The water pool for cattle

Gokatte

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All over Karnataka, there are small ponds that dot the landscape. Called gokattes, these pools are designed for use by cattle. Gokattes provide water to drink as well as a place to rest for cattle. Fed by rainwater, these pools serve as a perennial source of water for cattle and a community asset as well.

Protection of land and water has been an issue of prime importance to rural communities. Over time, various conservation practices have been developed through the use of indigenous knowledge, a bold sense of experimentation and a keen eye for measurement and calculation. It is, therefore, not surprising that tanks, ponds, wells and cattle pools developed by these local skills provide the blueprint for present day check dams, gully plugs and trench cum bunds.

Gokatte or cattle pool is a simple and traditional water conservation practice. These pools can be found all over – in and around villages, outside towns, at one corner of the field, at the base of the hill and in some instances, even in the middle of a tank. While some have been built very systematically using stones, others have been created in pits. This is built without the help of any special tools or gadgets.

There are many different types of gokattes in Karnataka, such as community cattle pool, town pond, small pond, madaka, excavated well, water pit etc. Though the water conservation methods varied, gokattes were in practice in some form or the other, as a community effort even as recently as two decades ago. However, community-based activity was directed not only at the building of gokattes but for desilting and strengthening of tanks, repairing the wall, whitewashing and removing mud from the ponds, which were all a part of the community effort. People participated in good numbers for the construction of the gokatte and the tank.

Eye-technology

A gokattes is a simple but amazing construction which captures and collects all the rain in an area. Using the unique eye-technology of the elders, this system uses the skill of the trained eye to work out the entire process of the flow of water to the gokattes by just observing the gradient of the land. So scientific was the point of placing the gokattes that not a drop of water is wasted, thereby filling the gokattes to the brim. The overflow water reaches the village tank and this in turn would fill up all the wells in the area.
Normally all the *gokattes* in an area were connected to each other. This facilitated a system where a full pool would flow into the next one, which in turn would fill up another nearby pond. When all the ponds were full, the water would reach the main tank in the town.

The cattle would generally graze in the hills located at the outskirts of the town. On their return, the cattle drank water from the *gokattes* which were situated at the base of the hills or on the borders of the villages. As these pools were built on a slope, some portion of the water soaked into the earth and the rest was retained in pools for cattle.

**Who built the *gokattes***?

A common answer to this question is the Taluk Panchayat, District Panchayat and Village Panchayat. But it is the names of persons like Ramajja and Kittappa who were responsible for building the *gokattes*, tanks, ponds and wells for the benefit of the villagers. This was done entirely as *shramdhaam* or service to the community. Their commitment towards the wellbeing of the community has been recognized - that even today many of the *gokattes* carry the names of their donors in acknowledgement of the services that the people had rendered to the community.

**Gokatte water - its uses**

*Gokattes* are plentiful in the plains of Karnataka including Kolar, Tumkur, Chitradurga, Davanagere, Shimoga and Bangalore rural districts. For instance, in Gowribidanur Taluk of Kolar District, the *gokattes* are in the form of water pools. Sri Narayanaswami, a retired teacher puts their number at about 200. According to him, these pools were not only a community asset but were individual water systems to feed the land of each farmer. The concerned farmer undertook the maintenance, though anybody could use the water collected in it.

It would not be an exaggeration to say that all the coconut trees in the plains have thrived on water provided by the *gokattes*. The subterranean moisture it provides is sufficient to nurture the coconut saplings, irrespective of their distance from the *gokattes*. *Gokattes* are of great benefit to floriculture too and there are cases of...
farmers in Chitradurga district who undertake cultivation of flowers using water from the \textit{gokattes} and earn about Rs. 50,000 annually.

Mr. N. Devaraja Reddy, a water expert from Chitradurga, cites some success stories as a result of \textit{gokattes} thus:

Kenchappa, a poor farmer with a family of six members, has about 40 \textit{guntas} of land in Nagaraghatta of Holalkere Taluk, Chitradurga district. This is a very dry area and is rain-dependent. But there is a \textit{gokatte} in his village. He has taken up jasmine cultivation and carries water from the \textit{gokatte} on his cycle for watering the jasmine plants. Kenchappa is able to earn about Rs. 50,000 in a year.

In Holalkere and Hosadurga Taluks of the same district, water available from the \textit{gokatte} is used even to this day to water coconut saplings. The farmers carry water in pots on cycles irrespective of the distance they have to pedal. Shekarappa, a farmer of Chikkaimmiganur provides water to his 10-acre coconut grove from the nearby \textit{gokatte}.

In Chitradurga town, water at a place called Rangajjana \textit{gokatte} is sweeter than borewell water. This is because, water that collects in the \textit{gokatte} is rainwater that has percolated into the earth over several years. This improves the level of groundwater, both in respect of quality and quantity. The local people believe that food prepared with the latter remains undercooked whereas the \textit{gokatte} water ensures tasty dishes!

Normally, farmers grow different crops in the fields around the \textit{gokattes} as water contained in it can sustain any type of cultivation. This implies that the \textit{gokattes} conserve groundwater level and ensure diversity in cultivation.

When BAIF, a NGO took up the issue of community based land-water conservation in Tiptur district, the first action was to create awareness among people about the \textit{gokatte}. The organization introduced the history of \textit{gokatte} as part of its project in order to make people water-literate. It also revived the languishing \textit{gokattes} in the villages coming under the project, propagated a flourishing nursery using its water and created employment for the farmers.

\textbf{Why did the Gokattes disappear?}

According to Late Dr. Somashekara Reddy of the Indian Institute of Management, Bangalore, during the British rule, the government conducted a land survey. Wherever it found lands that did not generate income, they were considered unfit for cultivation and were included under the government administration. As part
of this survey, much of the land with gokattes was confiscated from the people. Gradually, as a result of this, the system faded. What remains today are only the gokattes that are under community ownership and in religious places.

**The present status**

Unfortunately, gokattes have been allowed to fall into disuse. The tanks and bunds that were built and maintained earlier by the communities are now under the village, taluk or district administrations. Thus, the villagers do not volunteer for de-silting the tank or for repairing the gokatte. There is a change in attitude that as tax payers they need not concern themselves with these problems. The government has also turned a blind eye towards these systems, resulting in the unfortunate loss of a tried and tested tradition and a culture associated with it.

At the same time, the government has taken up World Bank aided projects like Sujala, Water Augmentation Project Association and River Basin Development Schemes, through which it has stepped forward to protect gokattes, tanks and the like. These have undergone a metamorphosis and are called canal bunds, gully plugs, agricultural pits etc. The only difference is that the communities no longer evince enough interest in these and the government is trying to persuade them with incentives and money to participate in the project.
Solution for revival

Farmers should voluntarily identify the gokattes, tanks and ponds, study their condition and facilitate the smooth flow of rainwater into them. Tanks and ponds should be desilted and the water level should be increased. Construction of a gokatte costs approximately Rs. 40,000 today. If the government can finance this amount, either in the form of a loan or a subsidy and make the construction of a gokatte compulsory, there is no doubt that all the villages will be rich in water within two years. If the gokattes can be revived before the monsoon starts, a traditional and time-tested water harvesting system will get a new lease of life.

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