Journal of Social Sciences and Humanities Review (JSSHR)
Vol. 7, No. 4 (215-228)
ISSN: 2279-3933
http://doi.org/10.4038/jsshr.v7i4.96

Original Article

Contribution of British Colonial Rule to the Conservation and Maintenance of Ancient Irrigation Works in Sri Lanka

Chithrananda, D.C. [1], Wawwage, S.[2], Alexander, K.M.[3], Perera, M.P.[4], Gamage, G.C.L.[5]

[1,2,5]Department of History and Archaeology, University of Ruhuna, Sri Lanka

[3]Department of History and Archaeology, University of Sri Jayewardenepura, Sri Lanka

[4]Department Geography, University of Peradeniya, Sri Lanka

[1]chithranandac@yahoo.com

https://orcid.org/0009-0000-8535-8180

Abstract

The earliest irrigation system in Sri Lanka dates back to the sixth century BC. It reached its peak of development around the twelfth century AD. With the migration of civilization to the southwest, the arid zone was overgrown and destroyed by the abandonment of ancient irrigation industries. But many old irrigation industries are still active today as living heritage. This was due to the conservation and maintenance are done by the local rulers and the colonial rulers who ruled the country. The purpose of this research was to trace the contribution of the British colonial rulers who ruled the country for more than a century to the conservation and maintenance of the ancient irrigation industry. The research problem here is what kind of conservation and maintenance was done during the British colonial rule on the ancient irrigation system of Ceylon. Because this research is based on a qualitative approach, the methodology used in the case studies used the study of archival records and documents, direct observation, and the examination of physical archaeological remains. The irrigation system that spread over the plains of the dry region was initially protected by the people who built it and by the conservation and preservation activities done by the government machinery of the ancient period. Centuries after the collapse of civilization, ancient irrigation was rediscovered and identified, and proposals for preservation were made during British colonial rule. In addition, funding for the conservation of the irrigation industry and the implementation of small and large-scale irrigation preservation programs, as well as the formulation of laws, regulations, and institutions for preservation work, were important processes during the British colonial period. However, the British did not try much to reform the irrigation industry in the early stages of their rule. Also, some of the policies they followed for the reconstruction and maintenance of the irrigation industry later on, due to their little knowledge of local traditions, brought disastrous results.

Keywords: Ancient, British, Conservation, Irrigation, Maintenance

Journal of Social Sciences and Humanities Review (JSSHR)
Vol. 7, No. 4 (215-228)
ISSN: 2279-3933

Original Article

INTRODUCTION

Sri Lanka is a small island in the Indian Ocean located between 5055'- 9051' North latitudes and 79041'- 81053' East latitudes. Located in the south of the Indian subcontinent, the irrigation industry begins here at Approximately B.C. It started in the 6th century. Later, the flourishing irrigation industry spread to the plains of the semi-arid and arid regions of the northern and southern parts of the island. By the twelfth century AD, the irrigation system had reached its peak. By the end of the twelfth century, the Rajarata civilization, centered on the more than 1,500-year-old cities of Anuradhapura and Polonnaruwa, had collapsed due to South Indian invasions and internal rule disputes. People migrated to the southwestern parts of the country. Due to the lack of people to maintain the irrigation system, they were destroyed because there were no people to maintain the irrigation system. In the 16th century, Europeans campaigned for the colonization of the eastern part of the world. As a result, Ceylon also came under the control of the Portuguese, Dutch, English, and other European nations. From this, the British came under his rule in the coastal provinces of Ceylon in 1796 AD. In 1815 AD, the British conquered all of Ceylon They ruled the country for about 133 years until 1948. Some of the ancient irrigation works were rediscovered, conserved, and maintained during their reign. The colonial rulers aimed to save a large sum of money spent annually on the importation of rice by locally producing rice for the consumption of their colonists and armies. To achieve that goal, they had to maintain the old irrigation system without destroying it and quickly conserve the destroyed irrigation system (Karunanada, U.B. 1999.). Proposals contained in reports submitted to the Colonial Office by various contemporary practitioners regarding the conservation and maintenance of the irrigation industry. Effects of Conservation and Maintenance of Irrigation Industry on the recommendations made by the Commission appointed from time to time by the British Governors, matters relating to the conservation and maintenance of irrigation initiated by the Governors, the establishment of the Central Irrigation Board and the Irrigation Department and the Irrigation Conservation Initiatives carried out thereby. Various ordinances and regulations were passed to provide legal rights for running and maintaining the irrigation industry, and conservation. This article will discuss.

