

Reasons for obsolescence of village tank system: A case study of Bulankulama Wawa in Mihintale GN Division

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Introduction

Sri Lanka is a tropical country. That feed from monsoonal rainfall. Sri Lankan economy mainly depend on agriculture. As well as Sri Lankan civilization based on hydraulic system. Dry zone is suitable area for colonization. Because of that have adequate physical and natural resources for agriculture. Ancient ancestors introduced village tank system for dry zone. Sri Lanka is covered with a network of thousands of manmade lakes and ponds, known locally a “tanks” numbering around 25000. Some are functional others still remaining abandoned. Many are thousands of years old and almost all show a high degree of sophistication in their construction and design. (Madduma Bandara CM, 2009) In dry zone each village consist own small scale irrigation system. That is best practice for drought control and it maintain by villagers themselves. Traditional village and livelihood join with ancient wawa culture. Bulankulama is a one of the largest and isolated tank in ancient period.

That was 24000feet. (@@ 1000 x 6). In past, wawa expand until Mihintale railway station, Rajarata university premises, Hotel Saji Sami, Mihintale Rest House, Mihintale Police Station and thekka Forest. Mihintale villagers was feed from Wawa in several ways. They got nutrients, water for agriculture and human activities, scenic beauty and obtain income from selling flowers, fishing and medicine. After Gamudawa Program in 1996 Bulankulama Wawa was going to decadence. Wawa limited too little area like 1260 feet because of improper constructions.

Methodology

In this research information based on primary and secondary data. 50 samples have been collected by questionnaires survey. These 50 samples were distributed to different stockholders including Wel Widane, members of agrarian society, fishermen and some villagers and student. Furthermore primary data were collected via Field survey, interview and discussion. Secondary

data were collected from newspapers, magazines, extended report and internet. Used MS Excel for analysis data and represent information and also use MS Word, GIS for represent information.

Findings and Discussion

At present we can't identify a proper village tank system in Bulankulama Wawa. Although In past there were Purana wela, akkarawela, godawala (water hole), kattakaduwa (interceptor), gasgommana (windbreak of trees), landa (shrub land), welyaya (paddy field) kiul ela (drainage canal), this bambe (hamlet buffer), gamgoda (hamlet) and hena (rain fed farm) as well as they followed Wawa Rajakariya. (poduwella: the owner of paddy land must clean his own area of canal, pahu wela, wel pota). And also they followed their cultural activities like "mutti nemum mangalyaya", "wehi piritha", "and Kiri itireema" and "panam nemeema" There are 6 bathing ports in ancient Bulankulama. Most of flora and fauna species lived surrounding wawa. Furthermore lot of herbal plants consisted in Wawa area. But in today they are becoming extinct from the environment.

In present 42 acres are cultivating under the Bulankulama Wawa agrarian society and 25 acres are cultivating by Wel pahu watura. They built "Amuna" for collect water. Villagers are cultivating in two season per year. Those are Yala and Maha. Some time

they use Bethma system for Yala season. They produce 1320kg -1760kg of paddy in Yala and 2200kg-2640kg per acres for Maha.

However peoples avoid Wawa from their lives. Mainly the Wawa contaminate by waste water of institute in Mihintale area (hotels, shop and university). Some people dispose their waste to the tank bund & some use licker surrounding tank area. As well as Wawa is going to dead due to aggressive plants like Diya siyabala, Water lily, (*Nemphaea pubescens*), blue Manel (*Numphaea stellate*), Nelum (*Nelumbo hucitera*) *Salvinia* (*Salvinia molesta*) Water hyacinth (*Eichhornia crassipes*), Kankun (*Imomoea aquatic*), Ikiliya (*Asenthus illicitolia*), Diya Nidikumba (*Neptunia oleracea*). That cause to eutrophication and reduce water quality. That plants cause to siltation of Wawa and according to that water capacity of wawa has reduced.

Water board supply pipe water to villagers. As a results of that villagers aren't using Wawa for their uses. People destroyed windbreak of trees. Villagers avoided Wawa Rajakariya and cultural event. 65% of student in Mihintale GN division didn't go to Bulankulama Wawa. Agrarian society of Bulankulama was unable to leasing wawa to fishermen. Lot of peoples have ignored fish production of Bulankulama due to contamination of Wawa. According to that reasons it is

unable to see a proper village tank system in Bulankulama wawa.

Conclusion & Recommendation

As a result of the research, hugely breakdown the village tank system in Bulankulama. It can be damaged to environmental, economic & historical value of wawa. As an educated community awareness program should be continue about priceless value of village tank system. And also follow cultural events should be related with wawa. Proper waste water treatment plant should be implemented for university. Suitable method should be

introduce for control intensive plants. Finally strict legal action & plan reconstruction must be adopt for protecting the wawa.

References

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