewelketiya and Kirigallewa inscriptions also mention a sub-district called *Amgamkuliya* in this region (EZ. vol. i No. 21). The Wewelketiya

inscription says a Tamil temple in a village called *Kibigama*, and the Kirigallewa inscription mentions an area called *Itnarugama* (IC. vol. v: No. 40. 7).

An area name of Matalagama mentioned in a Handagala temple inscription (ibid. vol. i: No. 128). Numerous inscriptions in Rasnakawewa mention the areas of Dahanakara, Thojanahinaka, Abedavarayanagan, Thabetha, Palavasaya, Abalavasaya and Pekeravasaka (ibid. vol. ii: No. 153). The Lower Thammennawa inscription mentions paddy fields in Majimagama (ibid. No. 82), Abalakubara, Pakarawasaka, Dubalakubara, Pahanakubara, Rachitaviniya, Jabukubura and Managamaka. King Gajabahu I's Thamaragala inscription mentions a temple called Guttapabbatha in the Yan Oya valley and a number of fields called Hajiya, Maradikumbura, Chulavika, Danakaraka Kubara, Uttara Araka, Panadathamaha Kubara, Karabeka, Sivavaka etc (ibid. No. 63). The Thimbiriwewa Inscriptional site that dates back to King Mahallakanaga is also locating close to this area. There is a reference to a temple called Ganga Pavatha in its river basin (ibid. No. 73). It means being close to the river. There is an inscription in this place that belongs to King Gotabhaya, and it also mentioned as Gangavi (EZ. vol. iv: No. 28).

Inscriptions, place names, temples indicate that this inter-valley region had been inhabited for a long time. It is possible that this region, which was a remote terminal fed by the Kingdom of Anuradhapura, was inhabited mainly by agricultural people. It can identify as a process that has existed since Proto-historic times. Evidence of this can seem in the names of persons whom these inscriptions can locate. It can determine that it has a wide range that ranges from paranormals to different craft grades.

In addition to agriculture, the establishment of settlements in this inter-valley region may have been due to the attraction of certain minerals that can identify from the area's suburbs (ibid: 161). These inscriptions reveal information about tombs. Apart from this, commercial activities may also have contributed to the settlement of this area. Roads connecting the resource-rich East Coast and Gokanna Port with the capital city of Anuradhapura through these zones may have contributed to the growth of trade links in the region. It is confirmed by the Wewelketiya inscription on the rural administration of the tenth century AD, near the Palipbothana Megalithic Burial site (ibid. vol. i: No 21). In this situation, expanding the region's water requirement into various fields beyond agriculture may affect irrigation's progress.

The dry zone's indigenous people have created their settlements in a collective pattern. They may have laboriously built a small tank, limited to a few acres, with a bulwark not too high to cover a group of houses and set up their farmland beneath it. Accordingly, the early dry zone "Gama" may have built around the tank. For this reason, these small tanks can define as rural tanks. Initially developed as micro-irrigation structures, these rural tanks were interconnected and formed into network tank systems. These networked tank systems are considered as an identity factor of dry zone irrigation water management in Sri Lanka. The dry climate associated with this region has had a direct impact not only on the area's settlement but also on the socio-economic process. It can seem that the contribution of these networked tank systems in the region to the development of a sustainable agro-economy based on paddy cultivation while minimizing the damage caused by drought has been more outstanding than that of large scale irrigation. Therefore, it has been able to meet the climate challenge in this region successfully.

It can seem that the contribution of such rural tanks was very high during the early settlement of the region. Clear evidence of settlements in the vicinity of such rural tanks can also found in pre-Brahmin inscriptions. An example of this is the mention of such tanks in cave inscriptions such as Nattukkanda (IC. vol. i: No. 168) and Handagala (ibid. No. 1130) in the vicinity. The fact that rural tanks have been a close factor in the people's lives since ancient times confirms that it has influenced the village's name since pre-Christian times (Withanachchi 1999).

Although the dry zone small rural tank functioned as the basis of agricultural irrigation in the area, a distinctive feature transformed the then-existing rural tank concept into large irrigation structures by the end of the first century BC. Social transformations such as population growth, urbanization, and commercial development have led to increased agricultural production capacity due to increased consumption rather than production. The experience of weakening rural tanks may have contributed to this transformation. However, this region's distinctive feature is that the small tank converted into a slightly larger tank, but no large-scale irrigation built in the region.

