



# **Improving Social Protection for the Poor: Health Insurance in Ghana**

## **The Ghana Social Trust pre-Pilot Project**

### **Final Report**



**The International Labour Organization  
March 2005**

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ISBN 92-2-117144-2  
ISBN 92-2-117145-0 (Web pdf)

*First published 2005*

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Printed by the International Labour Office, Geneva, Switzerland

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## List of acronyms

CHAG	Christian Health Association of Ghana
DMHI	District Mutual Health Insurance
DWHIA	Dangme West Health Insurance scheme Administration
DWHIS	Dangme West Health Insurance Scheme
GEA	Ghana Employers' Association
GHS	Ghana Health Service
GST	Global Social Trust
HIPC	Debt initiative for Heavily Indebted Poor Countries
ILO	International Labour Organization
ILO-FACTS	International Financial and Actuarial Service of the ILO
MHO	Mutual Health Organization
NHI	National Health Insurance
NHIC	National Health Insurance Council
NHIF	National Health Insurance Fund
NHIS	National Health Insurance System
PMHI	Private Mutual Health Insurance
PRSP	Poverty Reduction Strategy Papers
SOC/FAS	Financial, Actuarial and Statistical Services Branch
SSNIT	Social Security and National Insurance Trust
TUC	Trades Union Congress

*Exchange rate: 1US\$ = 8400 cedis. (Note: The exchange rate used in the section of the Annexes may be different)*



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## Preface and project history

As we move into the twenty-first century, a fundamental challenge faces the world. Too many people are too poor. 1.2 billion people – one person in five – are living on less than one dollar a day. And 3 billion people – half the world’s population – live on less than two dollars a day. More than a challenge, this shameful fact highlights a failure to ensure that the world’s wealth is distributed equitably, so that no-one is in real need.

For many years, an international institutional framework has been in place, stating the commitments of the global community. The International Covenant on Economic, Social and Cultural Rights recognizes the right of everyone to “an adequate standard of living...including adequate food, clothing and housing, and to the continuous improvement of living conditions”.<sup>1</sup> And in 2000, at the Millennium Summit, the United Nations concluded that urgent action was needed to address the world’s problems, and that one of the most serious problems was poverty. The member states therefore resolved to “halve, by the year 2015, the proportion of the world’s people whose income is less than one dollar a day”.<sup>2</sup>

Alongside this commitment from governments, we must recognize and salute the genuine desire of the majority of the world’s citizens to see a more just and equitable global society, and the will of millions of many ordinary people in the richest nations to contribute to that goal.

In 1944 the ILO declared that “poverty anywhere is a threat to prosperity everywhere”.<sup>3</sup> The impact of poverty on global prosperity, and security, has been amply and repeatedly demonstrated in the sixty years since that declaration. The ILO occupies a unique place in the battle to eradicate poverty, having recognized two key components: employment for those who are able to work, and social transfers for those who are not.

There are those who think that social protection is an add-on, something that can only be achieved when prosperity has been attained. The ILO and its constituents have long recognized that social protection is, rather, a factor contributing to development and prosperity. Income security and health care, for example, can increase productivity and labour market mobility.

In 2001, ILO constituents discussed social security at the International Labour Conference. They concluded that one of the main areas for future action and research was extending and improving social security coverage.

The coming together of institutional commitments to eradicate poverty and improve social security coverage, and the belief in the willingness of citizens to join this effort gave birth to the idea for a Global Social Trust. This document traces the genesis of that idea, and the first efforts to put it into practice in Ghana.

<sup>1</sup> Article 11 of United Nations: *International Covenant on Economic, Social and Cultural Rights*, 1966 (New York, 1966).

<sup>2</sup> Paragraph 19 of United Nations General Assembly: *United Nations Millennium Declaration 55/2* adopted by the United Nations General Assembly on 8 Sep. 2000 (New York, United Nations, September 2000).

<sup>3</sup> Article I (c) of the Declaration of Philadelphia adopted by the ILO in 1944 (Philadelphia, 1944).

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The original project funding was made available under the umbrella agreement on the financing of technical co-operation between the Dutch government and the ILO – the “Technical Co-operation Resource Allocation Mechanism” (TC-RAM). The original summary of the project description reads as follows:

*“This project aims at the piloting of a new methodology to extend the coverage of social protection to informal sector communities. It will test in collaboration with National Social Insurance Schemes whether these schemes can support community based social protection arrangements through the concept of “satellite schemes”. This concept envisages the continued mentoring and financial support of community-based schemes through formal sector social insurance. Supporting community based schemes could become a new branch of activities for national social insurance schemes. These pilot projects are a component of SOC/FAS’ feasibility analysis of a Global Social Trust network.”*

During the project execution it became obvious that, in the Ghanaian case, the testing of possible links between national social insurance schemes and satellite schemes required more than management by a single technical adviser supported by national staff. The Ministry of Health was under a tight deadline set by the President to introduce a National Health Insurance System that planned to include the existing and emerging community and District-based Mutual Health Insurance schemes (DMHIs) in a hub-satellite relationship. It was obvious that the project needed to respond to government requests to support the design and implementation process of that arrangement if it was to avoid operating in isolation of the government’s development plans. That support required a much bigger team and added a whole new dimension to the project work. In addition to testing certain support mechanisms for community based schemes expertise was needed in:

- social health insurance planning and policy design;
- health insurance financing and national health financing; and
- health insurance management.

The ILO appointed a Chief Technical Adviser, Mr David Tumwesigye, to the project. In addition, the Ghanaian Social Security and National Insurance Trust (SSNIT) agreed to second two officials (Messrs. Benjamin Yankah and Tetteh Carboo) to the enlarged project; and the Government of the United Kingdom seconded Ms Fiona Kilpatrick of the Department of Work and Pensions to act as Project Co-ordinator. She also co-ordinates the Global Social Trust Initiative of the ILO.

When it became obvious that the ILO would be seeking to extend the project into a fully fledged Global Social Trust Pilot Project, it became known as the Global Social Trust Pilot Project.



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## Acknowledgements

This project is the result of extensive teamwork between experts in Ghana and an international support team. It benefited from a consortium of donors (the Governments of the Netherlands and the United Kingdom; the Ghana Social Security and National Insurance Trust (SSNIT); and the ILO) as well as support from many individuals. We are grateful to all those listed below and others too numerous to mention.

Hon Dr. Kwaku Afriyie, Minister of Health, Ghana

Dr. Sam Akor, Director Project Planning, Monitoring and Evaluation, Ministry of Health, Ghana

Government of the Netherlands

Hon Cecilia Bannerman, Minister of Lands and Mines (former Minister of Manpower Development and Employment), Ghana

Hon Yaw Barimah, Minister of Manpower Development and Employment, Ghana

Mr. Kwasi Osei, Director General, SSNIT

Dr. Sam Adjei, Deputy Director General, Ghana Health Service

Dr. Irene Agyepong, Dr. Margaret Gyapong, Ms. Evelyn Ansah, Mr. Francis Fiifi Arkorful and all staff of Dangme West Health Insurance Scheme

Mr. Kofi Adusei, Ministry of Health

Mr. K.T.K. Agban, District Chief Executive, Dangme West

Mr. Osei Bimpong and all staff of Public Affairs Dept, SSNIT

Ms. Valerie Quarmyne, General Manager Admin, SSNIT

Mrs. Amartey, General Operations, SSNIT

Mr. William Siaw and all staff of Informal Sector Social Security Project

Mr. Robert Nsiah, FIT-Ghana

Ms. Sandra Baldwin, Health Adviser, United Kingdom Department for International Development (DFID)

Dr. Andreas Grueb, The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

Ms. Helen Dzikunu and Ms Hanne Thorup, DANIDA

All staff of Dangme West Health Research Unit

Mr. Peter Kodua-Tweneboa, Senior Welfare Officer, Dangme West District

Ms. Rose Asane, Social Development Department, Dangme West District

Mr. Francis Abofra, Planning Officer, Dangme West District

All staff of the ILO projects office, Accra

Mr. Johnson Fasemkye, Finance Department, UNDP Accra

Particular recognition is due to the Ghana Social Trust country team:

Mr. David Tumwesigye, Chief Technical Adviser, Ghana Social Trust

Mr. Benjamin Markin Yankah, Finance Expert to the Project

Mr. Tetteh Carboo, Administrative Expert to the Project

Mr. Kwabena Awuku, SSNIT, Project Driver.

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The country team was supported by an ILO team consisting of Ms Fiona Kilpatrick (Project co-ordinator), Ms. Karuna Pal, Mr. Florian Léger and Ms. Diane Vergnaud (all of the Financial, Actuarial and Statistical Services Branch (SOC/FAS) of the ILO in Geneva); and Mr. Chinedu Moghalu of the Regional Office of Africa. The project was supervised by Mr. Michael Cichon, Chief, SOC/FAS. Mr. Cornelius Dzakpasu, Director of the ILO Office in Nigeria, facilitated co-operation with various levels of the Government of Ghana and with other ILO projects operating in parallel to the Ghana Social Trust pre-Pilot Project. In particular, the project team co-ordinated activity with that of the Decent Work teams in Accra and Geneva.

Professor Charles Normand of the London School of Hygiene and Tropical Medicine, and Dr. Raymond Wagener of the Inspection Générale de la Sécurité Sociale of Luxembourg served as project advisers at different stages of the project. The project also closely co-ordinated its activities with a World Bank Health Care team lead by Mr. Alex Preker and Ms. Laura Rose.

The ILO-commissioned survey was carried out by Market Decisions Limited of Accra, under the supervision of Mr. George Fugah, Director.

The Social Security and National Insurance Trust (SSNIT) of Ghana supported the project by hosting the project's country team and seconded two officials to the project. The Government of the United Kingdom seconded Ms. Kilpatrick to serve as a project coordinator and financed most of her missions.

Sincere thanks are due to the Government of the Netherlands who financed the major share of this project under the Dutch-ILO umbrella agreement on technical co-operation.

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## Executive summary

The International Labour Conference in June 2001 concluded a discussion on social security by renewing the commitment of the International Labour Organization (ILO) to the extension of social security coverage and the improvement of the governance, financing and administration of social security. As a result, the Financial, Actuarial and Statistical Services Branch of the ILO (SOC/FAS) through its International Financial and Actuarial Service (ILO-FACTS) developed an innovative concept, the Global Social Trust, wherein individuals in the industrialized economies contribute a modest monthly sum (around €5) into a trust fund which is used to support the extension of social security in developing countries. The host government makes a commitment to take over the funding of the extended protection gradually over a number of years until the provision is fully funded on a sustainable basis.

The feasibility of the benefit delivery mechanisms was tested in the Ghana Social Trust pre-Pilot Project, which set out with two primary objectives:

- to develop and test methodologies for the extension of social protection benefits (health care) to excluded members of society especially in the informal sector; and
- to support the establishment of a pluralistic national health protection system in Ghana.

