TANZANIA HUMAN RESOURCE CAPACITY PROJECT

MULTISECTORAL CRITERIA FOR DEFINING UNDERSERVED AREAS

(A BASIS FOR DEVELOPING AN INCENTIVE PACKAGE)

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Acronyms

BMAF	Benjamin William Mkapa HIV/AIDS Foundation
CHAM	Christian Health Association of Malawi
LGAs	Local Government Authorities
MOHSW	Ministry of Health and Social Welfare
MNF	Mwalimu Nyerere Fund
MoH	Ministry of Health
MSF	Médecins Sans Frontières
USAID	United States Agency for International Development
WHO	World Health Organization

PREFACE

The work in this study report was funded under a five-year cooperative agreement from the United States Agency for International Development (USAID) to IntraHealth International, Inc. for the Tanzania Human Resources Capacity Project (THRP). IntraHealth is a North Carolina-based nongovernmental organization whose mission is to empower health workers to better serve communities in need around the world. IntraHealth fosters local solutions to health care challenges by improving health worker performance, strengthening health systems, harnessing technology, and leveraging partnerships. A subgrant from IntraHealth to the Benjamin William Mpaka AIDS Foundation (BMAF) supported this study. The consultant, O.A. Nkya, was engaged by BMAF to carry out the scope of work for this study.

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Appreciation also goes to the Ministry of Health and Social Welfare and other stakeholders in human resources for health for providing different reference materials. I would also like to thank the health workers who shared their experiences, particularly information on various/different incentives being provided to health care providers from respective district councils.

EXECUTIVE SUMMARY

The Benjamin William Mkapa HIV/AIDS Foundation (BMAF), through the Tanzania Human Resources Capacity Project, commissioned consultancy work with the purpose of developing multisectoral criteria for defining the underserved areas in the health sector and for developing an incentive package that can be used to attract health personnel to underserved areas in Tanzania.

The objectives of the consultancy were:

- To review available incentive packages literature and recommend best practices in using incentive packages
- To identify and analyze multisectoral factors that will form a basis for defining the underserved areas and design a monetary and non-monetary incentive package for the health workforce in Local Government Authorities (LGAs)
- To assess the structural and operation challenges influencing the implementation of the incentive package in the local government set-up and recommend alternative solutions
- To design a framework for guiding LGAs in developing an incentive package.

Available literature reveals that countries across the globe face staffing problems in rural and remote areas for various reasons. Different countries have used various strategies in the attempt to alleviate health staffing problems. One such strategy is the use of incentives. Health workers' incentives can be categorized broadly into financial or non- financial. Financial incentives may be direct or indirect. Direct financial incentives include pay such as salary, pension, and allowances for accommodation, travel, childcare, clothing, and medical needs. Indirect financial benefits include subsidized meals, clothing, transport, childcare facilities, and support for further studies. Non-financial incentives include holidays, flexible working hours, access to training opportunities, sabbatical/study leave, planned career breaks, occupational health counseling, and recreational facilities.

Evidence from the literature shows that the use of financial and non-financial incentives has helped to reduce the health staff shortage problem to a certain extent in underserved areas in some parts of Africa. In Tanzania, the use of incentives has worked well in nongovernment health facilities that have managed to attract and maintain staff in remote areas as compared to government facilities.

Using information gathered from literature, a framework for defining underserved areas is proposed, comprising four broad contextual factors, each with its indicative defining characteristics. The broad contextual factors are physical-geographical location-related factors; basic social services-related factors; community-cultural environment-related factors; and policy and management related factors. These groups of factors are elaborated by their indicative defining characteristics which act as push factors for professional health workers from rural underserved areas.

On the basis of the proposed framework, a generic incentive package consisting of both monetary and non-monetary elements is proposed. The monetary package includes a variety of elements which the LGAs may choose from to address situational realities: salary, allowances, paid leave, pensions, and gratuity, loans and settlement allowances. Non-monetary incentives include: professional development, better access to health services, free housing, long-term leaves, and planned transfers. Other proposed incentives are associated with human resources management issues, namely early confirmation of health workers as well as spouse employment.

The main recommendations emerging from the study include:

- Collect primary data from stakeholders—including practicing health staff, students, policy-makers, and LGAs—that is required for the development of a comprehensive framework for defining and designing incentive packages.
- Involve professional health staff working in underserved areas in designing the incentive package. A good incentive package is the one that involves the beneficiaries.
- Document the existing health sector staff incentives in public health facilities, private and nongovernmental facilities, and conduct a SWOT analysis to generate data and lessons on what works and what does not. This may help to inform the designing of effective incentive packages in specific LGAs and other health facilities. The current desk study is limited to reviewing available literature rather than generating new data by working with a reasonable sample in the field.

The study also proposed some other innovative ways to avail health staff in underserved areas:

- **The use of compulsory service:** This strategy requires recent graduates to be assigned conditionally to work in rural areas for one year. This can be taken to be a part of their training before they are licensed to practice as professionals. This has two advantages: first, an individual may like the posting and stay there for a longer time, and second, every year the completing students will go to those areas and provide services thereby assuring availability of staff in those areas.
- **Bonding:** Bonding was used in past years as mechanism to retain staff in various sectors. This practice faded away due to economic liberalization. This practice can be used for health staff to work in rural underserved areas. The education grant proposed in the financial package should be used as a bond for two years to any recipient to work at least two years in those areas.
- **Use of retired health staff:** The use of retired health employees is common to many countries. Retired staff members have the advantage of not having young children who will require school in underserved areas. Arrangements can be made to employ the retired personnel on a contract basis and post them to those areas. Mkapa Foundation had practiced this through the Emergency Hiring Project supported by the Global Fund and proved successful with a retention rate of 82%.

SECTION ONE: INTRODUCTION AND BACKGROUND

Introduction

The Tanzanian health system suffers considerable human resources constraints including inadequate staffing and imbalances in deployment and retention of professional health workers between rural and urban areas, a factor that undermines service delivery and the performance of the health sector as a whole. Some of the factors that underlie these human resources constraints, which also affect other national sectors, relate to problems of poor economic performance and management. Tanzania went through a period of steep economic decline from the mid-1970s to the mid-1980s, which disrupted national human resource development due to budget constraints. A combination of lower wages and the decline in the performance of various institutions resulted into a severe brain drain, especially in the health sector. In addition, the Structural Adjustment Programs imposed in the 1980s led to a freeze in public service employment, contributing immensely to the severe shortage of the health workforce the country is experiencing today. The deterioration in the quality of tertiary education over the past two decades has also affected the quality of new recruits into the public service.

These factors, coupled with the increasing population and demand for services, particularly health care, undermine the country's capacity to deliver quality health services. According to official figures, the demand for qualified health workers in 2009 was 144,704, but only 39,789 were available (*The Citizen,* 11 February 2011). Various local and international studies have further established that the shortage is more pronounced in rural and marginalized areas and covers mid-level workers such as clinicians, nurses, midwives, laboratory staff, pharmaceutical technicians, health officers, and administrators. The World Health Organization (WHO) categorizes countries faced with a 'critical' health worker shortage as those with fewer than 23 health workers for every 10,000 people. Tanzania fares dismally in this regard as one doctor attends an average of 20,000 people.

For instance, it is stated in the Service Availability Mapping Survey (2006) that by 2006, Tanzania had 1,339 doctors including 455 in the private sector. According to the same survey, this is equivalent to one doctor per 25,000 people—a ratio far below the WHO recommendation of 1:10,000. Tanzania is thus experiencing a critical shortage of professional health workers, implying a heavy workload for the existing workforce, likely to result in burnout and also thwarting of the country's goal to provide quality health care to its people, as elaborated in the National Health Policy (2007).

The shortage of professional health workers is generally more severe in rural areas than urban areas, which offer relatively better prospects in terms of basic social services and economic opportunities for the available professional health workers. Thus, many rural areas are considerably underserved in terms of health services.

To address the shortage of professional health workers in the country, the government has stepped up the training of health workers. However, due to changes in policies and the dynamics in the labor market, health workers can work in areas of their preference, albeit with

more affinity for urban areas, a factor that reinforces the phenomena of rural underserved areas. In the I980s, the government implemented the bonding policy whereby graduates, on completion of their courses, were bonded to work for the government for five years in all areas, including rural areas. This, in the past, could ensure the availability of professional health workers in the rural areas. The bonding policy for professional health workers is no longer in place.

The government has also established a central board called the Recruitment Secretariat to employ staff both at central and local government levels. Placement of professional health workers is done centrally through direct postings by the Ministry of Health and Social Welfare (MOHSW) after students' successful completion of their courses. Unlike other professions, professional health workers are not subjected to interviews. Although this approach could considerably reduce the shortage of professional health workers in rural areas, a major disadvantage is that the applicants do not have a choice of where they would prefer to work. Hence some staff members, once posted, do not report to their duty stations and sometimes leave immediately after reporting. Consequently, those places perceived as underserved areas have suffered the most in terms of recruitment and retention of skilled manpower in many sectors, including health.

Government efforts to improve working conditions, such as increasing salaries for the health sector as compared to other sectors, have not shown significant improvement in recruiting and retaining staff in the underserved areas. For the health sector, the situation is worsened by the fact that the demand for professional health workers has been increasing faster, far beyond what the government and other stakeholders can provide. The apparent decline in the number of students interested in science subjects has also affected the resource base for a steady supply of professional health workers in the country. Consequently, the few graduates in health sciences who enter the labor market each year are absorbed by the increasing number of relatively high-paying health facilities run by private, religious, and nongovernmental organizations. These are mostly located in urban areas. The remaining join government facilities, also mostly located in urban areas, leaving only very few willing to serve in rural underserved areas.

A few district councils, including Mbinga and Meatu, have developed incentive packages both in monetary and non-monetary forms to attract health personnel to their undeserved areas. There is, however, no comprehensive strategy to address the shortage of professional health workers in the underserved areas. There are neither clear criteria for defining the underserved areas nor guidelines for recruitment, placement, enumeration, motivation, and retention of professional health workers in those disadvantaged areas.

To address the problem of shortage of professional health workers in the country—and especially in the rural settings also known as underserved areas—there is a need to put in place a mechanism that will attract these professionals to those high-demand areas. Such a mechanism needs to include criteria for defining the underserved areas and for designing appropriate incentive packages tailored to attract and retain professional health workers in specific underserved areas on a more sustainable basis.

In response to this situation, various stakeholders—including the Benjamin William Mkapa HIV/AIDS Foundation (BMAF)[1] through the Mkapa Fellows Programme and the Emergency Hiring Project—have tried to develop some criteria to define the underserved areas. However, one of the major limitations of these efforts is the inability to cover most of the key parameters that are important for a comprehensive definition of underserved areas. Despite this limitation, BMAF has managed to design an incentive package which has contributed to the retention rate of 82% of staff in the so-called underserved areas.

Building on the need for a more comprehensive framework, BMAF, under the Tanzania Human Resources Capacity Project, commissioned this consultancy with the main objective of developing multisectoral criteria for defining the underserved areas in health sector and designing an incentive package that can be used to attract professional health workers to those areas. Since the underserved areas have different environment and difficulties, the incentive package needs to be generic and adaptable to different underserved districts in Tanzania.

(Terms of references are attached as Appendix I).

Objectives

The objectives of the consultancy were:

- To review available incentive packages literature and recommend best practices in using incentive packages
- To identify and analyze multisectoral factors that will form a basis for defining the underserved area and designing a monetary and non-monetary incentive package for the health workforce in Local Government Authorities (LGAs)
- To assess the structural and operation challenges influencing the implementation of the incentive package in the local government setup and recommend for alternative solutions
- Design a framework for guiding LGAs in developing an incentive package.

The study reviewed literature on the incentive packages being used in several countries, including sub-Saharan countries, and came up with the framework for defining underserved areas and designing appropriate incentive packages that LGAs may adapt for their specific situations. Within this framework, a generic incentive package is proposed.

[1] The Benjamin William Mkapa HIV/AIDS Foundation (BMAF) was established in February 2006 by the former president of the United Republic of Tanzania, Benjamin William Mkapa. BMAF complements and supplements the government's efforts in achieving the Millennium Development Goals, Vision 2025, and the National Strategy for Growth and Reduction of Poverty (NSGRP) with a focus on HIV/AIDS and human resources for health.

Methodology

The consultancy was principally a desk study, based in Dar es Salaam. A list of pertinent literature on underserved areas and related incentive packages, particularly in the health sector, from various countries was compiled by the consultant. The literature was sourced through the Internet as well as from public offices, including the President's Office; Public Service Management; Prime Minister's Office, Regional Administration and Local Government; Ministry of Finance; and MOHSW. More literature was sourced through the BMAF. The consultant thus had access to considerable literature on incentives for attracting staff from both developed and developing countries, including sub-Saharan Africa.