A more organized society developed since the first century AD, it is possible to identify a significant increase in settlement in this inter-valley region. A large amount of archaeological evidence in this regard can be found throughout the area. Scattered clay pots are the prominent remnants. Also, information can be obtained through inscriptions. It may

be since the influence of organized government extends to this inter-valley region. It seems that there has been an increase in the distribution of settlements due to the gradual increase in population density in the area. The place names and village names revealed by the contemporary inscriptions can give some idea of that distribution.

It is clear that as a result of taking necessary measures to meet the needs of the gradually growing population, systematic irrigation industries have begun to emerge in the area to meet agricultural and other water needs. Due to the rapid development of population expansion in the early historical period, the construction of tanks in this area which can retain more water capacity has initiated the realization of the society, including the political authorities, that it is no longer sufficient to collect water through the use of simple technological methods.

Essential living evidence of this inter-valley region's settlement is the medium and small-scale tank formations scattered throughout the area. Most likely, these first tanks built by the Proto and early history, which turned the area into a settlement. Created initially as small tanks, they thought to have gradually expanded as settlements expanded. Contemporary inscriptions mention several ancient irrigation structures built in this inter-valley region. Several Handapagala Brahmi cave inscriptions near Palipbothana mention the leaders who worked on the tanks. Among them are *Naka Nakaraka Vapi Hamika Upashaka Data* (Trustee worshipers Data of the tank in Naka city), *Anulapi Vapi Hamika Parumaka Mahawebaliya* (Trustee Mahavebaliya of Anula tank) and *Nakodapika Vapi Hamika Parumaka Mahadata* (Wewa Trustee Mahadatt of Nakodapika tank) is mentioned in this article (IC. vol. i: Nos. 1129, 1130, 1132). Although rural tanks' construction was considered a public affair, this confirms the construction of some tanks carried out by pastoral leaders, including the village chiefs. They are known as "*Vapi Hamika*". It may have meant the officer in charge of the tank. Ownership of the tank seems to be more related to the tank's administration than to its right. Besides, it is mentioned in the inscription of King Gajabahu I is Palumakichchawa I in the suburban area that the Vadamana tank or Vaddamanaka tank in the sub-divisional area restored (EZ. vol. i: No. 18). The Rasnakawewa inscription mentions *Chulaviya, Vihikaviyavi, Anulamahaviya, Alagadaka Vavi* tanks and a canal called Waraka (ibid. vol. ii: No. 153). The lower Thammennawa inscriptions refer to several tanks as *Kabaraviya Vavi, Mataviya* (ibid. No. 154). The Kumbukwewa rock inscription mentions a tank called *Watala Vavi* (ibid. No. 154). Several other ancient tanks have been mentioned in the inscriptions associated with the Palipbothana and the surrounding area. Among the

Nattukkanda inscriptions are *Erakapi Wewa*, *Pajina Honagiriya Wewa*, *Jaba Wewa*, *Padi Wewa*, *Sidaviya Wewa*, *Karajaviya Wewa*, *Dataviya Wewa*, *Kabaragama Wewa*, *Sivilaviya Wewa*, *Pathani Wewa* and *Manikiragama Wewa* (Nicholas, 1979: 189). It shows that several tank based settlements have been established in this region.

Although many large tanks had been gradually built in this inter-valley zone's vicinity, the small rural small tank that was initially built did not perish. Most of these small tanks, which have been maintained, are connected to a suspension system. Therefore, it can assume that the group of active and dilapidated small tanks that can be identified in this region today are the small rural tanks built in this area in the pre and early historical period.

Natural Activities Related to the Emergence of Irrigation Industries in the Inter-valley Region

Environmental and climatic problems in Sri Lanka can be identified as a significant factor in the ancient irrigation designers' involvement in irrigation in Sri Lanka. These problems were associated mainly with the plains used as the dry zone where the country's oldest settlements spread most successfully. Examining the area's current environmental conditions reveals that the situation may have felt in this area. Among them is biological activity based problems such as insufficient rainfall, water scarcity, high evaporation, high temperature, dryness of the environment, severe dry winds, lack of natural water sources, depletion of natural waterways and insufficient water existing waterways. There may be many. Apart from the dry conditions created by such conditions, many other factors, from the nature of the soil pattern to its suitability for agriculture, may have contributed to the region's settlement from time immemorial.