The project took place against a background of substantial health insurance reform in Ghana, as the Government worked to replace the 20 per cent of health care costs met through the current pay-as-you-go system (cash and carry) with a national health insurance scheme. The remaining 80 per cent would be met, as now, from the national health budget. This is to be achieved through building and expanding on a network of existing voluntary Mutual Health Organizations (MHO) at the district level. Legislation was enacted in August 2003. Funding is to come from a monthly transfer of two and one-half per cent of each person's seventeen and one-half percent contribution to the Social Security and Pensions Scheme Fund (SSNIT insured members), and from a two and one half per cent national health insurance levy; and health insurance premiums.

## The development and testing of methodologies to extend social security coverage to the excluded

### *Preparatory work*

The Ghana Social Trust project developed the concept of linking the formal and informal sectors in a "hub-satellite" relationship, whereby the formal sector acts as a partner and sponsor of smaller community-based social security schemes in the informal sector. In Ghana the vision was that a national agency would act as a "hub" partner for the district voluntary MHOs ("satellites") which had grown up over the preceding ten years, broadly under the aegis of the Government. The hub had to have national coverage and the technical and administrative capacity to support the MHOs; and the MHO selected for the pre-pilot had to have likewise the technical and administrative capacity to deliver the benefit, and a benefit package and structure which would make it relatively simple to extend access to the non-covered. The benefit had to be designed to maximize the impact of the available funding.

There was no national agency existant in Ghana which met the necessary criteria, so the project office acted as a virtual "hub". The MHO selected for the pre-pilot was in Dangme West, in the Greater Accra region, which was well established and had a benefit package

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covering selected outpatient care, and inpatient care up to a ceiling of cedis 400,000 (i.e. US\$48) per case. The benefit selected was the subsidy of 75 per cent of the health insurance premium for the poorest.

As the concept was developed, full discussions and consultations were carried out with a variety of stakeholders: the Ministry of Health and the Ghana Health Service; the social partners; health insurers; community representatives; and development partners. A key event in this process was a two-day workshop held in February 2003 to discuss the concept and the wider issues of national health insurance reform. The workshop participants fully endorsed the concept.

Also as part of the preparatory stage of the project, the ILO commissioned a survey of usage of, and attitudes to, health care and health insurance in two districts: Dangme West, and Kwahu South (the latter in the Eastern Region). A sample of 1,000 people was interviewed, and data collected on demographics; employment and incomes of households; access to health care provision; recent medical history; awareness of health insurance, particularly MHOs; factors affecting membership of MHOs; and attitudes to exemption from or reductions of health insurance premiums for the poor.

The data collected was a useful illustration of the socio-economic environment in which the project would take place, and later provided comparisons with national data and more narrowly focused data in Dangme West. Broadly, the survey showed reasonably high awareness of District Mutual Health Insurance schemes (DMHI); and people viewed them positively and wanted to join, but were inhibited by the cost of premiums and a lack of knowledge or understanding of how health insurance worked. This highlighted key areas to be tackled in the project.

### ***Identification of beneficiaries***

The project sought to establish a methodology for identifying beneficiaries which combined local, community-based knowledge and experience gained during the project in order to develop a set of objective criteria which could be used nationally. The latter were particularly important to providing a national baseline selection procedure which could be adapted to different circumstances in different regions.

Extensive consultations were held with community representatives and health insurance registrars in Dangme West to this end. One of the key issues to emerge was that, while it was difficult to draw up a list of objective criteria from the start, everyone “knew” who were the poorest people in their communities. Some suggested identification based on particular socio-economic groups (widows, disabled people, orphans, the unemployed etc), but this was rejected as it did not necessarily indicate poverty on its own. It was therefore decided that a list would be drawn up on the basis of local knowledge, and would then be verified. At the verification stage, the circumstances of the potential beneficiaries would be assessed and used later to draw up the list of indicators.

The list was prepared in August 2003, and initially identified 2,500 households. Subsequent verification eliminated duplicate registration and households which could not be found, reducing the number to 1,633. Of those, eleven households were found not to be poor, resulting in a final list of 1,622 households, or about 8,000 individuals.

A questionnaire completed by those 1,622 households showed high incidences of elderly people; unemployment or insecure incomes; low levels of educational attainment; and large household size. Housing conditions were generally poor, and access to basic amenities (clean drinking water, electricity, toilets) was low.

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## ***Benefit delivery mechanism***

On the basis of available funding, and the number of households identified, it was calculated that the project could subsidize 75 per cent of the insurance premium for each person for three years. The premium is cedis 20,000 plus a registration fee of cedis 5,000 (i.e. the total being approximately US\$3), with lesser amounts for children under 5 and elderly above 69. The Dangme West Health Insurance Administration (DWHIA) then proceeded to register those identified, collect the members' 25 per cent of the premium and issue them with identity cards (ID). The cards are identical to those of other scheme members in order to avoid any stigma being attached to the poorest.

Essentially the process is: identification, verification, registration, collection of premium and issue of identity cards.

Some difficulties arose with the registration process, notably in collecting photos of the beneficiaries for the ID cards. This was overcome to some extent by ad hoc measures to subsidize the cost of photos. However, while people were apparently keen to participate, they were less keen to take the time for registration. The timing of registration is also important; the normal registration period is aligned with harvest time when more people have cash available. The registration of beneficiaries was later in this first year, making it harder for them to find the necessary money.

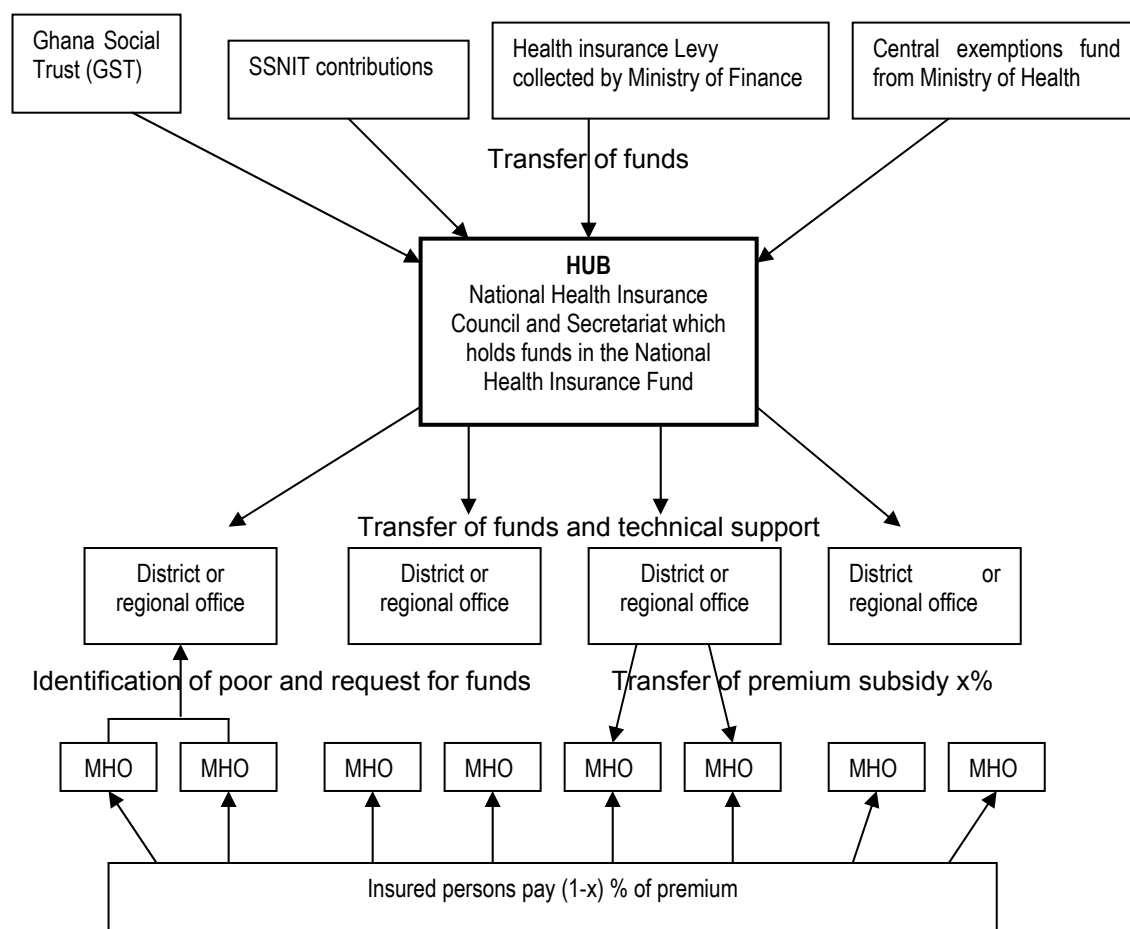
The number of households registered by September 2004 was around 800. It is hoped that this will increase in the second year of operation as the process is further developed.

## ***Outcomes and next steps***

The experience of the pre-pilot has been that the basic structures outlined in the original concept appear to be achievable, and require modification only to adapt to local circumstances. The fundamental hub-satellite structure is the most appropriate to deliver the benefit, and a methodology has been established to identify beneficiaries.

The hub-satellite model required modification, taking into account developments in legislation for and implementation of the new National Health Insurance System (NHIS), and particularly the establishment of the National Health Insurance Council (NHIC), which will effectively take on the role of the hub. The revised model is illustrated in Figure A below.

**Figure A. A revised model for a satellite health insurance system in Ghana**



Source: ILO.

The methodology for identifying and registering beneficiaries tested is essentially sound and it should be possible to replicate it elsewhere. However, work will have to be done to develop the objective selection criteria to be used in addition to the community-based identification process.

### ***Developing the selection criteria***

Work done suggests that the selection criteria have to strike a balance between simplicity/clarity and sufficient sensitivity to combine several criteria which, when brought together, are a reliable indication of severe poverty.

Income is one obvious indicator, as are living conditions. But in areas where all cash incomes are severely limited, and housing conditions are generally poor, other criteria must come into play. A differentiation also has to be made between the causes of poverty and the indicators. In some cases these can be separated, but in others a single factor may be both a cause and an indicator: for example, unemployment. Another issue is the difference between conditions in rural and urban areas.

Based on the experience of the pre-pilot, we suggest that the criteria used include:

- marital status (widowed or divorced with children);
- employment status;

- 
- state of dwelling;
  - access to utilities (water, toilets, electricity);
  - non-ownership of land (in rural areas);
  - ownership of livestock (principally in rural areas, although this would apply to some extent in urban areas; and based on sheep, goats and poultry);
  - access to transport in rural areas.

### ***Long-term financial sustainability considerations***

One major issue of the NHIS is to ensure its financial sustainability. While interim financing for some future pilots might be secured through international donors, ultimately the resources for funding the district (satellite) mutual health insurance schemes will have to be provided through either social health insurance contributions or general tax revenues.