REVIEW OF LITERATURE

It is difficult to find documents written for the conservation and maintenance of irrigation under British rule however, their measures for the development of paddy cultivation mention the steps taken to restore the ancient irrigation system. The coastal areas of Sri Lanka came under British

Original Article

rule in 1796 and in 1815 the whole country including the Kandyan Province was conquered by a treaty. (Mills, L.A., 2012) Colonial rulers were highly influenced by trade and commerce from the beginning. As a result, they promoted large-scale coffee, tea, and rubber plantations in the wet zone, and neglected traditional paddy cultivation in the dry zone (Karunanada, U.B. 2006). In the early days of British rule, little effort was made to improve paddy cultivation. Maitland (1760-1824) was one of the first governors to conserve agriculture and irrigation by giving money to paddy landowners and growers to renovate tanks (Brohier, R.L.2006) After the Uva Rebellion of 1817, the colonial government decided to abolish the king's labor or compulsory labor system (duty) from 1832 on the recommendations of the Colebrooke-Cameron Commission report. As a result, there is no specific system for the maintenance of the small tanks maintained by the village communities. Village tanks were gradually destroyed. (Alwis, J. 1986) From 1832 to 1875 minor conservation and maintenance work was carried out on the irrigation canals. Governor Henry Ward's (1855-1860) Ordinance No. 9 (1856) again facilitated the revival and enforcement of old customs related to paddy land, irrigation, and cultivation. (Alwis, J. 1986). Furthermore, this ordinance facilitates village councils to improve the rehabilitation of irrigation (Alwis, J.1986,) In 1872, Governor William Gregory made a significant contribution by providing sluices to every village tank that was successfully renovated by the locals (Brohier, R.L.2006). Reconstruction projects related to major irrigation schemes such as Yoda Ela, Kalawewa Wewa, Kantale Wewa, Yoda Wewa, and the Minneriya-Elahara Scheme were started in the last decades of the 19th century (Brohier, R.L.2006; Karunanada, U.B.2006.) Threaded on the Donoughmore Commission Report, the new Constitutionhered in the golden age of dry zone irrigation industry reform. With the new Constitution, public administration fell into the hands of the people of the area and D.S. Senanayake was appointed Minister of Agriculture and Lands of Sri Lanka (Brohier, RL 2006), resulting in Minneriya (10,000 acres of paddy), Kalawewa (paddy). Re The Dry Zone Irrigation Industries Reconstruction s accelerated by several government-sponsored state projects such as 17,000 acres, Minipe (3800 acres), and Parakrama Samudra (5940). (Brohier, R.L. 2006,) Nuwarakalawiya (Anuradhapura) was ruled by a Government Agent from 1833 (Mills, L.A. 2012) under British colonial rule. Initially, the agent's primary responsibility was to collect revenue, especially grain taxes (Karunanada, UB 2006.) After the enactment of Ordinance 1856, the Government's responsibility for irrigation development passed to the Government Agent as the Provincial Head, with the assistance of landowners who could cultivate

Original Article

through village councils. The Government Agent sought to develop irrigation (Alwis, J.; J. Alloys Compd. 1986,) 7 the "Ordinance 1856" became the more flexible and community-oriented "Paddy Cultivation Ordinance" (Karunanada, UB 2006; Alwis, J.1986,) was revised with. before 1874 Before reconstruction of small tanks was carried out mainly using the traditional procedures followed by the local community. (Karunanada, U.B. 2006.) At the same time, various mechanisms were put in place to rehabilitate large irrigation schemes such as Kalawewa Wewa and Yoda Ela as they required more engineering skills. After 1886, the Department of Public Works and its provincial divisions carried out renovations. Again, in 1887, an ordinance was approved for the establishment of a Central Irrigation Board and a Provincial Irrigation Board, where the Government Agent acted to promote rehabilitation and irrigation activities in the dry zone (Brohier, RL, 1997; Karunanada, UB 2006.) in the 19th century. By then the main irrigation activities in the dry zone were under the administration of the Centralized Irrigation Department established in 1900 (Alwis, J.1986). In the early days of English rule in Sri Lanka, the administration of small lakes at the village level was generally the responsibility of a hereditary official (gamarala) who was also the chief. In 1870, the British tried to allocate a recognized authority to this post by introducing a chief system called Vel Vidane under the village committee system. Under the leadership of Vel Vidane, the maintenance of the village tank and irrigation were maintained, and the activity of cultivation was maintained (Karunanada, U.B. 2006.).