An extensive review of literature was conducted to find out how different countries were designing incentives packages to attract and retain staff in various sectors, including the health sector. The countries included Kenya, Malawi, South Africa, Botswana, and Swaziland. A more in-depth review of the incentive packages was conducted to get insights into the incentive components, with a view to inform the design of an appropriate incentive package for Tanzania.

Literature was also reviewed to get information about how the incentives were being applied. This was done to identify the parameters which different countries use in defining underserved areas and programming for their human resource needs. An examination of the basic parameters generated information on the factors that determine the disadvantaged areas deserving such incentives in those countries. The resulting information was used toward the development of criteria that could be used for defining underserved areas in Tanzania's context, and an accompanying incentive package that LGAs could adapt to attract and retain staff to those areas**.**

Structure of the Report

This report, in addition to the executive summary, contains six sections. Section one presents the introduction to the report and objectives. Section two contains the consultancy methodology and an overview of the health sector staffing in Tanzania and other countries, outlining some of the approaches that have been adopted in solving the problem, especially in the underserved areas. In section three, an analysis of the common factors deduced from the literature that define underserved areas is presented, along with a tool of determining underserved areas that could be adapted to different situations in Tanzania. Section four presents an assessment of the structural and operational challenges facing LGAs in implementing incentives. A case study of two LGAs—Mbinga and Uyui—is provided.

Section five proposes a generic incentive package that could be adapted by LGAs in underserved areas as a tool to attract and retain professional health workers. Section six concludes and offers several pertinent recommendations.

SECTION TWO: AN OVERVIEW OF HEALTH SECTOR STAFFING

Overview

This section reviews the literature on the health sector staffing shortages and outlines approaches that have been used to alleviate or reduce this shortage. It also provides some empirical evidence on the incentives used in various countries, and, where possible, attempts have been made to show what works and what doesn't in terms of incentives used.

Health Sector Staffing Problems

The shortage of trained human resources in rural and other areas that have come to be known generally as underserved has been one of the major challenges in the developing world, sub-Saharan Africa in particular (Dambisya, 2007). The World Health Report 2006 estimated the global health worker shortage to be 4.2 million, including more than 1 million in sub-Saharan Africa. The region faces the greatest human resources challenges with 11%t of the world's population but with 24% of the global burden of disease and only 3% of the world's health workers.

According to a study by Lipinge, Dambisya, and others (2009) covering 16 African countries south of the Sahara, absolute shortage of professional health workers was associated with many factors such as the lack of a medical school (as was the case in Swaziland, Namibia, and Botswana) and low output from training institutions (as noted in Tanzania). However, even in countries with a higher number of professional health workers, such as South Africa, there were severe imbalances between public and private institutions, and between rural and urban areas. Also, in countries with sufficient training capacity such as Zimbabwe, there was a heavy out-migration of professional health workers due to the typical difficult economic and political conditions, which often emerge in sub-Saharan countries. Thus, besides failure by many countries to train adequate professional health workers, and poor distribution and retention of the available human resources, continuous brain drain to the so-called greener pastures abroad aggravates the shortage of trained health workers in sub-Saharan national health systems.

The shortage of professional health workers in Tanzania is illustrated in the following table. Despite the government's approval and budget line for employment of professional health workers, the district councils have not been able to fill the vacancies because they are not available on the labor market.

Table 1: Approved Establishment Versus Filled Establishment of Health Workers

Year	Approved posts	Posted staff	Shortage (%)
2005/06	1,677	983	41.4
2006/07	3,890	3,669	5.7
2007/08	6,437	4,812	25.2
2008/09	5,241	3,010	42.6
2009/10	7,471	5,256	29.6

Source: MOHSW (2011)

Data in the table clearly illustrates the supply constraint of professional health workers on the Tanzanian labor market with an average of 29.4% of the approved posts unfilled in a period of five years. Moreover, the approved posts are most likely not based on actual demand or gaps in the health system but on the budget available for the specific financial year, or the number of graduates from the training institutions. The actual demand for professional health workers is likely to be bigger: Tabora Region alone had 59 newly constructed health facilities in 2010 that were not operating due to lack of health staff (Tabora Region Official Report, March 2010).

In many countries, the problem of a shortage of professional health workers is more severe in rural and remote areas, and the reasons may differ from one country to another. Indonesia and Philippines, for example, have large populations, dispersed over many islands with very diverse conditions and significant natural obstacles to transportation and communication (Chomitz, *et al* [1998] and Perez [1998]). Thailand and Vietnam's high economic growth and opportunities in urban areas have outstripped those of rural areas. In much of Africa, income-generating activities in rural areas remain very low, and basic amenities and public goods and services are quite deficient. This factor is partly responsible for pushing professional health workers from the rural areas to urban areas, and from the public to private health sector (Lipinge S, Dambisya and others, 2009).

Health workers in Africa experience low remuneration. Good remuneration is one of the important factors in recruitment and retention of professional workers, yet professional health workers' salaries in many sub-Saharan countries are poor (Dovlo and Martineau, 2004). Anecdotal evidence reveals that in Tanzania, the average salary for doctors in public service as well as for paramedics, laboratory technicians, and nurses is lower although it seems to be higher than other professionals within the country.

Studies by Palmer in Malawi (2006), Matheau and Imhoff, Kenya (2006), and Kober and Van Damme, Swaziland (2006) have shown that an increase in salaries for health staff attracted professional health workers to apply for government or public service jobs and also reduced worker attrition.

Although the effectiveness of a basic salary as a financial incentive depends on the actual value of the salary on the market, professional health workers are expected to live on their salaries. Moreover, in Tanzania, the basic salary is the yardstick for other employment benefits including personal loans in banks, the calculation of pensions, and other retirement benefits. Low salaries tend to serve as a 'push factor' for professional health workers from public institutions to private and nongovernmental institutions or to rich countries with better salary emoluments (Labonte, 2007).

Many sub-Saharan countries experience considerable economic constraints and often fail to meet the salary expectations of professional workers, including health sector staff. This rationalizes the search for other appropriate non-financial incentives to attract and retain professional health workers, although in the end these incentives also cost money to provide.

There is an ever-growing high demand for the availability and retention of health workers, yet the costs of educating professional health workers are higher compared to the costs of other professions. The time lag between education and practice, and between changes in student intake and changes in supply of a particular category of professionals, is quite long in the health sector (Zurn, Dal Poz, Stilwell and Adams, 2002). Thus, failure to retain staff results in losses that aggravate the situation of those who are already primarily disadvantaged in the poor and rural underserved populations (Padarath et al, 2003). One way of retaining human resources is to offer incentives.

As defined by the WHO (2008), incentives are all rewards and punishments that providers face as a consequence of the organizations in which they work, the institution under which the providers operate, and the specific interventions being provided. An incentive serves as a mechanism to motivate workers to perform better and stay on job. The workplace climate indeed plays a role in job satisfaction and correlates highly with retention because workers who are satisfied with their jobs remain in their jobs (Luoma, 2006). In an exit study on 40,000 nurses in 11 European countries, Hasselhorn, Tackenberg and Muller (2003) showed a relationship between job satisfaction and the intention to leave the profession: the lower their job satisfaction, the more likely nurses were to leave.

Commonly Used Incentives for Health Workers

Health worker incentives can be categorized broadly into financial or non-financial. Financial incentives may be direct or indirect. Direct financial incentives include pay such as salary, pension, and allowances for accommodation, travel, childcare, clothing, and medical needs. Indirect financial benefits include subsidized meals, clothing, transport, and support for further studies. Non-financial incentives include holidays, flexible working hours, access to training opportunities, sabbatical/study leave, planned career breaks, occupational health counseling, and recreational facilities. Different countries use various strategies in the attempt to alleviate health staffing problems. In the following sub-section, experience from selected countries is reviewed to provide a broader picture of incentive use in Africa and some best practices that could inform the design of an appropriate incentive package for the Tanzanian context.

Incentives at Work—Empirical Evidence

There is significant evidence on the application of monetary and non-monetary incentives to attract and retain health staff in sub-Saharan Africa. The incentives have been used both to attract and retain health staff in remote areas, or to public facilities which are seriously under-staffed as compared to private, religious, and nongovernmental organizations' facilities. Generally, the incentives have been monetary or non-monetary. This sub-section borrows heavily from Dambisya (2007), complemented with other sources from related studies. The evidence is employed to come up with a framework for defining underserved areas and designing an appropriate incentive package that can be used to attract and retain health staff in areas regarded as underserved in Tanzania.

In Malawi, as cited from Dambisya (2007), a study among midwives by Aukerman (2006) and Mackintosh (2003) showed that midwives were attracted to stay in the public health sector by a

generous retirement package with a higher pension contribution of 25% from the government to which workers are eligible only after serving 20 years; access to post-basic training; a flexible leave policy; job security; and country-wide job opportunities.

The Ministry of Health (MoH) and Christian Health Association of Malawi (CHAM), with assistance from various donor agencies, started an incentive scheme with monetary and non-monetary incentives. Tutors were offered salary top-ups and a bonding arrangement where they would work for two years in the training institutions in return for fully paid tuition for further studies. At the same time, the government met the operating costs and funded infrastructural development programs in many institutions to improve and expand training facilities and staff and student accommodations. The scheme included a salary top-up to cover transport costs for visiting family and shopping, utility bills, and medical costs for tutor and family. A broad set of non-monetary incentives was proposed, such as promoting tutors against the tutor career structure, free housing, free medical services, subsidized utilities, transportation for shopping, education and training opportunities, loan schemes, improved supervision, mentoring, and communication systems. The salary top-up was accompanied by a campaign to attract nurses back from private practice.

In addition, Malawi offers free post-basic/post-graduate training to government health sector workers, which has proven to be popular because the private sector does not offer these incentives. In a number of government facilities, health workers receive free meals while on duty and some rural CHAM facilities offer health workers allowances for their children's school fees. The CHAM is reportedly more successful at retaining its upper-level skilled workforce in rural areas, using mainly allowances and salary top-ups, including a car allowance, hardship allowance, responsibility allowance, and duty allowance. These allowances may combine to effectively double the take-home pay of most health cadres. Some CHAM hospitals provide transport for nurses to go shopping, free uniforms and housing, easy access to loans, private rooms for sick staff members, and end-of-service packages even after only two to five years of service.

The impacts of using incentives have been found to be positive. Reports from districts suggest the top-ups have helped slow the exodus of nurses. The MoH has recruited over 570 new staff, and top-up allowance has also been able to attract some retired paramedics or those who resigned because of frustration (Dambisya 2007).

The Zachariah et al (2004) report on a public-private partnership initiative involving local government in Thyolo District (in Malawi) and Médecins Sans Frontières (MSF) that employs a mix of financial and non-financial incentives. All district staff members are eligible for a monthly performance-linked monetary incentive, ranging from US$13 to US$25. In addition, antiretroviral drugs were made available to all district health staff members and their immediate family if they were HIV-positive and met the eligibility criteria. Furthermore, instead of posting midwives to rural areas, they rotate them between urban and rural health facilities. According to Mackintosh (2003), the system works as the staff find it easier to stay at the rural facilities for short spells, as

opposed to longer-term postings. It is not clear how widely applicable that practice would be, or how feasible it would be to extend that approach to the entire country.

Lesotho has also put in place some measures that include an accelerated grade and increment policy for health workers, continuing professional education, better promotion prospects for those serving in remote areas, and overtime and night duty allowances (Dambisya, 2007). Other measures that are in place are computers, information technology support and better communication especially for remote highland facilities; staff housing for those in remote places; staff security in the workplace; reliable staff transport for those on evening/late shifts; employee support centers to promote social cohesion and ensure there is no discrimination in the workplace; respect for professional authority in technical matters; and sabbatical leave for health workers in scarce occupations, in the form of a leave of absence for up to two years for every ten years served, without the employee losing continuity of service or retirement benefits.

Mauritius has put in place non-financial incentives to solve the problem of health staff shortages in Rodriguez and the Outer Islands which are less attractive for health workers than the main island. Incentives include continuing professional development activities using visiting tutors and distance learning, the decentralization of operational management to promote local decision-making and management of operational budgets, and a disturbance allowance of 50% of basic pay to encourage health workers to serve on the islands. The financial incentives include incremental salary credits for years of service, annual salary adjustments, overtime, call and in-attendance allowances, rent-free telephones, car loans at concession rates, sponsorship for postgraduate studies, paid study leave, and performance bonuses. Doctors are the main recipients of the monetary allowances (Dambisya, 2007).