One possible source of financing is the funds freed up through the debt relief arrangements for Heavily Indebted Poor Countries (HIPC), and while available information is limited, it appears that this will be useful in establishing an exemptions fund for the poor in Ghana. A more detailed long-term financial plan has to be worked out to establish the precise amounts available.

Nevertheless, if long-term international subsidies might not be necessary, there will be a need for medium-term subsidies to:

- (a) assist to fully establish a functioning subsidization mechanism across the whole country, and
- (b) top up the subsidies of the National Health Insurance Fund (NHIF) to reach all the poor till the government's resource allocation to subsidies is fully operational.

### **ILO activities to support the establishment of a pluralistic national health protection system**

In the course of the Ghana Social Trust project, SOC/FAS worked closely with the Government to provide policy and technical advice on the new National Health Insurance System.

### ***Health budget***

The ILO, in partnership with the Government of Ghana carried out a financial study which provided an assessment of the evolution of the costs involved in providing public health care and its financing during the next decade. For this exercise a health budget model was developed, which provided a tool for evaluating different health care outcomes resulting from various policy options. The result was a first preliminary version built on a limited database, which allows for simulations of alternative financial scenarios and should serve as a planning tool for timing the introduction of various elements of the NHIS.

A critical condition for financial equilibrium during the coming years is that the government will not reduce its financial commitment to the health sector and hence all new sources of revenues are truly additional resources. In the longer-term future, the Government of Ghana will probably either have to bear a higher share of the public health

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expenditure bill, or it will have to introduce – which is the more likely case – higher premiums to the DMHI schemes, higher formal sector contributions and/or a higher health insurance levy or a suitable combination of the three.

### ***Policy advice to the Government on the National Health Insurance System***

The ILO team has produced a series of seven discussion papers relating to the project and to the national health insurance reforms.

The initial paper, discussed in the February 2003 workshop, presented the concept of the project. Following that, comments on the planned system offered an initial policy checklist for the development of the NHIS in a second paper. It covered a wide range of relevant issues, from objectives and design to financing of the system. Another paper provided a proposed road map of key activities necessary to implement the new NHIS following the passage of legislation. At the same time, another paper summarized the findings of the exercise on the national health budget model. An additional paper was prepared at the request of the Government of Ghana and contained an organogram for the Secretariat to the National Health Insurance Council, and model job descriptions for the Executive Secretary and the Secretariat Directors. Also prepared at the request of the Government, a further paper offered an initial proposed risk equalisation formula for the NHIS. A supplementary paper was prepared, again at the request of the Government, to offer advice on a possible mechanism for transferring funds from the NHIF to DMHIs in the first year to eighteen months of the new system, as full risk equalisation could not be calculated from the onset of the system. The social partners namely the Ghana Employers' Association (GEA) and the Trades Union Congress (TUC), who are considering the establishment of a bi-partite Private Mutual Health Insurance Scheme (PMHI) to serve their members (many of whom already have access to health care packages set up by collective agreement) asked for comments on such a scheme which were then provided in the latest paper.

### ***Development of follow-up activities***

In the course of the project a number of follow-up activities emerged. These were:

- monitoring and evaluation of the Dangme West pre-pilot over the remaining period of the project;
- training and capacity building for health insurance administrators: a proposal to provide training was submitted to the Government of Ghana and awaits approval;
- costing the minimum benefit package: a proposal to carry out this work also awaits approval; and
- capacity building of SSNIT personnel: several SSNIT officials have completed the Masters in Social Protection Financing at the University of Maastricht, which is a collaborative programme of the University and the ILO. In addition, SOC/FAS has spent eighteen months working with a SSNIT actuary to develop a health budget model for Ghana.



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## **Conclusions and recommendations**

### ***General policy implications***

The project has demonstrated the importance of proper budgeting and planning in developing and extending social protection. An in-depth assessment of funding and expenditure can provide a sound basis for the effective re-organization of social budgets to free up funding for the extension of provision.

The project has also demonstrated a simple, community-based method for identifying the poor, which may be replicated in other countries. More work needs to be done to develop the methodology in an urban context, where community structures may be weaker, but the foundation has been laid for the full development of a working tool which can be adapted to local and national circumstances.

### ***Opportunities and challenges***

The principal gain in this work has been the creation of a working methodology for identifying the poor. But in the course of the project, stakeholders have been fully engaged in the process, and the concerns from everyone, from remote rural smallholders, through medical professionals, administrators, international experts and central policymakers have been fed into the process. This has allowed for the effective development of ideas into sound working practice, and equally for the elimination of early ideas which were based on erroneous premises.

A number of challenges were presented. Firstly, resource constraints prevented a proper assessment of a wider range of potential participating health insurance schemes, and it must be recognized that in some areas there will be greater numbers of the poor which will place a correspondingly greater burden on district health insurance schemes.

Secondly, the mobilization of potential beneficiaries was particularly challenging. The anomaly that has arisen between the number who said they were willing to participate (almost all the original 1,600 households) and those who eventually did so will require further work in the evaluation phase of the project.

Thirdly, difficulties arose at a political and institutional level. The small number of expert staff in the Government has meant that much of the policy development is concentrated in a very small group of perhaps three or four people, and delays have arisen because of competing priorities. There is also no clear overall plan of implementation (notwithstanding the ILO's contributions in this area), and a certain lack of transparency in the general arrangements.

In addition, there was considerable opposition to the proposed NHIS from the social partners, based on concerns that the transfer of funds from SSNIT would have an adverse impact on the long-term sustainability of the pension fund; and that the social partners had not been sufficiently consulted. This might have been avoided through more thorough consultations.

### **Implications for the Global Social Trust concept**

This project also set out to gather further intelligence with respect to the overall design of the ILO's Global Social Trust Initiative. The project implementation started at about the

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same time as the ILO's Governing Body authorized the office to pilot the Global Social Trust idea.<sup>4</sup> The GST team prepared two pilots: one in Namibia and this project in Ghana as an alternative should the Namibia project not go ahead. The outcome was a decision to pursue the project in Ghana as the first full pilot. The main reason was that there was an obvious government commitment to extend the de facto coverage of the health delivery system through a new financing system (i.e. the National Health Insurance Scheme).

The main lessons learned for the concept of the Global Social Trust Initiative were:

- government commitment is a sine-qua-non condition;
- general technical support for the design and operation of new social protection schemes needs to play a much bigger role in the concept of the Global Social Trust; and
- benefits that target the poor can be delivered if the identification process is based on community involvement and that community involvement is organized by existing institutional structures. The actual delivery of benefits requires a fairly thorough supervision through local and external arrangements.

## Recommendations

*Taking the outcomes of the project into account, the project team recommends that:*

- *the project be expanded to further test the methodology of identification of the poor in other districts in Ghana; and that this work form the pilot for the Global Social Trust;*
- *that should this work be carried out, close consultation be maintained with DANIDA to compare results from their project on identifying and subsidizing the poor in the Northern Region;*
- *that further work be done on the development of a full working tool to put the methodology into practice on a national basis;*
- *that work be taken forward on related projects to cost the minimum benefit package; design a training programme for health insurance administrators; and carry out extensive monitoring and evaluation of the Dangme West project.*

<sup>4</sup> Documents ILO: GB.285/ESP/4: *Exploring the Feasibility of a Global Social Trust* (Geneva, Nov. 2002); and ILO: GB.285/205: *Record of Decisions, Para 55* (Geneva, Nov. 2002).

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## Introduction

## Background

### ***The Global Social Trust***

The 89<sup>th</sup> International Labour Conference (ILC) in June 2001 concluded a general discussion on social security with a renewed commitment on the part of the ILO to the extension of social security coverage and the improvement of the governance, financing and administration of social security.<sup>5</sup> The conclusions and recommendations of the ILC also called for “innovative approaches in the area of social security to help people moving from the informal to the formal economy”. The Director General of the ILO, Juan Somavía, therefore decided that the ILO should explore the possibility of supporting the development of national social protection systems through international financing. The ILO's International Financial and Actuarial Service (ILO-FACTS) subsequently developed an innovative concept for a Global Social Trust Network (herein called “The Global Social Trust” or GST) which connects the global, national and community levels of financing for social security.

The concept is simple. Individuals in the industrialized economies – who are benefiting from reliable social security arrangements - contribute a modest monthly sum (around €5) as additional voluntary social insurance contributions into a trust fund. The funds collected are used to support the extension of social security systems in developing countries, with financial commitment from the host government gradually increasing over a number of years to replace the GST funding until the new system is fully funded by the host government on a sustainable basis.<sup>6</sup>

The intention is to foster a real sense of partnership, between individuals in both exporting and recipient countries. The commitment of host governments is also vital to the creation of sustainable systems. The GST is not designed to fund national social security schemes on an open-ended basis, but to kick-start the extension of existing schemes. It offers support to governments over a fixed period of time during which those governments can adjust their expenditure and forward plans in order to take over the financing of the social protection in the long term.

Testing the feasibility of the GST has led to a variety of activities. An initial feasibility study on the potential income and collection mechanisms was conducted, and gave encouraging indications about the willingness of people to contribute. A tripartite meeting of experts was then held in May 2002 to establish the way forward. The meeting worked to develop the concept further and recommended that it include several features:

- that, as well as individuals, institutions, businesses and governments be able to contribute;
- that each donor country have direct links with the recipient country through a network of national social trusts which would be part of the global concept;

<sup>5</sup> See ILO: *Social Security – A new consensus*, page 1 ff “Resolution and conclusions concerning social security”, International Labour Conference, 89<sup>th</sup> session, paragraphs 17 to 19 (Geneva, 2001).

<sup>6</sup> The concept is developed in more detail in ILO: *A Global Social Trust Network: Investing in the world's social future, Report and documentation of a feasibility study* (Geneva, 2003).

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- that there also be a global board of trustees to oversee the operation of the whole GST.

The meeting also recommended to the ILO Director General and Governing Body that they go ahead with further exploration of the idea. The Governing body in turn authorized further testing of the concept through a major pilot project.<sup>7</sup> Work is now underway on that.

In the meantime, an important part of preparation for a full pilot was a practical demonstration of the feasibility of the concept. That demonstration was the Ghana Social Trust pre-Pilot Project.

## **Objective - The Ghana Social Trust pre-Pilot Project**

As the project developed it set out to serve two primary purposes:

- to develop and test methodologies for the extension of social protection benefits (health care) to excluded members of society especially in the informal sector, and
- in broader terms, to support the establishment of a pluralistic national health protection system in Ghana.

The project also generated further experience for the development of the overall Global Social Trust concept. This paper therefore reports on the experience of the Ghana Social Trust, placing it in the relevant context in Ghana, and discussing the development of the project and its outcomes.