It is a fact that the use of technology mitigates the damage caused to the people by their understanding of the dry nature of the inter-valley region. Society's primary economic process has always been based primarily on agriculture may not have seen such diversity. Water scarcity is a significant factor affecting agriculture in the dry zone. The people of the arid region have long understood the seriousness of this place. Various factors, mainly drought, may have contributed to the water shortage in this inter-valley region and identified natural causes such as insufficient rainfall, changes in rainfall patterns, high evaporation, strong dry winds, low groundwater table, and forest cover changes. It can also be identified as having a direct effect. Due to this, there is a severe drought in this inter-valley region from February to May and a severe drought from May to September. In the country's dry zone, the

soil moisture does not decrease much, only from October to February next year (Thennakoon, 1993). Groundwater levels fall sharply during this period as soil moisture decreases due to the spread of drought following the northeast monsoon rains' gradual depletion in early January. This situation is common to the dry zone of the North, North Central and East.

As a result, the ancients who inhabited the area and other dry settlers wanted to find solutions to the challenge posed by the dry conditions that hindered their main livelihood, agriculture. The introduction of tank-based artificial irrigation systems has helped overcome this environmental challenge.

Geomorphology

The ancients' cognition about the land's heterogeneity in ancient Sri Lanka's settlement was fundamental. It has been an essential factor in various aspects of the country, from pre-human settlement to the historical period (Nicholas, 1964). The ancient civilization in the country's dry zone was rooted in agriculture and irrigation by systematically building settlements based on land heterogeneity. The ancient peoples of Palipbothana and the suburbs used the anomalies such as the land's elevation to build ponds and carried the water to the respective fields through canals. Many small tanks have been constructed in this region connecting the plains that can identify, and medium-sized tanks such as Wewelketiya Wewa have been built using small thin or not very high natural ridges.

Tank and Cascade Irrigation System

Netted tanks or Cascade play a significant role in dry zone irrigation. There is unmistakable evidence that the water in the dry zone has secured by embankment systems that allow water to flow from one tank to another. These tanks can use to identify how much paddy land has been actively cultivated based on the topography. A vital feature of this inter-valley region is the presence of several networked tank systems. Since these tanks belong to several valleys, it can be seen that they are directed in several directions. Utilizing the region's topography, these suspension systems have been constructed from a small tank to a slightly larger tank.

Examination of small and medium-sized tanks found in this region can identify as 746 tanks. In addition, there are about 80 hanging systems in the study area (Vitharana 2000, Irrigation details of River Basin - Agrarian Service Department).

Evidence of the Proto-historical settlement associated with the Palipbothana can trace back to an agricultural culture that progressed rapidly after 1000 BC. They are moving fast based on their experience on the ground and the technology they have gradually developed.

Focusing on expanding the inland rural small tanks in the region, it is clear that it has developed intending to obtain a sustainable solution with the water needed to cope with the prolonged drought that lasts from May to about the end of September each year. Ivers' claim (1899) that there would be no settlement in the North Central region if an artificial water tank could not create would affect the study area.

Understanding about the variegated terrain with various identifiable contour locations in this inter-valley region provided a solution to the above situation. According to Panabokke (2009), linear small inland valleys are abundant in the North Central Province. It was also common to the Palipbothana basin. Accordingly, the people who have built settlements in this region may have devised a system to retain the amount of water required for their daily needs outside of agriculture. It is clear that the water necessary for these tanks, which were constructed in the form of a networked tank system, has been procured and stored during the monsoon season and used for protection during the dry season.

