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Improving Access to Health Care Facilities through Decentralisation in Ghana

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Abstract

The study assessed the impact of decentralisation on physical accessibility to health care facilities in Ghana. It was conducted in the Asante Akim North Municipality, New Juaben Municipality and Twifu-Heman-Lower Denkyira District. The study was conceptualised within the geographical accessibility framework and the Geographic Information Systems (GIS) technique was used to create health buffers. It was found that health care facilities were expanded and physical accessibility improved, partly as a result of the implementation of the decentralisation programme. However, the study showed that the inequalities between and within Municipalities and Districts were not addressed. A meaningful intervention by the Municipal/District Assemblies (MDAs) and the Ghana Health Service (GHS) on inequalities requires mapping of existing health facilities. Application of coverage models using GIS is therefore recommended to the MDAs in collaboration with the GHS in order to reduce inequalities in physical accessibility to health care facilities.

Introduction

Decentralisation in Africa followed the recommendations of the World Bank for developing countries to devolve political and administrative powers to local and autonomous levels (Muriisa, 2008). Decentralisation was seen initially as having important political value. However, it has other potential benefits, including increasing community participation, equitable health care provision and speeding up health care coverage nationally. For instance, decentralising the delivery of social services is thought by some as a means to improve efficiency and effectiveness as well as make such services available to people who need them most (Malo, 1995). It is also expected to promote local autonomy and inter-sectoral coordination, increase management flexibility, adaptability, responsiveness and accountability (Conn et al., 1996).

The motivation for decentralisation varied from country to country. One of the justifications for decentralisation was to improve the delivery of social services such as health, education, water and sanitation (World Bank, 2003). For instance, it was carried out to improve service delivery in Uganda, Chile and Cote D'Ivoire. In Sri Lanka and South Africa, however, it was a response to ethnic and regional conflicts (Shah & Theresa, 2004). In Ghana the

decentralisation policy was expected to divest the centre of implementation responsibilities, and transfer such responsibilities to the Metropolitan, Municipal and District Assemblies (MMDAs) (Ministry of Local Government & Rural Development, 1996).

The present local government system is made up of a Regional Co-ordinating Council (RCC) and a four-tier Metropolitan and three-tier Municipal/District Assembly (MMDA) structures. Subject to the Constitution of the Republic of Ghana, an MMDA is the highest political authority in the district with deliberative, legislative and executive powers (Republic of Ghana, 1992). The assembly occupies a more strategic place and is indeed the focal point of the decentralisation programme and constitute a key unit in the system of local government. The MMDA, as set up under the Local Government Act (Act 462), is composed of a Chief Executive and one elected member from each electoral area. Others are member(s) of parliament from the district (who have no vote), and other persons whose number does not exceed 30 per cent of the total membership of the assembly appointed by the President in consultation with traditional authorities and other interest groups. The assembly has a Presiding Member who is elected from among its members by two-thirds of all the members of the assembly.

Civil service departments whose functions are decentralised constitute integral part of the DA. Local Government Act 462 of 1993 established eleven departments of DAs, including that of health. The departments are to implement decisions of the assemblies and provide quarterly reports to the executive committee through the office of the DA. In addition, the Ghana Health Service (GHS) among others is to increase access to improved health services; and manage prudently resources available for provision of health services. For instance, one of the strategic objectives of the Ghana Health Sector 2009 programme of work was to 'strengthen the health system's capacity to expand access, manage and sustain high coverage of health services' (MOH, 2009, p. 4.). This study therefore examined the impact of the implementation of the decentralisation policy on inequalities in physical accessibility to health care facilities in selected Municipal and District Assemblies (MDAs) of Ghana.

Conceptual issues

The concept of decentralisation means "reversing the concentration of administration at a single centre and conferring powers on local government" (Smith, 1985, p.1). Decentralisation has also been defined as the "transfer of authority to plan, make decisions, and manage public functions from a higher level of government to any individual, organisation or an agency at a lower level" (Rondinelli, 1981, p.137). In addition,

Rondinelli et al. (1989) defined decentralisation as a situation in which public goods and services are provided primarily through the revealed preferences of individuals by market mechanisms.

Different approaches to decentralisation are distinguishable primarily by the extent to which authority to plan, decide and manage is transferred from the central government to other up-country organisations and the amount of autonomy granted to these organisations in carrying out such tasks. Hicks (1961) and Rondinelli (1981) distinguish between different modes of decentralisation along the lines of deconcentration, delegation, devolution and privatisation. In Ghana the decentralisation policy first and foremost sought to devolve central administrative authority to the district level. It was also meant to fuse governmental agencies in any region, district or locality into one administrative unit.