## **Overview of the health policy environment in Ghana**

### **Context**

Government spending in Ghana on social programmes for poverty reduction and in the area of health constitute around 7.0 percent of GDP with a disproportionate amount of the resources being used for personnel emoluments and administration. It is planned that special programmes for the vulnerable and excluded will establish systems and provide resources to improve conditions of extreme poverty and social deprivation. Interventions will include the extension of social security coverage to those who are excluded from formal social protection programmes and the introduction of health insurance schemes to cover the majority of, and ultimately the whole of, the population.

Although some improvements have been made in many health indicators including mortality and morbidity, crude indicators still demonstrate the need for major improvements. Life expectancy in 1999 was only 54.2 for males and 55.6 for females. Whilst the impact of HIV/AIDS is less severe than in some other countries, recent developments show a steady increase in prevalence, which is expected to reach 6.4 per cent in 2004. Under-five mortality is high, at 118 per 1,000 for males and 109 for females. Maternal mortality is also a concern at around 214 per 100,000 live births. Public expenditure on health at the end of the 1990s was only in the order of US\$ 11 per capita and year of which a significant proportion was borne out of pocket.

<sup>7</sup> See ILO: GB.285/ESP/4: *Exploring the Feasibility of a Global Social Trust* (Geneva, Nov. 2002); and ILO: GB.285/205: *Record of Decisions, Para 55* (Geneva, Nov. 2002).

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Access to and use of health facilities has been low and declining, particularly since a shift some twenty years ago from a universally accessible national health service to the introduction of user fees. A survey conducted by the Ghana Statistical Services in 1998 suggested that around 43.8 per cent of those who were ill had consulted a medical practitioner; this ranged from around 65 per cent in Accra to only 37.7 per cent in rural savannah areas.<sup>8</sup> This trend can be linked, at least in part, to the increasing health care user fees over recent years, but may also be influenced by a decline in the quality of publicly provided health services.

Provision of health care in Ghana has in recent years been based on a pay-as-you-go system known as “cash and carry”: whilst the Government meets around 80 per cent of the cost for public health care, the remainder is paid by the end user at the time of use. For over twenty years successive governments have recognized the unsatisfactory nature of this system, which acts as a disincentive to use of health care facilities; excludes the poorest; and limits access generally.

In 1995 proposals were made in a report, “A feasibility study for the establishment of a National Health Insurance Scheme in Ghana”, but this was limited to formal sector workers and registered cocoa farmers. An attempt to pilot the scheme in 1997 stalled for a variety of reasons.<sup>9</sup> However, in parallel to this effort, a number of voluntary Mutual Health Organizations (MHOs) were established with the help of donor funding. In 2002 there were around 159 MHOs in Ghana, with 67 districts involved.<sup>10</sup> The oldest MHO in Ghana is at Nkoranza, in the Brong Ahafo region, which was established in 1989. The Ministry of Health also helped establish an MHO in the Dangme West district, Greater Accra region, in 1998, to test the feasibility of such schemes in the context of a possible national system.

The present Government made a commitment to introduce, by 2004, a national health insurance system to replace the cash-and-carry financing mechanism, and legislation to that effect was passed in August 2003.<sup>11</sup> The objective is to pool the risks, reduce the individual burden and achieve better utilization rates, as patients do not have to pay out of pocket at the point of delivery. The desired outcome is that at least 50-60 percent of residents in Ghana will belong to a health insurance scheme within the next 5 to 10 years, although under the legislation registration with a health insurance scheme will be mandatory for all residents.

The new national health insurance (NHI) system will build on the network of existing MHOs, and is in the process of establishing District Mutual Health Insurance schemes (DMHIs) in those districts where none yet exist. In addition to the DMHIs there are a variety of private sector schemes, which cater for particular groups of employees or others; while these will not be included in the public NHI system, they will still have an important role to play in ensuring maximum coverage.

All health insurance schemes, public and private, will be supervised and supported as appropriate by the National Health Insurance Council (NHIC), a body which has separate

<sup>8</sup> Ghana Statistical Services: *Ghana Living Standards Survey (GLSS 4)* (Accra, October 2000).

<sup>9</sup> Further information on the pilot is contained in Atim, C. et al.: *A Survey of Health Financing Schemes in Ghana* (Bethesda, MD, The Partners for Health Reformplus Project, Abt Associates Inc., 2001).

<sup>10</sup> Source: USAID ([www.usaid.gov/missions/gh/health/stories/](http://www.usaid.gov/missions/gh/health/stories/)).

<sup>11</sup> Parliament of Ghana: *National Health Insurance Act 2003 (Act 650)* (Accra, 2003).

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legal personality from the existing agencies (the Ministry of Health and the Ghana Health Service). The NHIC has, *inter alia*, responsibility for meeting a commitment to “devise a mechanism for ensuring that the basic healthcare needs of indigents are adequately provided for”<sup>12</sup>. That mechanism has yet to be put in place, *and the number of potential beneficiaries of such provision presents a significant challenge to the overall financing, implementation and success of the new system*. Initial indications are, however, that provision will be applied to the “core poor” (a group yet to be defined, but which may consist of people with essentially no means of support). There is an expectation that this group will not exceed five per cent of the population, although evidence points to significant regional variations.

In addition to the existing health budget, most of the funding for the NHIF will come from a monthly transfer of two and one-half per cent of each person’s seventeen and one-half percent contribution to the Social Security and Pensions Scheme Fund (SSNIT insured members), from a two and one half per cent national health insurance levy (calculated on selected goods and services, VAT type levy) and from health insurance premiums. The secretariat of the NHIC will be responsible for disbursing funds from the National Health Insurance Fund to support DMHIs, through a system of subsidies to support the poor, and to equalise risks. DMHI members will have to contribute flat rate premium directly to their DMHIs (except members of SSNIT who are in principle automatically covered).

The ILO (SOC/FAS) has been closely involved with the Government of Ghana in the development of policy, through the provision of technical advice in the form of a national health budget; and advice on institutional structures, medium-term financing and implementation. The new NHI system is at an early stage of implementation and the ILO intention is to continue to offer technical advice and support as appropriate.

*It is against this background that the Ghana Social Trust project has been taking place. This final project report documents the full range of activities of the project. The main body of the report accounts for the main results achieved with respect to the two main purposes of the project described above. Further detailed information which might be useful for the various stakeholders in Ghana and elsewhere is documented in an extensive set of annexes which inter alia includes all discussion papers prepared by the project team.*

<sup>12</sup> *Ibid*; Part I, Article 2(j).

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# **1. The development and testing of methodologies to extend social security coverage to the excluded**

## **1.1. Introduction**

The first phase of the project was to take the basic Global Social Trust concept and develop it to meet the circumstance in Ghana. Based on an analysis of the health insurance system in Ghana, the project team developed a concept which aimed to facilitate and extend access to health care by the poor, particularly in the informal sector.

## **1.2. The Ghana Social Trust – concept development**

The approach was to attempt to link the formal and informal sector schemes in a “hub-satellite relationship”. The general concept is that the established formal sector scheme acts as a partner and sponsor of smaller community based social security schemes in the informal sector. The project sought full compatibility with the emerging overall national vision on the future national health insurance system; in the course of the project legislation for a new NHI system was passed by the Ghanaian Parliament. The concept was set out in a paper.<sup>13</sup>

As the plan was developed, it was envisaged that a national agency would act as a hub and partner for the satellite MHOs that were springing up in the informal sector, broadly under the aegis of the national government, but principally with donor funding and support. This agency would be supported by a cash benefit that would be channeled through a suitable body – initially the Social Security and National Insurance Trust (SSNIT) was considered for this purpose – or paid directly to the participating MHOs. The benefit would provide a straightforward subsidy of the insurance premium in MHOs. Members of such schemes, many of whom work in the informal economy and cannot afford the full premium, who made the commitment to insure their whole family in an approved MHO would be eligible for a subsidy. The effective cost of insurance cover to individuals would thus be reduced.

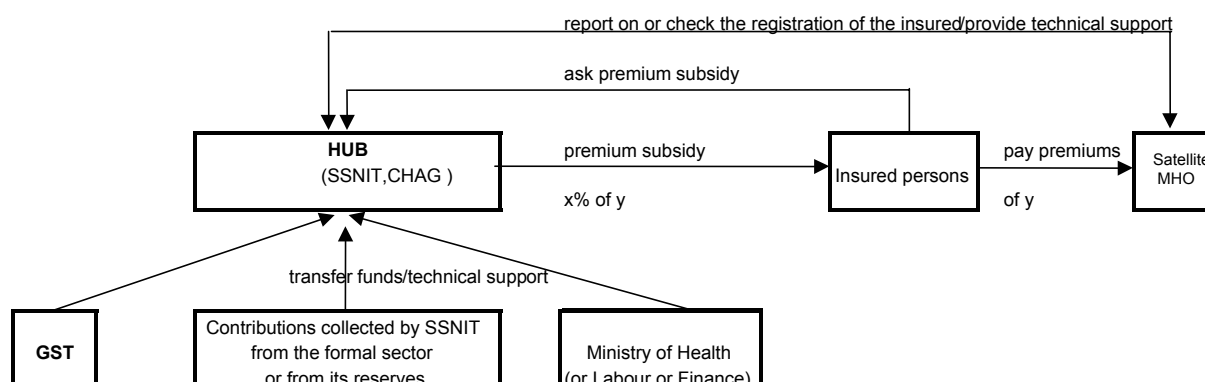
It could be assumed that due to the expected high elasticity of demand for insurance cover to the price of such cover, the population coverage of the MHOs would be considerably increased. The agency established to manage the transfer of funds would channel these subsidies to the insured persons, and would also set and ensure a minimum quality requirement for participating MHOs. That way the agency would have a normative influence on the quality of health care cover and the efficiency of its provision. Moreover, it would thus execute – instead of have a direct management role – a more indirect and administratively lighter role in the provision of health care coverage.

While interim financing for some future pilots might be secured from international donors or possibly some National Social Trust organizations in OECD countries, in the longer term the resources for funding this concept would have to be provided by the country through either social insurance contributions, contributions to the MHOs or general tax revenues.

<sup>13</sup> *A draft concept developed by the Ghana Social Trust Pilot Project*, Discussion paper (Geneva, ILO, February 2003).

The development of the concept of a Social Trust in Ghana was therefore built around three key components; a hub, a number of satellites, and a benefit. The initial structure envisaged at the outset of the project is set out in Figure 1.

**Figure 1. A tentative outline of a satellite health insurance system in Ghana**



Note: GST – Ghana Social Trust; CHAG – Christian Health Association of Ghana

Source: ILO.

In this model, the *hub* is a central body which would channel funds and provide technical support to the *satellites*, which would be the health insurers. The *benefit* would be some form of subsidy to extend access to health insurance. Early work on the project was therefore focused on identifying these three key components. The model has been altered in the light of experience, as the following explains.

### 1.2.1. Choice of hub - criteria

It was originally envisaged that a national agency will act as a hub and partner for satellite agencies.