Investigation into the matter reveals that the central catchment system in the area is mainly waterways and aquifer-based tanks based on rainwater that is not available from natural sources. Since these tanks were not as self-sufficient as the spring tanks, it is possible to identify how the tanks are installed in the suspension systems to mutually support the process of interconnection. There are about 79 tanks associated with this area and any of them with an embankment system *Thammannagoda Wewa, Bogahawila Wewa, Ethawetunu Wewa, Palipbothana Wewa, Wile Wewa, Nelugollakada Maha Wewa, Ulpathagama Wewa, Gonumaru Maha Wewa, Paluketuma Wewa, Kadurugaskada Patukketu Wewa, Meegaskada Wewa, Kudagama Wewa, Ataveeragollewa Maha Wewa, Amune Wewa, Rata Ethawetunu Wewa, Indigollewa Wewa 1, Siyambalagas Wewa 1, Dambagas Wewa, Athiniwetunu Wewa, Kuda Wewa, Wikawa Wewa, Andara Wewa, Veherahena tank and other tanks are connected. The Ulpathagama Wewa (Ulpathagama tank) and the Ulpath Wewa (Ulpath tank) are two tanks based on natural water fountain sources.*

Andaragollewa Wewa, Ataveeragollewa Kuda Wewa, Kayangollewa Wewa, Mahakumbukdematawala Wewa, Mahakumbuk Wedakaraya Wewa, Mahakumbuk Kuda Wewa, Mahakumbuk Maha Wewa, Kadurugaskada Wewa, Ethala Watunu Wewa, Kele

Wewa, Kirigal Maha Wewa, Rathwahawewa Kimbul Wewa, Jayanthi Wewa, Hendegama Wewa, Ikiri Wewa, Adiyagala Wewa, Kondakarayage Wewa, Makichchawa Wewa, Siyambalagas Wewa 2, Rasnaka Wewa, Palugas Wewa, Rilavidda Wewa, Inginigaha Wewa, Madugaha Wewa, Katukeliya Wewa, Thara, Wewa, Dunumadalawa Wewa, Kukulbandidigiliya Wewa, Thambalagollewa Wewa, Wewelketiya Wewa and Pethiyannekada Wewa are functioning as single tanks.

Proximity to the Palipbothana Megalithic Burial site

Palipbothana Megalithic Burial site is located slightly in Ma Oya's valley in the northeast and Malwathu Oya valley in the west. Wewelketiya and Ratmalgahawewa tanks are located in the Malwathu Oya valley, while other small tanks, including Palipbothana and Thambalagollewa, are located in the Ma Oya valley. In addition to the paddy fields fed by these tanks, many paddy fields cultivated in this area irrigated by small streams fed during the northeast monsoon. Water from several surrounding hills flows into the paddy fields and the area's tanks during the rainy season. There the rainwater flows in several directions depending on the slope of the land. The water of the southern slope joins the Palipbothana and Thambalagolla tanks, and the western slope's water enters the tanks of Wewelketiya and Ratmalgahawewa. This tank connected to the Kandara Oya, a tributary of the Malwathu Oya. The water flowing in the north and east joins the tanks such as Pethiyannekada, a Ma Oya branch and connect the Kuda Oya.

The study of ancient settlements in the vicinity of the Palipbothana ancient burial site where the research carried out can identify the surrounding rural tanks' main factors. As an inter-valley region that borders the Palipbothana Burial site, it can locate several nearby tank valleys. In designing the tanks, it is possible to identify the direction in which the water flow based on the land's contour pattern by selecting suitable sites for constructing the tanks in each of the existing landscapes. An example of this is the connection of the right end of the Thambalagollewa tank bund, which can be identified as the Great Tank, the hill called Temple Kanda, and the left end of the Wewelketiya tank bund to the left side of the temple hill to protect their stability. It can seem that the bund of the Palipbothana tank connected to a mound on the right side.

Chronology

Archaeological excavations at the proto-historic megalithic cemetery above Palipbothana tank have yielded the bone-organic sample No. 2/60905, dating to carbon-14. There the sample is dated to 369 - 165 BC. When considered a period from the present day, it belongs to the period between 2318 and 2114 BP. When we look at the mean value here, it is today as 2190 ± 30 BP ((Beta Analytic Radiocarbon dating Beta - 586186, 18/03/2021). Therefore, it proves that the cemetery has been in operation since at least 369 BC. Accordingly, it is undisputed that the Palipbothana and suburbs' human settlement took place \pm 2300 years ago from today.

