

TV white spaces beneficiary profile:
Gakawa Secondary School, Nanyuki, Kenya
Mawingu White Spaces Broadband Project



Ms. Beatrice Nderango is the headmistress for Gakawa Secondary School in the community of Nanyuki, a rural market town in Kenya's Rift Valley. With no electricity, phone lines or broadband Internet, many Nanyuki residents have grown potatoes and other crops for a living. A new Microsoft pilot project – the Mawingu White Spaces Broadband Project – could change that, unleashing local entrepreneurship. Launched in 2013, the pilot uses solar-powered base stations to deliver broadband access via unused wireless spectrum, specifically TV white spaces, typically reserved for television stations. The technology is creating new opportunities for commerce, education, healthcare and delivery of government services.



*Ms. Beatrice Nderango (right); TV White Spaces Commercial Pilot in Kenya
(Source: Greg von Doersten)*



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Ms. Nderango's students are direct beneficiaries of the Mawingu Project, and she says having Internet access at Gakawa Secondary School is helping her students by giving them access to new life-changing educational opportunities. It allows them to do more research to better complete their assignments and provides unprecedented learning opportunities to connect with the rest of the world. Further, through "Mawingu," which means "cloud" in Kiswahili, villagers in these isolated areas are now able to

use tablets and services to browse the Internet, and it will give farmers in the community access to critical planting information and tools to improve their business skills.

The Mawingu Project is part of Microsoft's 4Afrika, an initiative to improve global competitiveness in Africa. In collaboration with the government of Kenya's Ministry of Information and Communications and Indigo Telecom Ltd., the pilot project delivers low-cost wireless broadband access to previously unserved locations near Nanyuki, Kenya.

The initial installation near Nanyuki currently includes seven customer locations: the Burguret Dispensary (healthcare clinic), Male Primary School, Male Secondary School, Gakawa Secondary School, Laikipia County Government Office, the Red Cross office in Nanyuki, and the first Mawingu changing and bandwidth agent. Employees at the Laikipia County Government Office will soon be enjoying Office 365 accounts. The students are taking advantage of Windows Multipoint Server ICT labs. Between now and early 2014, an additional 33 end user locations will be added to the network, including several more schools, Mawingu agents, and businesses in the area. The network is featuring white space radios manufactured by Adaptrum and 6Harmonics.

Providing broadband to rural areas of Kenya is critical to driving prosperity in rural areas, as well as Africa as a whole. It gives students – both children and adults – a new way to experience learning, and rural communities the ability to connect to the world, improving opportunities for economic development via e-commerce and small business growth