The criteria for the hub was that it should have national scope and reach; and that it should have the administrative and technical capacity to calculate and deliver benefits. Among the bodies considered were CHAG and the Ghana Healthcare Company, a quasi-independent agency attached to SSNIT. However, the former was limited in scope, as well as lacking the capacity to give technical support to MHOs. The latter was still not operational some three years after coming into existence, and so was deemed to be unsuitable for the time being. It was therefore decided that the Ghana Social Trust project office itself would act as a virtual hub for the purposes of the project. The implications of the new NHIS and potential hub agencies will be discussed later in this report.

### 1.2.2. Choice of satellites – criteria

The proliferation of MHOs in Ghana at both district and sub-district level immediately pointed to these acting as satellites. Any attempt to set up a different structure would simply have meant parallel, and duplicated, activity.

The project team therefore identified and visited two potentially suitable MHOs, namely Okwawuman Health Insurance Scheme at Nkawkaw in Kwahu South District (Eastern Region); and Dangme West Health Insurance Scheme at Dodowa in Dangme West District (Greater Accra Region). Limited resources prevented the identification of MHOs further afield.



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Discussions focused on the performance and progress of the schemes. This offered an opportunity to identify the schemes major problems and areas where the project would assist. (See Annex 2, Discussion paper No. 1 for a summary description of the schemes). It was also important to ensure that there were significant proportions of poor people in the community; Dangme West has higher levels of poverty than elsewhere in the Greater Accra region; and in the Eastern Region poverty is around the national average level of 40 per cent.

The criteria for the satellite was that it should have sound administrative and technical capacity; and that it should have a benefit package and structure which would make it comparatively simple to extend access.

Both MHOs met the first criterion. However, the Okwawuman scheme had a threshold for the reimbursement of outpatient care of cedis 200,000 (i.e. US\$ 24) i.e. if the cost of treatment fell below that amount it had to be met in full by the patient. Clearly if people were having difficulty paying a premium, then they would equally have difficulty in paying for treatment under this condition, and so the scheme was considered unsuitable for testing the benefit. However, this is an issue to which we return later in this paper, as many MHOs in Ghana have a similar condition, which will have to be addressed if the mechanism is to work elsewhere.

The Dangme West scheme has a ceiling (of cedis 400,000, i.e. US\$ 48) for costs rather than a threshold, and so was considered to meet both the necessary criteria.

It should be noted that under the NHI legislation, DMHIs will have to provide a minimum benefit package set out at national level. This will mean at the very least benefit packages will have to be adapted and, in some cases, completely changed. This has obvious implications for the kind of support that can be offered in the long term.

### **1.2.3. Choice of benefit – benefit analysis**

There were a number of options for benefits which could be piloted, depending on the conditions in the satellite schemes. In Dangme West these were:

- provide universal subsidy to all members of the scheme;
- target poor families;
- subsidize large families;
- provide cash incentives to providers to improve quality of service;
- facilitate negotiations between the schemes and providers together with government;
- negotiate with government to facilitate participating provider with ambulances, equipment, drugs;
- help with the marketing of the schemes in the media, seminars etc.

In Okwawuman they were:

- subsidies outpatient care and have it covered under the scheme;
- negotiate/facilitate the provision of transport to the scheme;

- provide salaries for the workers;
- increase the involvement of the District Administration in supporting the scheme.

The principal constraint in considering benefits was the limit of resources available to the project for the direct support of the schemes, which were around US\$60,000 for actual benefit payments over three years; and the capacity of the project team and the health insurance administrators to process complex transactions.

#### **1.2.4. Analysis of benefit options – Dangme West**

##### **Universal subsidy**

At the time of consideration (February 2003), the Dangme West scheme had 7,500 members in a total population of just over 100,000. The annual premium was cedis 15,000 (i.e. US\$ 1.8) for adults and cedis 6,000 (i.e. US\$ 0.7) for children under 5 and elderly above 69 for the second insurance year (1 October 2001 to 30 September 2002). For the third insurance year (1 October 2002 to 30 September 2003) the premium had risen to cedis 25,000 (i.e. US\$ 3) for adults and cedis 15,000 (i.e. US\$ 1.8) for children under 5 and elderly above 69. The available project funds would have been sufficient to afford a universal subsidy of 7.5 per cent of the premium for all residents of Dangme West for a period of 3 years (on the basis of the latter premium cost).

Another option would be to provide to x number of persons a flat subsidy rate of 25 per cent of the premium for three years (upto what the available project funds can afford). According to our calculations the subsidy could be provided to approximately 30,000 persons.

A universal subsidy is, however, a blunt instrument, and it is difficult to assess its impact on how many people would decide to join. An ILO-sponsored survey<sup>14</sup> (see section 1.4) in the two districts suggested that around 77 per cent of non-members would consider joining if the premium were cedis 20,000 (i.e. US\$ 2.4) or less. Whilst it is unlikely that a subsidy would de facto have caused such a significant increase in membership, it might have caused sufficient increase to stretch the capacity of the Dangme West Health Insurance scheme Administration (DWHIA).

Most importantly, a universal subsidy does not specifically target the poorest in the community.

##### **Targeting poor families**

Targeting poor families meets the basic objective of helping the poorest. However, it raises a number of difficulties over how to identify such families, and against which criteria to measure their eligibility.

Discussions with the DWHIA suggested at an early stage that they believed it was possible to carry out the initial identification of poor households through local community knowledge, using a combination of scheme registrars and district community development workers. This started from the simple premise that “everyone knew” who the poorest people in each community were. After initial identification, the selections could be independently verified, and then, through a reverse methodology, objective criteria could be established for future use.

<sup>14</sup> ILO: *ILO Health Insurance Survey* (Geneva, December 2003).

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Once the numbers of poor people were established, the level of subsidy could be calculated on the basis of available funds.

### Subsidize large families

Whilst evidence points to large families being more likely to be poor, this too is a broad instrument and would exclude small households living in extreme poverty, notably amongst the elderly.

The Ghana Living Standards Survey,<sup>15</sup> conducted in 1997-8, showed the mean household size in Ghana as 4.3. Households of 6 or more accounted for 29.2 per cent, and 7 or more for 18 per cent. However, calculating the actual number of persons involved would require further work by simply identifying the households and counting the number of people therein. Household sizes also fluctuate, as members join or leave, and they are not a simple indicator of income or ability to pay health insurance premiums.

### Other options

*Provide cash incentives to providers to improve quality of service*

*Facilitate negotiations between the schemes and providers together with government*

*Negotiate with government to facilitate participating provider with ambulances, equipment, drugs*

*Help with the marketing of the schemes in the media, seminars etc.*

These options have been grouped together because similar arguments apply. They are all issues of notable concern to end users, and there is no doubt that investment in these areas would be beneficial overall. However, there is no guarantee that such interventions would increase access; they would not help those who were not insured; nor would it make insurance or health care any more affordable for the poorest. Therefore these options did not meet the project criteria.

## **1.2.5. Analysis of benefit options – Okwawuman**

### Subsidize outpatient care and have it covered under the scheme

The non-reimbursement of outpatient care costs below cedis 200,000 (i.e. US\$ 24) under the scheme is a significant barrier to access by the poor. Reliable data on the average unit cost for each medical intervention is not available, but it is a fair assumption that it is less than cedis 200,000 for the end user (who, it should be recalled, paid only 20 per cent of the cost under the previous cash-and-carry system in Ghana). The ILO survey, for example, showed that in only 15 per cent of interventions did the user fee exceed cedis 200,000. Families on low incomes therefore see little to be gained by paying an insurance premium against the smaller risk of expensive treatment if their everyday medical expenses are not met under the scheme.

The cost of subsidizing outpatient treatment is difficult to calculate, given the lack of reliable data. However, if we take a very rough calculation based on the ILO survey, the average cost to the user is around cedis 31,600 (i.e. US\$ 3.8). In the same survey, 50 per cent of respondents in Kwahu South had used a medical facility in the previous year, of

<sup>15</sup> Ghana Statistical Services: *Ghana Living Standards Survey (GLSS 4)* (Accra, October 2000).

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which around 90 per cent appears to be outpatient treatment. The population of the district is 216,000.

Therefore, to give an idea of figures, if we were to decide to subsidize 25 per cent of the fees for outpatient cases:

$216,000 \times 50 \text{ per cent} \times 90 \text{ per cent} \times 31,600 \times 25 \text{ per cent} = \text{cedis } 767,880,000 \text{ (i.e. US\$ } 91,400 \text{ per annum)}$

This calculation assumes a subsidy (for the extension of the benefit package) which would apply to all in the district, and therefore would not only target the poorest, who would still have to meet the full cost of the premium. It would also mean that the insurance scheme would have to meet the remaining 75 per cent of the outpatient care, which would probably not be financially sustainable under its present structure without an increase in the premium, which would again exclude the poor. However, it does indicate that at a later stage it might be possible – and affordable – to consider a more targeted form of such a subsidy.

### Other options

*Negotiate/facilitate the provision of transport to the scheme*

*Provide salaries for the workers*

*Increase involvement of the District Administration in supporting the scheme*

As in Dangme West, these options did not meet the criteria of improving access to health care among the poorest, although they would probably have helped improve the performance of the scheme.

### 1.2.6. Benefit analysis -conclusion

In the light of the above considerations, and the decision to opt for Dangme West as the pre-pilot area, it was decided during the February workshop that a targeted subsidy at poor families would be the best way to proceed. The decision was also influenced by the complementarity of such a subsidy with the Government's plans. At this stage, although no final decision was taken, it was already clear that the subsidy would be in the order of 75 per cent of the premium for a period of three years. The premium to be paid by each beneficiary member was 25 per cent and it was expected that this be paid at the beginning of the insurance year.

## 1.3. Stakeholders

In parallel with the concept development was the establishment of contacts with key stakeholders. Taking the lead in establishing the NHIS is the Ministry of Health. However there is a wide range of other stakeholders who are closely involved in many ways.

The Ghana Health Service (GHS) is a major player, as the provider of public health services. The GHS will have a key role to play in ensuring that there is adequate benefit provision, in line with a proposed national minimum benefit package.

Although opposing some of the aspects of the proposed NHIS, the social partners, as representatives of formal sector workers whose contributions are to support the funding of the NHIS, were consulted in the development of NHI policy. Moreover, employers (some

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of whom are providing health cover for their employees) had an interest in the development of the policy.

Health insurers are another key group, as many of their association members will be providing the necessary health insurance. Two notable organizations are the Christian Health Association of Ghana, which represents many of the mission hospitals which are the only providers of health care in some areas; and the loosely structured network of MHOs, which represents the interests of that sector.

At community level were District Assembly representatives, local community development workers, health insurance registrars, traditional community leaders and faith-based representatives.

There is also a group of development partners with an active interest and participation in the new system, namely the United Kingdom Department for International Development (DFID), DANIDA (Denmark), the United States Agency for International Development (USAID), the World Health Organization (WHO), the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) Germany, the Dutch department for Development Cooperation, the World Bank, the European Commission and, of course, the ILO.

