



Paupers, Princes and Paper: Vouchers Revisited—can small enterprises save government programs?

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This paper presents a case study that highlights the roles of small enterprises and vouchers in a government program that is distributing subsidized insecticide-treated nets to vulnerable populations across Tanzania. Within the context of a large publicly-funded campaign to roll-back malaria, the private sector is the mechanism by which even remote rural consumers are being reached. In essence, micro and small businesses are providing a cost-effective service to the public sector, receiving their usual commercial mark-up as payment for this service. Vouchers are the vehicle of exchange throughout the system, enabling target clients to acquire nets, and providing the means for tracking the impact and outreach of the program. As results are being monitored, there is evidence that not only is the public-private partnership a success, but that the commercial distribution of unsubsidized insecticide-treated nets has been strengthened and widened.

Introduction

This paper describes *Hati Punguzo*, a project through which MEDA is assisting the Tanzanian Ministry of Health in its commitment to reach households across the country, and to dramatically reduce malaria incidence in vulnerable populations. *Hati Punguzo* is the colloquial term used for the Tanzania National Voucher Scheme (TNVS) and is Swahili for 'discount voucher.'

This paper provides background information on vouchers in small enterprise development, details of the country and programme contexts for *Hati Punguzo*, a description of the intervention including the roles of public and private sector players, costs and preliminary results, and concluding comments with possible future directions.

Vouchers and Small Business Development

In small enterprise development, vouchers are generally recognized as a tool for the stimulation of commercial training markets – that is, the subsidized purchase of business training by micro and small enterprise owners and operators from private sector trainers. For example, the Inter-American Development Bank (IDB) funded eleven voucher programmes for business training in Latin America in the late 1990's and early 2000's, costing on average between \$1 and \$2 million dollars for each initiative. During the same time period, the Swiss Development Corporation financed several training programmes in Latin America and Asia, with programme budgets of a few hundred thousand dollars each (Goldmark et al, 2001, p.10). Perhaps the most ambitious and

focused training voucher programme was the \$21.8 million Micro and Small Enterprise Training and Technology Project (MSETTP) that ran from 1997 – 2002 in Kenya (Hallberg, 2006, p.56). The intent of all the above initiatives was to increase demand for training by small business owners, and to improve the sustainable supply of quality training programs. In general, evaluations have been inconclusive but suggest that the promise of a vibrant unsubsidized training market has not been achieved (see, for example, Gagel, 2005). A recent assessment by the World Bank of its voucher programme in Kenya has been even more critical of the results of the subsidized initiative – although 35,000 micro and small businesses received training, the overall impact of the programme on the training services market was modest and “distortionary rather than developmental” (Hallberg, 2006, p.65).

Less well known, ‘vouchers’ have also been used in related programmes in the form of food stamps, housing vouchers and public education coupons (Goldmark, 2003, p.3). Analysis of such ventures may determine that these subsidies have more positive outcomes, but the level of analysis required is beyond the scope of the current paper.

The Hati Punguzo voucher scheme is very different from the training projects described above, and may have more in common with housing vouchers and education coupons. The primary goal is to provide a subsidized product (public good) to hard-to-reach consumers (in this case, rural women). Additional key objectives are to build on the burgeoning private sector for insecticide treated net (ITN) manufacturing and distribution, and to leverage the delivery capacity of small businesses, thereby creating a ‘win-win’ public-private partnership. Hati Punguzo has been successful on all these counts, and provides a scalable and sustainable model for public-private partnerships that offer country-wide delivery systems for essential products and services. Further, Hati Punguzo is contributing

to the development of commercial networks of small enterprises for the delivery of *unsubsidized* products to those who can afford to purchase the goods and are outside the reach of public subsidies.

Country Context

In 2005, Tanzania ranked 164th out of 177 countries on the United Nations Human Development Index, with a life expectancy at birth of 46 years, a literacy rate of 69%, 41% primary, secondary and tertiary school enrollment, and a GDP per capita of \$621 (UNDP, 2006, p.222). The per capita GDP is misleadingly positive since the richest 10% of the population accounts for 30% of income and consumption (UNDP, 2006, p.273). Public expenditure on health was 2.7% of GDP (as of 2002) compared to between 6% and 7% in the United Kingdom, United States and Canada (UNDP, 2006, p.284-287).