RESEARCH METHODOLOGY

The case study methodology can be used as this research is located within a qualitative approach. Six sources can be used to gather evidence in a case study. Sources such as archives, documents, direct observations, and physical archaeological remains were used in the selection of research technology for this research. Systematic stylistic analysis of sources and content criticism is the methodology used for the study. Under this, the data reported by classification, summary, and tabulation were analyzed.

RESULTS AND DISCUSSIONS

The result of this study

The country was ruled by British colonial rulers for about 133 years from 1815 to 1948. During that time, there were many positive and negative results due to the actions and policies they adopted for the governance of this country. The result of this study is to uncover the positive effects of actions adopted by the British rulers for the preservation and maintenance of the ancient irrigation system in this country.

Original Article

Discussion

In 1796, the British East India Company annexed the coastal provinces of Ceylon. In 1815, the British conquered the whole of Ceylon. Considering irrigation and agriculture, the first fifty years of their rule had two salient features. One is negligence, the second is discouragement. But later the rulers focused on conserving and reusing the ancient irrigation system for water conservation which was a major factor in the prosperity of the country. It can be discussed in several approaches.

1. Reports containing proposals made by various professionals on the conservation of the irrigation industry.
2. Recommendations made by the Commission.
3. Irrigation conservation and maintenance measures were initiated with the enthusiasm of the governors.
4. Establishment of Central Irrigation Boards and their conservation and maintenance activities.
5. Conservation and maintenance activities were carried out after the establishment of the irrigation department.
6. Formulation of various ordinances and rules relating to irrigation.

are those approaches.

At the same time, various professionals submitted reports containing various important proposals to the colonial rulers to restore the old irrigation projects. Initially, most of these proposals focused on rehabilitating coastal irrigation.

Professional reports and suggestions on irrigation conservation

Table 01: Professional reports and suggestions on irrigation conservation

The professional's person who submitted	Titles of reports &Year Objectives	Source
William Over	Report on Magampattu irrigation industries in Hambantota District – AD 1800	(Brohier .2007.74)
Jonesville First Survey General	Report prepared regarding Kantale tanks – AD 1877	(Brohier .2007.74) (Brohier .1975)
Sir Thomas Maitland	Proposal to renovate Yoda wewa	(Arumu gam, S. 1969,21)
Captain Gaulterus Schneider	Report on irrigation industries in Matara and Hambantota Districts – AD 1808	(Brohier .2007: 75)
Liishin – Officer, Department of Public Works	Article describing how the "Kulam Katti" (tank diggers) from South India. – AD 1870.	(Brohier .2007: 83)
Captain John Keane	Irrigation in Ceylon –AD 1905.	(Keane.1 905: 03)

Journal of Social Sciences and Humanities Review (JSSHR)
Vol. 7, No. 4 (215-228)
ISSN: 2279-3933

Original Article

Recommendations made by the commission

Table 02: Recommendations made by the commission

Year AD	The person who submitted	Objectives	Source
1832	Presided over by Sir N. Colebrooke Team to join	• Identify the benefits of the old irrigation system and tank anicuts • Mentioned the benefits to the island's agriculture from the reconstruction of tanks and sluice • The abolition of compulsory labor by this Commission was detrimental to the survival of the irrigation industry	(Brohier. 2007: 75).