The involvement of stakeholders was simply indispensable to the success of the project. Initial meetings and consultations were focused on Government and experts in the sector, as well as the social partners, in order to develop the concept. The Ministry of Health, and the Ministry of Manpower Development and Employment were key. Relevance to Ghana's poverty reduction strategy was explored with the Ghana Poverty Reduction Strategy Implementation Unit. Development partners shared their experience in health insurance in Ghana, notably DANIDA, which had provided both technical and logistical support to almost all the then existing MHOs in Ghana. CHAG and the two MHOs, Dangme West Health Insurance Scheme and Okwawuman Health Insurance Scheme, were also involved in initial consultations as potential partners – the former as a hub and the latter as satellites (see section 1.5).

The project team then set up, in February 2003, a two-day workshop to launch the project with key stakeholders and to discuss the wider issues relating to the reform of the NHI system. The concept was discussed thoroughly and endorsed unanimously by the participants.

During the workshop a number of issues were raised in regard to identification of beneficiaries and sustainability of the project. It was understood that the long-term sustainability of the project rested with the Government of Ghana through the exemption scheme. The project could support the government to test methodologies to deliver benefits to the poor. As proposed in the concept, if successful, the Government would take over the project and channel the exemption funds through it. One of the outcomes of that seminar was a discussion paper,<sup>16</sup> which is at Annex 2.

A full report on the workshop and list of participants is at Annex 1.

<sup>16</sup> Cichon, M. et al.: *Comments on the planned National Health Insurance System in Ghana*, Discussion paper No. 2 (Geneva, ILO, March 2003).

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## 1.4. Survey

### 1.4.1. Introduction

Having developed the concept, and carried out initial consultations, the next step was to gather information on usage of, and attitudes to, health care and health insurance. The project commissioned a survey of attitudes to health insurance in two districts, Dangme West and Kwahu South, covering a sample of 1,000 people (500 in each district) in 2003. The main objective of the survey was to draw conclusions on the factors which encourage, or prevent, people from joining MHOs; and on the potential criteria for identifying eligibility for reduction in or exemption from premiums for health insurance with the aim of increasing coverage.

The survey gathered information on the following areas:

- household size, ages, level of education and socio-economic class;
- employment and income of household members;
- access to health care provision;
- recent medical history;
- awareness of health insurance with particular reference to MHOs;
- factors affecting membership of MHOs,
- attitudes to exemptions from, or reductions in, health insurance premiums.

Although at this point the project team had decided to proceed in only one district (Dangme West), the survey was carried out in both of the districts which had originally been considered. This naturally gave the opportunity for comparisons, and allowed the project to consider which factors might be specific to each location, and which might reasonably be extrapolated more generally. In particular it allowed comparisons between two different approaches to the health insurance benefit package.

Quantitative research based on face-to-face interviews was conducted in the homes of respondents. The respondents were selected using probability sampling procedure, thereby reducing any bias that might affect the findings of the study. Every respondent was given an equal and calculable chance of either being included or excluded from the sample. Respondents were heads of adult household who also had the responsibility of decision making in the household.

### 1.4.2. Summary of survey results<sup>17</sup>

In the following figures, the y-axis represents percentage of respondents.

<sup>17</sup> It should be noted that where national data is cited, it is based on the 4<sup>th</sup> Ghana Living Standards Survey. Data collection took place around 1998, so figures are not directly comparable. However, they give a broad indication of the relation between the survey areas and the country as a whole.

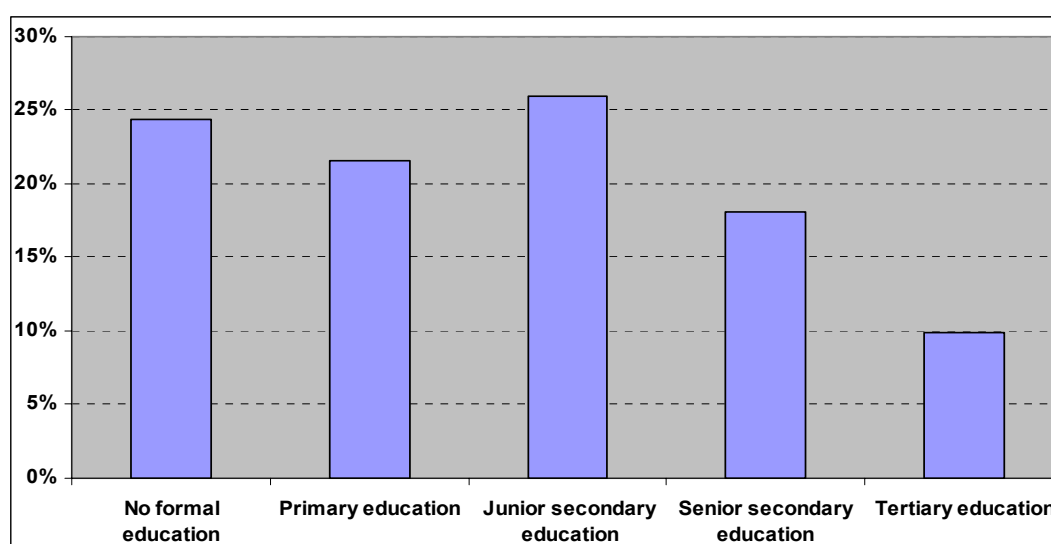
## Demography

Around 70 per cent of heads of household were male, which is broadly comparable to the national figure. 50 per cent fell in the 21-40 age bracket, although a significant proportion (16 per cent) were aged over 60. The average household size in the Dangme West district was 5.5, compared to the national average of 4.3. Around two thirds were married, of whom most had only one spouse. Approximately 73 per cent had children under the age of 18.

## Education

A quarter of respondents had had no formal education; a further quarter had completed junior secondary education and a fifth had completed only primary education. The remainder had attained at least senior secondary level, with around ten per cent of all respondents having completed tertiary education. The number of people who had completed senior secondary or tertiary education was almost three times the comparable national figure. The reasons for this are not clear, but may be simply because of relatively good access to secondary schools.

**Figure 2. Educational attainment, Survey Dangme West and Kwahu South (2003)**



Source: ILO Health Insurance Survey (2003).

Of households with children under 18, around 74 per cent had one or two of those children in school. Household heads were sometimes reluctant, however, to discuss whether all of the children were attending school. This was probably because non-attendance was due to the family being unable to afford school fees; or because the children were working. Where a reason for non-attendance was given it tended to be because the children were too young, or they refused to attend. Nevertheless, the attendance rate was higher than the national figure of 59 per cent.

## Employment

Most respondents (72 per cent) considered themselves to be self-employed, and just over 60 per cent of those in work were employed in trading, farming or fishing. 84 per cent of the employed were working in the informal sector. 7 per cent of respondents were unemployed and a further 5 per cent were retired. Of those respondents who were unemployed, 76 per cent had been so for a year or more.

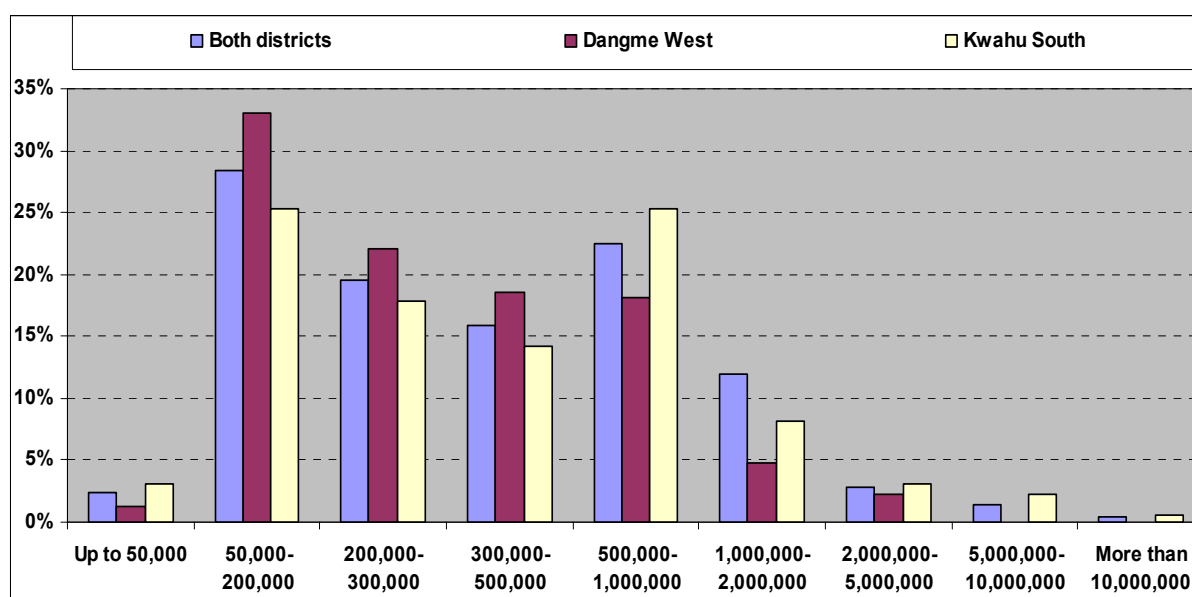
Eighty per cent of employed spouses were working in trading, farming or fishing, with 88 per cent of their work in the informal sector. 37 per cent of spouses of respondents were unemployed.

The high level of people in the informal sector, along with the seasonal nature of much of employment, is probably indicative of low or fluctuating incomes.

### Incomes and assets

Half of the households had a monthly income of less than cedis 300,000 (roughly equivalent to the US\$1 per day level). 66 per cent had a monthly income of less than cedis 500,000 (around US\$2 per day); this figure rose to 75 per cent in Dangme West.

**Figure 3. Gross household income, Survey Dangme West and Kwahu South (2003)**



Source: ILO Health Insurance Survey (2003).

Employment and farming were cited as the principal primary sources of income, and also formed a high proportion of secondary sources. Remittances from abroad were an important source of primary or secondary income in 5-6 per cent of cases.

