



# Case Study Series 3:

## Addressing Citizen's Concerns: Inspiration from Proactive Civil Servants

**Case Title:**

**Three-Wheeler Ambulance:**

**Pathway to Accessible Healthcare in Grassroots of Bangladesh**

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The case studies for this series are collected from real-life cases of civil servants working in different South Asian countries. This collection initiative is an attempt to document different proactive approaches taken by civil servants and, in the process, encourage other civil servants to become more proactive in their own workplaces. If you know of other such instances of proactive acts, please email us ([hossainsaadia@gmail.com](mailto:hossainsaadia@gmail.com)), and we will get back to you to collect more information.

# Three-Wheeler Ambulance: Pathway to Accessible Healthcare in Grassroots of Bangladesh

Saadia Hossain Muna and Hasan Muhammad Baniamin

## Healthcare Accessibility Crisis

Generally, in the peripheries of rural Bangladesh, lack of access to immediate and affordable medical transport has often resulted in a life-or-death situation. Even Satoria *Upazila*,<sup>1</sup> which is very close to the capital Dhaka, lacks essential healthcare infrastructure. The medical transportation service within this *Upazila* is scarce as only one conventional ambulance exists. It has functional constraints, too, as it is unable to navigate through narrow rural pathways. Moreover, the cost structure for availing medical services is beyond the economic capacities of marginalized populations living in this area. The state of healthcare inadequacy in this *Upazila* was deeply realized in the demise of a pregnant woman due to timely medical intervention.

## A Ray of Hope in Healthcare Logistics

When Mr. X-the UNO (*Upazila Nirbahi Officer*<sup>2</sup>) of Satoria *Upazila*, witnessed this tragic maternal death, he felt a need to improve the residents' healthcare conditions as the *Upazila*'s field administrative head. He started thinking about introducing a faster and more accessible mode of transport for patients in remote areas that standard ambulances could not reach. Mr. X thought that a three-wheeler vehicle would be more suitable for navigating the poor road conditions but it needed to have medical equipments and facilities to function as an ambulance.

<sup>1</sup> Subdistrict

<sup>2</sup> Executive Officer of the Subdistrict

### Problem

Unavailability of fast and affordable medical transportation in rural regions

### Solution

Creating an innovative emergency transport system, designed to navigate rural roads and equipped with essential medical amenities within the economic capacities of marginalized populations.

### Outcome

Enhancement of healthcare accessibility, reduction in mortality rates, and the promotion of equitable access to emergency medical care.

Mr. X came up with the idea of creating a CNG (Compressed Natural Gas) Auto rickshaw style three-wheeler ambulance. To find a manufacturing partner, he compiled a list of various domestic vehicle builders that import CNG engines and contacted them to propose his idea. Among them, Uttara Motors came forward. They were already working on a similar concept of accessible medical transport in collaboration with the Bangladesh University of Engineering and Technology (BUET). Uttara Motors invited Mr. X to their exhibition booth at a Trade Fair; he was impressed by the company's project demonstration. While further discussing the concept of a three-wheeler ambulance in a formal meeting at Uttara Motors' office, Mr. X realized that his vision aligned with theirs.

Initially, Mr. X was concerned about financing the project until he came across the donor agency—JICA (Japan International Cooperation Agency). It has a fund worth BDT 40 lakh (USD 50,000) under the *Upazila Management and Development Project*, which was for sponsoring locally led development initiatives at the grassroots level. He applied for a funding worth BDT 10 lakh (USD 12,500) for the construction and operation of the three-wheeler medical transport that he named '*Grameen Ambulance*' (rural ambulance). Upon the Project Director's approval, Mr. X managed to secure funds and started utilizing the resources to build this vital healthcare transportation for his Upazila. He devised a comprehensive plan to equip it with essential medical facilities for emergency assistance and Uttara Motors ensured it. After successful completion, he also ensured the route permit for this unique vehicle to drive on highways, if needed, to reach district-level hospitals.

Since the initiation of these CNG-run ambulances, many lives have been saved because of the availability of emergency transportation to various healthcare facilities. Mr. X also gave mobile phones with sim cards to the drivers where patients can call 24/7 as a hotline to avail of ambulance services. Patients can be transported to the *Upazila Health Complex*, the union's community clinic and family planning center, or the district headquarters hospital as necessitated by their conditions. A nominal fee has been introduced to cover the expenses of the ambulance driver and fuel costs to make it self-sustaining. The fair is fixed at BDT 200 (USD 2.5) for the local clinic, BDT 400 (USD 5) for *Upazila Health Complex*, and BDT 600 (USD 7.5) for the district level. However, provisions have been made to provide this essential service free of charge for those who cannot afford it.

## **Life-Saving Impacts**

The impact of the *Grameen Ambulance* service has been immediate and profound. It has not only provided a life-saving solution for critical emergencies but also brought timely medical transportation within the reach of lower and middle-income families in that *Upazila*. Moreover, the community's enthusiastic appreciation and the attention it received on social media demonstrate a wider demand for such initiatives in other areas, especially for vulnerable populations such as the elderly, pregnant women, and infants. Mr. X believes that replicating such initiatives across other rural regions could be pivotal in ensuring equitable access to healthcare and reducing mortality rates. In broader terms, it aligns with Bangladesh's public health goals by covering Sustainable Development Goal 3 (Good Health and Well-being) and Sustainable Development Goal 17 (Partnership for Goals).

## **Declarations**

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Baniamin, H. M., & Jamil, I. (2021). Effects of representative bureaucracy on perceived performance and fairness: Experimental evidence from South Asia. *Public Administration*.

Baniamin, H. M., Jamil, I., & Askvik, S. (2020). Mismatch between lower performance and higher trust in the civil service: Can culture provide an explanation? *International Political Science Review*, 41(2), 192-206.

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