Measures were taken by the Governors for irrigation rehabilitation and conservation

Table 03: Irrigation rehabilitation and conservation measures by Governor Henry Ward (1855-1860)

Tasks performed	Source
• Issuing Order No. 9 of 1856 to give effect to the rehabilitation of old irrigation systems • Easing the original ban on compulsory service. • Ordinance No. 9 of 1856 "To facilitate the revival and enforcement of ancient customs related to irrigation and cultivation in paddy lands" • The Kirama and Urubokka reservoirs dam in the Southern Province were rehabilitated. Rs 170,465 was spent on that. • The tank at Tissamaharama was renovated. • Two dilapidated anicuts built by the Dutch were rehabilitated and water was supplied to the Great Paddy Field in the Eastern Province under the Pattipola Aru (Galoya) Scheme. • Rugam and Divulana reservoirs in the Eastern Province were rehabilitated. • Mahagalla tank in the North Central Province was also rehabilitated. • Created by the Dutch, the Irakkamam tank in Batticaloa and the Urubokka dam, and the Kirama were reactivated.	(PWD. Report 1918: 209) (Arumugam, S. 1969,21) (PWD. Report 1918: 208). (Arumugam, S. 1969,21)

Table 04: Irrigation rehabilitation and conservation measures made by Governor Sir Hercules Robinson (1865-1872)

Tasks performed	**Source**
• A strong commission was appointed with the participation of Mr. Morgan to report on the subject. **Recommendations of this Commission.** • Tank conservation and other irrigation conservation activities in several districts • Condition of paddy cultivation island wide • That the irrigation system has been ruined due to the	(PWD. Report 1918: 209)

Original Article

lack of a proper system for maintenance due to the abolition of the duty system. • Recommendation for allocation of funds for the maintenance of irrigation works. • Providing immediate allocations for irrigation activities through the State Council. • Appointment of royal engineer Captain Woodward as irrigation assistant. • Adoption of a new irrigation ordinance No. 21 of 1867. – (Includes necessary modifications within a wide scope to cover village tanks and minor irrigation works.) • Conservation completed irrigation and conservation started irrigation • North Western Province Deduru Oya scheme, Kospotu Oya scheme, Thinipitiwewa Project. • Uva Province Horabora tank, Buttala canale, Kudawewa tank • Southern Province Kekandura tank, Hali Ela tank, Tissamaharama tank, Udukiriwela tank • Eastern Province Periyakulam tank, Rugam tank, Pulukanavakulam Tank • About 25 more tanks were rehabilitated • For irrigation rehabilitation Rs. 1,050,000 was spent.	(Arumugam, S. 1969,22)

Table 05: Irrigation rehabilitation and conservation measures by Governor William Gregory (1872-1877)

Tasks performed	Source
• The North Central Province was created and irrigation conservation was placed under J.J. Dixon. • Many relaxed policies were put forward for the conservation of irrigation in the Northern and Central Provinces. • With the full involvement of the village councils, the farmers were allowed to conserve the tanks in the villages as they wished. The government provided a sluice for the tanks and skilled labor.	(Brohier. 2007: 85).
• Two hundred thirty-six small tanks from 1874 AD to 1885 AD were conserved for Rs. 318,081.	PWD. Report 1918: 210).
• Several irrigated lands underwent renovations. • North Central Province Basawakkulama tank, Madawachchiya tank, Kalawewa tank and Yoda Ela canal, Elahera Elacanal • Saparagamu Province Urapola Anicut • Eastern Province Allei Scheme, Sakamam, Chandiyanthalawa, Kantale tanks • Northwestern Province. Maha Uswewa tank, Galgamuwa tank. • William Gregory demanded that "at least a hundred tanks in the village should be properly rehabilitated every year. ''	(Arumugam, S. 1969,22)

Journal of Social Sciences and Humanities Review (JSSHR)
Vol. 7, No. 4 (215-228)
ISSN: 2279-3933

Original Article

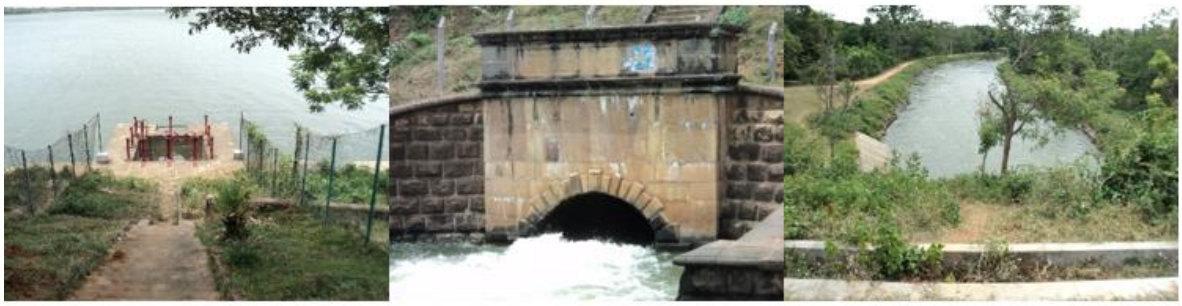

Fig. 01: After British Conservation – Kalawewa tank- sluice inner side & front side and Yoda Ela canal. (Photo taken by the author)