In Mozambique, health workers in rural areas get a 50% bonus when calculating their years of service, thereby progressing faster along the career ladder. Other incentives include free housing, especially outside Maputo City, free or subsidized health care and medicines (but not uniformly applied), and free or subsidized food in some facilities outside Maputo.

South Africa has introduced increases in salaries and scarce skills and rural allowances for rural doctors, and South Africa has deployed foreign doctors to rural areas to reduce workloads and has upgraded clinics and hospital properties to improve the work environment (MoH, 2002). Bonding is used by provincial departments of health for students sponsored for health professional courses, with personnel expected to serve the province for one year for every year sponsored. This bonding arrangement has shown some positive progress in KwaZulu Natal, which began a scholarship scheme in 1997. The hospital sponsors rural students for health professional courses and provides them with mentorship during their training. The students sign a contract obliging them to pay back the sponsorship by working a year for the hospital for each year of study that was sponsored. Between 1998 and 2005, fourteen students completed various health courses and returned to serve the hospital.

According to Reid (2004), the government of South Africa has also introduced community service for various categories of health professionals, who are all expected to do one year of

compulsory public service. This move was primarily intended to enhance the training and experience of new graduates, but it also keeps them in public service, preferably in rural settings, for an additional year. Results have been mixed, with some staff viewing their year's experience as a disincentive to work in public hospitals due to poor supervision, skills gaps, and poor conditions of service. There was no documented evidence found on compliance with or the effectiveness of these measures.

After Uganda implemented the decentralization program and introduced user fees in 1993, fees collected at the health facilities were managed locally by each unit to top up workers' pay, and the balance was used to maintain the facilities and purchase additional drugs and supplies. Staffs were reportedly more motivated by the higher pay and better work conditions. After the abolishment of user fees, there have been some reports that health workers have shifted more of their time to work in private clinics or have reverted to asking for bribes from patients to compensate for loss of earnings from cost sharing (Burnham et al, 2004). However, there is no documented evidence to support these claims.

Uganda, however, undertook pay reforms, with substantial increases in health worker salaries at higher pay scales than for other civil servants. Categories such as junior doctors received a 60% increase, and entry-level enrolled nurses received a 300% increase, as well as a pension allowance with the salary increase. Before the salary enhancement, health workers benefited from a lunch allowance given to public servants in certain categories. The government also sponsored grants to health institutions to promote research capacity and motivate health worker trainers to stay and work. Health workers got paid sick leave and more opportunities for further training. Other non-monetary incentives include the possibility of acquiring higher qualifications, recognition, promotions and better tenure of service. An early result of these measures was that they made the public sector more attractive than the nongovernmental organization sector, and staff, especially nurses and paramedics, moved from the private sector to public facilities (WHO 2006).

The Government of Zambia put various retention initiatives in place for Zambian doctors in rural and remote districts, supported by international agencies. The retention scheme, piloted in 2003, contained a mix of monetary and non-monetary incentives. The incentives applied included priority consideration for post-graduate studies; a rehabilitated/improved working environment; and an annual performance appraisal (Dambisya, 2007).

In a three-year contract with district authorities in Zambia, doctors are assured of a functional basic infrastructure (operating theatre, X-ray department, lab facilities), a housing subsidy up to a maximum one-off payment of US$3,000, a monthly hardship allowance depending upon the remoteness of the area (usually US$250-300 per month), education for up to four children, access to a loan (up to 90% the value of the contract, or up to US$7,500-9,500), an end-of-contract incentive ranging from US$2,000-2,600, and priority consideration in selection for post-graduate training.

Koot et al (2003) reported that there was evidence of its success, with about 40 doctors already posted to rural stations. Moreover, report from the Zambian MoH showed that 66 doctors had been attracted from tertiary hospitals to work in rural areas by the end of 2005. The government was reportedly able to meet its part of the retention scheme using savings from debt payments to the International Monetary Fund to support salaries within the Public Service Reform Programme.

In addition to the doctors' retention scheme, at the district level, retention measures include provision of staff transport, group performance incentive schemes, top-up salaries for staff in remote areas, the renovation of accommodations, and electrification using solar energy in remote areas. Zambia received support from various sources including the United States Agency for International Development (USAID) for top-up allowances for members of district health management teams and for renovation and construction of houses for medical staff; from the WHO for salary supplementation for lecturers at the School of Medicine, University of Zambia; and from Swedish International Cooperation Development Agency for training nursing tutors, curriculum review, and general strengthening of training institutions.

A 12-month pilot study was carried out to compare the use of financial or non-financial incentives to improve health worker motivation and performance in two health districts in Lusaka Province (Furth, 2005). In one district, the best performing and most improved health centers received a monetary award based on user fee collections. In the other district, the best performing and most improved health centers received a trophy and plaque. Non-financial incentives were found to be more motivating and less controversial than financial ones. These results have to be interpreted with care given that Lusaka Province is urban, and health workers may be motivated and have stayed even with lower financial benefits due to other attractions in urban areas as compared to rural areas.

In Tanzania, the documented evidence highlights the work of the Mkapa fellowship program through which incentives were offered to few selected cadres to fill government health care positions in selected rural underserved districts with a high HIV-prevalence rate and that are suffering severe shortages of health workers and poor geographic accessibility to regional hospitals. As part of incentives, the program provided intensive training in aspects of health system management and antiretroviral treatment. The Mkapa fellows received a monthly stipend, a 20% pension contribution by the employer, and an end-of-service bonus. In addition, fellows get skills enhancement through planned training sessions, cell phones and $30 monthly airtime, laptops, Internet connection to the districts, and a life membership to a prestigious alumni network. Since 2006 when the program started, 99 fellows have been recruited, trained, and posted in 33 remote districts of Tanzania; the number of HIV/AIDS clients enrolled in care and treatment programs in these districts has doubled. Fellows have increasingly been involved in district technical tasks in collaboration with district council health management teams, and other fellows were absorbed into the public service in their respective districts. The major constraints have been delays in disbursement of district funds to support the comprehensive scaling up of HIV/AIDS activities; and lack of enough office space and houses to accommodate professional health workers arriving from outside the district to work at the hospitals.

Other Studies on Staffing Problems in Underserved Areas in Tanzania

In 2005, the Government of the United Republic of Tanzania commissioned a short-term study on the staffing problems of peripheral or otherwise disadvantaged LGAs[2]. The study objective was to explore the underlying causes for the problems of recruitment and retention of senior staff in LGAs generally assessed as peripheral and or disadvantaged; and to consider the manner in which specific and targeted incentives or other interventions might serve to mitigate this problem. The study identified 23 LGAs that can be categorized as having persistent and significant staffing problems. The reasons attributed to these LGAs' failure to attract and retain staff are financial, including lack of special incentives and lack of supplementary income opportunities. Other reasons identified from this study are amenities including lack of appropriate housing, lack of adequate health and educational facilities, lack of telephone and Internet access, and lack of water and electricity. Other reasons are governance-related, mainly political interference. In addition to those factors, human resources management and organizational factors such as shortage of support staff, demoralization due to delayed confirmation and promotions, lack of access to training opportunities and lack of incentives schemes for hard-working and exemplary staff were identified as reducing attraction and retention in some LGAs.

The study recommended a financial incentives package for targeted LGAs. The proposed package would include: the agreed medium-term pay targets, with systematic enhancement of salaries of qualified skilled professionals and technical and managerial personnel; location allowance for qualified skilled human resources engaged in rural and remote locations to the tune of 25% of the basic salaries of personnel, to be paid on a monthly basis; and the introduction of a reduced location allowance of 18% combined with staff retention gratuity of 10% of the last year's basic salary.

A study on the analysis of staff availability issues, including issues related to understaffing, workloads, and the implications of understaffing on the quality of health services, found that most qualified professional health workers are concentrated in a few centralized locations. The remaining small number of professionals is inequitably and inefficiently distributed in rural areas. Rural areas, therefore, have restricted access to government-run health care because the facilities are understaffed. Due to this uneven distribution pattern, the workload per qualified staff in rural areas is high, and the quality of services is jeopardized. In comparison to staff at government health facilities, professional health workers at non-governmental health facilities are benefiting from better compensation packages, with employment contracts that offer an educational stipend; better organizational and governance environments; better human resources management, with better and more flexible human resources policies and a lower workload per qualified worker; and active training of local staff (Olsen, Ndeki and Norheim,

[2] Consultancy on the Staffing Problems of Peripheral or Otherwise Disadvantaged Local Government Authorities (2005); United Republic of Tanzania, President's Office – Regional Administration and Local Government (Crown Management Consultants and PEM Consult East Africa Limited).

2005). The better conditions in nongovernmental health facilities enable them to recruit and retain staff even if they are located in very remote areas.

The study by Tibandebage and Mackintosh (1999) found that nongovernmental facilities have higher capacity to recruit and retain qualified skilled professionals than the government facilities in similar rural and remote areas in Tanzania. In addition, clients' satisfaction is higher at these facilities than government facilities. According to the study, the key to improving delivery, quality, and accessibility of health services in areas of staff shortage is to: devise an incentives package where public service health personnel can maintain a reasonable standard of living; improve staff motivation by non-monetary incentives such as facilitation to achieve career progression goals; and improve human resources management and institutional governance.

Experience of Incentive Use in Tanzania

Staffing problems in underserved areas in Tanzania is not a new phenomenon. In the past, hardship allowance was paid to public servants who worked in rural and remote areas of the country (URT, 2005). The notion of hardship was seen to have negative connotations whereby political leaders from those areas were not happy with their areas being identified as hardship areas. Furthermore, hardship allowances were seen to be beneficial to individuals rather than benefiting the underserved areas. As the result, the hardship allowances were abolished, and there has been no concrete replacement of such allowance. Recently, having realized the difficulties associated with attracting and retaining qualified staff in some remote, underserved areas, the government (through its budget) has increasingly engaged in investing in some underserved areas through purchases of transportation equipment—notably boats in some isolated islands to improve transport in those areas. Other budgetary measures include the salary adjustment to all public servants through the medium-term pay policy which aims to increase the salaries of public servants to the level of the private sector in the near future. In addition, the government is currently carrying out a comprehensive study on the appropriate incentive package that will attract and retain qualified staff in underserved areas.

The government approach toward incentives has been generalized in nature whereby all staff in underserved areas has to be included in the package. Even the study commissioned by the government in 2005 (URT, 2005) recommends that the package should not only offer incentives to some professionals but all staff in underserved areas. The assumption made under this approach is that the country is faced with the same level of demand for staff in all professions. However, statistics clearly show that health professionals are indeed scarce and therefore require some innovative incentive mechanism to attract them to underserved areas.

The literature reviewed in this section has provided evidence on the applicability of various incentives in the health sector and the areas where they have worked to attract and retain staff, either in rural underserved areas or in public health facilities. The evidence suggests that a combination of both monetary and non-monetary incentives is widely used in various countries, and their effectiveness depends on various factors such as proper administration and ensured sustainability of the incentives.

For Tanzania, empirical evidence—from several LGAs, the work of BMAF in selected districts, and at the institutional level in a nongovernmental health facility such as St Joseph's Hospital based at Peramiho in Ruvuma region—demonstrates that incentives indeed do help to attract professional health workers to underserved areas. The limited financial and non-financial incentives, however—without changes in the social, economic, and infrastructural barriers that characterize the remote rural areas—may not provide long-term conditions for retention of professional health workers. But as indicated by allocations in the government's special budget for development projects in the underserved areas since the 2009/10 financial year, there seems to be a lack of clear criteria for defining the remote, underserved areas. The review also indicates that, traditionally, a variety of terms are used to denote underserved. They include: rural areas, hard-to-reach areas, rural districts, remote areas, disadvantaged areas, peripheral areas, and marginalized areas. However, Dar es Salaam, Tanzania's biggest conurbation, was allocated funds from the budget for underserved areas in the 2009/10 financial year.

There is, therefore, no common definition for underserved areas to guide programming for those areas. In the next section, an attempt is made to identify some factors that can collectively be used to define the underserved areas by utilizing the evidence gathered in the literature and the experience of Tanzania.

SECTION THREE: DEFINING UNDERSERVED AREAS

Overview

In this section, the basic factors determining underserved areas identified through the literature review are analyzed to provide the basis for a broad framework that could be used to define underserved areas in Tanzania. The section also outlines a conceptual framework that may be helpful in analyzing the basic factors that affect attraction and retention of professional health workers to underserved areas in Tanzania.

