

Identifying present status of ancient village tanks of Thirappane Divisional Secretariat area in the North Central Dry Zone of Sri Lanka

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Introduction

When exploring the history of dry zone of Sri Lanka, it is not hard to find out the great evidence to prove that the ancient village tanks have been playing a massive role to fulfill the numerous needs of the people who are living in the dry zone of Sri Lanka. According to the historical evidence such as Mahawnsa, and some inscriptions like Pillar inscription, Basawakkulama built by king Pandukabhaya around 300 BC is the first tank or the wewa of Sri Lanka. All the well known ancient major irrigation works in this country are known to have been constructed after this datum period (Brohier 1935). However, there are about 15000 both activated and abandoned tanks in dry zone of Sri Lanka among them 90% is clustered into the cascades (Madduma Bandara 1985). According to Madduma Bandara "a cascade is a connected series of tanks organized within a micro (or meso) catchment of the dry zone landscape, storing, conveying, and utilizing water from an ephemeral rivulet". The word 'dry zone' means a considerable portion of the year can be seen as dry period specially May to September because mean annual rainfall is less than 1250mm and annual average evaporation of the dry zone is between 1700 mm to 1900 mm which exceeds the average annual rain fall. Hence, the meaning of dry zone and why ancient kings were

encouraged to construct thousands of tanks in each and every corner of the dry zone in Sri Lanka is obvious.

In the ancient times, whole livelihood of the people was depended on the agriculture. Therefore, the king had to construct a lot of tanks in order to supply water not only for agriculture but also for domestic purposes like drinking, bathing etc and by constructing 165 dams, 3910 canals, 163 major tanks, 2376 village tanks by great king Parakkramabahu. This works bears testimony as to how ancient kings have fulfilled their responsibility from the bottom of their heart for the betterment of the mass. As well as proper irrigation water management system was practiced by the ancient times where king was the main commander and supervisor and Gamarala (village leader) and Gamsabhawa (village council) played a gigantic role in the village level through Rajakariya system (Leach, 1980). At the same time, It is enough to consider the utterance of king Parakkramabahu, "Let not a single drop of water go waste into the sea without benefitting the world" to understand how they protected and managed water in the past era. The investment of village labor in the successful innovation and construction of these village tanks resulted in the development of a strong source of common property that ensured the maintenance and stability of these small

village tanks over hundreds of years (Panabokke, C.R., Sakthivadival, R. and weerasinge ,A.D. 2002).

However, with the abolition of Rajakariya system in 1832 by British administration era, water management and maintenance of minor irrigation tanks became degraded until 1887 after that various methods were used such as establishing Provincial Irrigation Board in 1887, establishing Central Irrigation Department in 1900, introducing Paddy Land Irrigation Ordinance in 1956, Paddy Land Act 1958, Agricultural Productivity Law No 02 of 1972, Agrarian Services Act No 59 of 1979. Since 1991 farmer organizations is being practiced under the supervision of Velvidane and Divisional Officer as a new approach up to now.

Research Question

According to classification of Irrigation Department of Sri Lanka ,three types of tanks can be identified as minor tanks (less than 80 ha or 200 acres), medium tanks (more than 80 ha but less than 810 ha or 2000 acres)major tanks (more than 810 ha).However,When observing ancient minor irrigation tanks or small village tanks, These types of tanks have contributed to fulfill various needs of the villagers than the medium and major tanks. Therefore, though there are many research they have been carried out by various researchers about ancient village tanks,no research has been done to identify present status of village tanks by exploring its essential or whole elements such as Gasgommana,Is wettiya or potawetiya, Godawala, Kaligubemi, wew Bemma, Pitawana, Ethuluwana, Goda sorrowwa, Mada sorrowwa, Kattakaduwa, Thaula, Ihaththawa, Thisbambe, Diyagilma , Ralapanawa, Ela, Kiul Ela etc that is why this research was carried out and this research is about the ancient village tanks of Thirappane DS division in North Central Dry Zone of Sri Lanka.

The general objective of this research is to identify present status of ancient village tanks of Thirappane Divisional Secretariat area and specific objectives are to identify essential parts of ancient village tanks and its importance and present condition of those elements, identifying issues of water management and maintenance of village tanks, exploring difference of past and present behavior of farmers and administrators.

Methodology

Both primary and secondary data were used for this research and a questionnaire was used to collect necessary data as main primary data collecting method and key person interview and field observation also were used for the purpose. Referring relevant books, journals, maps and use of internet were the source of secondary data collecting methods. SPSS and MS Excel computer based software were used for data analysis and text, graphs, charts, tables, were main data presenting methods.

Conclusion

Thirappane Divisional Secretariate Division is located in Anuradhapura district and it has forty one Grama Niladari Divisions and its total land area is 294 square kilometers. There are 166 village tanks in Thirappane DS Division and total capacity of the tanks is 11304 acres feet and 9985 acres are grown under each tank by 5681 farmers.

According to the results of the research it is crystal clear that the use of tank at present has been limited for getting water for agricultural purpose because It was found that no tank is used for getting water for drinking and 3% of the villagers use water of the wewa for bathing especially most of them are old inhabitants of the village. It is observed that Most of traditional customs related to the tanks

have been become degradation due to various reasons. There is no argument that the ancient villagers wholly depend on the village tank because most of their needs were fulfilled in and around the ancient village tanks such as drinking water, water for agriculture, fish, herbal plants for medicine, various flowers for religious activities, different natural resources for domestic production etc, that is why our early villagers respected to the wewa like God and protected as Gem from the bottom of their hearts.

At present, though there are farmers' organizations, and the Velvidane and Divisional Officer for manage and maintain water of the village tanks only Maha season is being practiced most of the times because of the shortage of water. As well as most of the essential elements of the ancient village tanks have been annihilated for example Kattakaduwa, potawetie, Kaligu Bemmi, kiul Ela, Thisbambe, already have been disappeared due to various reasons and those elements were being rendered price less service for sustainability and the prosperity of the village tanks in the ancient times but rarely can be seen some ruin of them.

When exploring the reasons for this massive degradation of village tanks, changing the Rajakariya system, increasing population pressure on village tanks, use of chemicals, agro wells, technology, selfishness of the people, lack rehabilitation, declining responsibility, customs and norms, and weakness of the practice of relevant laws and regulations were found as major reasons for this lamentable situation. Especially, destroying catchment area of the village tanks is rapidly taken place due to various human activities such as Chena cultivation, some constructions in the catchment area etc and it was found that about 46% of catchment area of each village tank has been destroyed by now.

Therefore, it is time to take necessary steps to protect the ancient village tanks by enforcing relevant laws and regulations and people should be motivated to protect the village tanks are protected and it's all elements. If it is protected village tanks, there is a high possibility to overcome the water shortage for growing both Maha and Yala seasons as well as drinking water for people who are living in dry zone and they will be able to get rid of water based diseases like kidney failure menace then while conserving ancient village tank based heritage, sustainable ecofriendly development can be achieved at present as in the past.

Key words: ancient village tank, rajakariya system, cascade, elements of tanks,

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