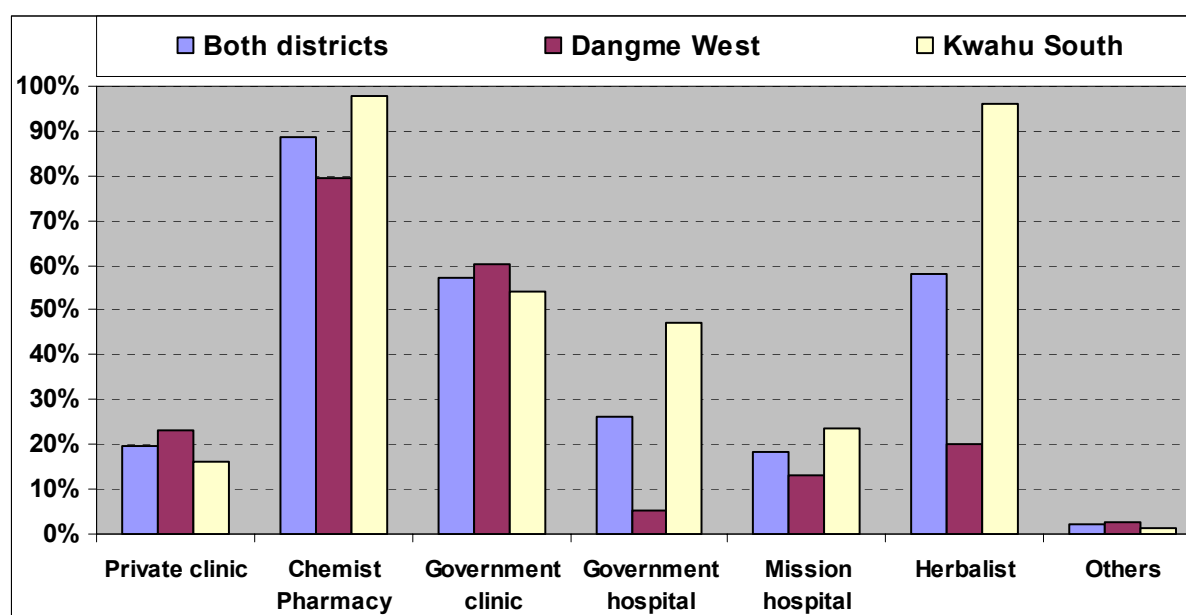
Only 39 per cent of respondents owned any land asset – significantly less in Dangme West, at 29 per cent.

### Access to and use of health facilities

97 per cent of respondents had access to a health facility in their own town or village, and 91 per cent had access to a facility within 3km of their home. For most people (89 per cent), however, the nearest facility was a chemist or pharmacist. 58 per cent had access to a herbalist (with a significant difference in the two districts), and 57 per cent to a government clinic. Only a quarter had access to a government hospital, and around 20 per cent had access to a private clinic and 19 percent to a mission hospital. The particularly low level of access to a Government hospital in Dangme West (5 per cent) reflects the fact that there is no hospital in the district, although some people have ready access to a hospital in a neighboring district.



**Figure 4. Access to health facilities, Survey Dangme West and Kwahu South (2003)**

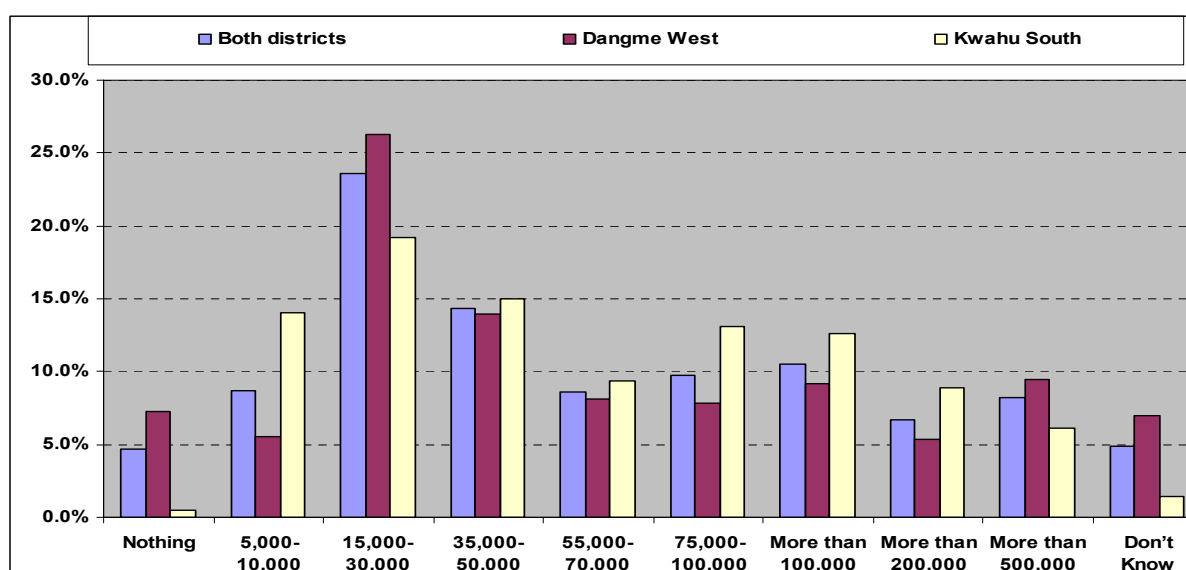


Source: ILO Health Insurance Survey (2003).

#### Illness and cost of medical treatment

57 per cent had had at least one member of the household fall ill in the past 12 months, of which 43 per cent were children. In three quarters of cases, the illness lasted less than two weeks. Of this subgroup, 60 per cent of respondents had visited a government clinic or hospital to seek help. The cost of treatment did not exceed cedis 50,000 (US\$5.95) for half of respondents, but for a quarter the cost was over cedis 100,000 (US\$11.90). A fifth of respondents had had a household member admitted to hospital in the previous two years, the cost of which had exceeded cedis 100,000 for 54 per cent.

**Figure 5. Cost of medical treatment, Survey Dangme West and Kwahu South (2003)**



Source: ILO Health Insurance Survey (2003).

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In Dangme West, a significant proportion of the households of those who were ill had paid much more for medical treatment than the premium they would have paid. In Kwahu South, since there is a threshold of cedis 200,000 (i.e. US\$ 23.80), it is only those whose treatment cost more who would have been better off. That still applies to 13.8 per cent of those who were ill.

### Perceptions of quality of treatment

Around 85 per cent of respondents were satisfied or very satisfied with the treatment they had received, with levels of satisfaction slightly higher in Kwahu South than in Dangme West. For those who were not satisfied, the causes tended to be associated with drugs: either generics were prescribed rather than more expensive drugs; the quality of drugs was inadequate; or the drugs prescribed did not improve the patient's condition.

There were also concerns about the quality of assistance, either in terms of treatment or in the attitudes of hospital staff towards patients. Lastly, around 14 per cent felt that the bill for treatment was too high.

This reflects two major concerns of health care users. Firstly, there is a perception that more expensive drugs are better, and so many people are unhappy with being prescribed generics. This is a question of perception rather than quality of care, and so would be best tackled through education and information. Secondly, there is a perception that those who have insurance are given poorer levels of treatment. There may be some truth in this, since health care providers are probably likely to give better service to those who are paying up front, rather than to those for whom they have to await reimbursement from the insurance scheme. This is also best tackled through the sensitization of health provider personnel, although it should change in any case with the advent of the national health insurance system.

### Awareness of and attitudes to MHOs

Around three quarters of respondents were aware of an MHO in their community, but only 13 per cent were members, with no significant differences in the two districts. For this latter group of members, 66 per cent overall had all family members registered in the MHO. This figure rose to 84 per cent in Dangme West as opposed to 53 per cent in Kwahu South. For the remaining group (i.e. 34 per cent), the principal reason for not-registering all the members of the family was the cost of the premium, cited in 44 per cent of responses.

The premium paid was in the range of cedis 11,000-30,000 (US\$1.30 – 3.60) annually in over 80 per cent of cases, with more people in Kwahu South paying the upper end of that range.

65 per cent of respondents felt that the level of the premium was about right, while 22 per cent thought it too high in absolute terms. However, only 50 per cent felt it was about right in relation to the cost of other household expenditure, while 38 per cent thought it high.

58 per cent felt that membership of the MHO had improved their access to health care, rising to 67 per cent in Dangme West. For those who did not believe access had improved, 35 per cent said this was because the quality of treatment had not improved: paradoxically, this rose to 50 per cent in Dangme West. One particular concern in Kwahu South was that health insurance did not cover the first cedis 200,000 (US\$23.80) of hospital costs.

**Table 1. Reasons why insurance coverage had not improved access to health care, Survey Dangme West and Kwahu South (2003)**

Reasons	Total (Percentage)	Dangme West (Percentage)	Kwahu South (Percentage)
Have not been to hospital since joining scheme	22.6	14.3	29.4
Scheme does not pay for full medical bills	19.4	0.0	35.3
Quality of treatment not improved	35.5	50.0	23.5
Lack of drugs at clinic	12.9	21.4	5.9
Prescribed drugs do not cure sickness	9.7	14.3	5.9
Total	100.0	100.0	100.0

Source: ILO Health Insurance Survey (2003).

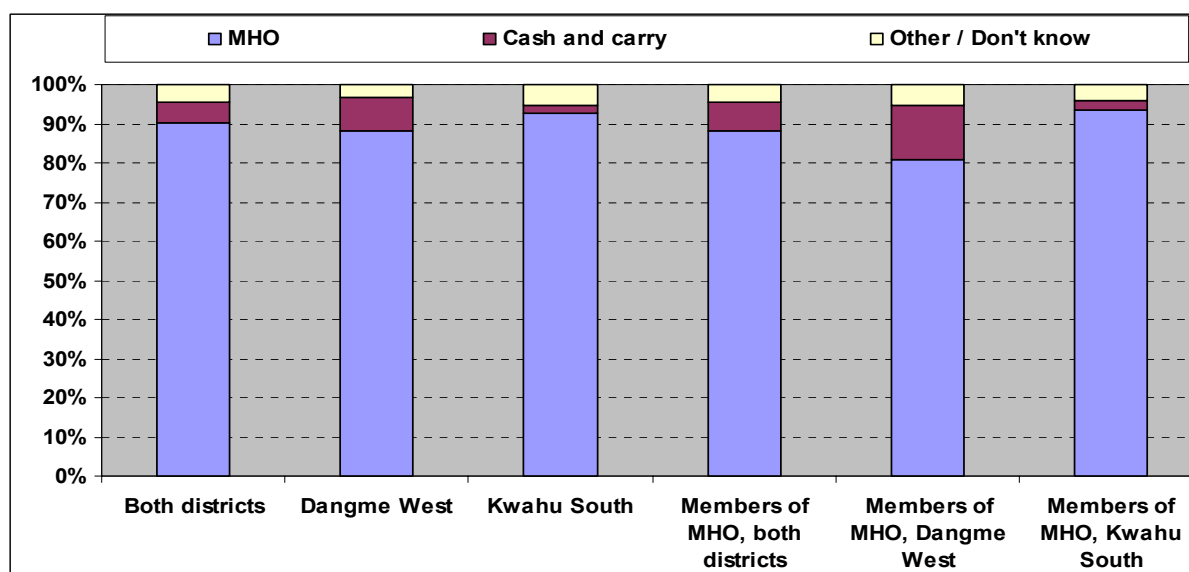
A small number of people had withdrawn from the MHO – a total of only nine persons. Two of these had done so for financial reasons, with the remainder dissatisfied with various aspects of the service.