Table 06: Irrigation rehabilitation and conservation measures made by Sir James Robert Longden Governor (1877-1883)

Tasks performed	Source
• The amount available for irrigation in 1881 was Rs. 1, 20,000. Out of this Rs. 40,000 and Rs. 50,000 were spent on maintenance and sluice gates in village tanks • In 1882 Rs. 45,656 was spent on irrigation • In 1883, Rs. 100,000 was given for the conservation and maintenance of irrigation.	(PWD. Report 1918: 211).

Table 07: Irrigation rehabilitation and conservation measures by Sir Arthur Hamilton Gordon (1883-1890 AD)

Tasks performed	Source
Commencement of reconstruction of Kalawewa tank and its twin reservoir Balaluwewa tank • Reconstruction of these tanks was completed in 1887 AD. • Rs 405,095 was spent on this. • The Yoda Ela (Old Jayaganga) which carries water to Anuradhapura, 45 miles from Kalawewa tank, was also rehabilitated. In 1887, the water of the Kalawewa tank was first diverted back to the Tissawewa tank. • A sum of Rs. 304,484 was spent on this conservation. He also rehabilitated Anuradhapura, Nuwarawewa, Tissawewa, and Basavakkulama town tanks.	(PWD. Report 1918: 211). (Arumugam, S. 1969,23) (PWD. Report 1918: 211).

Table 08: Money spent by several British governors on irrigation development

Reign period	Governor	Amount Rs	Source
1865 - 1872	Sir Hercules Robinson	Rs. 789,646.00	(PWD.Report 1918: 212).
1872 - 1877	Sir William Gregory	Rs. 1521,420.00	
1877 - 1883	Sir James Longden	Rs.1,1281,408.00	

Original Article

1883 - 1890	Arthur Gordon Hamilton	Rs.2,855,48 1.00
1890 - 1896	Arthur Elibank Havelock	Rs.1,703,48 6.00

As illustrated in Table 01, William Over, First Surveyor-General Jones Willie, Sir Thomas Maitland, Capt. Galerius Schneider, Public Works Department Officer Lichine, Captain John Keane Suggestions have been made. It is clear from the subsequent actions taken by the colonial rulers that these proposals gave them some impetus to renovate the old irrigation projects.

Many of the recommendations made by Sir N. Colebrooke's team, as per Table 2, were an incentive for the British colonial rulers to identify the usefulness of the old irrigation system and renovate the reservoirs. But the abolition of compulsory labor by this Commission was detrimental to the survival of the irrigation industry.

During British rule, the country was ruled by 30 governors and 24 acting governors. According to Tables Nos. 03 to 08, a minimal number of them, such as Henry Ward, Hercules Robinson, William Gregory, Sir James London, and Sir Arthur Gordon Hamilton, make a great contribution to the reform of the resrestoratof ion the ancient irrigation industry. Ancient anicuts, canals, and tanks were extensively restored during their rule. In addition, making recommendations for allocating funds for the maintenance of irrigation works, taking action to provide immediate relief for irrigation activities through the State Council, issuing Ordinance No. 9 of 1856 to effect the rehabilitation of old irrigation schemes, a new Irrigation Ordinance No. 21 of 1867 Also passed, the government provided a sluice and training human resources for the tanks and appointed Captain Woodward, the Royal Engineer, as Irrigation Assistant.