Basic Factors Defining Underserved Areas

In the literature reviewed, various definitions of underserved areas have been provided. The WHO (2009) defines hard-to-reach and problem areas in the rural context *as* the rural populations who have little regular contact with routine immunization services which may include people living in areas too far from health services or seasonally mobile populations (e.g., nomadic populations). The World Bank (2010) refers to those areas as typically remote and hard-to-reach and stay and which have significant and persistent staffing problems in the health and education sectors. In the Tanzania National Budget Guidelines (2010/2011), underserved areas are envisaged as those areas which do not attract qualified staff due to factors such as absence of basic facilities including staff houses and other infrastructure facilities, remoteness (geographical location and setting), and culture (e.g., willingness to use, or suspicion of, public services). According to Dambisya (2007), nearly all African countries have hard-to-staff areas: they are typically poor rural areas with poor infrastructure.

The above definitions reveal several common contextual factors that relate to determining underserved areas. These may be summarized as: difficult physical-geographical location factors; deficiency of basic social services and amenities; policy- and management-related factors; and the community cultural environment.

Difficult physical-geographical location factors are reflected in the definitions by the World Bank, Ministry of Finance, and others that emphasize the hard-to-reach aspects and remoteness. Many rural areas are hard to reach by virtue of their natural physical-geographical location. Large populations scattered in small islands as in Indonesia and Thailand (pointed out in section two) and marginal remote locations present physical obstacles to transport and communication that make service delivery extra difficult and expensive. These areas are often underserved and unattractive to professional health workers, who often have better options. Other distinctive features include closeness to national parks or game reserves, and arid or drought-prone areas. The condition of roads to the district, regional, and national headquarters; the internal road network within the district and reliable public transport, whether road, water, or rail; and communication infrastructures including mobile phones and Internet facilities may be regarded as crucial factors outside the health system for mitigating the attrition of professional staff.

Basic social services-related factors include: availability and accessibility to quality educational facilities—primary, secondary, and tertiary; housing; primary health care and referral facilities;

reliable supply of safe and adequate water for domestic use; electricity; banking services; reliable public transport service; telephone service; reliable supply of essential commodities; and recreational facilities. Many rural and remote areas in Tanzania are characterized by poor basic social services, a key contributing factor to the growing stream of rural-urban migration, which also acts as a 'push factor' for professional government staff, including health workers. Better basic social services in the urban areas lure not only the common people but also professional workers for personal and family welfare reasons.

Policy- and management-related factors include the existing policy framework at national and local government levels applying to the health sector and how it is interpreted and implemented by local government leaders. These have important implications for human resources recruitment, deployment, and retention; salary structure and employment benefits; and training, promotions, and other career path-related expectations. Poor policy interpretation and implementation by local government leaders may precipitate multiple push drivers for public servants from a given area, increasing the attrition of professional workers and making an area underserved unnecessarily.

Human resources management, in particular, is usually associated with management styles in which it is generally perceived that, as long as the managers are far from the center, they are loosely monitored and thus mistreat staff under them. Both human resources management and the organizational environment are perceived to be much weaker in rural and remote areas. This contributes to reducing job satisfaction, worker motivation and morale, and pushes qualified skilled personnel to seek employment elsewhere (URT, 2005). Common human resources management and organizational environment pitfalls include shortage of support staff, delayed confirmation and promotions, blocked access to training opportunities, and lack of incentive schemes for exemplary staff.

In some districts, there is anecdotal evidence of staff fear of what is known as 'untouchable leaders.' Staff members recruited or transferred to such areas perceive the postings as temporary and start organizing for relocation, or further their education immediately on arrival. These areas are perceived by staff as having a difficult-to-work-in environment. A positive working environment includes providing a safe working environment for staff and proactively responding to emerging risks, as well as creating a positive organizational culture (WHO, 2007). Other factors which may lead to lower turnover and higher levels of job satisfaction include decentralized organizational structure, a commitment to flexible working hours, an emphasis on professional autonomy, and development and systematic communication between management and staff.

Effectiveness and resourcefulness of financial management in an LGA, on the other hand, has direct implication for improvement of macro and micro factors—both outside and inside the health system—that act as push or pull factors for attraction and retention of professional health workers. Specifically, financial managers or accounting officers have considerable leverage in initiating incentive packages for professional workers in the district as LGAs are empowered administratively to do so (General Budget annual review, 2010). The United Republic of Tanzania

(2005) identifies 23 areas as highly underserved. However, many with large human capital needs in the health sector do not have effective incentive packages in place for attracting and retaining professional staff.

Community-cultural environment-related factors may also act as push and pull factors to professional health workers individually or as families. This is evident when local community or cultural attitudes and practices are perceived by health workers as not welcoming or supportive but instead as repulsive and even threatening. Traditional beliefs—such as witchcraft which drives related criminal activities including ritual killings and systemic persecution of elderly women and albinos in the Lake Victoria zone—and overriding fear based on superstition, religious intolerance, and social conflicts contribute to a difficult working environment. This, being more common in rural or remote areas compared to urban areas, makes such areas unattractive to health staff, moreso for those who are directly targeted, including health workers with albinism. The identified factors are summarized in table below.

Table 2: Some Contextual Factors and Their Characteristics for Defining Underserved Areas, and Recommendations for Incentive Packages

Contextual factors	Defining characteristics	Recommendations toward designing incentive packages
Physical-geographical location factors	• Hard to reach due to natural and physical obstacles to transport and communication • Marginal or peripheral location from district, regional, or national capital (remoteness) • High vulnerability to natural calamities such as floods, droughts, famine, predators, vermin, and epidemics.	• Promote a multisectoral approach to improve infrastructure, the working environment ,and general mitigation of natural obstacles • Provide coping skills and tools to health workers • Provide for the special needs of health staff • Provide a hardship allowance.
Basic social services-related factors	• Lack of reliable and quality health services and lack of educational facilities (nursery, primary, and secondary) • Lack of reliable public transport • Lack of appropriate housing, electricity, and safe water supply • Lack of banking services, telephone services, and Internet • Inadequate recreational facilities and amenities.	Pursue a multisectoral approach to improve the basic social services in underserved areas, and involve sectors responsible for public works, education, housing, energy, water, and the private sector.

Contextual factors	Defining characteristics	Recommendations toward designing incentive packages
Policy- and management environment-related factors	• Low salaries • No incentive packages in place • Government policy and standing orders on non-financial incentives not effectively implemented • No fund for health workers' financial incentives, besides salaries • Lack of realistic and transparent guidelines for application of incentives in specific underserved areas • Poor and unsafe working environment for health workers • Management and leadership weaknesses: non-transparent leaders, untouchable leaders, and political interference.	• All LGAs with underserved areas to design incentive packages for professional health workers; • All LGAs to establish a fund for incentives through local resources, central government budget resources and donor partners support; • All LGAs to establish realistic and transparent guidelines for application of incentives.
Community-cultural environment-related factors	• Prevalence of witchcraft-based attitudes, behaviors, and practices including excessive fear based on superstitions, and maiming and killing of people with albinism and elderly women • Religious intolerance • Different forms of social violence including those ignited by land rights conflicts between pastoralists and agriculturalists.	• Enhance security and rule of law • Ensure physical protection of health workers or family members with albinism; if their security cannot be guaranteed, they should be deployed elsewhere • Provide pre-deployment orientation training to staff • Provide psycho-social support for needy staff in such areas • Engage community leaders proactively in designing and implementing strategies to attract and retain staff in those areas.

As illustrated above, underserved areas can be defined as a function of both contextual factors and specific factors that push professional health workers from a given area. These factors, singularly or collectively, could contribute immensely in pushing or pulling professional health staff to a given work area.

The above factors may weigh differently in determining the extent to which an area could be termed as underserved. If the areas score are ranked, those with high value indicating the severity of the problem could be termed as most underserved. Apportioning weights to the identified common contextual factors needs to take professional health workers' perceptions into consideration, a task limited by the methodology of the current consultancy. An example of assigning weights to the identified factors is nevertheless illustrated in Appendix III. Physical-geographical location factors tend to dominate other factors as strong disincentives for the health workers due to difficult accessibility resulting from obstacles to transport and communications. Lack of important services such as mobile phone service and Internet accessibility can easily put off professional health workers. Isolated small island cases, for

example, are not only common to Tanzania. In the Caribbean Islands, relocation allowances to assist staff in moving to the island, followed by short-term housing subsidies to help staff secure accommodations, are provided (ICN *et. al* [2008] cited in WHO [2008]).

Poor basic social services-related factors such as education tend to put off families of health staff—in particular families with young children. A study of oral health professionals in rural and Western Australia found that the most common reason for leaving a rural practice was to access children's education facilities (Uger and Tennant 2005 cited in WHO 2008). This may be true for areas with poor health services.

Although community-cultural environment-related factors may seem oblivious due to their subjective qualitative interpretation, some of the issues—such as prevalence of witchcraft and systemic persecution of people with skin pigmentation disability (commonly known as albinos) involving maiming and ghastly killings—may be too brutal. Also, structured gender-based persecution and violence—such as the killing of elderly women, female genital mutilation, sexual abuse, social violence, and religious intolerance—may be a disincentive to some professional health workers and their families to live and work in those areas.

Justification of the contextual factors

The contextual factors identified, defining characteristics, and recommendations toward the design of incentive packages may be validated through a framework developed by Labonte (2007) which elaborates the push, pull, stick and stay factors that affect the movement of health workers globally. For the purpose of this consultancy, the model is adapted to internal rural-urban migration of professional health workers, rather than to out-migration. The movement of professional health workers in Tanzania is characterized by a rural-urban dichotomy rather than an out-of-the-country migration which affects most health systems of most Eastern and Southern African countries, reportedly due to Tanzania's peaceful environment with political stability, lack of conflict, strong national culture, and relatively low cost of living (Awases et al, 2004; Bryan et al, 2006).

Push factors (indicated as defining characteristics in Table 2) tend to push professional health workers away from rural areas to urban areas. On the other hand, pull factors (as indicated under recommendations for incentive packages) are those that could, if implemented, pull professional health workers to rural areas. They represent a basis for staff attraction which—if consolidated and sustained—could enhance retention of health staff.

Push factors that cut across most Eastern and Southern African health systems include low pay, work-related health risks (including HIV/AIDS and TB), unrealistic workloads, poor infrastructure, sub-optimal conditions of work, poor and unsafe environments, unclear defined career paths, and poor quality education and training (Dambisya, 2007).

It is worth noting that the factors identified and described above are by no means exhaustive. The intention is to provide a framework that can be used by managers in the underserved areas in designing incentive packages for health workers. It is important to attach and validate weights to each factor based on the perceptions of health workers and other key actors in the health

sector, in particular LGAs, and ultimately consolidate the framework. This, although important, is beyond the current desk study and requires a more comprehensive study involving different groups of practicing health workers in undeserved and better served areas, health managers, LGAs, and prospective health labor force entrants.

Section Four: Structural and Operational Challenges for LGAs in Designing and Implementing Incentives

Overview of the Incentive Initiatives by LGAs

LGAs in Tanzania have the power to establish local incentives to attract and retain human resources, including professional health workers, in their areas. The following overview provides a general picture of the incentives situation in LGAs, which do not all target health workers but could inform the design and implementation of specific incentives for professional health workers in those areas. LGAs that have attempted to establish incentives schemes include Mbinga, Uyui Masasi, Namtumbo, and Monduli. Two district councils and other initiatives at national, regional, and institutional levels are examined to provide insights in modalities being employed in designing and implementing incentives.

Mbinga District Council

Mbinga is one of the districts considered hard to reach due to its geographical location, with some parts of the district located in remote peripheral areas far from Mbinga town. Mbinga experiences enormous difficulties in attracting and retaining professional health workers. The district council has developed a motivation scheme for those public servants allocated to those remote areas. The incentive scheme includes: a 50% loan to buy personal means of transport such as motorcycles; a rotation system whereby the public servants are allocated to the remote areas for a particular period of time and then transferred to other areas considered to be well-served; and a system of visitations and invitations to council meetings.

The council has also developed a staff training and development program that enhances individual staff capacity building and career development. Council departments and sections identify gaps and nominate staff for appropriate training opportunities under the council's human resources management and development framework. Newly employed staff members in the district council also receive subsistence allowances as they report to their work stations, as well as a refund of the transportation expenses incurred. In addition, the council has a system of informing employees once their salaries are deposited in their bank accounts. They do this through the ward offices. The Cooperative and Rural Development Bank also has a system of sending messages using mobile phone to their clients once the salaries are deposited.