Article 240(1) of the 1992 Constitution of Ghana stipulates that the country shall have a system of local government and administration, which shall, as far as practicable, be decentralised (Republic of Ghana, 1992). In furtherance of the decentralisation programme, which was aimed at local government reform, Parliament promulgated the Local Government Act 462 in 1993 that established District Assemblies (DAs) to serve as conduits in the promotion of development. Section 10 of the Act assigns deliberative, legislative and executive functions to the DAs. It gives them responsibility for overall development in the districts and authority to formulate and execute plans, programmes and strategies for effective mobilisation of resources necessary for development of the district.

Accessibility to health care entails a complex set of factors and processes including proximity to health care facilities, transportation networks, socio-economic characteristics and decision making strategies of individuals (Meade & Earickson, 2002). However, according to Hare and Barcus (2007) factors such as insurance status, employment, income and education jointly affect accessibility more than distance to service facilities. Research on access to services has been dominated by two assumptions. Firstly, the nearer one is to services, the greater is the access. Secondly, people living in areas with more services have greater access to health care (Rosenberg & Hanlon, 1996).

This study confines itself to measures of geographical accessibility, which refers to the relationship between location of health facilities and surrounding communities (Guagliardo, 2004). Accessibility may be expressed using a coverage distance. Coverage models are based on the simple notion that there is a distance within which patrons are served and beyond which they are not (Church & ReVelle, 1974). According to Berman

et al (2010), a community is assumed to be covered if it is located within a specified coverage radius of a facility.

WHO (1996) identified three contributing factors influencing the decision on seeking early medical care in Ghana. These are accessibility to medical institutions, inadequate medical care and the reported quality of medical care provided. It was found that the distance from the client's abode to the medical institution was a crucial variable influencing the decisions to go for early medical care. It was realised that people rarely wish to travel more than 10 kilometres to seek early medical care. Oppong and Hodgson (1994) observed this in the Suhum District in Ghana. People from the surrounding villages did not travel about 10 kilometres or more to seek early medical care. Ekumah and Garson (1995), in a study of five districts of the Western Region of Ghana, stated that poor physical accessibility, distance and other socio-economic variables accounted for low immunisation coverage in the region as a whole. World Bank Health Sector Review (1989) indicated the main problems concerning coverage of health services in Ghana as poor access and inequality of access in urban and rural areas. MOH (1998) indicated that 70 per cent of the population of Ghana resided in communities, which were 8km or more from a nearest health facility in the 1990s. According to Gyapong et al. (2007) geographic and financial access to health care still remains a challenge.

Study setting and methods

In 2002, Ghana had ten administrative regions with 110 Metropolitan, Municipal and District Assemblies (MMDAs). This study covered three municipal and district Assemblies: Asante Akim North, New Juaben and Twifu-Heman-Lower Denkyira. The districts were selected from different regions with dissimilar characteristics. The New Juaben Municipality falls within the Eastern Region of Ghana. It is geographically located between latitudes 6^0 03' N and 6^0 10' N and longitudes 0^0 13' W and 0^0 23' W. It is bounded by four other districts (East Akim District on the northwest; Yilo Krobo District on the northeast; Akwapim North District on the east and south, and Suhum Kraboa Coaltar District on the west) in the region as shown in Figure 1. The Municipal capital, Koforidua (which is also the regional capital), is located about 85km northwest of Accra, the national capital. The Municipality existed before the present local government system was initiated in 1989. The municipality has been classified as developed by the Ministry of Local Government and Rural Development (MLGRD, 1996). It covers an estimated area of 200 square kilometres, with population of 136,768 as of the year 2000 and was 83.4 per cent urbanised.

Asante Akim North District is one of the 27 MMDAsin the Ashanti Region. The district is geographically located in the eastern part of the Ashanti

Region. It lies between latitude 6°30' N and 7°00' N and longitude 0°45' W and 1° 15' W. The district shares a boundary with Kwahu South District in the east (Eastern Region). Within the Ashanti Region, the Ejisu-Juabeng, Sekyere East and Asante Akim South Districts border it on the west, north and south respectively (Figure 2). It was carved out of the erstwhile Asante Akim District with Konongo as its capital. It is considered as one of the old districts in the country and has been classified as developed (MLGRD, 1996). Its total land area is estimated at 1,260 square kilometres and had a total population of 126,477 as of 2000 with 60 per cent of the people living in urban areas.