Establishment of central irrigation boards and their conservation and maintenance activities

The Ordinance to create a Central Irrigation Board was passed in 1887 by Governor Sir Arthur Gordon (1883-1890) for the general management and promotion of irrigation. He appointed the relevant Government Agents of the area as the administrators in charge of carrying out all the activities in his area and also established the Provincial Councils. The Central Irrigation Board was not provided with special staff and the work was carried out by the team of the Public Works Department. (Arumugam, S. 1969, 23)

Table 09: Irrigation conservation activities were carried out by the central irrigation board

Province	Rehabilitated Irrigation
Uva Province	Hambegamuwa tank
Central Province	Bodi Canal (3 miles)
Sabaragamuwa Province	Uggalthota Scheme

Journal of Social Sciences and Humanities Review (JSSHR)
Vol. 7, No. 4 (215-228)
ISSN: 2279-3933

Original Article

Northern Province	Kanagarayankulam tank
Eastern Province	Lahugala tank
North Western Province	Maha Nanneriya tank

Source: **(***Arumugam, S.* 1969, *23)*

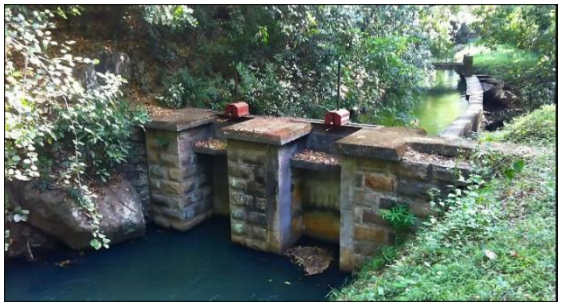

Fig. 02. After British Conservation –Uggalthota Anicut, Sabaragamuwa Province (Photo taken by the author).

The following table is a review of the progress of the reconstruction and construction of irrigation development work carried out by the Central Irrigation Board at the end of 1889.

Table 10: The Central Irrigation Board carried out irrigation development and rehabilitation work at the end of 1889

Province	Irrigation development work and reconstruction				
	Large tanks	Small tanks	Anicuts	Canal	The length of the canals in miles
Western Province	-	-	-	-	-
Central Province	1	28	104	168	197
North Province	5	35	01	-	-
Southern Province	13	26	96	105	303
Eastern Province	17	05	11	08	20
Northwestern Province	07	981	03	03	13
Northwestern Province	06	1148	-	14	61
Uva Province	10	27	28	26	100
Saparagamuwa Province	-	-	02	02	05
The sum of	59	2250	245	326	700

Source: **(***Arumugam, S.* 1969, *23)*

Table 11: Projects in which construction and renovation work commenced during the five years 1889-1890 and projects completed in the intervening period

Province	Projects for which renovation work has been started
Uva Province	Kumbukkan anicut, Badulla canal
Central Province	Bowatenne canal, Body canal
Eastern Province	Irakkamam, Sagamam, Thumpankarni and Rugam tanks
Southern Province	Hingura Ara tank, Yoda wewa tank,
North Province	Madukande, Cheddikulam, and Periyakulam tanks
Northwestern Province	Deduru Oya tank.

Source: **(***Arumugam, S.* 1969, *24)*

In 1896 it was decided to release the government agents from the task of Irrigation Reconstruction and to delegate the responsibility of implementation of Irrigation to the Director-General of Public Works. To this end, a special Irrigation assistant (Henry W. Parker) and several junior engineers were added to strengthen the department of public works (P. W. D.) (Arumugam, S. 1969, 24). A new

Original Article

irrigation manual was published on March 18, 1899, which helped to define the responsibility for maintaining irrigation. Established in 1887 during the reign of Governor Sir Arthur Gordon, the Central Irrigation Board conserved a large number of irrigations throughout the country during the three years leading up to 1890. This research is confirmed by Tables 09, 10, and 11 of this research. It is also confirmed by archeological records in examining the relevant sites.

Conservation and maintenance work was done after the irrigation department's establishment

Department of Irrigation-Phase I

Both the central irrigation board and the provincial irrigation board, which were established to control irrigation in 1887 AD, failed miserably. Ten years later, as a precautionary measure, the department of irrigation was established on 15 May 1900 to expedite the irrigation conservation and irrigation work of the period 1900-1907. This had a different structure than the department of public works. The first director of irrigation was H.W. Parker. It consisted of a staff of seven irrigation assistants and seven irrigation engineers. The new department was responsible for overhauling all surveys, plans, and new work, and for maintaining large-scale proposals (Arumugam, S. 1969, 24). In 1904, Henry W. Parker, an irrigation assistant who had become a very valuable official at the time, retired from government service. He repaired the Deduru Oya irrigation works and the Yoda we tank and reported on several irrigation schemes throughout the island (Arumugam, S. 1969, 25). The new department started several new large constructions and by 1907 it was able to perform the following functions:

Kirindi Oya scheme, Walawe scheme, Yoda wewa tank, Kala wewa tank, Deduru Oya wewa tank, Wakaneri Sagamam-Vammiyadi, Pattipolaru scheme, Nachchaduwa wewa (Arumugam, S.1969, 25). Conservation of Ampara, Kondawaddavan, and Vellathipathi tanks in the Eastern Province has been completed. Rs 374,700 was approved in 1912 for the reconstruction of the Tabbowa tank (Arumugam, S.1969, 25). The existing irrigation ordinance was amended and the new "Irrigation Ordinance No. 45 of 1917" was enacted by the recommendations of the Strange's Report 1908. The conservation of the Iranaimadu tank was started in July 1902 and completed in 1921 (Arumugam, S.1969, 25). Restoration of the Tabbowa tank, which resumed in 1921, was completed in 1925. By 1930, the irrigation department had conserved and repaired 82 miles of the bund and 563 miles of canals (Arumugam, S.1969, 26).

Department of Irrigation -Phase II

In 1932, a new irrigation policy was announced by D.S. Senanayake, Minister of Agriculture and Lands. Thus the improvement of rural village irrigation became a function of the

Original Article

department. In1936-37 construction began on several new major works and the old irrigation system was preserved. During the months of February-March 1939, the Mahaweli River was utilized for the first time in recent history by the reconstruction of the Minipe Anicut (Arumugam, S.1969, 26). Despite the change in normal activities of the island due to the Second World War (Colombo airstrikes took place on April 5, 1942) ancient irrigation projects such as the Parakrama Samuddraya tank project, Minneriya Phase-III, Elahera phase-II, Bathmadila phase-II, Kottukachchiya irrigation project conservation, and maintenance work was carried out. The first aqueduct was filled on 22 February 1944 (Arumugam, S.1969, 27) after the conservation of the Parakrama Samuddraya Project. Reconstruction work of the Dewahuwa tank and Murapola Scheme commenced in October 1945.

Formulation of various ordinances and rules relating to irrigation.

Table 12: Ordinances passed during British rule

The year	Act	Source
1856	Irrigation Paddy Land Act	Ordinances of Ceylon.1856:648-651
1861	Gazette Notifications on Local Customs	Ordinances of Ceylon.1856:453-458
1861	Irrigation Paddy Land Act	Ordinances of Ceylon.1856:678-683
1887	1867/21 Paddy Cultivation Act	Ceylon Government, Ordinances. 1884:454-456
1887	Amendment Act No. 2 of 1887	Ceylon Government, Ordinances. 1887:88-92
1889	Irrigation and Paddy Cultivation Act No. 23 of 1889	Ceylon Government, Ordinances. 1889:58-78
1906	Irrigation Act No. 19 of 1906	Ceylon Government Gazette, Ordinances. No 16 of 1906:207-228
1917	Irrigation Act No. 45 of 1917	Ceylon Government Gazette. Part II, Dec 21.1917:312-334
1946	Irrigation Act, 1946	Act of Ceylon. Chapter 453:731-787

According to Table 12 above, the British rulers passed several laws relating to the irrigation industry. The British rulers understood that the sustainability of the irrigation system could be confirmed by the customs and traditions followed by Sri Lanka in the field of irrigation and agriculture. Therefore, they always tried to impose only local laws without introducing the existing legal traditions of their country into this field. Although this attempt was not entirely successful, the colonial rulers were able to carry on the irrigation conservation effort in local customs that emerged from the revival in certain areas.