Although it is difficult to conclude that this scheme has worked, preliminary evidence shows that new employees posted to Mbinga District are reporting to their work stations. For instance, in the financial year 2010/11 the Mbinga District Council was allocated 22 new teachers and 11 agriculture extension officers, all of whom reported and received their subsistence allowances on time. While this study could not go further to ascertain whether these staff were retained or not, these initiatives provide a highlight on how workable an incentive package is in attracting and retaining health workers especially in hard-to-reach areas.

Uyui District Council

Uyui District in Tabora Region is another example considered underserved which has come up with an incentive package for teachers. This is because some parts of the district located in remote peripheral areas far from Tabora town do not attract professional staff, including health workers. The district council initiative to attract professional workers includes immediate payment of subsistence allowances as posted staff report to their work stations. Upon new staff members reporting, the council provides lodging and transport to their work stations where the supervisors have advance instructions to make arrangements for temporary accommodations and assist the new staff to get their own housing. Furthermore, the newly employed teachers are posted to nearby well-served areas, or within the district center with better social services, while those staff members who have stayed in the area for many years are transferred to the periphery areas.

Regional initiatives

There are also some other initiatives taken at regional level. Rukwa Region, in particular, has innovatively crafted an incentive package known as the Mwalimu Nyerere Fund (MNF) to attract staff to different parts of the region. The regional initiative aims to keep up with the demand for teachers due to expansion of the secondary schools program in the region (Njau, D). The MNF was established to attract newly graduating teachers to the region by providing housing, settlement, and transport allowances to the region and six months' salary during the process of registration into the government payroll system, which takes long and causes undue suffering to newly employed government staff. Since its inception in 2006, over 400 teachers have been recruited and retained. Despite these achievements, lack of more resources to enable rapid expansion of MNF activities and a shortage of decent housing in Rukwa remains a major obstacle.

Central government initiatives

Since the financial year 2009/10, the government has initiated a special budget to fund the development projects in the underserved LGAs aimed at improving the environment to attract and retain human resources. In the financial year 2009/10, a total of Tshs. 42 billion was distributed to 36 identified LGAs to fund selected developments projects. Further more, according to the Ministry of Finance data (2010), in the financial year 2010/2011, the government allocated a total of Tshs. 66.9 billion for development projects in the underserved areas. This amount was allocated as follows: construction of council offices, Tshs. 15 billion; construction of staff houses, Tshs. 8.1 billion; construction of girls' hostels, Tshs. 7.55 billion; construction of district hospitals, Tshs. 6.3 billion; construction and rehabilitation of special schools, particularly for students with disabilities, Tshs. 3.33 billion; Dar es Salaam City Council cleanliness, Tshs. 2.0 billion; and for other projects, Tshs. 8.85 billion (See appendix II).

Institutional initiatives

At the institutional level, evidence of successful incentives documented include the St. Joseph Hospital housing scheme in Peramiho, Ruvuma region which has, for a long time, managed to attract and retain staff—in spite of its location in a remote rural area--mainly through

mobilization of resources for construction of enough houses for all senior staff, as well as identification and procurement of ideal staff accommodations in the hospital neighborhoods.

Other initiatives

Other documented initiatives in the country include: facilitation for health workers to access loans from commercial banks and provision of work uniforms by Bunda District Council; extra duty allowances by the International Centre for AIDS Care and Treatment project in Mwanza; a call allowance implemented by the government in the past until its abandonment in 1997; a night duty allowance at faith-based facilities in Rukwa; and salary top-ups by most faith-based district designated hospitals (Njau, D. undated).

The above overview shows that there are efforts aimed at addressing the challenge of attracting and retaining professional workers (including health workers) in various sectors in rural underserved areas, and limited success is being reported. It is also noted that LGAs have the power to design and implement incentives and have started receiving budget support from the central government and more support from partners, including BMAF.

Structural and Operational Challenges Facing LGAs

LGAs are limited by various structural and operational constraints in designing and implementing incentive packages for attraction and retention of professional health workers. The major structural challenges include: inadequate funding or an irregular budget line for incentive packages at the district council level (Munga MA, and DR Mbilinyi 2008); inadequate district council facilities, such as staff houses, office facilities, and educational- and health-related infrastructures; socio-economic constraints in remote rural areas characterized by a lack of electricity and safe water, a poor road network, a lack of banking services, a lack of telephone access, poor recreational facilities, and limited opportunities for income generation.

Although the government has made progress and institutionalized a fund for underserved areas, there is uncertainty of the flow of adequate funding to the district councils for implementation of staff incentives. A review of the projects' allocated funds from the central government budget fund such as Dar es Salaam City environmental projects indicates inconsistencies in defining underserved areas and the application of the fund. Moreover, the vertical top-down approach may not reflect health sector staffing issues in different district councils. It is evident from the government budgets that the central government is investing a lot more in infrastructure-related projects with the aim of reducing some infrastructural bottlenecks in underserved areas rather than focusing on staffing issues.

No funds, however, were allocated for direct staff financial incentives, a key factor for attraction and retention of staff in rural areas, considering the labor market dynamics, particularly the high demand for professional health workers. The LGAs, therefore, need to take more responsibility for financial incentives to attract and retain professional health workers, a challenge which tests their resource capacities. Capitalization of the incentive fund in LGAs, through a mix of strategies involving local sources, central government budget funds, and partners is strongly

recommended. Also, financial incentives need to be backed up by appropriate non-financial incentives designed with the participation of the health workers themselves.

Another important structural challenge at the LGA level is the poor and unsafe working environment for health workers (Dambisya, 2007), characterized by poor health infrastructure and a lack of essential tools and equipment. Some unmet needs in health system infrastructure are being increasingly addressed at the district level through several health sector improvement programs by the central government with support of bilateral and multilateral partners, including BMAF, the WHO and USAID; however, improvements in the health system alone, though important, are not a sufficient condition for attraction and retention of staff in rural areas. Health systems and professional health workers are influenced by a variety of other contextual factors such as socio-economic factors. These include a reliable supply of electricity and water, adequate basic health care services, a reliable road network, quality education in primary and secondary schools, telephone and banking services, and economic opportunities for personal development. Thus, in targeting the macro environment in rural areas that affects the functioning of the health system, there is a need in the long run to move away from the health sector approach to a multisectoral approach that involves all key sectors: public service, finance, public works, education, and housing (Munga, et al). Also, a public-private partnership approach to addressing macro factors affecting attraction and retention of professional rural workers in rural areas should be aggressively promoted by LGAs. The approach should build on best practices in other sectors such as the availability of mobile telephones, efficient public transport (air, sea, and road), quality private schools, and recreation facilities.

The LGAs also face a variety of operational challenges in designing and implementing incentive packages. The challenges include: a lack of adequate capacity to implement and sustain the incentive packages; inadequate powers and authority to manage health workers; an inability to design and implement targeted training and education for professional health workers; a heavy staff workload; and a lack of clear guidelines on incentives.

Although the incentives are institutionalized through government policies and standing orders, the district councils lack adequate capacity to implement them. For example, inadequacy of available funds has often resulted in targeting special health cadres or segments, a factor that is perceived as a disincentive for others with a potentially damaging impact on service delivery. Thus, a health sector-wide approach is advocated, with a component for incentives in the annual budget, and support sought from partners for severely constrained underserved areas.

The district councils also have limited powers over management of professional health workers, as professional matters are handled by the professional bodies and MOHSW headquarters. Underserved areas exist in different contexts, and health workers serving in those areas could have specific needs, but most district councils are unable to design and implement tailored trainings for their professional health workers. This reduces the range of effective district-initiated non-financial incentives. The district councils need more power and capacity to design tailored training for health staff to meet the specific challenges in their underserved areas. This can help health workers cope with the specific demands of their work stations in the

underserved areas and thus improve the chances of retaining those health workers. Establishing and filling the position of a training officer at a district or regional level could expedite training needs assessments for health sector staff and organization and coordination of tailored training programs for health workers in the areas. This, however, calls for devolution of some powers from the central training department at the MOHSW to the region/district.

Another operational constraint is shortage of staff. Shortage of health management staff and supervisors results in limited or no backstopping of health workers in remote rural areas, a situation which could result in demotivation. Moreover, professional health workers in most rural underserved areas have a heavy workload. This makes the administration of other important non-financial incentives—including annual leave, study leave, leave without pay, and attendance and participation in professional workshops and courses—difficult.

The centralized recruitment and posting of professional health workers, abolition of pre-employment interviews, and improved starting salaries for health workers is being implemented by the central government level. This is more likely geared to improve the human resources situation in underserved areas. However, these measures may not be sufficient for retention of professional health workers in those areas. The design and application of a mix of district context-specific financial and non-financial incentives to maximize 'the stick factors' are regarded as crucial and therefore highly recommended.

LGAs seem to lack practical and realistic guidelines for implementation of incentives. Although the government has issued policies and standing orders for incentives to district councils, there is little evidence of their effective implementation as most councils lack resources. For example, most professional health cadres are entitled to housing as a non-financial incentive. Empirical evidence indicates that rarely are the houses available or a housing allowance provided instead. Since all districts receive money from the central government and also mobilize their own local resources through taxes, donor support through the basket fund, and through partnerships with multilateral and bilateral agencies, they need to come up with practical and realistic guidelines to address specific challenges for attraction and retention of professional health workers in their underserved areas. The application of incentives is not only a matter of policy, it often relates to the real situation of management authorities and decisions and the resources available (Munga and Mbilinyi, 2008 as cited by Dambisya 2007).

Thus, district management could come out with innovative and realistic guidelines for operationalization of the incentive packages which build on, rather than contradict, existing government policies and standing orders.

SECTION FIVE: PROPOSED INCENTIVE PACKAGE

Overview

This section proposes a generic incentive package that can be used by different stakeholders in Tanzania in attracting and retaining professional health workers in underserved areas. The package is based on the framework provided in Table 2. The WHO guidelines for an effective incentive scheme for health professionals as well as the experience from other countries reviewed in this study have guided the design of the proposed incentive package.

Characteristics of an Effective Incentive Package

The WHO (2008) has outlined some important characteristics of an effective incentive scheme for professional health workers. An incentive package should have clear objectives; be practical and deliverable; reflect health professional's needs and preferences; and be well-designed, strategic, and fit the purpose. The other important characteristics are that incentive packages should be appropriate to the situation; fair, neutral, and transparent; measurable; and combine financial and non-financial elements.

Clear objectives guide the incentive toward desired results—e.g., whether the incentive is focused on all staff or on professions or programs where shortages are particularly acute. **The incentive package needs to be practical and deliverable**, and realistic and achievable. An incentive package that is not delivered is not an incentive at all. Health professionals will quickly become demoralized and de-motivated if promised incentives do not come. Incentive packages therefore need to be considered in the broader budget framework for sustainability.

Health professionals' needs and preferences also need to be prioritized in incentive packages. Incentives that health professionals regard as irrelevant, as going their personal or professional values, or as actively destructive to either their own well-being or that of their clients will fail in purpose (Weller 2008). At worst, these types of incentives may create a disincentive for continued effective work.

Some of the issues to be considered in designing incentives include whether they will assist in advancing long-term strategic objectives as well as short-term goals. Other important design considerations include whether mechanisms for monitoring and evaluation can be incorporated into the package. Whether financial or non-financial, an incentive package must, as far as possible, be appropriate to the local context. This is particularly true of training and development activities, which must be adapted to local realities, such as the prevailing funding mechanisms and actual conditions and infrastructure that the staff members are working with (Weller 2008 Mathauer & Imhoff 2006).

Incentive packages should be fair, neutral, and transparent. Inequities or perceived inequities in the way incentive packages are designed and implemented are repeatedly cited as a source of de-motivation. Inequities may arise from selective access to bonuses, new programs, or salary incentives, or simply a lack of transparency and accountability in the allocation of opportunities and rewards.

Effective incentives are measurable. Their implementation is essentially accompanied by a tool by which an individual's overall work performance will be assessed by a supervisor or other feedback mechanisms such as peer review.

In developing incentive packages, **a good combination of financial and non-financial incentives is important,** bearing in mind different social and cultural differences as well as the educational background and perceptions of health staff. Financial incentives must be considered, particularly in underserved areas where health workers struggle to earn a living wage and where agencies are competing for workers to work in urban areas. Still, financial incentives alone are not sufficient to fully motivate a workforce or make it feel valued and recognized for its contribution. As noted by DeGieter *et al.* (2006) ". . . Managers should therefore not rely only on their limited number of formalized financial reward possibilities, but should also acknowledge the value of non-financial and psychological rewards."