These scientific organic dates are significant as they reveal the latest scientific information regarding this inter-valley region's settlement. It is clear that by the end of the proto-historic period, the area was moving towards complete and permanent settlement, especially concerning the macro-technological cultural transformation patterns associated with the capital city of Anuradhapura. Accordingly, as urbanization continues to develop around the capital city of Anuradhapura, the building resource zones in these suburbs may have gradually grown.

The Palipbothana tank adjacent to this proto-historic megalithic cemetery and the adjoining rural tank complex can be considered a significant structure that arose in parallel with the settlement process in connection with this cemetery. Water is a direct factor for settlement, and the irrigation system in the region depends on these lakes. Accordingly, the group of tanks, including the Palipbothana, goes back to the proto-historic period.

Premises Review:

Thambalagollewa tank is located between 8.513019 North Latitude and 80.649241 East Longitude. The southern end of the bund connected to the foot of the hill is known as the Temple Mount. From the nature of the prepared boulders below the tank wall, it can infer that there was a Bisokutuwa stone sluice that was not so large. It is located about 50 meters from the right end of the wall.

Wewelketiya Tank

It is located between 8.52717 North Latitude and 80.65252 East Longitude. The left end of the tank bund connected to the foot of the hill is called Temple Mount. The large tank in size. A natural water filter called Kattakaduwa can be seen below the tank bund of this

tank. A canopy of Nuga, Kumbuk, Kohomba and Mee plants can be seen around Kattakaduwa. Small aquatic plants can also be identified in this section and the bund is located on the east side. The water of this tank flows through the Medawachchiya-Rathmalgahawewa main road, according to the downfall. It is possible to identify how the canal used to flow back down to the tank.



Figure 13-1 Wewelketiya Tank

Ratmalgaha Wewa

This tank is located in the east direction between 8.53033 North latitude and 80.67448 East longitude. The tank bund has been designed with bends. Due to the restoration, it is difficult to find the ancient irrigation elements associated with the tank.

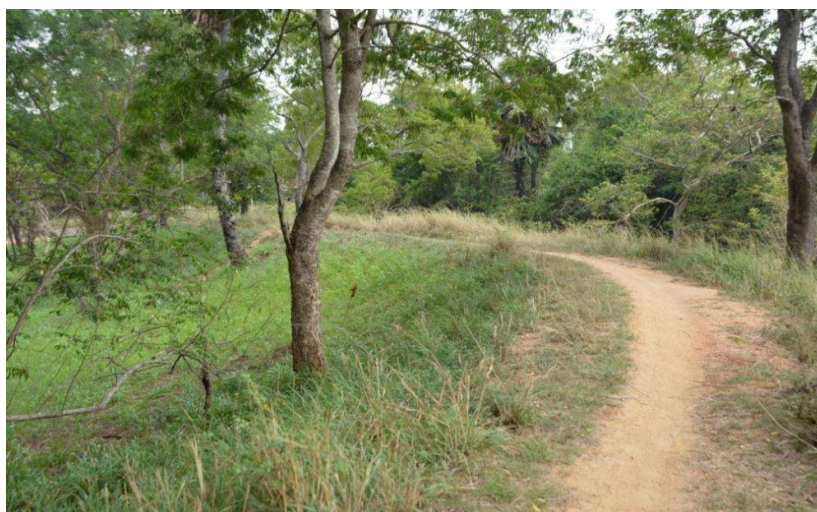


Figure 13-2 Ratmalgaha Wewa

Pethiyannekada Wewa

It is located between 8.52667 North Latitude and 80.68441 East Longitude. The tank's outlet located at the southern end of the bund, connected to the Mora Oya's tributary. There are five sluices associated with this tank. There is evidence of an ancient stone rectangular fort adjoining the third sluice or the middle sluice. The new sluice is built on the exact shape using concrete on it. The silt accumulation area near the tank bund called Batticaloa, seen in this tank's vicinity, is now gradually rising. This part has been protected during the cutting system that existed decades ago. The Kattakaduwa water filter below the tank is still well preserved.



