

Participatory Geographic Information Systems (P-GIS) for natural resource management and food security in Africa

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October 2010

By Mbaye DIENG, Researcher, ICT4D programme, ENDA Lead Africa

The fight against hunger in Africa: A figurative snapshot

On the 16 October 2010 World Food Day was celebrated around the world. The right to adequate food is recognized and codified by the UN bodies. However, in view of the figures published each year, the proportion of hungry people has risen. In the aftermath of the 2008 food crisis, African leaders returned to its rhetoric about the need to move towards food self-sufficiency. If all African leaders merely agreed on the need to increase agricultural production to feed people, it is clear that the situation has not fundamentally changed.

Countries, once self-sufficient are now dependent on food aid worldwide. According to the first edition of "The State of Food Security in the World" published by FAO in October 2009, 10 SSA countries have reduced the number of undernourished by 21 million people between 1980 and 1996. Yet over the same period, 22 SSA countries have seen their population undernourished increase from 114 million, while six countries registered a slight decrease - a decrease that failed to prevent the proportion of the population suffering from malnutrition from declining. In West Africa, FAO (2008) estimated that since 1990, famine in Senegal

has increased from slight to dramatic rating. In East Africa, Kenya is facing a production shortfall due largely to the decline in rainfall in 2008-2009. In Malawi, land degradation is the greatest threat to human survival and remains the biggest challenge despite three years of surplus production (FAO 2008).

In 2010, according to the World Food Programme, "the number of people who suffer from hunger remains unacceptable despite the recent publication of latest figures indicating that just under one billion people affected. The new estimates indicate that the number of people who suffer from chronic hunger this year will be 925 million. In 2009, this figure stood at 1,023 billion people." Despite this progress, the proportion of the population suffering from malnutrition in sub-Saharan Africa remains the world's largest, with 239 million people or 30% of the population.

The causes of hunger are well documented, so there is no need to further explain. According to the committee of the FAO food security, fundamental challenges to lift Africa food crisis are related to land tenure security

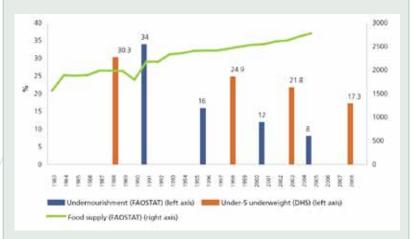
The programme

The overall objective of this pan-african programme of research is to contribute to making available good quality, reliable and accessible information systems through the application of the P-GIS approach to improve natural resource management (water, land and forest in particular) and promote food security. The programme will also support social change in study countries (Benin, Kenya, Malawi, Rwanda, Senegal, Tunisia) by developing P-GIS as methodological tools for participation and to inform decision-making.

Ghana – on track to meet MDG1

Ghana has seen levels of poverty fall from 52% in 1991/92 to 28.5% in 2004/06, close to half. Rural poverty and child nutrition have seen similar levels of decline, making Ghana on track to being the first SSA country to achieve MDG1 halving the population living in poverty and hunger.

Food supply has grown faster than the population has, making Ghana largely self-sufficient in terms of staples. A change has been largely attributed to the economic reforms undertaken since 1983, supported by government with the political will coupled with the right type of support from donors. Investment in agricultural research allowed for the use of disease-resistant, high-yielding varieties of cassava. Urbanisation and economic growth from a better investment climate helped boost domestic demand for other foods, such as, chicken, fish, and plantain, diversifying income sources for rural populations.



The message is clear, Ghana's agricultral sector has transformed over the last 20 years through incremental and sustained change, and putting underused resources to work.

Source: Leturque & Wiggins, 2010

and international investment, how to manage a country's vulnerability and the risks involved in protracted crises. Long-term implementation strategies for agricultural growth are absoultely vital. Thus it should be remembered that the first of the Millennium Development Goals (MDGs) is a fight against hunger and food insecurity.

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