According to the Centers for Disease Control (CDC) in the United States, the entire 35 million populace of Tanzania lives at risk of contracting malaria, and this represents the third largest at-risk population in the world (CDC, 2006). Further, CDC states that malaria is the leading cause of death in Tanzania, with one person – usually a child – dying every five minutes.

Project Context

Hati Punguzo is a significant component of the Tanzanian Ministry of Health’s response to the Abjua Declaration.

The Abuja Summit on Roll-Back Malaria was held in Abuja, Nigeria on April 25, 2000, with representation by heads of state and government of the 53 countries of Africa. The meeting resulted in a concise two-page statement of goals, assumptions, and commitments – The Abuja Declaration on Roll-Back Malaria in Africa (African Heads of State and Government, 2000). The second of the three resolutions included in the Abuja Declaration is a commitment to ensure that

60% of pregnant women and children under five – the two most vulnerable populations – are protected from contracting malaria by the best protective measures available “including insecticide treated mosquito nets” (African Heads of State and Government, 2000, p.2).

In response to the Abuja Declaration, Ministries of Health, the Global Fund (the Global Fund to Fight AIDS, Tuberculosis and Malaria), and international partners set targets and plans for specific countries, including Tanzania. For its part, Tanzania decided to achieve its targets without undermining the fledgling but vibrant commercial sector for ITNs.

ITNs have proven to be one of the most effective deterrents to the spread of malaria, especially amongst those most vulnerable – pregnant women and children under five years of age. Additionally, ITN insecticides are approved by the World Health Organization, and are a much healthier solution than the toxic mosquito coils used throughout much of the country. Tanzania, unlike most other countries in Africa, has local manufacturing of ITNs, and almost 20% of the households have acquired an ITN (CDC, 2006). Until recently this has been predominantly in urban settings, with distribution to rural areas limited to non-existent.

Following the Abuja Declaration, the Ministry of Health in Tanzania launched the National Insecticide Treated Net Programme (NATNETS). It is a long-term multi-donor, multi-partner initiative to promote the nationwide use of ITNs by making nets affordable, accessible, and acceptable. NATNETS is made up of complementary interventions aimed at: (i) increased demand creation for ITNs; (ii) a national public-private partnership for developing a sustainable domestic commercial ITN market; and (iii) targeted subsidies for high risk groups (Magesa et al, 2005, p.3). The overall goal of NATNETS is to massively scale up the use of ITNs in Tanzania.

As part of this larger programme, the Hati Punguzo project is responsible for the

voucher scheme that involves both public and private sector players, and ensures that ITNs reach disadvantaged consumers in remote communities. MEDA, as logistics contractor for the project, operates under a strict set of targets, established by the Tanzanian Ministry of Health, agreed to by MEDA, and vetted by the Global Fund. These include, but are not limited to, geographic reach, number of vouchers distributed and redeemed, and number of participating retailers.

Description of Project Implementation

The Tanzania National Voucher Scheme, Hati Punguzo, has facilitated the development of a public-private system, in which: 1) commercial trading channels comprise the product delivery mechanism for both subsidized and unsubsidized nets; 2) the public sector distributes a subsidy in the form of a voucher to target clients; and 3) the voucher acts as both the vehicle of exchange and the primary tool for monitoring.

On the product delivery side, private sector players carry on business as usual – they manufacture, distribute, and sell products. Hati Punguzo impacts the private sector supply chain in that the distribution networks are dealing with increased ITN sales – making nets available in many communities for the first time. This means that distributors and retailers have expanded their product lines, and consumers – whether voucher-holders (subsidized) or unsubsidized – can purchase an ITN in their local shop. Prior to Hati Punguzo, small retail outlets existed in even small and remote communities, but shopkeepers did not generally sell nets due to the upfront investment required. Shop owners preferred to stock reliable merchandise with predictable sales. These retailers now stock nets according to projected purchase numbers, and exchange them for vouchers or sell them to customers with cash. Manufacturers and wholesalers are tapping into both existing and newly expanded distribution networks, and reaching more

consumers with their ITNs. In some cases, traders deliver nets from manufacturers to wholesalers in the main urban centers. One of the major manufacturers, encouraged by voucher sales, has set up distribution depots in these district towns. Retailers typically pick up nets from one of the many manufacturers' or wholesalers' distribution outlets. In Dar es Salaam, the capital city, manufacturers and wholesalers have established mobile units that deliver nets directly to retail outlets.