Figure 13-3 Pethiyannekada Wewa

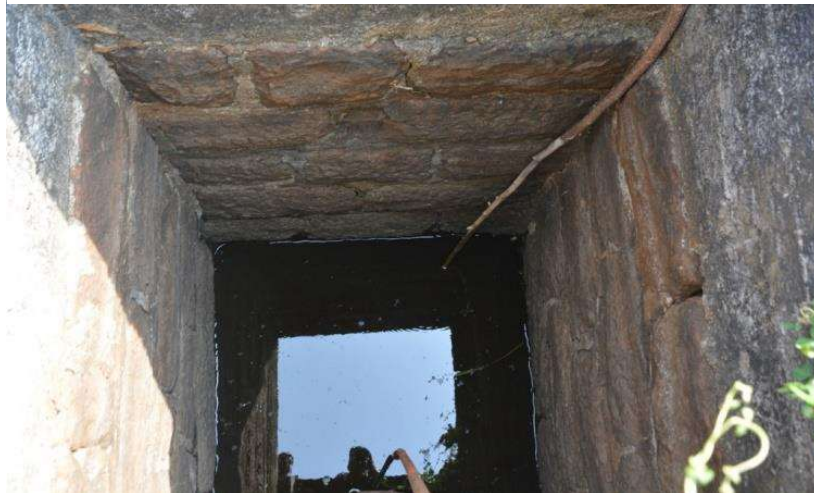


Figure 13-4 Pethiyannekada Wewa bisokotuwa

Palipbothana Wewa

This tank is located to the southwest of the old burial site premises connected to the Thambalagollewa tank's dam and built between 8.5149 North Latitude and 80.6623 East Longitude. There is evidence of an ancient stone sluice associated with this tank. It has been completely demolished to make way for the new sluice. However, the cut edges and cut marks of the well-cut stones can be identified. The tank's bund was connected to the general high mound on the right side and installed at the right end of the tank's outlet.



Figure 13-5 Palipbothana Wewa

Meegaskada Wewa

It is located on the south side of the Ratmalgahawewa - Kahatagasdigiliya road. It is a medium-sized tank. Evidence of ancient evidence related to the tank cannot identify.

Recently constructed small tank

This tank is located in the region between 8.52680 North Latitude and 80.663080 East Longitude. This tank situated on the western slope of the Wewelketiya tank. The tank was built by Sudahamige Serathna (71) and Malhamige Ranmenika (66) who live in Wewelketiya village. The tank's bund has constructed using the bumps in the ground, and it has taken nearly two years to complete it. The work on this tank completed in 1970. They have constructed this tank to collect the northeast monsoon rainwater. Once fully submerged, the water level can maintain at a depth of about 5 feet. A 24 feet long pipe has been used as a sluice pipe to discharge water from this tank. They have cultivated about 3 acres of land from

the water and rainwater of this lake. The lake has been abandoned for about two years now. This tank can provide an essential idea in studying the construction of minor rural tanks in ancient times. That is to say, the minor tanks ranging from 1/2 to 2 acres, which have been identified in some places in the dry zone, may have been constructed in this way by a single-family or several families with their labour contribution for the use of their family. It is possible that they used the land location for this purpose and used the soil cut through the tank to construct the earth wall. There are no sluices in these small tanks, which are in ruins in some places. When water needed, one part of the dyke cut down, and the water is taken out. In some cases, a hole drilled in the wall, and water used to obtain water. Accordingly, small tanks for personal use may have been constructed in the past as well.

Investigation

This research, which focuses on the Palipbothana ancient burial site, is essential to identify ancient settlements in the area and the tanks' connection. Palipbothana Tank, located close to the old burial site, is located southwest of it. The tank is about 1 km from the burial site. There is a direct distance of about 0.70 km to the central part of the bund, and there is a direct distance of about 1.09. Evidence of pottery scattering found north of the tank and west of the burial site. The southern end of the bund is 554.86 m and 574.68 m apart. The pottery site is located slightly to the southwest of the old burial site, northeast of the Palipbothana Tank. From there, it is about 393.95 meters to the tank basin. However, all three of these pottery sites can be considered as a single settlement. It is because the maximum distance between these pottery scattering sites is about 544.43 meters. Accordingly, a village may have been built in its vicinity. This tank had been built to get the water that the village needed. Their paddy fields may have been extended below the tank to the Thavalla of Thambalagollewa tank. The place now known as *Manige Vehera* may have been later developed as their religious centre. It is only 100.5 meters from the left end of the bund to that place. It is 819 meters below the tank from the settlement site.