As discussed above, effective incentive packages are those that are modified to suit the particular situation in which they will be implemented—in this case, the underserved areas. Thus, the proposed incentive package is generic and meant to be adaptable to different underserved rural situations.

Proposed Generic Incentive Package for Underserved Areas in Tanzania

Section three of this report identified four major contextual factors in which underserved areas in Tanzania could be defined. The combination of these factors may be said to act as push or pull factors for attraction and retention of professional health workers in underserved areas. For each contextual area, indicative defining characteristics were provided along with recommendations toward the design of incentive packages. These are by no means exhaustive, as underserved areas exist in different contexts. Thus, more contexts and defining characteristics can be added to address the specific reality in each underserved area.

It is proposed here that an incentive package for health workers in underserved areas should be well-structured. The structure of the incentive package and required information is summarized below. (See Appendix IV for an outline of the generic incentive package structure.)

Background data on the underserved area

Basic data on the underserved areas should be collected and compiled. It is on the background data that the design of the incentive package and its administration will be based. Data necessary for the effective design and implementation of the incentive package may include a detailed list of push and pull factors that affect professional health workers in the specific LGA or underserved area. It is also important to state actual health sector manpower demand by cadres and what is available. Hence, the human resource deficit gap ought to be clearly established.

The objectives of the incentive package

Objectives need to be clearly spelled out to guide the design and implementation of the incentive package. Each LGA could have slightly different objectives considering their different

contexts, although the main objective may revolve around attracting and retaining adequate and motivated professional health workers for the delivery of quality health services, and addressing the inequities in health sector human resources and service provision between rural and urban areas in the LGA.

Targeted health sector staff

Incentive packages need to target specific professional health worker cadres critically needed in the specific underserved areas. Target groups need to be identified by the LGAs in a transparent and participatory manner. Different cadres such as physicians, clinicians, and nurses share common needs as health workers, but they do also have specific cadre-occupational environment needs and personal expectations. These need to be addressed in the design of incentive packages. Moreover, realistic incentive packages need to be commensurate with health workers' appointment, salary level, and statutory benefits, or else the packages could become a disincentive to deserving professional health workers.

The incentive package elements

The WHO guidelines and lessons learned from different countries through the literature review clearly reveal that an effective incentive package for professional health workers should have both **financial and non-financial elements**. There is substantial evidence on the efficacy of such incentive packages from South Africa, Zambia, Kenya, Uganda, and Tanzania (Dambisya 2007). The next sections will discuss these two types of elements.

Funding for the package

The incentive package—both financial and non-financial elements—costs money. LGAs need to plan adequate budgets for implementation of the incentives, drawing from local resources, central government resources, and donor partner resources. Resource mobilization will therefore be an important LGA function in incentive package development. The funds for incentives need to be institutionalized in annual LGA budgets to promote sustainability.

Management plan

The management system for the incentive package needs to be clear and transparent, with specific roles and responsibilities defined for the implementing officers in the LGA. It is proposed that the LGA executive director be the overall incentives package manager. Although there are government standing orders governing the application of incentives, LGAs need to interpret these orders realistically and come out with practical guidelines tailored to their specific contexts and that fit within the available resource envelope.

A monitoring and evaluation plan

LGAs need to monitor the implementation process of the incentive packages, ascertain the achievement of the incentive objectives, and finally their impact. To address the specific situation in different LGAs, each LGA may develop an appropriate monitoring and evaluation system as well as tools that will include specific indicators and expected output to realize the desired goal of offering incentives.

Financial Elements

Traditional financial incentives may take a form of wage and salary, pension, insurance, allowances, and paid leave. LGAs need go further and come out with innovative financial incentives tailored to their underserved areas.

Starting salaries for professional health workers in underserved areas

It is proposed that the starting scale for health professionals—namely medical doctors, nursing officers, and laboratory technicians—posted in underserved areas be relatively higher than for those who will work in other areas. The starting salary for underserved areas may be pegged to that of recognized high-profile private facilities such as Aga Khan and Hindu Mandal private hospitals or Muhimbili National Hospital which has relatively higher salaries compared to other facilities. This strategy has worked in Angola. However, in the principal of equity, the salaries for existing staff have to be increased as well, since the higher starting salaries for new staff may be a disincentive for existing staff. This is the central government's issue since the salaries are paid by the central government.

For example, if a starting salary for a nursing officer is Tshs. 400,000 across the board, the nurse employed in the area not regarded as underserved has to start with that amount. This amount may increase according to the severity of the underserved area.

Table 3: Example of Salary Allocation

Salary notches	Salary range[3]	Remarks
Starting (Notch 1)	400,000	The recommended increase in notch is normally the normal annual increment that workers get on annual basis.
Notch 2	480,000	The start salary for the nurse in the underserved area probably may be this.
Notch 3	510,000	
Notch 4	560,000	

Allowances

Allowances are an important financial incentive for all public servants in Tanzania and may help to uplift professional workers' generally low salary incomes, which on their own are often hardly able to sustain workers throughout the month. LGAs should be able to consider different cost-effective allowances that could help to attract and retain professional staff in underserved areas. The allowances that may be justified for underserved areas include hardship allowance, risk allowance, overtime allowance, housing allowance, night allowance, uniform allowance, relocation allowance, and motor vehicle/cycle or bicycle allowance.

[3] Actual designing of starting salary and increments on the basis of severity of the underserved areas has to be done jointly with policy-makers and health practitioners. This example gives some thoughts on how to go about doing this when designing.

Hardship allowance could be provided directly to health sector staff in underserved areas where a higher entry-level salary scale for health workers may be difficult to implement. The overtime allowance is also important, as the few available staff members are usually required to work many hours. Most professional health workers in rural areas are overloaded. Housing allowance is particularly important for those areas where there are no staff houses. Uniform allowances have been used in Botswana, Kenya, and Tanzania as a way to retain nurses in the country. The uniform and risk allowances in Botswana have helped to reduce the salary gap between nurses and other health professionals[4].

A night or travel allowance should be extended to all health staff members travelling out of their stations on official duty. There is anecdotal evidence that some staff members in rural areas are not paid such allowance. Many are accommodated by relatives, friends, and village chairpersons, or at health facilities. Staff travel from a remote rural area to a bank for collection of salary should also be regarded as official travel and an allowance should be paid. Otherwise staff members in remote, underserved areas spend a significant part of their income and time collecting their monthly salaries. The LGAs may budget monthly one to two nights per diem for health staff to travel to the nearest bank for salary. The distance from the nearest bank and availability of transport has to be the main criteria.

LGAs could identify professional health workers in underserved areas who use their own basic transport means for official duty and pay an appropriate allowance in compensation. There is no official staff transport at many health facilities in rural areas. Some professional health workers own transport means, such as motorcycles, bicycles, and vehicles, which the workers sometimes use to travel on official duty.

Loans

Professional health workers engaged in the rural remote areas, compared to their colleagues in urban areas, are disadvantaged due to the lack of financial services in the rural areas which makes access to credit facilities—including loans—difficult. There are perceptions that professional workers posted to remote rural areas have their personal social-economic development at stake for lack of such opportunities. Although the government has put in place a number of schemes to enable its workers to access loans from financial and non-financial institutions—and has put in place housing schemes managed by the Ministry of Lands, Housing and Settlement Development—evidence on the extent to which those working in underserved areas have benefitted is not well-documented.

LGAs may consider various options deemed suitable for professional health workers in underserved rural areas:

- A salary advance is a form of a short-term loan by the employer to the employee guaranteed by the employer with the staff's salary for the coming month. The loan,

[4] The objective of these allowances in Botswana is not to attract staff in underserved areas but rather to reduce brain drain. These allowances can be used in Tanzania to attract workers to underserved areas.

which assists workers in case of emergency or safeguards them against financial embarrassment, is recovered at once at the end of the month. The short-term loan is important in remote rural areas, considering the severe limitations of options.

- LGAs could lobby banking and credit institutions operating in the district to develop loan products tailored to staff working in underserved areas. These may include personal development loans, motor vehicle loans, and children's education loans.
- LGAs could also lobby pension and social security funds to provide health workers in underserved areas with long-term loans. Long-term loans could enable workers to acquire important assets such as houses and land (farms) and to engage in income-generation activities.
- LGAs could lobby government to convert higher education loans into grants given to those professional health workers serving in underserved areas. An agreeable conversion rate, considering the loan amount to be converted per year of service in underserved areas, could be worked out by the government involving key stakeholders, including the professional health worker themselves.

In guaranteeing staff loans, the LGAs should give first priority to professional health staff members working in underserved areas to help retain them in those areas or bond them to the LGA or district.

Settlement allowances

It is proposed that new professional health workers posted to the underserved areas be given 21 days per diem allowance as settlement allowance. It is the practice for all new staff to be given settlement allowance equal to 14 days per diem to help them settle before getting a house in new areas. This difference signifies the need to attract professional health workers to underserved areas.

Insurance

Despite the fact that health insurance covers all professional health workers and family beneficiaries in underserved areas, generally those areas lack adequate health facilities. The LGA may liaise with institutional health service providers to work out appropriate modalities for serving health insurance clients in the rural underserved areas. LGAs may also explore possibilities of insuring professional health workers against unusual risks in their remote rural areas.

Pensions and gratuity

Health workers contribute to pensions funds like all other public servants. LGAs could attract professional health workers to their underserved areas by considering the following options:

- Reducing the contribution of health staff members in underserved areas and topping it up to increase staff members' disposable income.

- Increasing or subsidizing its contribution to health workers posted to work in underserved areas while health staff members maintain the same contribution rate. This implies that their future income will also increase.

These two options may be justified by the relative lack of suitable opportunities for income generation in rural underserved areas for health workers to help them generate savings.

- Gratuity schemes of 15% of the three years' salary may also be included in the financial package. This means that, every three years, health staff members working in underserved areas have to be paid gratuity amounting to 15% of their salaries. What can be done is for the government to increase its contribution to the pension scheme—say to 25% for health-related staff in underserved areas—knowing that at the end of three years, 15% is to be paid as gratuity.

Non-Financial Elements

LGAs can influence health workers in underserved areas by addressing their physical, developmental, and psycho-social needs through non-financial incentives. A range of non-financial incentives appropriate for the respective LGA may be developed to cover the three categories:

- Physical needs: these may include housing, medical care, transport, nutritional breaks, flexible working hours, a well-equipped and conducive working environment, maternity leave, sick leave, and recreational activities.
- Development needs: these may include professional development opportunities (short- and long-term training, and study tours), supportive supervision backstopping, and support for children's education.
- Psycho-socio needs: these include promotion, rewards and awards for hard work or exemplary achievement, job security, and compassionate (bereavement) leave.

It should be noted that most non-financial incentives have financial implications and need to be included in LGA budgets. Indeed, both financial and non-financial resources need to be within the LGA available resource envelope. LGAs have to start with a few incentives that can be accommodated in the budgets given the limitation of the budgets. Several key non-financial incentives are elaborated further in the context of rural underserved areas.

Professional development

LGAs can create professional development programs for health workers in which staff members in rural underserved areas are given first priority. Adequate plans should be made for their implementation, including budgets, contingency staffing plans to retain adequate personnel at any given time so that service delivery is not compromised, and retention plans for human resources.

Staff professional development programs need to address the immediate and long-term human resources needs in the LGAs. Immediate LGAs' human resource needs in the underserved areas

may be addressed through short courses, tailored certificate courses, or on-the-job training conducted within working localities or outside working localities in order to let staff members travel out of their working environment at least once a year.

Long-term or strategic human resources needs in the underserved areas may be addressed through staff sponsorship for diploma, degree, and post-graduate programs. Considering the relatively high cost of long-term training, LGAs may explore partnerships for staff development on long courses (exceeding an average of one year of continuous study) from the central government, Higher Education Students Loan Board, and donor partners.

To retain human resources in the underserved areas, the LGA needs to provide enabling conditions for optimum productivity and performance, and job satisfaction. This may include:

- Upgrading health facilities in the underserved areas
- Providing appropriate working gear, equipment, and supplies
- Adjusting salaries to be on par with those paid by prestigious health facilities in urban areas
- Implementing career path-related promotion and benefits.

Training a health staff member to use equipment which is not available in the working facility may be a disincentive to the staff member and may become a reason for seeking employment elsewhere. Health staff members working in underserved areas and who want to pursue upgrading courses may also be assured of upgrading after working three years. Those health workers who are employed at the level of certificates may upgrade to diploma level, those employed at diploma to degree level, and so on. This requires authorities to have a comprehensive staff development plan and to budget accordingly while ensuring that the health facilities and health service delivery are not compromised.