Twifu-Heman-Lower Denkyira District is one of the 17 MMDAsin the Central Region. It is located between latitudes 5° 10' N and 5° 55' N and longitudes 1° 15' W and 1° 50' W. It is bordered on the north by the Upper Denkyira District; on the south by the Abura-Asebu-Kwaman Kese, Cape Coast, and Komenda-Edina-Eguafo-Abirim Districts; on the west by the Wassa Mpohor District; and on the east by the Assin District (Figure 3). The district was created in 1989 and has been classified as deprived (MLGRD, 1996). It covers a geographical area of 1,370 square kilometres. According to the Ghana Statistical Service (2001) the district had a population of 107,787 with 13.8 per cent urban dwellers as of 2000.

The study relied on secondary data from the Ministry of Health and the Ghana Heath Service. In addition, primary data were collected from health care facilities which were functioning in the selected districts. A list of available health institutions in each district was obtained from the district directorate of the GHS. Each listed institution was visited and information on location, ownership and date of establishment was sought. The data collected were analysed using Geographic Information Systems (GIS) technique.

The use of GIS to measure physical accessibility is well established and has been applied in many areas (Cromley & McLafferty, 2002). In the area of health planning, the analytical capability of GIS to identify the geographic extent of a health facility catchment area, which corresponds to the area which contains the population utilising this facility, is particularly important (Ebener et al., 2005). Esri ArcGIS 9.3 was employed to generate maps and create buffers of 8 kilometres radius around the health care facilities in each of the sampled Municipalities and District. The guideline of the Primary Health Care (PHC) policy, which was adopted by Ghana in 1978, recommends a health facility in every 8 kilometres radius.

Results

The number of orthodox health care facilities (public and private) in the selected MMDAs increased over the years. The New Juaben Municipality had 16 health care facilities in 1990 and the number has increased to 19

(Table 1). The Municipal Assembly established a clinic at *Koforidua* in the year 2000 for the *Zongo* community and private health providers set up two facilities in *Koforidua* (1995) and *Effiduase* (1998). Thirteen out of the existing 19 health facilities in the Municipality are located in *Koforidua*, the capital of the municipality. The available facilities consisted of two hospitals (including a regional hospital), 12 clinics, two health centres and three maternity homes. Private providers owned the majority of the health care facilities (58 per cent) in the municipality. Eight out of the nine private for-profit health facilities are located in *Koforidua*.

All the communities in the New Juaben Municipality are within catchment area of health care facilities (Figure 1). Buffers of some of the health facilities, which existed before the implementation of the decentralisation policy cover the entire Municipality.

Table 1: Distribution of Health Facilities in New Juaben Municipality

Location	Facility	Date	Owner
Koforidua	Koforidua Regional Hospital	1928	Government
Jumapo	Jumapo Health Post	1955	Government
Koforidua	Koforidua MCH/FP	1960s	Government
Koforidua	St. Joseph's Hospital	1964	Mission
Effiduase	Effiduase MCH/FP	1968	Government
Koforidua	Nightingale Memorial Home	1970s	Private
Oyoko	Oyoko Clinic	1974	Government
Koforidua	Eunice Memorial Clinic	1977	Private
Koforidua	Asomani Clinic	1979	Private
Koforidua	Koforidua Clinic	1981	Private
Koforidua	Bonna Clinic	1982	Private
Akwadum	Akwadum MCH/FP	1983	Government
Koforidua	Densuagya MCH/FP Clinic	1984	Government
Koforidua	Eureka Maternity Home	1985	Private
Adweso	Adweso Clinic	1987	Private
Koforidua	Pat's Maternity Home	1989	Private
Koforidua	Oman Medical Centre	1995	Private
Effiduase	Ahmadiyya Homeopathic Clinic	1998	Mission
Koforidua	Zongo MCH/FP Clinic	2000	Government

