



**INFORMATION IS AN INTERVENTION THAT WORKS**  
**Results from the Nigeria Evidence-based Health System Initiative (NEHSI)**  
**in Bauchi and Cross River States (2008 – 2014)**

*Improving the health of women and children worldwide is central to development. In Nigeria, ground-breaking research that addresses the root causes of maternal, child, and newborn mortality demonstrated that producing and sharing good-quality information with target communities and decision makers, combined with bringing health care to households, reduces the maternal and infant mortality ratios.*

*NEHSI is a collaboration between the Government of Nigeria, Foreign Affairs, Trade and Development Canada, and Canada's International Development Research Centre (IDRC) in Bauchi and Cross River states. NEHSI strengthened health systems through the entry point of health information systems.*

**Improved health outcomes**

- *Maternal mortality ratio declined* in a pilot project in Giade, Bauchi from 624 to 566 per 100,000 live births over a two year period – a result that demonstrates the power of combining data collection and providing door-step care through four household visits for each expectant mother.
- *Maternal mortality ratios were lower* in the target group than in the control groups, proving that health information about good practices during pregnancy and childbirth can have a direct impact on mothers' health (511 compared to 597 per 100,000 live births).
- *Infant mortality ratios were lower* in the target group compared to the control groups, proving that information on nutrition, hygiene, and management of childhood illnesses can have a direct impact on children's health (34 compared to 42 per 1000 live births).
- Children in the target group were *25% less likely to have malaria* than children in the control group.

**Improved health practices**

- *More women were having safer pregnancies:* getting their blood pressure checked and getting the recommended four pre-natal care visits.
- Almost twice as many women had *post-natal check-ups*.
- Households in the target group in Cross River and Bauchi States *were 40% more likely to own a mosquito net* than households in the control group and their children were more likely to always sleep under the mosquito net than children in the control group.
- Women in the target group in both states reported *having more information on health and hygiene* related issues than those in the control group.
- Women and men had increased *knowledge of danger signs* such as bleeding during child birth.
- Women in the target group in Bauchi and Cross River States were more likely *to believe that all pregnant women should have pre-natal checkups* than women in the control group – a key step in reducing preventable maternal and child deaths.
- Based on NEHSI research, communities and state governments *are changing* the practice of using medication to manage diarrhea, which is less effective than continued feeding and providing extra fluids to children.

### **Improved planning: building a culture of evidence use**

- All 20 Local Government Areas in Bauchi State now use evidence from NEHSI in their health planning and budgeting processes.
- All key planning documents (Local Economic Empowerment Development Strategies) for 18 Local Government Areas in Cross River use NEHSI data to inform their action plans.
- The Cross River State Planning Commission created a Sector-Wide Social Audit Office with staff and a budget-line in order to scale-up NEHSI's social audit methodology to other sectors in the State.
- The new National Health Information System policy of the Federal Ministry of Health has incorporated elements of the social audit. This demonstrates a Federal commitment to promoting the NEHSI approach in other states.

### **Improved budgeting practices**

- Both Cross River and Bauchi States have allocated resources to carry out social audits in their states, to continue to collect actionable information to plan for better health.
- NEHSI data was used in the development of the Bauchi State's Medium Term Development Plan (2013-2015), from which annual budgets are derived. Evidence-based budgeting orients spending to priority areas that can have an impact on maternal and child health.
- More nurses and community health extension workers were hired in Bauchi state after NEHSI data showed that additional human resources were needed to serve the population.

### **Improved health policy, health services, and vital statistics**

- Policy makers have taken measures to increase vital registration after NEHSI research found unacceptably low registration rates and, in consultation with the population, identified solutions to address barriers to registering.
- The Ministry of Health in Bauchi State and the State Planning Commission of Cross River are taking action against illegal user fees that prevent many pregnant women and children from seeking health care. Bauchi State's Ministry of Health and Primary Health Care Development Agency decided to prioritise routine immunization, using NEHSI data that demonstrates that focussing on polio eradication was undermining routine immunization coverage in Bauchi.
- The Cross River State Planning Commission used NEHSI data to assess a recent bed net campaign against malaria which found that fewer than 50% of young children slept under bed nets.
- NEHSI data was used by the Ministry of Water Resources in Bauchi State in plans to make portable water more accessible.
- The Ministry of Information in Bauchi and Cross River States have used NEHSI data to increase awareness around public health issues.

### **Lessons**

- Addressing the root causes of maternal and child health in homes and communities, *promoting* health and *preventing* illness and death, as opposed to improving facility-based care, is effective.
- Eliminating asymmetric information at the community level empowers them to address root causes of poor health in their communities, and to demand better quality and access to care from authorities.
- Strengthening the health information system allows planners to make better health spending decisions. Actionable, high-quality, and timely information about root causes is demanded. The breadth and depth of information needs to be balanced for it to be useful.
- To allocate resources efficiently and effectively, people must be trained and there needs to be a culture of continuous improvement within institutions. This takes time.
- Working with the existing system (rather than creating a parallel system) is best for sustainability.