Health services

Health workers are highly knowledgeable of the quality of health services offered in any given facility. They understand the degree to which an illness requires the attention of a specialist and advanced diagnostic tests. If health workers are working in a locality with poor health service quality, they become highly demoralized. Therefore the mechanism through which health staff in underserved areas access better health services in higher-quality facilities within the locality or outside of it has to be developed. One way to do that is to upgrade all health staff working in underserved areas and who contribute to the National Health Insurance Fund into green card status. Green card status allows the holder to access services at high-quality private and public facilities. This can be complemented by giving them transport allowance if health care is sought outside of the locality. The upgrading arrangement has to be done with the National Health Insurance Fund and may require no extra contributions from these staff.

Free housing

LGAs may rent houses for the staff if staff houses are not in place. Arrangements should be made so that, upon reporting to the job, a professional health worker has a habitable house.

LGAs should ensure that for every health facility constructed in underserved areas, there are houses for the professional health workers to live in, or suitable, appropriate accommodations.

Different types of leave for staff in underserved areas

The LGAs should implement mandatory leave types outlined in the government standing orders, as these are workers' rights rather than benefits. Mandatory leave may include annual leave, sick leave, and maternity leave. LGAs, however, should consider other modalities suitable for attraction and retention of staff in their underserved areas:

- Paid leave should be given annually for health staff working in underserved areas instead of after every two years as is currently done.
- In the long run, LGAs should consider increasing maternity leave for male health workers in underserved areas from the current 3 days to 14 days.
- LGAs should consider payment in lieu of untaken annual leave in deserving situations in underserved areas.

In addition, compassionate leave for a close relative's death (a child, spouse, or a parent) may be accompanied by transport allowance to and from the burial place. This carries a lot of weight for Tanzanian societies and should apply to all health staff in underserved areas.

Reserve farm land for staff in underserved areas

Professional health workers posted to underserved areas may be assisted to access land for farming. The LGAs, in collaboration with the village government, may set aside farm land for use by health workers to plant seasonal crops for domestic consumption to ensure food security for their families, and also to sell to increase the health workers' incomes.

Limited staff stay in underserved areas: planned transfers or rotational transfers

A health worker in an underserved area has the right to transfer to any other area like other public servants. It is proposed that those who are employed in underserved areas stay for a period not exceeding five years. Later, they may be transferred to other areas which are not necessarily underserved to gain wider experience. However, those who are willing to stay in the same locality longer may be allowed to do so and enjoy the incentive package offered, although this could become counter-productive in the long run.

A system of rotational transfer of staff members between underserved areas and areas that are better served (such as urban areas) may be instituted to give all professional health workers in the LGAs well-rounded experience and to promote equality and equity in deployment.

Human resources incentives

Health workers in underserved areas may be given less time to be confirmed after their first appointment. It normally takes a year for any new employee to be confirmed, and it can sometimes take more than three years, especially in remote areas. The proposal here is to confirm health workers after six months if they have performed their duties satisfactorily. Confirmation is a form of job security. This should be done with care so that staff members who

are confirmed early are not transferred to other areas after confirmation. A bond of two years may be put in place after confirmation.

Spousal employment
For married health workers transferred to underserved areas, spouses already employed or qualified should be assisted by the LGAs to get appropriate employment within the LGA in the locality or nearby.

Addressing the Big Picture of Health Staff Supply

The scarcity of health staff in underserved areas is complicated by the low supply of health workers. Addressing this problem requires a deep analysis of why there is low enrollment of health-related professionals. Given this problem, an incentive package has to go deeper than only addressing those who are already in the market. Even if the government provides a good package for health workers working in underserved areas and manages to attract those health workers, it will create scarcity somewhere else. If health workers move from private facilities to public underserved facilities, scarcity will be created in the private facilities that are saving other people. This argument calls for the need to include in the incentives a mechanism to attract students from secondary schools to enroll in science subjects. That will require massive campaigns, providing scholarships for those in the sciences, and providing other relevant incentives to address this problem in the long run.

SECTION SIX: CONCLUSION AND RECOMMENDATIONS

Conclusion

Human resources are a major input in health systems and constitute the key to health service delivery in developing and developed countries. Health staff costs dominate health services expenditure, and ongoing shortages of health professionals present a real and direct threat to the continued delivery and development of quality health care services.

However, scarcity of human resources in the health sector is a global phenomenon that requires considerable resources to address. The situation is worse in resource-constrained developing countries, especially sub-Saharan Africa. Underserved areas are now synonymous with rural remote areas and present direct challenges to national health policies and efforts toward the achievement of the Millennium Development Goals. Incentives, both financial and non-financial, provide one tool that governments and nongovernmental organizations can use to develop and sustain a workforce with the skills and experience to deliver the required care. Not only do incentive strategies require political will but also a financial commitment from the LGAs, central government, and donor partners for sustainability.

As is evidenced in the literature reviewed in section two, use of incentives has helped some countries to attract staff to public facilities, particularly to underserved areas. In Tanzania, BMAF has put in practice the use of incentives in some rural areas to attract and maintain professional health staff. Available evidence shows that staff recruited under the BMAF program have stayed and worked in such areas. However, the criteria used to offer such incentives are not well-defined.

The framework for defining the underserved areas and designing an incentive package for rural underserved areas proposed in this desk study is generic and may be adapted by LGAs to fit in their own contexts. It is important that LGAs include in their budgets the resources for providing sustainable incentives and mobilize other sectors to improve the difficult macro environment in rural areas that push away professional workers, including health sector staff. Due to the increasing national population and demand for professional health workers, the big challenge is for the government and other health stakeholders to address the long-term supply professional health workers. The national output of professional health workers is still low, and the increasing regionalization and globalization may also prey on this low output by offering better terms and prospects. This remains a big challenge as it takes relatively considerable financial resources and time to train professional health workers, and the proportion of students interested in science courses seem to be falling over time.

Also important to note is that underserved areas are transitory: they will not remain permanently underserved as efforts are gradually made to reduce the difficult multisectoral conditions that make them underserved. The improved infrastructures and social services in some areas, for example, will relieve some of the hard conditions, thereby making the area more habitable and attractive, thus reducing the costs of incentives.

Recommendations

The use of financial and non-financial incentives may reduce the problem of the shortage of staff in underserved areas to a certain extent as has occurred in some countries reviewed in the literature. The framework for defining and designing incentive packages, proposed in this study, is generic and therefore not comprehensive. It is subject to the LGAs' capacity for adaptation. The following recommendations are put forward:

- **Support LGAs** without adequate capacity to design comprehensive incentive packages.
- **Collect primary data from stakeholders**, including practicing health staff, students, policy-makers, and LGAs that is required for the development of a comprehensive framework for defining and designing incentive packages.
- **Involve professional health staff working in underserved areas** in designing the incentive package. A good incentive package is one that involves the beneficiaries.
- **Document the existing health sector staff incentives** in public health facilities, private and nongovernmental facilities, and **conduct a SWOT** (strengths, weaknesses, opportunities, threats) **analysis** to generate data and lessons on what works and what does not. This may help to inform the designing of effective incentive packages in specific LGAs and other health facilities. The current desk study is limited to reviewing available literature rather than generating new data by working with a reasonable sample in the field.

Some other innovative ways to avail health staff in underserved areas need to be used: The following ways are recommended:

- **The use of compulsory service:** This is a strategy whereby recent graduates would be required to work in a rural area for one year. This can be taken to be a part of training before they are licensed to practice as professionals. This has two advantages: that an individual may like the place and stay there forever and that every year, graduating students will go to those areas and provide services.
- **Bonding:** Bonding was used in past years as mechanism to retain staff in various sectors. This practice faded away due to economic liberalization. This practice has to be started again and used for health staff to work in rural underserved areas. The education grant proposed in the financial package should be used as a bond for two years to any recipient to work at least two years in those areas.
- **Use of retired health staff:** The use of retired health employees is common to many countries. Retired staff members have the advantage of not having young children who will require school in underserved areas. Arrangements can be made to employ the retired personnel on a contract basis and post them to those health facilities with a severe shortage of health workers.

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APPENDIX I: TERMS OF REFERENCE

Developing a multisectoral criteria for defining underserved areas in the health sector as a basis for the development of an incentive package

Background

The Benjamin Williams Mkapa HIV/AIDS Foundation (BMAF) was founded in 2006 as a nongovernmental organization to primarily work in partnership with the government and other partners to contribute effectively in the national response to the HIV/AIDS pandemic. BMAF was established to oversee various programs under the foundation which were principally implemented in 52 underserved districts. The foundation intends to play this role by developing highly need-responsive programs aimed at supplementing and complementing government efforts by enhancing the delivery of quality HIV/AIDS prevention, care, treatment, and other related services to the people of Tanzania.

Inadequate staffing of skilled health workers is one impediment of health sector performance in the country. There are many factors that underlie this shortage which relate to problems of poor economic performance and management:

1. Tanzania went through a period of steep economic decline from the mid-1970s to the mid-1980s, which disrupted national human resources development due to budget constraints. A combination of lower wages and the decline in the performance of various institutions resulted in a severe brain drain, especially in the health sector.
2. The Structural Adjustment Programs imposed in the 1980s led to a freeze in public service employment, contributing immensely to the severe health workforce shortage the country is experiencing today.
3. The deterioration in the quality of tertiary education system over the past two decades has affected the quality of new recruits into the public service.
4. Furthermore, there is evidence suggesting that the process of recruitment in the public service, including the health sector, is not consistent with best practice[5].

The above-mentioned factors—coupled with increased population and demand for services, including health care—have increased work pressure to the available workers. The health sector in the country is one of the sectors which has witnessed a critical shortage of skilled human resources, thereby hindering the capacity to deliver quality health services. Currently, it is estimated that the country's capacity to deliver health service stands at 38%. The situation is worse in the rural areas when compared to the urban areas. Available statistics show that currently in Tanzania, the doctor-to-patient ratio is 1:26,000. This ratio is far below the recommended WHO standards of 1:10,000. This situation not only results in burnout to the existing workforce but also puts the country at risk of failing to attain its goal of providing good

[5] GOT/PO-PSM Annual State of the Public Sector Survey

health care to its people, especially in rural underserved areas. One of the obvious results of this shortage is low staff morale, consequently leading to low productivity in the health sector.

In the effort to deal with the shortage of skilled manpower in the county, the government in the late 1980's had laid down strategies whereby students were bonded to work for the government for five years in all areas, including rural areas. This ensured the availability of skilled personnel in underserved areas. Due to changes in policies and the dynamics in the labor market, the government abandoned the bonding policy for graduating students to work in the areas of the government's preference.

Currently, the placement of skilled personnel in the health sector is done centrally through direct postings from the MOHSW. The applicants do not get to choose where they would prefer to work, so some staff members do not report to their duty stations and sometimes leaving upon reporting. As such, those places perceived as underserved areas have suffered the most in terms of recruiting and retaining skilled manpower in many sectors, including health.

Despite the government's efforts to improve conditions of service, including increasing salaries for the health sector when compared to other sectors, the underserved areas have not shown significant improvement in recruiting and retaining staff. For the health sector, the situation is worsened by the fact that the demand for health workers has been increasing faster than the ability of the government and other stakeholders to supply them. The training of health personnel takes longer than training of personnel for other professions. This, coupled with the increased drop of students interested in science subjects, has continued reducing the supply of health workers in relation to the demand for them. As a consequence, the few graduates who enter the labor market each year are absorbed by the increasing number of health facilities run by private, religious, and nongovernmental organizations mostly located in urban areas and the few graduates remaining join government facilities with only a limited number in rural underserved areas.

Although a few district councils in the country have developed incentive packages consisting of monetary and non-monetary benefits to attract health personnel in their undeserved areas, there are no national guidelines available to define criteria for underserved areas. Worse still, no comprehensive study has established and defined underserved areas or made recommendations on how to design a package to attract staff to such areas.

Various stakeholders, including BMAF through the Mkapa Fellows Programme and the Emergency Hiring Project, have developed some criteria to define the concept of underserved areas. However, the major limitation of these efforts is the inability to cover all parameters that can be used as a guide to define underserved areas. Despite this limitation, the BMAF has managed to design an incentive package which has contributed to the retention of its staff in underserved areas by 82%. Other LGAs, notably Meatu and Kongwa, have reported that they have recruited and retained health workers in their districts reasonably as compared to the situation prior to introducing the incentive package.