From the consumers' perspective, the process is straightforward: a pregnant woman goes to the local health clinic for her prenatal appointment. As part of the consultation, pregnant women receive a voucher for an ITN that can be redeemed at the local shop. The woman takes the voucher to the shop, and can choose the brand, size and colour of net that suits her (from the certified nets), hand over the voucher, and pay a small fee for the transaction. This relatively small amount ensures commitment on the part of the consumer to the product.

The public sector's role in this system is threefold. First, the Ministry of Health, through a grant from the Global Fund, subsidizes the cost of the nets and the operation of the voucher scheme. Secondly, the Ministry of Health must ensure that the subsidies reach target clients; this is accomplished by ministry staff delivering vouchers to clinics as part of their regular visits to distribute medications. As such, the ministry incurs very limited additional cost, and no fundamental changes to procedure. In turn, trained clinic staff disburses vouchers to pregnant women during their routine prenatal consultation. In order to stimulate demand for vouchers, and to ensure that information provided to pregnant women is accurate, public awareness campaigns and training of clinic staff are carried out by two programme partners – CARE and World Vision.

The Hati Punguzo logistics team ensures that vouchers are produced and securely stored, enter the voucher distribution

system, and are subsequently tracked. Vouchers are the vehicle that make the subsidization of ITNs possible; acting as both the currency of exchange from the Ministry of Health to the consumer and up through the supply chain, and as the monitoring system for the series transactions in the system. In order to manage the Hati Punguzo process, MEDA developed a state-of-the-art tracking and security system. The latest in bar-code technology provides tracking functionality, while a registered watermark and a UV stamp reduce the potential for fraud. The tracking system is accompanied by an operations manual that details the correct procedure at each stage and for each transaction.

However, for each stakeholder in the system, there are straightforward and simple reporting requirements – for example, retailers must collect all vouchers, and identify the recipient of the ITN on the voucher. The retailers' records should dovetail with complementary records at the clinic that indicate to whom vouchers have been distributed, and the accompanying voucher number. All stakeholders, including the ultimate ITN users, the health clinic staff, manufacturers, wholesalers and retailers have been trained on the necessary procedures that make the various parts of the model work seamlessly.

Throughout Tanzania, even in remote and rural villages, the Hati Punguzo project has resonated with pregnant women. They attend health clinics at the appointed time to receive the voucher that allows them to buy a subsidized ITN in a nearby shop. Women embrace the dignity and control they experience through the simple act of deciding the size and colour of the net that will protect their family. Friends, neighbors and other family members are inspired to purchase nets from the same village shop – a shop that might never have invested in ITN inventory in the past, but is now able to include nets as regular stock.

Client Spotlight: Leia's story is like hundreds of thousands of others in Tanzania that attest

to the impact of this project. Leia is a Masai woman from the Morogoro region of Tanzania and would not normally attend a clinic for prenatal care. She learned from her friends that by attending a clinic she could receive a voucher to subsidize the cost of an insecticide-treated mosquito net by 2,750 Tanzanian shillings (exchange rate of 1250 Tanzanian shillings to one USD at the time of writing this paper.). Nets usually cost 3,000 to 7,000 shillings, so a voucher may bring the price down to as low as 250 shillings. Leia attended the clinic for her check-up and was provided with a voucher that she redeemed for an ITN that is now protecting her and her newborn baby from malaria.

Programme Partnerships

MEDA works with a wide range of partners in the implementation of Hati Punguzo. The roles of each of the implementing partners were established through a competitive bidding process by the Ministry of Health, and objectives, targets and outcomes are refined during regular stakeholder meetings.

The Global Fund is the key donor, contributing almost \$6 million per year to Hati Punguzo. In addition to the Global Fund, Irish Aid, Swiss Development Corporation, and the Swiss Tropical Institute provided funds for the project launch and for its coordination with the integrated NATNETS programme. The PERLS Foundation also provided financial support to MEDA for the production of a video to raise awareness internationally. The Ministry of Health is the government partner that has programme oversight – dedicating staff to manage and oversee their areas of responsibility in project implementation. Further, the Ministry facilitates the Hati Punguzo project through the utilization of the public health system to distribute the vouchers. CARE and World Vision, training partners in the project, have held public awareness campaigns, promoted behavioral change through community education, and have conducted training

modules for health sector workers. The London School for Hygiene and Tropical Medicine (LSHTM) and the Ifakara Health Research and Development Center (IHRDC) monitor the impact of the programme with reference to the use of ITNs and reduction in malaria-related deaths. As detailed elsewhere, private sector players are the project partners responsible for manufacturing, distribution, and retail sales. Commercial stakeholders participate in the voucher scheme, and follow the necessary procedures to ensure the system functions, motivated by clear business benefits.