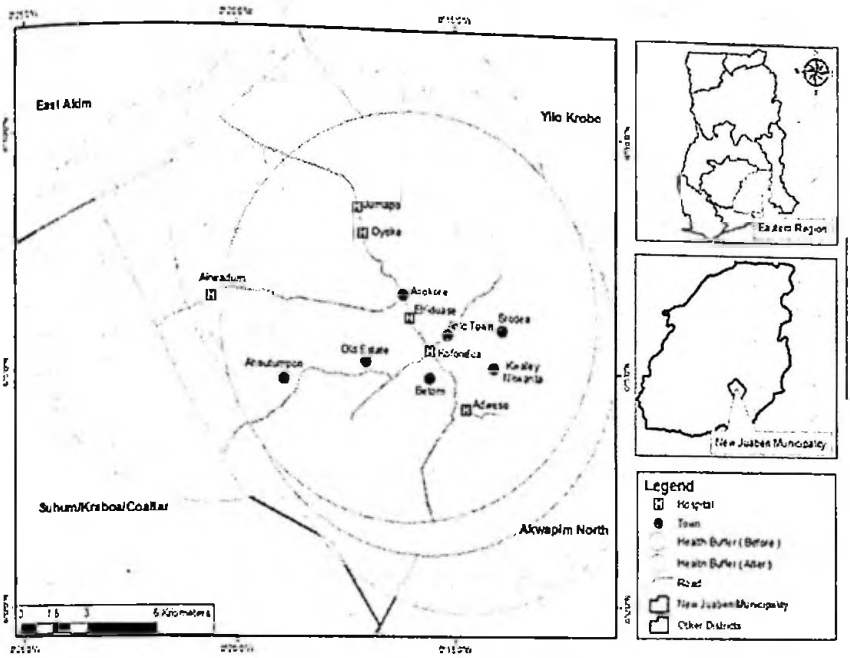

Figure 1: New Juaben Municipality - Health Buffers

Asante Akim North Municipality had six health care facilities in 1990. The number has increased to 12 (Table 2). The facilities, which are available, include three hospitals, three clinics, five health stations and one maternity home. The government owns 50 per cent of the facilities in the Municipality. Four out of the five private for-profit health facilities are located in *Konongo-Odumase* (the district capital). Six out of the 12 health care facilities were established after 1990. The Municipal Assembly in collaboration with the Municipal Health Management Team (MHMT) established two health facilities at *Nyinamponase* in 1999 and at *Brahabebome* also in the 1990s. Private providers set up four additional health care facilities (three at *Konongo* and one at *Hwediem*) after 1990.

Table 2: Distribution of Health Facilities in Asante Akim North Municipality

Location	Facility	Date established	Owner
Agogo	Agogo Presbyterian Hospital	1931	Mission
Konongo	Konongo hospital	1964	Government
Praaso	Praaso Health Centre	1976	Government
Konongo	Adom Hospital	1979	Private
Dwease	Dwease Health Centre	1981	Government
Juansa	Juansa Health Centre	1983	Government
Brahabebome	Brahabebome Clinic	1990	Government
Konongo	Safety Life Clinic	1992	Private
Konongo	Life Land Clinic	1994	Private
Nyinamponase	Amantenaman Health Centre	1999	Government
Hwediem	Nyamebekyere Maternity Home	2000	Private
Konongo	Daasebere Health Services	2001	Private

