

Theodor Rehbock, the father of the Neckartal Dam

Manni Goldbeck and Dirk Heinrich

If one were to build a solid concrete wall one meter high and one metre wide from Cape Town past Keetmanshoop in the south of Namibia, one would need the same amount of concrete that was used to build the recently-inaugurated Neckartal Dam west of Keetmanshoop. To construct the dam wall which is 540 metres long at the crest and 60 m wide at the bottom, more than a million cubic metres of concrete were used. The dam wall is 82,5 m high from the lowest point to the non-over-spill crest and can store a total of 857 million cubic metres of water when full. This is three times the amount of that can be stored in the Hardap Dam near Mariental. Neckartal Dam stretches 38 km upstream with a surface area of 25 km². It is a curved gravity dam in the Fish River, 40 km west of Keetmanshoop and a few kilometres north of Seeheim.

The dam will mainly be used for irrigation purposes and the government plans to have 5000 ha made available for the farming of Lucerne, dates, grapes and vegetables. Water will be released at a rate of 50 m³ per second by two turbines which are three metres in diameter and which can together generate 3,5 MW per hour. The water will flow down the Fish River for 13 km where it will be dammed up at an abstraction weir from where the water is being pumped into a reservoir on top of a hill, nine km away. From there the irrigation scheme will be supplied with water. All necessary infrastructure is already in place.

On the 13th March this year (2020), the Neckartal Dam was officially inaugurated by Namibia's Vice President Nangolo Mbumba. Construction had started on the 11th September 2013 and was completed in September 2019. The plans to build a dam on this site in the mighty Fish River date back to German colonial times.

In 1896 and 1897 Theodor Rehbock, who was born in Amsterdam in 1864, at the invitation of the colonial Syndicate of Water Affairs, conducted an expedition through Namibia and South Africa. During this, he became a visionary of a country transformed by more permanent water supplies in farm dams and massive dams in river beds. He designed Pokkiesdraai and Avispoort Dams for Windhoek, Hatsamas near Dordabis, De Naauwte or Naute Dam in the Löwen River southwest of Keetmanshoop in the now !Karas region and a system of terraced dams in the Fish River starting with the Kommatsas North Dam (today's Hardap Dam) and climaxing with Kokerboomnaute or Neckartal Dam. In his two books, German South West Africa, its economic development with special emphasis on the usage of water resources (Berlin 1898) and Germany's duties in German South West Africa (1904), he outlined his designs and his plans to finance the projects. Farm dams were the responsibility of the individual farmers organised in co-operatives and aided by state-sponsored credit institutes. Larger dams would be state-financed and could be linked to farming co-operative complexes.

The project derived its name from Neckartal and Kokerboomfontein; two farms just outside Keetmanshoop and the Berseba Reserve. Theodor Rehbock attended school in the Netherlands and Germany and studied engineering at the Technological Institutes in Berlin and Munich. After completing his diploma, he was engaged in prestigious projects: building the innovative arch bridge across the river Weser in Germany and renovating the German Parliament (Reichstag). In 1899 Rehbock became a professor of hydrology in Karlsruhe. In the 35 years he spent there, he became famous for the mock-ups he constructed which were up to 60 m in length and in which he tested the behaviour of water before putting his plans into practice. His academic obligations did not prevent national and international engagements in Spain, South America (Panama Canal) and New Zealand. His most prestigious work was making the Rhine navigable up to Switzerland, solving problems that had arisen during the construction of the gigantic Dutch Zuiderzee polder system. He remained eager to put his Namibian dam projects into practice.

Though his ideas became significant during the German colonial period, the war lasting from 1903 to 1908 disrupted further plans. This was also due to the enormous amounts of money spent during the war. Farm dams were constructed, but plans for the larger dams were only approved in 1912 and then aborted by the time World War I started. From 1915 to 1955 not much happened in terms of building further dams, and Theodor Rehbock and his ideas were somewhat forgotten, despite the fact that he was considered an international engineering celebrity. The poor whites flooding into Namibia from the south, received Land Bank credits to drill boreholes on their farms. In 1933, at the height of a drought and global depression, dams were built hastily at Avis and in Ovamboland as part of a relief-payment-for-work-scheme.

After World War II and between 1955 and 1969, water affairs officials Otto Wipplinger and Heinz Stengel built many of today's dams in Namibia. Thereby they reactivated many Rehbock traditions and visions. Upon their retirement and resignation, water affairs lapsed into relative inaction.

The second phase of the Neckartal project now awaits completion, in order to use the dam's potential to the fullest and to benefit the people in the surrounding area. Not only will agriculture provide jobs and food security, but even tourism can play an important role in job creation efforts. Water sport like water skiing and angling on Namibia's biggest dam could attract many tourists for competitions and leisure, an aspect Rehbock had never considered. With all the water available, the natural world too will benefit and another paradise for aquatic birds could establish itself in this part of the country.

[#namibia](#) [#padlangs](#) [#gondwanalodges](#) [#stories](#)