Most importantly for Hati Punguzo programme success, everyone is doing what they do best without adding new levels of administration, or additional management and distribution costs. The public sector and the business community are interacting in a new way to cost-effectively serve disadvantaged populations in Tanzania, and to foster win-win relationships for all concerned. Hati Punguzo has proven that commercial networks represent a viable option for health care delivery in situations where the public system is overburdened. As a consequence of utilizing the Hati Punguzo voucher mechanism to leverage commercial distribution, the public sector is developing a vision of how government policies can be turned into actions, in practical and viable ways, even after the donor-led partnerships have come to an end.

Hati Punguzo Results, Costs and Monitoring

Hati Punguzo is well on the way to achieving the 60% coverage rate for targeted clients, and has surpassed a key milestone of over 1,000,000 redeemed vouchers, with additional vouchers distributed at a rate of 95,000 – 100,000 per month (MEDA, 2006). According to established research, this achievement represents as many as 5,500 lives that can already be attributed to the project (5.5 lives per 1000 nets is based on analysis of the percentage reduction in mortality combined

with baseline data on mortality rates prior to ITN usage; see Lengeler, 2004). Independent monitors have also recorded that expectant mothers are coming to clinics sooner in pregnancy and in greater numbers resulting in better maternal and infant care (LSHTM and IHRDC, 2005). And, there are reports from MEDA staff that families who use ITNs are less likely to use environmentally harmful and unhealthy mosquito coils.

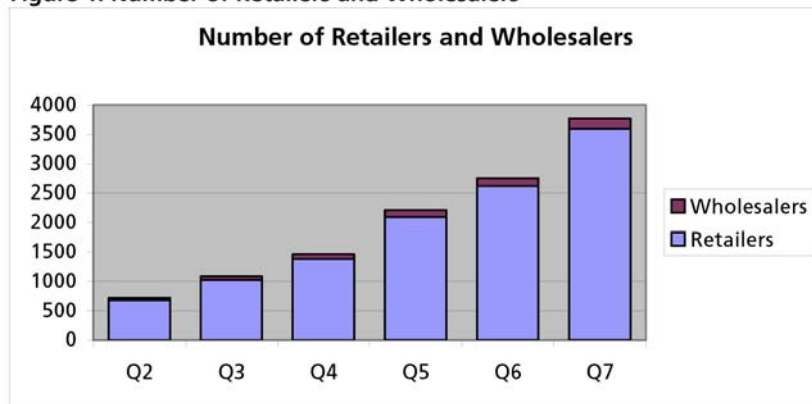
The results regarding the development of a commercial network are presented in figure 1 below that depicts the growth in the number of retailers and wholesalers participating in Hati Punguzo since project inception. By the end of March 2006, a total of 3,773 retailers in 21 regions were involved in ITN distribution, and the number of wholesalers had reached 174 (MEDA, 2006).

A key goal of the programme, set by MEDA, was to ensure retail availability of an ITN within ten kilometers of each health clinic. At the December, 2005 MEDA ITN retreat, MEDA regional staff committed themselves to meeting an aggressive target of registering a retailer within five kilometers of every clinic. This was decided since there is a positive relationship between voucher redemption and the close proximity of a retailer to a health clinic. As a result of the commitment made by MEDA regional staff, there was a large increase in the number of retailers in the first quarter of 2006 (MEDA, 2006).

Hati Punguzo's annual budget is close to \$ 6 million – for reaching pregnant women alone. (Based on the success of Hati Punguzo, USAID is investing funds to target children under five with a similar voucher programme.) This is a huge investment to combat a single disease amongst one target group in one country. Yet, in Tanzania, the economic toll of malaria is much larger, and the investment is paying off. Malaria consumes an estimated US\$ 119 million of Tanzania's national resources per year (3.4% of GDP) through expenditures of state and household, loss of economic productivity, and loss of economic opportunities (PSI, 2005). In short, malaria is a major contributor to the continuing cycle of poverty in Tanzania.

