

# FLOOD-RESILIENT MASS TRANSIT PLANNING IN OUAGADOUGOU, BURKINA FASO

(Project Period: 2020/02/11-2021/06/30)



Credit: RFI, 2009

## CHALLENGES AND OBJECTIVES

Urban areas in Sahel Africa are highly vulnerable to extreme hydro-meteorological events with the frequency of extreme storms tripling in the last 35 years. Burkina Faso is no exception. In 2018, heavy rains resulted in significant flooding and caused road transportation disruption throughout Ouagadougou, the capital. This is largely because a climate-resilient road network hasn't been established and poorly maintained dirt roads are ubiquitous. Furthermore, urban growth, extreme weather events, and climate change pose a threat to the transportation system due to Ouagadougou's lack of experience with effectively incorporating hazard risk data into the spatial planning of its transport system and developing appropriate engineering and management solutions.

To improve the resilience of the urban transportation system, the Japan -World Bank Program for Mainstreaming DRM in Developing Countries supported the technical assistance project "Flood-Resilient Mass Transit Planning in Ouagadougou, Burkina Faso" aiming at incorporating flood and other hazard risk in its spatial planning and technical design, and enhancing the capacity of national and city institutions to systematically consider flood risk in urban transport planning and management.

## JAPANESE EXPERIENCE LEVERAGED

To manage flood risk significantly affecting the urban transportation system in Ouagadougou, the project compiled a diverse set of best practices as a case study from around the world that Burkina Faso could learn from. One of them was focused on a Japanese city Toyooka, Hyogo Prefecture, as Toyooka has similarities with Ouagadougou in terms of public transportation being affected by flooding events. In February and March of 2021, a Japanese expert on road engineering of the Department of Civil and Environmental Engineering, Miyazaki University, provided valuable input on Toyooka's experience and measures such as a pre-disaster action plan with the emphasis on timelines.

The case study explained how the city developed the pre-disaster action plan, which would be a great resource for Burkina Faso in better preparing for future disasters. In addition, the idea of creating a "flood prevention and disaster awareness society" – the entire society is always prepared for disaster – was introduced. The experience of Toyooka will help inform Burkina Faso's urban transport and urban development planning.

Publication: [Flood-Resilient Mass Transit Planning in Ouagadougou](#)



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