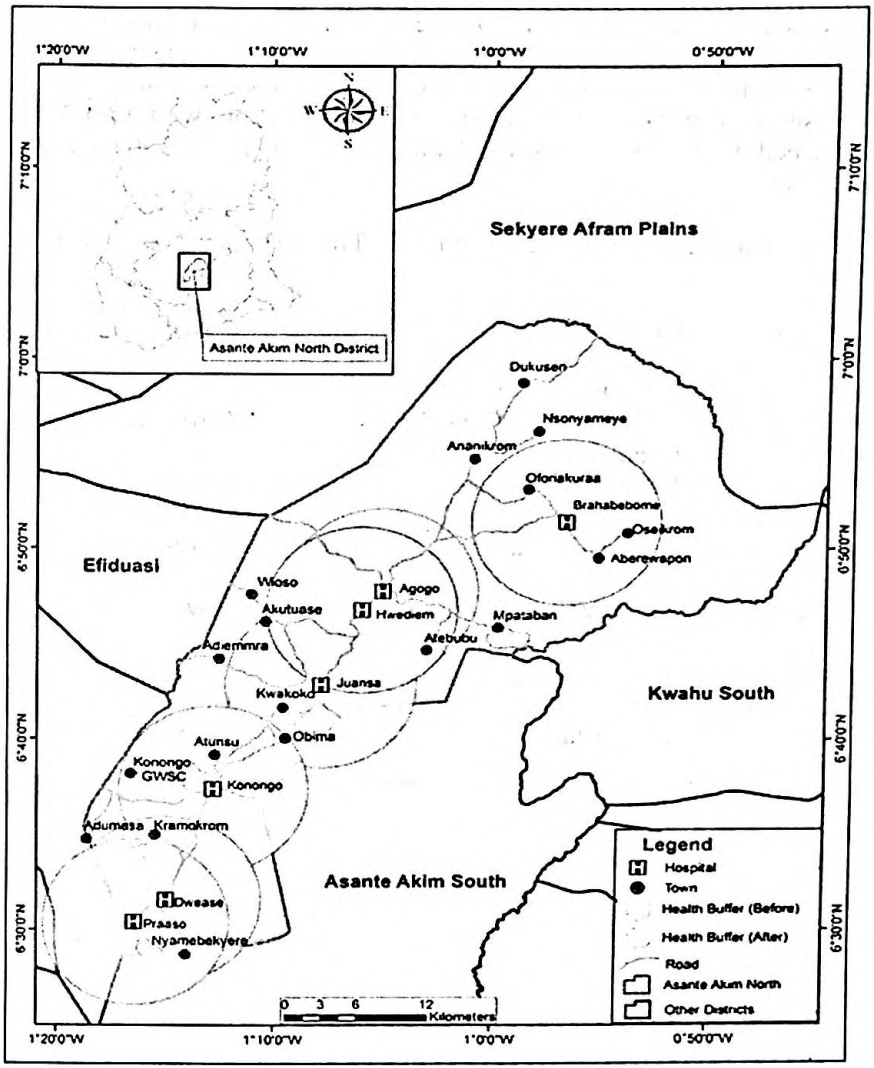

Figure 2: Asante Akim North Municipality - Health Buffers

The health facility, which was established at *Brahabebome* in the 1990's, is strategically located. The health buffer covers areas, which hitherto were outside the catchment area of existing facilities (Figure 2). However, the health buffer of a private clinic, which was, established at *Hwediem* in the year 2000 covers communities, which were already in catchment area of existing facilities. In spite of the increase in the number of facilities, there are communities in the north-eastern part of the municipality, which are not covered (Figure 2).

Twifu-Heman-Lower Denkyira District had five health facilities in 1990 and recorded seven in 2002, comprising one hospital, four clinics and two health stations (Table 3). There was no private provider of health services in the district. The District Assembly in collaboration with the DHMT established two new clinics at *Agona* and *Frami* in 1990 and 1993 respectively.

Table 3: Distribution of Health Facilities in Twifu-Heman-Lower Denkyira District

Location	Facility	Date	Owner
Twifu Praso	Twifu Praso hospital	1968	Government
Ntefrewaso	Twifu Oil Palm Plantation Clinic	1975	Government
Heman	Heman Health Post	1977	Government
Mokwaa	Mokwaa Health Post	1984	Government
Jukwa	Jukwa MCH/FP Clinic	1987	Government
Agona	Agona Clinic	1990	Community/ Government
Frami	Frami Clinic	1993	Community/ Government

