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# Improving access to maternal health care in Senegal: WAHA International's mHealth programme



The Tambacounda region in eastern Senegal experiences some of the highest recorded maternal and infant death rates in the country, at 650 maternal deaths per 100 000 live births (Ministry of Health, personal communication, 2014) and 49 infant deaths per 1000 live births in 2010–2011 (1). Only 4% of the population use modern contraceptives, and attendance at the four recommended antenatal care (ANC) visits is very low (1). Furthermore, only 32.4% of births are attended by a health professional (1), and on average there is only one health worker per 3000 inhabitants in the region (2). Frontline health-care providers in these rural communities are often the sole link between mothers and health-care facilities. Gravely overextended, with basic training and limited access to specialized medical advice, these rural workers need professional support and capacity-building.

WAHA International's mHealth programme addresses several barriers to maternal and neonatal care, including: a lack of information at the community level about locally available services; a large distance from services and a lack of affordable transport for patients; and ineffective communication between community-based and facility-based health workers.

## How WAHA International's mHealth programme works

A mass communication campaign will be launched to send text messages (SMS) to the general community to inform them of the availability and benefits of the maternal and neonatal health services at their local health-care facilities.

A separate communication campaign will specifically target pregnant women and new mothers to inform them about the importance of ANC visits, delivery with a skilled birth attendant, and postnatal care. These messages will be reinforced by a team of community health workers known as Bajenu Gox ("community godmothers") who are trained by the Senegalese Ministry of Health (MOH) to carry out home visits in their communities and to encourage uptake of key maternal and child health services.

Transportation barriers will be addressed through a motorcycle ambulance system specially designed and tested by WAHA International for rural African settings. A call centre will be created in order to efficiently manage the referral system. Bajenu Gox and ambulance drivers will be provided with mobile phones so that they can contact the call centre to coordinate the referral process for high-priority patients requiring urgent transfer to the nearest health-care facility.

Women attending ANC consultations will also be provided with a mobile phone SIM card for receiving the informational SMS messages and for contacting a Bajenu Gox or senior midwife at the call centre. At each subsequent ANC or other maternal health consultation, the woman will receive additional credit as an incentive to attend their maternal health consultations at a health-care facility.

## Supporting national public health programming

WAHA's approach couples a comprehensive communication and transportation network with reinforcements to the existing health system in Senegal. This intervention capitalizes on existing government-trained health staff, the Bajenu Gox, to improve awareness of available medical

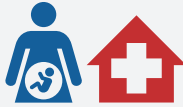




General SMS campaign informs communities of beneficial services available at local health centres



Pregnant women receive SIM cards to receive targeted messages and to contact Bajenu Gox (BG)



Targeted SMS campaign encourages all pregnant women to visit local health centre and provides appointment reminders



Trained BJs reinforce messages during home visits and follow-up care



Motorcycle ambulances provide referral services for obstetric emergencies with support from the call centre



Targeted SMS campaign informs new mothers of benefits of infant care

resources, while increasing local demand for health services. This integrated maternal and neonatal health project builds on a pilot-tested initiative (in Kédougou, Senegal) which demonstrated positive impacts on outcomes related to MDGs 4, 5 and 6.<sup>1</sup>

### Partnerships for support and sustainability

This project will be implemented within the context of an existing agreement between WAHA and the Senegalese MOH to provide maternal and neonatal health care, including fistula repair, to women in this region. Furthermore, the project has received strong support from the Government, with endorsement from the MOH.

The sustainability of the project is further secured by the local health authorities who have committed to continuing to provide training and salary support to the Bajenu Gox, the call centre and ambulance drivers once the project concludes.

### IWG catalytic grant for mHealth programme scale-up

WAHA International was awarded a grant to scale up the Bajenu Gox programme in the Tambacounda region of Senegal by the United Nations Innovation Working Group's (IWG's) catalytic grant competition for maternal, newborn and child mobile health (mHealth), managed by the United Nations Foundation. WAHA International was successful in the grant competition because it employs an effective delivery strategy for an evidence-based maternal and child health intervention, combined with creative financing strategies to promote sustainability – elements that are critical for mHealth tools to contribute to Millennium Development Goals 4 and 5.

<sup>1</sup> MDG 4 is to reduce child mortality; MDG 5 is to improve maternal health; MDG 6 is to combat HIV/AIDS, malaria and other diseases ([www.unmillenniumproject.org/goals/gti.htm](http://www.unmillenniumproject.org/goals/gti.htm))

### References:

1. Enquête démographique et de santé à indicateurs multiples Sénégal (EDS-MICS) 2010–2011. Dakar, Senegal and Calverton (MD): Agence Nationale de la Statistique et de la Démographie (ANSD) Senegal and ICF International; 2012 (<http://dhsprogram.com/pubs/pdf/FR258/FR258.pdf>, accessed 2 October 2014).
2. Situation économique et social de la Région de Tambacounda 2009. Dakar, Senegal: Ministère de l'Économie et des Finances, République de Sénégal; 2010 ([http://www.ansd.sn/ressources/ses/SES\\_Tamba\\_2009.pdf](http://www.ansd.sn/ressources/ses/SES_Tamba_2009.pdf), accessed 7 August 2014).

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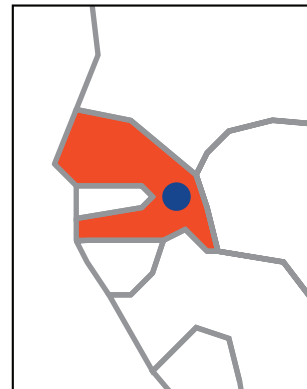
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### Tambacounda region Targets (2014–2015)



668 804



153 000

### Senegal



Population covered



Women of reproductive age targeted

Through IWG, WAHA International is receiving assistance from World Health Organization's Department of Reproductive Health and Research to optimize scale-up of the Bajenu Gox programme while contributing to the mHealth evidence base and best practices on implementation and scale-up. Please visit <http://www.who.int/reproductivehealth/topics/mhealth/en/> or <http://www.unfoundation.org/features/mhealth/iwg.html> for more information.

**Partners:** Senegalese Ministry of Health, Mobile Phone Operators (MPO)

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