

ESRC/DFID Joint Scheme

Project Progress Report

Award Number:	RES-167-25-0343
Award Title:	Poverty and maternal health in Ghana: A spatial analysis of exclusion from care
Award Holder's Name:	Zoe Matthews
Award Holder's Institution:	University of Southampton
Award Dates:	Start Date: 21/07/2008 End Date: 20/07/2010
Progress Report date:	20 March 2009
Brief summary of research project:	<p>Overview By linking nationally representative geo-referenced survey datasets with digital maps of health facilities and physical features for Ghana – a country rich in health-related data - this project is deriving spatially disaggregated estimates of welfare, maternal health service utilisation and accessibility of services. After quantifying the spatial links found between these variables by means of regression techniques first at district, and then at individual level, the project will go on to explore three case study districts in more detail – using much more spatially precise GIS techniques. Lastly, a qualitative study involving in-depth interviews with relevant stakeholders and users will be undertaken in order to facilitate the interpretation of the results and to refine the policy implications of the study findings.</p> <p>Progress of Research Programme We have seen delays at the start of this project due to problems with financial transfers and difficulties associated with data acquisition. We estimate that this has caused a possible 4-month delay. Details and current timeline are given below this table under 'Summary of changes to timeline'.</p> <p>Engagement Strategy This is early days but we have already engaged in the following:</p> <ul style="list-style-type: none">▪ An initial presentation was given at DFID Ghana country office to inform them of the research and introduce them to RIPS researchers especially PN. Much interest was expressed and we were able to bring DFID Ghana on board

as potential collaborators for our District Mapbook for maternal health. DFID Ghana also alerted us to the work done in GIS by CERSGIS at Ghana University.

- Two meetings have taken place with the local IMMPACT office at the Noguchi Institute for Medical Studies on the University of Ghana campus. This group is known for their studies in maternal health in Ghana – mostly primary data collection and analysis. Our team has obtained data from a recent study on out of pocket costs for maternity care in three regions of Ghana – these are likely to be used as part of the case study work in Phase III
- A sister project in Accra which is investigating urban poverty in two adjacent slums (funded by the EU) will be collecting data on a sample of 600 households this summer. Maternal health and poverty are both topics on the general questionnaire. We are also looking at this as an opportunity to eventually include as a case study.

3 Outputs of the research project to date

None so far – but outputs are planned (see below)

4 Forthcoming engagement activities

- A related project being undertaken with the White Ribbon Alliance (WRA- an NGO focussing on improving maternal health in poor countries) is being led by the PI – involving the collation of world maps showing indicators related to maternal health. Discussions are currently taking place to use Ghana as a case study here – using the district Mapbook as a data source. The local Ghanaian branch of WRA are being contacted to establish the usefulness of these mapping presentations as a way of holding government to account for policies in reproductive health.

5 Capacity Building

The project has initiated capacity building for CERSGIS at the University of Ghana (see below for details). We are also planning to establish GIS software and training in RIPS – just as soon as the finance issues are resolved! In terms of finance and support staff – we were able to leverage support from other projects to allow a limited amount of training on the job for 2 support staff at RIPS to visit the University of Southampton.

6 Project Linked Doctoral Studentships

None

7 Project Management

. PG (Pete Gething) has moved to Oxford University – but a new contract has now been made to allow him to continue with this research in his new post.

8 Research Ethics

The project uses secondary data and therefore our ethics committee did not raise any objection to our study plan. We do feel, however, that there may be ethical concerns with the release of small area data from Government Statistical agencies – and that capacity building in disclosure protocols and techniques would be

9 Financial Management

No major deviations from the original budget profile or significant virements made across grant headings that we know of. Only the delays mentioned below have been problematic

Summary of changes to timeline

Finance

Problems with the transfer of monies to RIPS Ghana have been particularly problematic. Despite the best efforts of RIPS and the University of Southampton's Finance office, including the section that arranges the legal contracts with other Universities – delays have crept into the system. We have attempted to remedy this by capacity building activities under sister projects that have enabled direct exchange of the Ghanaian finance and administration team with the Southampton staff. Without this – even the delayed progress that we have seen would have been compromised.

Travel

More travel than expected was undertaken at the beginning of the project to initiative activities and to aid acquisition of data – see below.

Acquisition of data

Both the acquisition of GIS as well as socioeconomic and health data took much longer than expected despite starting long before the project start date to put in place data acquisition requests/activities.

- Acquisition of geographical data: The project team needed to put in place an official MOU between University of Southampton, the Regional Institute for Population Studies and the University of Ghana's CERSGIS (GIS section at the Dept of Geography) in order to acquire GIS data on access to services (roads, topography, rivers etc) without incurring a huge fee. This required for the Head of Geography (PA) and other geo-mapping experts (PG and AB) to meet with Foster Mensah (Head of CERSGIS) on more than one occasion to arrange the link and the consequent capacity building efforts that CERSGIS requested in return for providing the data – capacity building is ongoing.
- Acquisition of socioeconomic data: In order to obtain socioeconomic and health data from the Ghana Statistical Services in Accra, social scientists in the project team (especially FAJ) have needed to be present in Ghana much more than expected in order to ensure that the correct data is acquired at small area level. We have been unable to obtain a 5% sample of the Ghana 2000 census, but have obtained a 1% sample – and we have been successful in obtaining much more aggregated census data at Enumeration Area level than we had anticipated.

The data acquisition is almost complete – but some checking is ongoing because there are potential 'holes' in the GIS network, and there are potential problems in linking the geographies to the surveys data.

Creation of maps

Making maps for policymakers was initially thought of as a final dissemination stage, but in consultation with the Department for International Development Ghana office, we have understood that there is a need for district level maps for maternal health – as well as for maps at smaller aggregations. We are therefore in a position to disseminate much earlier than originally planned – and to create a district map–book within the next couple of months as we reach the end of Phase I.

Conference dissemination

- Population Association of America Detroit (April 2009) session on maternal health in Africa has been organised by the PI and the discussant is PN of RIPS – amongst other issues the effect of free delivery care in Ghana will be discussed. Effectively to be used as a project meeting because AB, JF will also attend.
- At the IUSSP four-yearly conference in September/Oct 2009 in Marrakesh there is a session on Spatial Demography in which the project has a paper accepted. This conference paper will present findings on district level associations from Phase I of the project. Another session on GIS and Health at the same conference will be chaired by FAJ. ZM is also discussant in a session on maternal mortality at the same conference.

Please see overleaf for effect on timeline