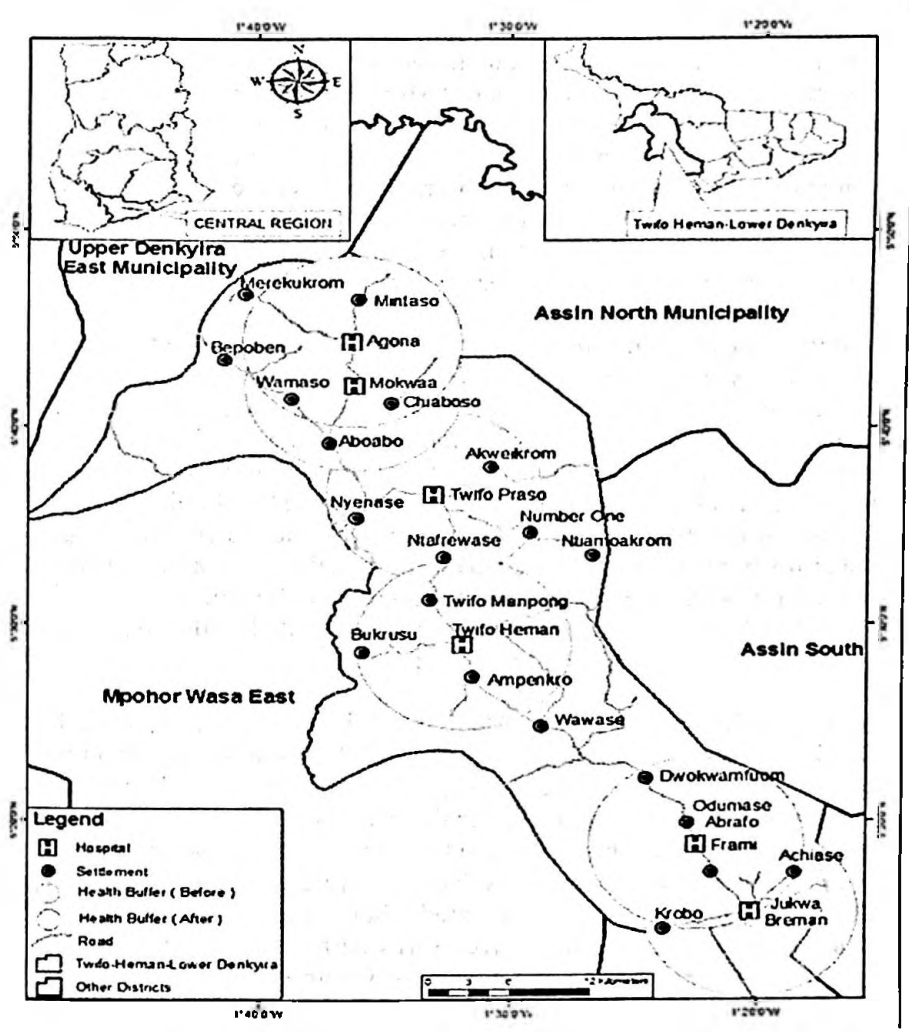

Figure 3: Twifu-Heman-Lower Denkyira District - Health Buffers

The buffers of the additional facilities established cover some communities, which hitherto were not in the catchment area of existing facilities (Figure 3).

Discussion

The results demonstrate an urban-rural difference in geographical accessibility to health care facilities. Residents of the predominantly urban Municipalities have physical access to health care facilities. For instance,

the New Juaben Municipality is well endowed in terms of availability of health facilities. This is partly due to the fact that, Koforidua, which is the Eastern Regional and the New Juaben Municipal capital is supposed to have both regional and district hospitals. This is in keeping with the organisation and management of health services in the country. In addition, the Municipality attracts private health providers because it offers a potential market. Similar observations have been made in other studies. According to Thomson (1984) and Barros et al. (1986), the private-for-profit health care tends to flourish most in urban areas and respond to financial incentives.

In spite of the fact that half of the existing facilities in the Asante Akim North Municipality were established after 1990, some communities are without health care facilities and are not located within catchment area of any facility. This confirms the observation by Awoonor-Williams et al. (2004) that, about 30 per cent of Ghanaians were still living in areas outside 8km from a health care facility. The private providers in the Municipality mainly operate in the urban areas. For instance, with the exception of a private maternity home which is located in one of the villages (*Hwediem*), the other private-for-profit providers are located in the district capital. As observed by Bennett (1992), one problem commonly associated with the private for-profit sector is its failure to reduce inequality.

In the Twifu-Heman-Lower Denkyira District, the additional health facilities, which were established after 1990 by the Assembly, improved physical accessibility. However, there are a number of rural communities, which are not covered by any health facility. Hare and Barcus (2007) made similar observations in a study conducted in Kentucky, where residents at greater distance from health care facilities were of lower socio-economic status. Koivusalo (1999) indicated that decentralisation and local democratic governance are not necessarily sufficient to guarantee access to services for minority population groups. Contrary to the findings of this study, however, Tanzania experienced an equitable expansion of services across regions under a decentralised system. Maro (1990) found that there was a clear bias in favour of regions that had fewer facilities prior to decentralisation.

Conclusions and recommendations

The study has clearly shown that health facilities were expanded and physical accessibility improved under the decentralised system during the period under review. However, the implementation of the policy could not address inequalities within and between Municipalities and Districts. The available evidence suggests that the expansion of the health facilities did not tend to be equitably distributed. This is partly due to the fact that health facilities are provided by public and private without any regulated

coordination. The private for-profit providers especially show no equality concerns and operate in the urban areas in order to maximise profit. It can be concluded that decentralisation has the potential to reduce inequality in physical accessibility to health care facilities provided there could be effective regulatory mechanisms and collaboration among the relevant stakeholders.

In view of the fact that health sector development is a complex issue, which requires a wide variety of institutions and regulations, the following recommendations are made to reduce inequalities. The MDAs in collaboration with the GHS should employ GIS techniques to assess geographical accessibility of health care facilities to identify critical areas for efficient location of additional facilities. The activities of the private healthcare providers complement the efforts of the government towards improving physical accessibility. Government should therefore offer tax incentives to private providers who operate in the rural areas in order to attract them to such areas.

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