

Hello again, and welcome to As It Is! I'm Jonathan Evans in Washington.

Today on the program, we tell about how drones are raising both hopes and concerns across the African continent. But first, we turn our attention to the African nation of Uganda. A new program is available to help pregnant women who live far away from cities. The program is designed to operate on smartphone and other mobile devices. June Simms has more.

## **Pre-Natal Care Goes Mobile in Uganda**

Three university students in Uganda have created a smartphone application that may help improve health care for pregnant women in rural areas.

Joshua Okello, and two other students at Makerere University in Kampala, created the app in 2012. They call it WinSenga. "Senga" is the local word used to describe a female family member who helps a woman during pregnancy. The "Win" in the name comes from the Microsoft product Windows. Last year, the computer software company gave Mr. Okello and his partners \$50,000 to continue development on their WinSenga app.

A small microphone is placed inside a plastic horn. Mr. Okello says midwives in the area have used similar devices for centuries to help women during childbirth.

"It's a long cone-shaped device with a hole through it and a flat top. The midwife places it on the belly and listens in. Every midwife in this country has seen it, and that is what they are trained with."

The smartphone app records and examines the sound of the unborn baby's heartbeat. Mr. Okello says if the app suspects a problem, then it informs the midwife of different actions she might take.

"Say you have a baby and we detect that the heartbeat is less than 120 beats per minute. That is a problem. So immediately, we pop up something that says 'please, we suggest that you could do A, B, C, D.'"

Mr. Okello says having a mobile device with this app could make it easier for health care workers to reach women in villages far away from cities. He says it will also be less-costly than the machines that are now being used.

"We are getting a solution that's cheaper, which means that more clinics are going to get it. If we could get Huawei or I don't know who to give us phones for free, we are looking at a solution that's less than \$100."

Juliet Birungi is an obstetrician, a doctor who cares for pregnant women. She has tried WinSenga. She says hospitals could use the app to help medical workers follow the health of the baby even when they are not there.

“You have so many mothers in labor, and we do not have enough staff. You find that while the mother is laboring here, the other one is delivering, the other one is bleeding. So when you come, you are able to look at the recording.”

Dr. Burungi says having these up-to-date records of the baby’s health condition could make the difference between life and death. But she says the app is not a substitute for a trained medical worker.

Mr. Okello says the app could also be helpful in other developing countries with similar problems to Uganda. And he says, with further changes to the app, it could even be used at home by pregnant women in developed countries.

I’m June Simms.

And I’m Jonathan Evans. Thanks for joining us today on As It Is from VOA Learning English.

We often hear stories about military use of drones in targeted attacks. Drone manufacturers say these unmanned aircraft can have many other uses. But some observers are increasingly concerned about privacy issues. Here again is June Simms.

## **Drones Raise Hope and Questions across Africa**

African militaries want drones to help them guard their borders and large open spaces. But makers of these drones -- which are also called unmanned aerial vehicles, or UAVs -- say they could do much more than military work. They could deliver medicine, protect endangered species, and move goods quickly and cheaply.

But some experts warn that letting drones operate, even for good uses, could create problems.

Kenyan engineer James Munyoki has built several drones. One of them can carry a load of up to six kilograms. He is trying to increase that to 10 kilograms.

"When I started building them, I was thinking the payload would be something like a camera for surveillance purposes. We need that in Kenya.

That would enhance security. Apart from that, it can also monitor traffic. These are drones that can be used maybe for things like journalism or photography. So the application is not just going to be for military purpose or security purpose."

Park rangers in South Africa are flying small drones to watch over endangered rhinos. Some experts say drones could also be used to document the flow of refugees trying to escape conflict in their countries, or to record government abuses of human rights. They could help in search and rescue operations and transport aid to hard-to-reach or dangerous areas.

Africa's strong economic growth and bad road conditions are seen as a great business opportunity for drone makers. They believe battery-powered drones could move from one charging center to another, carrying items to villages far from cities.

Kristin Sandvik is the Director of the Norwegian Centre for Humanitarian Studies. She says drones may solve some problems but create others.

"Across Africa, very few countries have comprehensive domestic legislation on privacy and data protection and information storage. A drone cannot only see or listen. It can also sense and hear and read. So in a couple of years' time when you have the smaller drones also outfitted with facial recognition technology or smaller drones that could potentially hack into wireless systems."

Ms. Sandvik says drones carrying cameras may be used to deliver aid to a refugee camp. But, she asks, what happens to the information it may gather?

"Is the drone going to give this humanitarian crisis mapping information, is that going to be handed over to the International Criminal Court, for example?"

Drones are not yet ready for widespread use. The sensor technology needed to prevent drones from crashing into things needs to be improved. They are also costly. And, in most countries drones or other aircraft cannot be flown without special laws governing their use.



Opponents and supporters of drones do not agree on much. But they do agree that the technology is coming, likely within the next ten years. And they say Africa needs to be ready.

I'm June Simms.

And that's our program for today. I'm Jonathan Evans. Thanks for listening! Join us tomorrow for another As It Is on the Voice of America.