



## Water Walking Shoe, amphibious cycle and a dream to cross English Channel

### Transport

State Award- Uttar Pradesh

### Dwarka Prasad Chaurasiya

Mirzapur, Uttar Pradesh

#### Background

An old man in his mid seventies now, Dwarka Prasad, made these shoes of thermocol in 1982, which could be used to skate or walk on water.

His life's journey of over seven decades is a saga of determination, courage, humility, service and deep spiritual beliefs.

Born in pre-independence India in 1932, in a farming family in Gaughat Mohalla, Allahabad, he was barely five years old when he lost his father. His mother moved on along with the family to live with her brother, who lived near Sangam or the confluence of three holy rivers near Allahabad. While the whole country was surging with feelings of nationalism and revolt against the British, he spent his time in the company of spiritual persons, sadhus, visiting temples and participating in satsangs, kirtans and bhajans.

Till date, it is this ardent faith and strong spiritual grounding that keeps him going, despite all odds and adversity he has faced in life.

Due to poverty, he could not continue his education beyond class fourth and it was in his adolescent years that he set up a cycle maintenance shop to support his family. He got married in 1950 and was blessed with two children, a girl and a boy.

While he was in Allahabad, he got in touch with Brahmakumaris, a spiritual organization and got influenced by their teachings and philosophy, which he follows still.

Due to tensions caused by family feud among brothers over land, he moved to Mirzapur in 1960 and set up a small pan shop.

Once he got settled in Mirzapur and got his children married off, he planned an All India cycle trip alone in 1972. After a few small trips of few hundred kilometers in nearby places over a period of three years he finally left for a long trip in northern India on September 11, 1975.

He reached Jagadhari in Punjab during monsoon time, the roads were filled with water and his cycle was loaded with his baggage and foodstuff. He got

stranded and it was then that an idea struck him to make an amphibious bicycle.

He bought four empty cans of Ghee, took them to a pond around two kilometers away, and tried assembling them to his bicycle in various ways. Struggling with finances and support, it was only after an intense effort of 2-3 months that he was ready with an amphibious cycle prototype, for testing. Once he got confident he started showing it to people around; where ever he went people thronged around him in thousands.

He started demonstrating this amphibious wonder from Mirzapur to Allahabad, from Kanpur and Bitthur to Kanauj to reach Delhi and then on to Ajmer, Mount Abu, Rajkot, and Porbandar and then to Bet Dwarka (Okha) where he crossed a stretch of five kilometers in high seas. He was taken to a nearby temple and the priests performed an 'aarti' of him.

Buoyant by the success he received, he came to Ahmedabad and demonstrated his cycle at Kankaria Lake in 1980 where tens of thousands

witnessed his feat. The then Chief Minister of Gujarat gave him an honorarium for his achievement. He then performed in Vadodara and moved to Mumbai for his next performance. There he travelled from Juhu to Nariman Point in the sea and from Gateway of India to Elephanta caves, a stretch of over eleven kilometers in sea, which tested his mental and physical strength. The design of his cycle is quite different from the one used by Shri Saidullah, awarded last year.

#### Genesis

It was sometime during 1978 that he went to Kolkata for a community gathering where he met somebody who told him about thermocol and its properties of floating. He was intrigued and when he came back, he planned to use it to make a life jacket from it.

Earlier, while he was in Mumbai (1980) demonstrating his amphibious cycle, he came to know about a 'baba' who wanted to walk on water. But later, it turned out to be a fraud. But this triggered a thought in him, to make an amphibious shoe using which one can walk on water.

Since he did not have any money to buy a thermocol sheet, he went to a nearby cold storage and asked the manager to give him a few sheets. He was given a single sheet, which he took to a nearby lake and put it in water and made a child stand on it while he kept on holding it. He was seeing the floating effect of thermocol with his own eyes.

His excitement grew and he went back to the manager of the cold storage to request more sheets. The manager got angry and asked him why he needed thermocol. Dwarka Prasad replied that he wanted to make a life jacket. The manager told

him that he would give him as many pieces as required if only he would make and show him the life jacket. He somehow managed to make it and when his trial was successful he ran from the lake in wet clothes itself directly to the manager and showed him the life jacket. The manager got impressed and allowed him to take thermocol sheets as and when he required.

Then he started working on making water shoes using thermocol. After a lot of trial with different shapes and sizes finally in 1982, he came up with the first prototype of the water shoes, which were 5 feet long and 4.5 inches wide.

This first attempt was unsuccessful but he was undeterred. After a series of failures, finally he managed to standardize the size to 3 feet long, 10-inch wide and 8 inch thick. This size gave him good buoyancy and ease in maneuvering. Once he had this ready, he went to Delhi to try performing in the Asiad Games but he was not allowed.

He stayed there for considerable time and finally gave his program in Delhi Boat club, which was widely covered by media and he was given accolades and appreciation. He was also interviewed by BBC during that trip, which was a great recognition for him. Since then the shoes have been with him and sometimes he performs on request.

#### Innovation

Dwarka Prasad uses large specially designed shoes filled with thermocol, fitted to each foot, and oars filled with thermocol to walk on water using buoyancy principles. Use of lightweight thermocol gives the desired buoyancy.



The shoes for walking on water consist of two floats made of thermocol, bonded to rexine sheet. This whole unit is attached to metal straps with back foot support. These two individual shoes are also tied to each other to prevent them from going too far apart beyond one's ability to steer or navigate them.

One needs a pair of hand held oars for balancing while walking in water.

Nationally, there are very few alternatives for crossing water bodies except boats. Amphibious bicycles are one among them which use buoyancy principles, using an air filled float and propeller in rear wheels.



For water shoe systems, most of the alternatives available abroad including Wetfoot-trainer and rescue, upright human propulsion apparatus and Water walker, etc., work on the principle of propulsion while the shoes developed by Dwarka Prasad work on the principle of buoyancy, which

results in lesser complexity, parts and weight, with no fuel requirement.

His life has been a life of constant turmoil and struggle. But the faith in God and tremendous support from his wife kept him going through out. Since the demise of his wife few years ago, he has been left alone as she was his pillar of strength; the very mention of her brings tears to his eyes.

The spirit of innovation and the desire to achieve his goals kept on pushing him to the edge of his physical, emotional and financial capabilities. A man of tremendous self-respect, he never sought any financial help from anyone and refused help from others even to buy his medicines. Today when he is in the evening of his life, one can see the sparkle in his eyes on the mention of what was his next goal. He can not help smile and assert, " bas ab English channel paar karni hai" ( now, I have to cross English channel).

