

The introduction of the Vaccine Landcruiser

“What impact has it had on vaccine delivery?”

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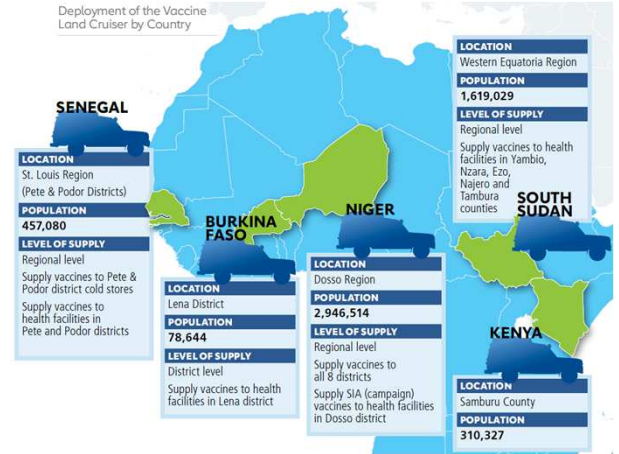
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About the project

In March 2021, Toyota Tsusho obtained the first WHO PQS E002 in the world for its Vaccine Land Cruiser. To fully understand the impact of the Vaccine Land Cruiser on the immunization program and supply chain, Gavi evaluated the introduction of the vehicles in five African countries for a period of 12 months. The vehicles were introduced by the Ministries of Health into the immunization supply chain program and evaluated against cost of transporting vaccines, access to locations and safe delivery of vaccines.

Deployment of the Vaccine Land Cruiser by Country



Key result

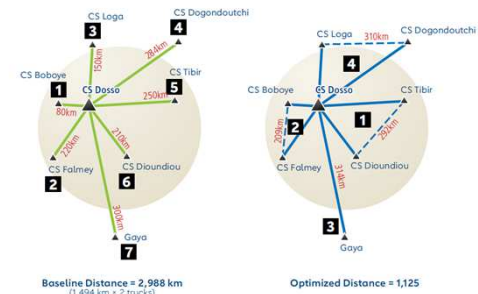
ACCESS

The VLC was utilized as a direct replacement for the conventional vehicles used in the country operation. Comparative data reveals that the VLC was able to access an increased number of locations. In Niger for example, while conventional vehicles were previously limited to delivering vaccines to district stores, the Vaccine Land Cruiser significantly expanded this distribution capacity.

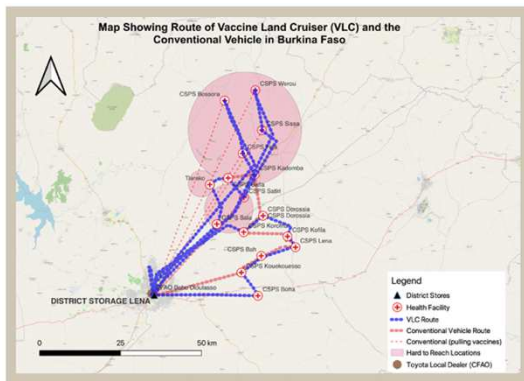
COST EFFICIENCY

The implementation of the VLC has had a substantial impact on reducing costs. By examining the cost per dose of transporting vaccines, we observed an impressive cost reduction of between 15% to 63% when using the VLC. This highlights the significant value and efficiency of this innovation in the logistics of vaccine delivery.

Niger: Route Optimisation using the Vaccine Land Cruiser for a Typical Vaccine Distribution Month



Burkina Faso: Map of Lena District Showing the Locations Reached by the Vaccine Land Cruiser



SAFE DELIVERY

The VLC provides a highly reliable means for vaccine transportation, demonstrating minimal risk of temperature damage to vaccines. With appropriate placement and handling of vaccines within the refrigerator, the likelihood of vaccine vial breakage is significantly mitigated. Thus, the VLC emerges as a safe and effective solution for maintaining the integrity of vaccines during transport, ensuring they are delivered in the optimal temperature and condition.

Table Summarizing the Temperature Alarms in South Sudan

Vehicle	Distributions	Temperature Alarm Rates		Doses
		High	Low	
Conventional Vehicle	4	21	17	11,651
VLC	7	0	0	41,124

About VLC



First of its category, the VLC is the fruits of the collaboration between Toyota Tsusho and B. Medical Systems, obtaining the WHO PQS E002 pre-qualification.

MAIN FEATURES

- Base Vehicle: Land Cruiser 78 Refrigerator: CF850
- Net Vaccine Storage Capacity of 396L
- Refrigerator battery of 16hrs power supply
- Dedicated space for Dry supplies
- Easy maintenance design



GAVI, The Vaccine Alliance (GAVI) was set up as a Global Health Partnership in 2000 with the goal of creating equal access to new and underused vaccines for children living in the world's poorest countries. In particular, GAVI aims at accelerating access to vaccines, strengthening countries' health and immunization systems, and introducing innovative new immunization technology. Since GAVI's inception, it has subsequently supported the immunization of 1 billion children and prevented a potential 17 million deaths.



Toyota Group's sole general trading company established in 1948. As automotive professionals with unique capabilities and know-how, we strive to lead the Toyota Group in the challenge to develop the evolution of next-generation mobility to contribute to the development of both society and the Group. WHO PQS E002 holder for the Vaccine Land Cruiser.

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Project Movie



Testimonies Movie