Journal of Social Sciences and Humanities Review (JSSHR)
Vol. 7, No. 4 (215-228)
ISSN: 2279-3933

Original Article

CONCLUSION

Many of the active ancient irrigation industries we see today are the result of conservation and maintenance during British rule. During the second half of British rule, much attention was paid to the identification of ancient irrigation systems as well as their conservation. William Over, Jonesville, Sir Thomas Maitland, The reports presented by William Over, Jonesville, Sir Thomas Maitland, Captain Galtarius Schneider, Liishin, and others, etc. for the reconstruction of the irrigation system which was destroyed all over the island provided the necessary stimulus to the British rulers. Although there were some shortcomings in the reports of commissions like Colebrooke - Cameron submitted by the British in the year 1833 during their rule, those reports played an important role in the conservation and maintenance of ancient irrigation works. Henry Ward, Hercules Robinson, William Gregory, James Longden, and Arthur Gordon Hamilton, Also, during the administration of governors like Henry Ward and William Over, the preservation and maintenance of Sri Lanka's ancient irrigation industries were greatly supported by the government. Irrigation-related ordinances were prepared as well as and financial allocations were made for conservation activities. During this time a new irrigation manual was published on March 18, 1899, which helped to define the responsibility for maintaining irrigation. Conservation and maintenance of the irrigation industry as well as the opening of new irrigation industries. After a report prepared by Governor West Ridgeway, A separate Department for Irrigation was established on 15 May 1900 with Ward H.T.S. as the first Director of Irrigation. Henry Parker was his second irrigation assistant and seven other irrigation engineers were appointed to the new department. During this period, many old irrigation works were rehabilitated and maintained covering all parts of the island.

References

Alwis, J. (1986). *Irrigation legislation and participatory management, In International Irrigation Management Institute*. Sri Lanka: IIMI, Kandy.

Arumugam, S. (1957). *'Development of Village Irrigation Works'*. Transactions IESL.

Arumugam, S. (1969). *Water Resources of Ceylon*. Water Resources Board Publication.

Bingham, P.M. (1918). *Public Works Department (PWD) Report 1796 to 1913*. Ceylon: Government Printer.

Brohier, R. L. (1934). *Ancient Irrigation Works in Ceylon* (Vols. I–III). Ministry of Mahaweli Development.

Brohier, R. L. (1975). *The Story of Water Management in Sri Lanka down the Ages*. Sooriya Publication.

Brohier, R. L. (1997). *Ancient Irrigation Works in Ceylon*. Asian Agri-History Foundation, Udaipur.

Brohier, R. L. (2006). *The Story of Water Management in Sri Lanka Down the Ages: Food and the People*. Sooriya Publication.

Brohier, R. L. (2007). *Anadimath Yougayaka*

Original Article

Sita Helaye Jala Kalamanakaranaya Pilibada Kathandaraya. Suriya Publisher.

Ceylon Government Gazette, Ordinances. (1906). No 16 Government Printer, Ceylon.

Ceylon Government Gazette (Vol. II). (1917). Dec Government Printer, Ceylon.

Ceylon Government, Ordinances. (1884). Government Printer, Ceylon.

Ceylon Government, Ordinances. (1887). Government Printer, Ceylon.

Ceylon Government, Ordinances. (1889). Government Printer, Ceylon.

De Sillva, K. M. (2003). *History of Sri Lanka*. Vijitha Yapa Publication.

Dharmasena, G.T. (2000). *One Hundred Years of Irrigation Department*. Colombo, Sri Lanka: Irrigation Department.

Karunanada, U.B. (1999). *Economic History of Sri Lanka British Rule 1796-1931 (Sinhala)*. Kadawatha: Abhaya Printers and Publishers.

Karunanada, U. B. (2006). *Nuwarakalawiya and the North Central Province under British Administration 1833–1900*. Research Centre for Social Sciences, University of Kelaniya.

Kamaladasa, B. (2007). *Irrigation Development in Sri Lanka*. Centenary Commemoration Publications, IESL.

Keane, J. (1905). *Report on irrigation in Ceylon*. Colombo, Sri Lanka.

Kennedy, J.S. (1933). *'Evolution of Scientific Development of Village Irrigation Works'*. The transaction, EAC, pp.184–229.

Mills, L. A. (2012). *Ceylon under British Rule, 1795–1932; Routledge: New York, NY, USA.*

Ordinances of Ceylon. (1856). Government Printer, Ceylon.

Parker. (1909). *Ancient Ceylon*. Luzac Publisher, London.

Perera, L. H. H. (1955). *Ceylon under Western Rule*. Macmillan.

Yin, R. K. (2003). *Case Study Research: Design and Methods* (3rd Ed.). Sage Publication, London.