The Giant Hydro Marvel

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An awe-inspiring aerial view of the massive Moragahakanda dam
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The water was almost at the brim and we were similar to tiny objects on a higher ground looking out at the ocean…We were on the Moragahakanda dam overlooking the largest reservoir of the Mahaweli Development Project.

Words Udeshi Amarasinghe

The Moragahakanda – Kalu Ganga Development is a dual reservoir project of which the Moragahakanda reservoir was completed and declared open this year by President Maithripala Sirisena. Prime Minister Ranil Wickremesinghe was also present on this occassion.

The project was initiated in 2007, when the President was the Minister of Mahaweli Development. The feasibility studies for this project had been conducted thrice; in the 1970s by Minister Maithripala Senenayake, in the 1980s by Minister Gamini

Dissanayake and in 1998-1999 with special focus on the Moragahakanda – Kalu Ganga project by President Maithripala Sirisena, then Minister. The project was finally initiated in 2007, however due to many challenges this could not be completed on time. It is under the direction of President Maithripala Sirisena that the work of this massive project was reinitiated and completed on time.

The President said at the opening that the people of Anuradhapura, Polonnaruwa, Matale, Kurunegala, Puttalam and Trincomalee will have access to clean drinking water as well as sufficient water for agriculture. While the Moragahakanda – Kalu Ganga dual reservoirs are the main features, an extensive canal system will be completed including the Upper Elahera Canal. The President also stated that the farmers of this country are the strength of the economy and thus all benefits would be provided to them.

The gates are open thus providing water to everyone
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Located in the Matale district, this reservoir has been constructed by building a dam across the Amban Ganga, a branch of the great Mahaweli river. The Kalu Ganga reservoir, which is still under construction, is built by damming the Kalu Ganga.

Due to the dam at Moragahakanda, the waters of the Amban Ganga that used to flow together with the Kalu Ganga via Elahara and Angamadilla has now stopped, so that the giant volume of water is stored within the reservoir and released when the need arises. The ancient canal that transports water from the Elahara anicut to the North Central Province still exists. However, a new canal by the name of Upper Elahara Canal, is being constructed under this project, and is parallel to the existing one. This will enable water to be transported from the two reservoirs further north of the Anuradhapura district with provision to extend the canal farther.

Along a steep road we walked, up and up, towards the dam. One of the gates was open and water was gushing through. The sky was a bit gloomy and the clouds heavy with rain. Upon reaching the top we were mesmerised by the sheer size of the reservoir. Water flowed as far as the eye could see along the contours of the hills. The 360-degree view was indeed awe inspiring. The main dam itself is 65m in height and colossal in size. The hydro electricity power station is at the base of the dam and from above was similar to a miniature structure. There is a large rock outcrop with a tunnel that is believed to be from ancient times.

President Maithripala Sirisena and Prime Minister Ranil Wickremesinghe declare open the Moragahakanda Irrigation Project while Pang Chunxue, Charge d’Affaires, Chinese Embassy in Sri Lanka looks on
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Rain drops splashed on our heads as we decided to journey towards the Kalu Ganga reservoir, which was about a 20-minute drive from Moragahakanda. Through rural Sri Lanka we travelled, it was quite apparent that larges scale development was in progress, where in certain areas the land was cleared and in others the jungle had taken over. Large mounds of sand were similar to natural hills, making us pause on our way.

Following the sign-boards to Kalu Ganga, we were suddenly on an ascent driving along bends and feeling our ears lock as we progressed farther up. We reached the viewing area of the Kalu Ganga reservoir, the cold breeze biting into our clothes and the gloomy skies heavy with rain looked as if it was going to spill on us. We were alone with no one in sight except for a friendly dog.

The Kalu Ganga dam was under construction, with much completed. A large crane towered above and excavated soil and gravel were arranged in mounds. Once completed the Kalu Ganga main dam will be 68m in height and the two reservoirs will be connected by a canal that has a tunnel as well.

The hydro electricity power station at the base of the dam
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The Moragahakanda and Kalu Ganga project was envisioned as a means of providing water for agriculture and consumption to the dry zone of the country that will include Anuradhapura, Polonnaruwa, Matale, Trincomalee and Kurunegala districts as well as hydro power generation for the country. The Moragahakanda and Kalu Ganga reservoirs combined will have a total volume of 660,000 acre feet,

which is six times the volume of the Parakrama Samudraya in Polonnaruwa.

The enormity of these man-made structures were impressive and were testament to the fact that anything is possible. These reservoirs represented a continuation of the legacy that we have inherited from our forefathers.