Due to the ongoing initiatives of providing incentive packages and good results of retaining staff in a few areas mentioned above, the Tanzania Human Resources Capacity Project, in collaboration with the MOHSW, is implementing several interventions that complement the government's efforts to address HRH challenges (as narrated in the Health Sector Strategic Plan III). The project is implemented within the country's policy framework and through local institutions to build on what exists, promotes government ownership, and engages with partners to improve the delivery of health and social services. BMAF is one of the local implementing partner focused on district strengthening.

It is from the above background that BMAF, under the Tanzania Human Resources Capacity Project, intends to develop comprehensive multi-sectoral criteria as a guide for defining underserved areas in the health sector as a basis for the development of an incentive package. A team of consultants with different backgrounds will be deployed to carry out a study and accomplish this task.

Objectives of the Consultancy

To develop a multisectoral criteria for defining underserved areas in the health sector which will ultimately be used as the basis for developing an incentive package for the underserved areas in the local government set-up.

Specific objectives

1. Review literature on the incentive packages available and recommend best practices in using incentive packages
2. Identify and analyze multisectoral factors that will form the basis for defining underserved areas and designing a monetary and non-monetary incentive package for the health workforce in LGAs
3. Assess the structural and operational challenges influencing the implementation of the incentive package in the local government set-up and recommend alternatives solutions
4. Based on developed criteria, design an incentive package that can be easily adopted by the LGA.

Scope of Work

The scope of work for this consultancy assignment will include:

- Preparing an inception report that will narrate the:
    - Consultant's understanding of the objective
    - Workplan for the activity specifying the activities and sub-activities, deliverables, and timeframe of each
    - Approach for stakeholders' review and dissemination meetings
- Reviewing literature on the subject

- Sharing with the stakeholders the assessment findings and proposed multisectoral criteria for defining underserved areas in the health sector
- Incorporating the stakeholders' inputs into the draft package
- Compiling and writing a comprehensive report of the findings.

Methodology

To undertake this assignment, both quantitative and qualitative techniques will be employed. Methods to gather information will include:

- Reviewing the appropriate literature on the underserved areas and related incentive packages in general and in the health sector in particular.

Outputs/Reporting Requirements

The main deliverables of the study will be:

- Multisectoral criteria for defining underserved areas in the health sector as a basis for the development of an incentive package for underserved areas
- A proposed regionalized incentive package to promote easy adoption by the LGA
- A draft report to be shared with stakeholders
- A comprehensive report of findings in hard and soft copy to be submitted to BMAF.

Duration

It is anticipated that the exercise will be completed in 38 working days starting in February 2010. The consultants will work with the BMAF internal team to expedite the process within the timeframe.

Consultant Qualifications

The consultant undertaking the assignment should have the following sets of qualifications:

- A postgraduate degree in public administration/political science, management, economics, and related subjects
- At least ten years' experience as a researcher or a consultant in the wider scope of human resources and organizational development fields
- Knowledge and demonstrated experience in consulting, research, and public service work in developing countries
- An understanding of the workings of public service organizations in Tanzania, especially within the context of public service reform
- Knowledge and experience in human resources preferred
- Experience in having undertaken similar assignment preferred.

APPENDIX II: AMOUNT ALLOCATED TO UNDERSERVED LGAS (2010/2011)

Region	District	Description of projects funded	Amount (000,000 Tshs.) in FY 2010/2011
Arusha	Karatu DC	Council buildings	300
	Meru DC	Council buildings	600
Coast	Kibaha DC	Water	200
Dodoma	Chamwino	Council buildings	800
Iringa	Njombe TC	Council buildings	800
	Kilolo DC	Council buildings	300
Kigoma	Kigoma/Ujiji MC	Council buildings	400
	Kasulu DC	Council buildings	400
Kilimanjaro	Rombo DC	Support to drought	625
	Siha DC	Council buildings	400
Lindi	Ruangwa DC	Council buildings	400
Mara	Musoma MC	Council buildings	400
	Serengeti DC	Council buildings	300
	Rorya DC	Council buildings	840
Mbeya	Chunya DC	Hospital	400
	Ileje DC	Hostel	250
	Kyela DC	Hospital	400
		Bridges	300
	Mbeya DC	Health center	210
		Hostel	250
	Rungwe DC	Hostel	250
		Government quarters	300
	Mbarali DC	Hospital	400
		Bridges	250
		Water	250
Morogoro	Morogoro MC	Bridges	600
	Morogoro DC	Council buildings	500
	Kilosa DC	Hostel	250
		Government quarters	300
		Malambo/water	200
	Kilombero DC	Bridges	450
		Hostel	250
	Ulanga DC	Bridges	450
		Hostel	250
		Government quarters	300
		Hospital	400
	Mvomero DC	Bridges	320
		Government quarters	300
Mtwara	Mtwara DC	Hostel	250
	Newala DC	Hostel	250
	Masasi DC	Hostel	250
		Government quarters	300
	Tandahimba DC	Hostel	250
	Nanyumbu DC	Government quarters	300

		Health center	200
Mwanza	Ukerewe DC	Government quarters	300
		Council buildings	300
		Hospital	400
	Geita DC	Bridges	400
	Kwimba DC	Government quarters	300
		Hostel	250
		Hospital	200
		Water	400
	Misungwi DC	Government quarters	300
		Council buildings	300
		Bridges	400
Ruvuma	Songea MC	Bridges	300
	Songea DC	Council buildings	700
		Hostel	250
	Tunduru DC	Hostel	250
		Hospital	400
	Mbinga DC	Hostel	250
		Bridges	300
	Namtumbo DC	Rest house	250
		Hospital	400
Shinyanga	Shinyanga MC	Bridges	400
	Maswa DC	Water	500
		Hostel	250
	Meatu DC	Bridges	350
	Bukombe DC	Bridges	400
	Kishapu DC	Council buildings	500
		Government quarters	300
Singida	Singida MC	Bridges	400
	Iramba DC	Water	300
	Singida DC	Special school	50
	Manyoni DC	Bridges	300
Tabora	Igunga DC	Bridges	400
	Nzega DC	Bridges	400
	Tabora DC	Government quarters	300
		Water	200
	Urambo DC	Bridges	400
	Sikonge DC	Council buildings	500
Tanga	Tanga CC	Hospital	400
		Special school	35
	Korogwe TC	Special school	35
	Mkinga DC	Council buildings	700
		Government quarters	300
		Hostel	250
	Handeni DC	Bridges	400
	Lushoto DC	Special school	35
	Kilindi DC	Council buildings	700
		Bridges	250
Kagera	Biharamulo DC	Council buildings	200
	Chato DC	Government quarters	300

		Council buildings	700
	Muleba DC	Bridges	400
	Misenyi DC	Bridges	200
		Council buildings	700
		Government quarters	300
	Ngara DC	Bridges	400
Dar es Salaam	Ilala MC	Environmental sanitation	500
	Kinondoni MC	Environmental sanitation	500
	Temeke MC	Environmental sanitation	500
	Dar es Salaam CC	Environmental sanitation	500
Rukwa	Sumbawanga MC	Council buildings	500
		Bridges	400
	Mpanda TC	Council buildings	700
	Mpanda DC	Hostel	400
		Special School	400
		Hospital	400
		Bridges	800
	Sumbawanga DC	Government quarters	300
		Hostel	250
	Nkasi DC	Government quarters	300
		Hostel	250
Manyara	Babati TC	Bridges	400
		Council buildings	700
	Babati DC	Bridges	250
	Hanang DC	Government quarters	300
		Staff compensation	180
		Classrooms	250
	Kiteto DC	Classrooms construction	100
	Mbulu DC	Government quarters	300
		Classrooms construction	250
	Simanjiro DC	Government quarters	300
		Hostel	250

APPENDIX III: CONTEXTUAL FACTORS

Scales for common contextual factors defining underserved areas, specific problems, and recommendations for designing incentive packages

No.	Contextual Factors	Defining problems		Remarks
1	**Physical-geographical location**			
1.1	Distance from the center	Measures the distance from Dar es Salaam to the regional headquarters	1.0	
1.2	Roads conditions to the regional and district headquarters	Tarmac road	0	It is assumed that all the roads to regional and district headquarters are passable throughout the year, regardless of the level.
		Gravel road	2.0	
		Earth road	4.0	
1.3	Distance from the regional headquarters to the district headquarters	20-50 kilometers	2.0	
		51-100 kilometers	3.0	
		101-350 kilometers	5.0	
1.4	Road conditions for district council	Tarmac	0	
		Gravel and passable throughout the year	2.0	
		Earth and passable throughout the year	3.0	
		Earth and not passable at some times of the year	6.0	
1.5	Availability of public transport within the district and from the regional headquarters to other destinations	Reliable public transport available on daily basis	0	Transport from regional headquarters to other destinations is important as it can facilitate movement of staff to visit family and relatives during the weekend or during off-duty time.
		Public transport available in some days	2.0	
		No public transport	6.0	
1.6	Availability of communication infrastructures to allow services such as mobile phone and Internet facilities	Mobile phones inaccessible	5.0	Internet and mobile phones have become important communication channels, especially for the young generation.
		No Internet accessibility		
1.7	Unavailability of bank facilities	Nearest bank branch within a 20-kilometer and above radius	5.0	It becomes difficult to get salary if the bank branch is far from the workstation.
1.8	House condition within locality	Habitable houses that may be rented by health workers	4.0	Even if there are no houses, particularly for health professionals in the district, they may rent around, provided they are habitable.
1.9	Electricity and water	No electricity and water	4.0	
1.10	Isolated small island areas	Isolated islands with poor transport means	5.0	Statistics show that areas like Uzinza, Namisati, and Mafia have critical shortages of human resources.

1.10	Areas close to national parks or game reserve areas	Work station within the radius of 10 kilometers from a game reserve or national park	2.0	There is a tendency of wild animals to kill people in the nearby areas.
	Total geographical- and infrastructure-related factors		**66**	
2.0	**Social services-related factors**			
2.1	Availability of both private primary and secondary school	Schools are not within a 2-kilometer radius	7.0	School availability is an important determinant for staff with children to make decisions about work location.
2.2	Health facility availability at village, ward, and district levels	No house for health worker	7.0	
2.3	Quality of social services	Quality of education and health services are said to be poor (low pass rate at school, health facilities not equipped)	6.0	
	Total social services-related factors		**20**	
3.0	**Cultural-related factors**			
3.1	Witchcraft	History of witchcraft in the community		This factor, important as it may be, requires one to conduct further research. Hence no weight is attached.
3.2	Negative reception by the local community	New staff being intimidated by local community members	4.0	
	Total cultural-related factors		**4.0**	
4.0	**Human resources management and working environment factors**			
4.1	Availability of equipment and other supplies	Basic equipment and supplies are not available.	3.0	
4.2	Training opportunities	Perceived unavailable training opportunities.	3.0	
4.3	Perceived poor working environment		2.0	
	Total human resource factors		**8.0**	
	Grand total		**98**	

APPENDIX IV: PROPOSED OUTLINE OF THE GENERIC INCENTIVE PACKAGE STRUCTURE

1. Background information on the underserved area
2. Objectives of the incentive package
3. The targeted health workers
4. A summary of the incentive package elements
5. The financial elements:
    - Starting salaries and systematic increments
    - Appropriate allowances for professional workers serving in underserved areas
    - Staff loans and other LGA-guaranteed loan products suitable for professional heath workers in underserved areas
    - Insurance coverage for professional health workers and policies against special risks in underserved areas
    - Pensions
6. Non-financial elements
    - Professional development opportunities
    - Health services
    - Staff housing
    - Different types of staff leave appropriate for staff working in underserved areas
    - Reserve farm land
    - Rotational tours of duty
    - Human resources issues
    - Spousal employment
    - Schools for children
    - Health insurance coverage for health workers and family
    - Basic services such as water, electricity, banking services etc
    - Knowledge sharing visits/meetings among district councils
    - Public transport to main towns
    - Staff recreational activities
7. Funding of the incentive package
    - Local resources

- Central government budget resources
- Donor partners' resources

8. A multisectoral plan for improvement of the contextual-push factors in underserved areas
    - Factors outside the health system in the underserved areas can push out health workers—factors such as schools for staff members' children, and transport to and from workplaces.
    - Sectors such as education, water, and roads are key to pulling staff to underserved areas.
    - There needs to be a mobilization plan for the different sectors toward mitigation of the push factors. This would include addressing long-term issues such as fixing infrastructure problems and creation of alternative income-generation activities, etc.
9. Management plan for the incentive package
    - Incentives package manager
    - Incentive package management guidelines
10. A monitoring and evaluation plan for the implementation of the incentive package and its impact.