The cost to provide a subsidized net to rural consumers is approximately \$5 – a cost that is incurred once every 3 to 4 years. Each malaria episode costs between \$1 and \$20 to treat, depending on severity, with typical costs of \$2 to \$5 (see for example: Gupta and Gupta, 2005), and every unprotected child and adult experiences many episodes per year. Although it is early days to evaluate the long-term impact, with this kind of cost-benefit analysis, even an unsubsidized net may become an attractive option to the majority once local shops offer them on a regular basis. And, early results from the monitoring of commercial sales by PSI indicate that unsubsidized ITN sales have increased by 30% already (PSI, 2005).

Figure 1: Number of Retailers and Wholesalers



The Ministry of Health has contracted the London School of Hygiene and Tropical Medicine (LSHTM) and the Ifakara Health Research and Development Center (IHRDC) to independently monitor and evaluate the performance of Hati Punguzo according to an extensive list of

qualitative and quantitative measurements. The LSHTM and IHRDC interview women to monitor usage of ITNs; evaluate clinic staff to assess efficacy of voucher distribution; and meet with retailers to understand pricing mechanisms and long term retail potential for ITN distribution. The monitoring team reports that almost 85% of all the pregnant women who receive a voucher during a health clinic visit redeem them for an ITN. The LSHTM and IHRDC have verified that the programme has resulted in the availability of ITNs in remote rural areas throughout the country, and has encouraged the purchase and use of both subsidized and unsubsidized nets for the prevention of malaria (LSHTM and IHRDC, 2005).

Studies have demonstrated that there are much higher usage rates when nets are purchased through a voucher or at full-price as opposed to being given at no cost, with giveaway nets being used as low as 35-40% of the time in some programmes (Killian et al, 2005). The LSHTM and IHRDC have found that almost 85% of voucher recipients buy an ITN, and of those that purchased a net, more than 95% had slept under it while pregnant (LSHTM and IHRDC, 2005).

MEDA has developed stringent management and reporting structures to ensure that internal policies and procedures are properly followed. A comprehensive voucher statistics database measures all aspects of distribution and redemption. This system, combined with weekly feedback from field managers, allows for immediate problem identification and resolution. Senior and middle management monitor activities during regular site visits and zonal meetings. Annually, MEDA holds an in-country staff retreat and training seminar where policies, procedures and best practices are reviewed and discussed by all levels of staff.

There are, of course, challenges in the program: not all women attend clinics, not all clinics have enough vouchers on a consistent basis, and some clinic staff do not distribute

vouchers unless they are sure that the woman will pay the extra fee to redeem the voucher for an ITN (LSHTM and IHRDC, 2005). Hati Punguzo project staff and the Ministry of Health are working to overcome these issues. It is interesting to note, though, the monitoring team has not indicated issues with the availability of ITNs at the retail outlets.

Conclusions and Future Directions for Investigation

In the past, initiatives that distributed ITNs on a project-basis, without developing private sector delivery mechanisms, did not create sustainable supply and demand for ITNs, and availability ceased after donor funds were depleted.

The Hati Punguzo project serves as a model for win-win public-private partnerships that benefit poor and remote households. Hati Punguzo has established vouchers as a powerful mechanism to promote public-private collaborations that can have impact on a national scale. Specifically Hati Punguzo is demonstrating that health care systems can be supported by well-structured alliances, delivering both subsidized and unsubsidized products and services to disadvantaged communities.

The success of Hati Punguzo is an endorsement for a wide range of potential public-private partnerships. Policy and decision makers are beginning to realize that people in poor and remote villages need not suffer for lack of health interventions for AIDS, malaria and other common but devastating health problems. Through viable win-win relationships, alliances can support the creation of healthier, more productive communities.

Where to Learn More about this Project

With the support of one of our foundation partners, PERLS, MEDA has recently completed a 9 minute video documenting the project and lessons learned. It has been distributed to over 100 policy and decision makers internationally, and can be viewed on the MEDA website at

http://www.meda.org/pml/itn_video.html. The project has hosted visitors from numerous NGOs, foundations, and donor agencies including Bono's DATA organization, the Bill & Melinda Gates Foundation, the World Health Organization and the World Bank. It was featured on a BBC news program, "Hands On." The segment was called "Reality Bites" and can be viewed at the following link http://www.handsontv.info/series6/programme_5.html.