Close to the old burial site are two sites where ancient material remains found on the eastern surface. The burial site's distance is approximately 169 meters to one place and 358 meters to the other. Another scattering of pottery can identify at a distance of 645.93 m, slightly to the northeast of the burial site. Evidence of pottery remains was also found in the area between Meegaskada Wewa and Rathmalgahawewa tanks. Accordingly, the land above

the burial site may have existed as a settlement. The ability to build the Ratmalgahawewa and Meegaskadawewa tanks may have been instrumental in establishing settlements.

Evidence has been found in another pottery area about 236.6 meters below the outcrop below the Pethiyannakada tank. Besides, there is evidence that there was an ancient village to the south of the Pethiyannakada tank. Cluster houses built around the yard in this village's vicinity existed for about four decades, and those houses built with high floors (Source compiled by M. Ratnatunga, Pethiyannakada). The front doors of these houses were made entirely of wood, and the upper cross-section of the doorway and the floor were cut and sunk into the roofs of these houses made of earthenware, and the top made of straw. In the olden days, the villagers said these people's way of life was directly connected with the Pethiyannakada tank.

The famous Wewelketiya slab inscription mentioned the village administration, located at about 122 meters from the left end of the Wewelketiya tank bund. According to this inscription, King Mahinda IV, who made this inscription in the 10th century AD, states that the villages built around the tanks such as Wewelketiya, Thambalagollewa and Palipbothana were known as 'Dasagam'. According to this article, Dasagam is a village with special powers. It is confirmed by the special privileges granted to them by the king. Accordingly, it is possible that these villages built with the chiefs who had direct relations with the kingdom of Anuradhapura. It can be often identified as the culmination of human settlement in this area, growing steadily for a long time. It is possible that the last rites of these nobles were performed in connection with this ancient burial site over a long period. However, a vital village species known as Dasagam centred on the burial site area for a long time. That may also have been a critical factor.

The main geological factor for forming settlements in the Palipbothana area is the rock complex found in the Handagala Archaeological Site's vicinity. There are 29 complete and post-Brahmin cave inscriptions associated with these caves. From these cave inscriptions, one can understand the social structure formed in this area during about five centuries between 3 BC and 2 BC. The area was inhabited by some aristocrats, including *Parumakas* and *Batas*. Earlier it stated that they had led many activities in these villages from the construction of tanks, and it is clear that they may have established a permanent settlement in this area. It is about 1 km from the Hendagala Archaeological site to the Palipbothana old burial site. A direct distance of about 4 m. They established settlements in the cave's vicinity

in the early days and gradually acquired metal technology, leaving the caves to be sacrificed to the monks and building their houses on the farmlands. The most crucial evidence to suggest that their distribution is to the south rather than to the north of Handagala is the large number of tanks found in the region. Accordingly, the area around this ancient burial site may have become the most attractive area for these people in the settlement expansion by the beginning of the Christian year. The existing elevation in this area may also have contributed to this.

Factors such as the southern region, which is higher in elevation than the northern part, can be protected from natural disasters such as floods. The other important point is that the land is suitable for constructing tanks located in this southern region according to the region's overall landscape. They can identify that a tank has been installed wherever a tank built on the ground. It is possible that this ancient burial site may have been used as the public burial site of these people. It may have affected later settlements as well.

Conclusion

The Palipbothana and suburban areas are some of the most prosperous regions of the Rajarata Dry zone, as evidenced by the widespread irrigation and archaeological remains. Archaeological and written sources and evidence gathered from folklore can be used to determine irrigation in agriculture in the area in the past. Archaeological excavations on the Vapi culture in the region have had an impact on agriculture since Proto-historic times. With the introduction of iron technology, the culture that existed till then underwent a complete change. As a result, evidence of the emergence of new rural colonies and the emergence of a new Vapi culture based on agriculture was found in the vicinity of the area.

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