Future Direction

Hati Punguzo raises as many questions as it answers about potential new commercial models for the sustainable delivery of healthcare and other essential products to disadvantaged consumers. We list a few areas of future research that we believe may hold promise for marginalized communities around the world:

1. What are the characteristics of a public good – product or service – that make private sector delivery a viable alternative?
2. In what sectors can a system such as the one described here be implemented – health, education, agricultural extension?
3. Is there potential for the development of best practices for programs that bring together public sector goods and services, based on commercial delivery mechanisms?
4. What is the cost-benefit (in hard numbers) to the public sector to leverage existing or expandable private sector delivery mechanisms?
5. Does the temporary funding of a product or service by the public sector distort or develop the market? If both occur simultaneously, what is the balance of effect when the funded programme ends?
6. If a voucher system is an effective vehicle of exchange, is it the only or best means for the exchange when public and private sector players are involved?
7. In conjunction with their role in transfer of subsidies, vouchers also offer traceability for monitoring and measuring impact. Can this be achieved by other vehicles of exchange?
8. Not only is there a need to reach disadvantaged communities with essential public goods, but producers benefit from access to new technologies. What can we learn from this example that can be to other supply chains and other types of supply chain finance?

REFERENCES CITED

African Heads of State and Government (2000) *The Abuja Declaration on Roll-Back Malaria in Africa*, document viewed on the internet June 29, 2006, http://www.usaid.gov/our_work/global_health/d/malaria/publications/docs/abuja.pdf

Centers for Disease Control (2006) *Fighting Malaria in Tanzania*, document viewed on CDC website June 28, 2006, http://www.cdc.gov/Malaria/features/tanzania_pres_initiative.htm

Gagel, D. (2005) *How to develop sustainable Business Development Services (BDS) without Radicalism?* Ethiopia Business Development Services Network, Addis Ababa.

Goldmark, L., Botelho, C., and Orozco, P. (2001) *Summary Paper: Key Issues in the Design, Implementation and Monitoring of Voucher Training Programs*, Development Alternatives Inc., Washington, DC.

Goldmark, L. (2003) *Market Development versus Resource Transfer: Lessons from Voucher Programmes in Latin America*, paper presented at the ILO BDS Seminar, Turin, September 2003.

Gupta, R. and Gupta, R. (2005) "Malaria millennium development goals, treatment costs

and generics," *Current Science*, Vol. 89 No.5, p. 730.

Hallberg, K. (2006) "A retrospective assessment of the Kenya Voucher Training Programme," *Small Enterprise Development Journal*, Vol. 17 No. 2, pp. 56-67.

Killian, A., Bell, A., Meek, S., Root, G., Mubiru, J., Komakech, J., and Collins, A. (2005) *Retention and use of free insecticide-treated nets by pregnant women in the displaced communities in northern Uganda*, paper presented at the Fourth Multilateral Initiative on Malaria Pan-African Malaria Conference, Yaounde, Cameroon, November, 2005.

Lengeler, C. (2004) *Personal Communication* – email written on October 29, 2004 explaining the calculation used and referencing the following article: Binka F., Kubaje A., Adjuik M., Williams L., Lengeler C., Maude G.H, et al. "Impact of permethrin impregnated bednets on child mortality in Kassena-Nankana district, Ghana: a randomized controlled trial" *Trop Med Int Health* 1996;1:147-54.

London School of Hygiene and Tropical Medicine and Ifakara Health Research and Development Center (2005) *Monitoring and Evaluation of the Tanzanian National Voucher Scheme*, report presented November 2005.

Magesa, S., Lengeler, C., deSavigny, D., Miller, J., Njau, R., Kramer, K., Kitua, A. and Mwita, A. (2005) "Creating an 'enabling environment' for taking insecticide treated nets to national scale: the Tanzanian experience," *Malaria Journal*, Vol. 4 No. 34, pp. 1-12.

MEDA (2006) *Tanzania National Voucher Scheme Hati Punguzo Quarter 7 Report January 1 – March 31, 2006, National Malaria Control Programme*, report prepared for the Ministry of Health of Tanzania, May 2006.

Public Services International (2005) *A Tanzanian Public/Private Partnership to Prevent Malaria, Country Brief*, document viewed on PSI website July 4, 2006
<http://www.psi.org/resources/pubs/Tanzania-ITN-program.pdf>

Public Services International (2005), *PSI Quarterly Report (final quarter 2005) to the Ministry of Health and Social Welfare of the Government of Tanzania*, December 2005, Dar es Salaam.

United Nations Development Programme (2006) *Human Development Report 2005*, United Nations Development Programme, New York.