Asked what improvements they would like to see in MHOs, most people wanted to see schemes covering all costs of treatment (20 per cent overall, and 35 per cent in Kwahu South). They also wanted better treatment of patients by hospital staff – a recurring perception is that people with insurance come a poor second to those who pay cash for treatment. This was a particularly strong feeling in Dangme West (27 per cent of responses).

88 per cent of those who were not members were willing to consider joining or re-joining an MHO scheme. Of the remainder, almost half said the cost of the premium prevented them from joining.

Overall attitudes were fairly positive, with 43 per cent of members experiencing no serious problems with the MHO. Some 13 per cent thought treatment was of poor quality, rising to 23 per cent in Dangme West. Other complaints were only cited by small numbers of respondents. Over 90 per cent of respondents thought that MHOs solved at least some of the problems of cash and carry, with 28 per cent saying they solved all the problems. The comparable figures among MHO members were 96 per cent and 20 per cent respectively.

**Figure 6. Preferred system of health care, Survey Dangme West and Kwahu South (2003)**

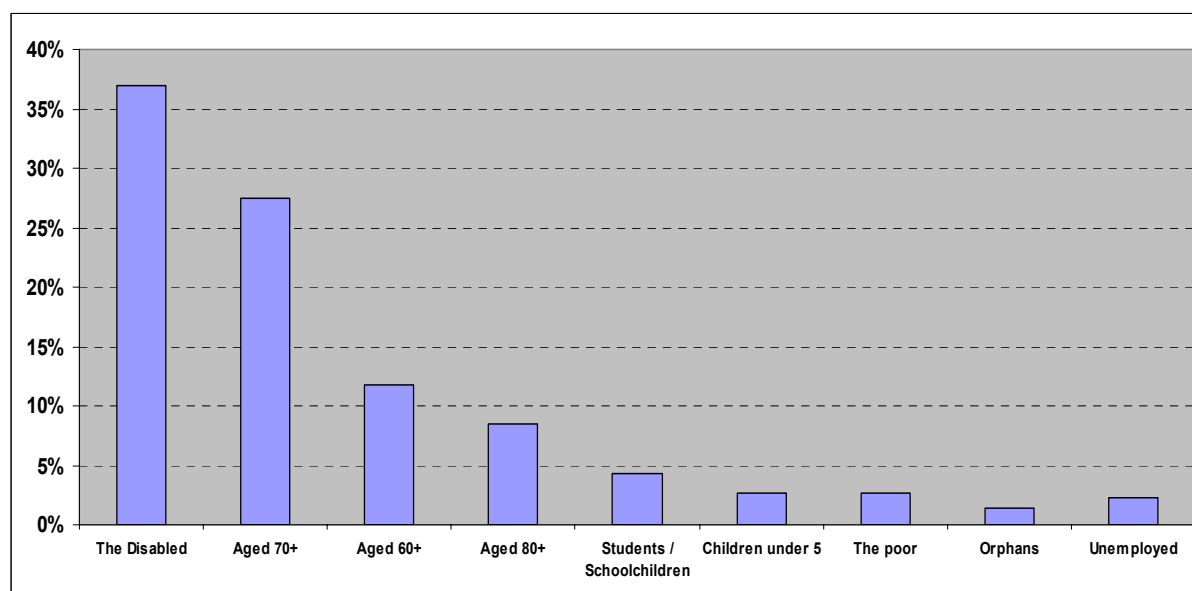


Source: ILO Health Insurance Survey (2003).

Overall, 90 per cent of respondents thought that the MHO was a preferable system to the cash and carry system. The proportion of those who thought it preferable among MHO members was slightly lower, at 88 per cent. The group where support fell most noticeably was members of the Dangme West MHO, at 81 per cent. While this is still a highly positive response, it suggests that there are still some perceived problems with the Dangme West scheme.

## Exemptions

**Figure 7. Exemption categories, Survey Dangme West and Kwahu South (2003)**



Source: ILO Health Insurance Survey (2003).

84 per cent of respondents thought that at least some people should have free access to health care. 37 per cent of these thought this should apply to people with disabilities, and 28 per cent to people aged over 70. These responses illustrated a tendency encountered

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elsewhere to identify the poor with particular social groups rather than on the basis of objective criteria. There was also a tendency to believe that help should go only to the “deserving” poor.

When it came to assessing people who should qualify for free access, 79 per cent thought the government should make that decision. Only 7 per cent thought it should be a task for community leaders, although this rose to 14 per cent in Dangme West, possibly as a result of community involvement in the project.

A variety of suggestions were offered as to how to increase MHO membership, notably more education (15 per cent) and effective implementation of the scheme (15 per cent).

## Conclusion

The broad conclusions drawn from these results were that attitudes were positive and people wanted to join health insurance schemes, but were inhibited by the cost of premiums and a lack of knowledge or understanding of how health insurance worked. This provided valuable supporting evidence to the project, by highlighting the key areas to be tackled. A copy of the full survey report is at Annex 3.

## 1.5. Further stakeholder consultations

Further consultations were held with the Dangme West insurance scheme registrars in the summer of 2003. A first community meeting was held in July between the project team, the DWHIS team, including registrars, the District Assembly team (Planning Officer, Welfare Officer, Community Development and Health Officers) and representatives from the 7 area councils in the district. This meeting discussed the proposal to have the community identify the poor and participants developed an initial list of indicators. One of the key issues was that although it was difficult to draw up a list of objective criteria, everybody “knew” who was poor. Therefore, it might be appropriate to have a combination of objective criteria and subjective community knowledge. The community also suggested that the exercise should be continuously reviewed; and that the poor be designated as “needy”, as this term was considered less likely to stigmatize the poor.

A planning meeting was then held between the project team, the District Assembly and the Scheme Managers at which it was agreed that a task force be established to facilitate the identification of the needy at the area council levels. Meetings were planned in all seven of the area councils in Dangme District (Dodowa, Ayikuma, Prampram, Ningo, Osuwen, Asutsuare and Dawa) over the following weeks. Mr. Peter Tweneboa-Kodua, the Senior Welfare Officer, was charged with preparing a report including the lists of beneficiaries to be presented to the ILO team during their mission in August 2003.

The area meetings were successfully organized and the project team managed to attend most of them. The results of the meetings were encouraging as registrars and community members enthusiastically offered to identify the needy within their communities. The meetings also offered an opportunity to gauge the people’s level of interest in the DWHIS. The question of quality (both drugs and health staff attitude) was predominant. It also emerged that the scheme faces a significant challenge with mobilization; the district is large, and it is difficult to reach more remote areas. Indeed, extra funds were allocated to some registrars to assist them in reaching areas where either there was no registrar allocated, some of which included the poorest villages. There was also some evidence of a need for capacity-building with some registrars.

Following the collection of information, and compilation and verification (see 1.6 below) of a list of beneficiaries, there was another workshop for registrars in February 2004, when they were given guidance on registering those who were on the list.

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## 1.6. Methodology of selection of beneficiaries

As explained in section 1.5 above, one of the key points to emerge from initial discussions was that people in communities “knew” who was poor, but had difficulty measuring this against objective criteria. The challenge was therefore to establish a methodology which drew on community knowledge, and would then measure that objectively through a process of verification, thus establishing the community-based approach which was an objective of the project.

Early discussions with stakeholders led to a list of criteria which might be used. Most cited the unemployed, the elderly with no carers, surviving partners of those who had died, orphans and people with disabilities. However, it was clear that while these people were likely to be poor, it was by no means certain, and they might well have sufficient sources of income.

Therefore, a form was designed to collect data on eligible families, and issued to participants at each of the area meetings, who were usually Chiefs and Queen Mothers, elders, teachers, pastors, Assembly representatives, women’s representatives, health workers, representatives of organized groups and opinion formers. A copy of the form is included in the Dangme West Report which is at Annex 4. This initial list produced some 2,500 households.

Given the experimental nature of the process, it was then decided to conduct a living standards profile questionnaire to verify all the households on the list. This exercise was carried out by administrative staff from the DWHIS, with the support of community development officers. The outcome of the verification exercise was that a significant number of households had to be removed from the final list for the following reasons:

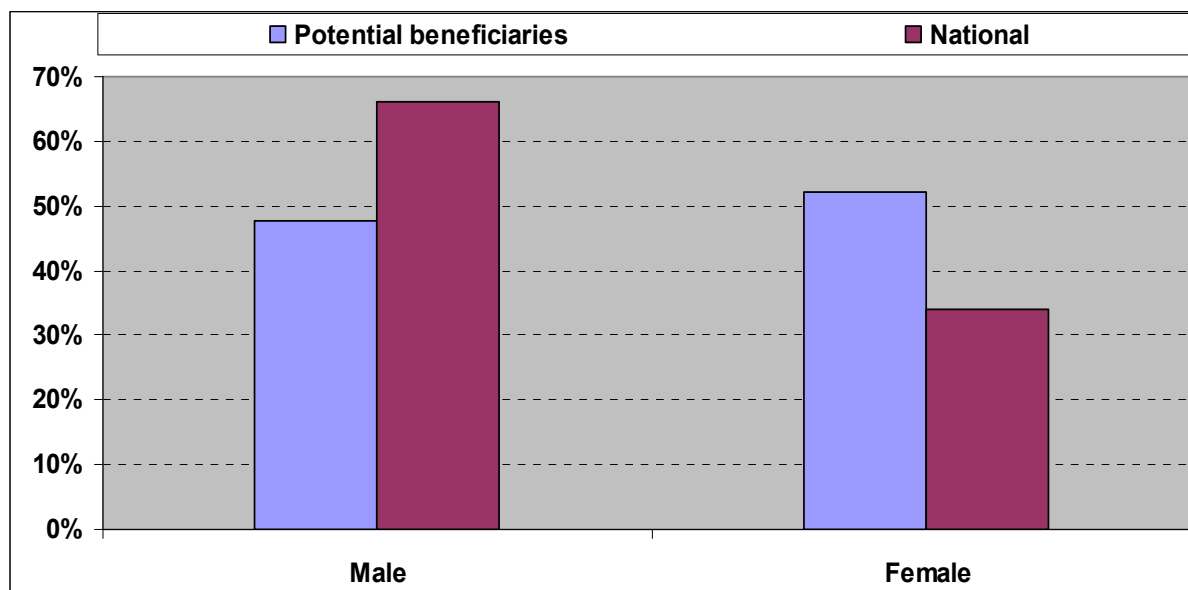
No trace of address	–	348
Double registering	–	205
Head of household member of another household	–	264
Head of household not found	–	61
Households found not to be poor	–	11

The final list was therefore made up of 1,622 households.

The questionnaire filled by all the households on the list included information on demography, employment and education status, housing and living conditions and asset ownership. The results illustrated a number of factors which could be used as indicators of poverty and which are presented in the following sections. It should be borne in mind, when considering the following data that the sample was of households *which had already been identified as poor*.

## Demography

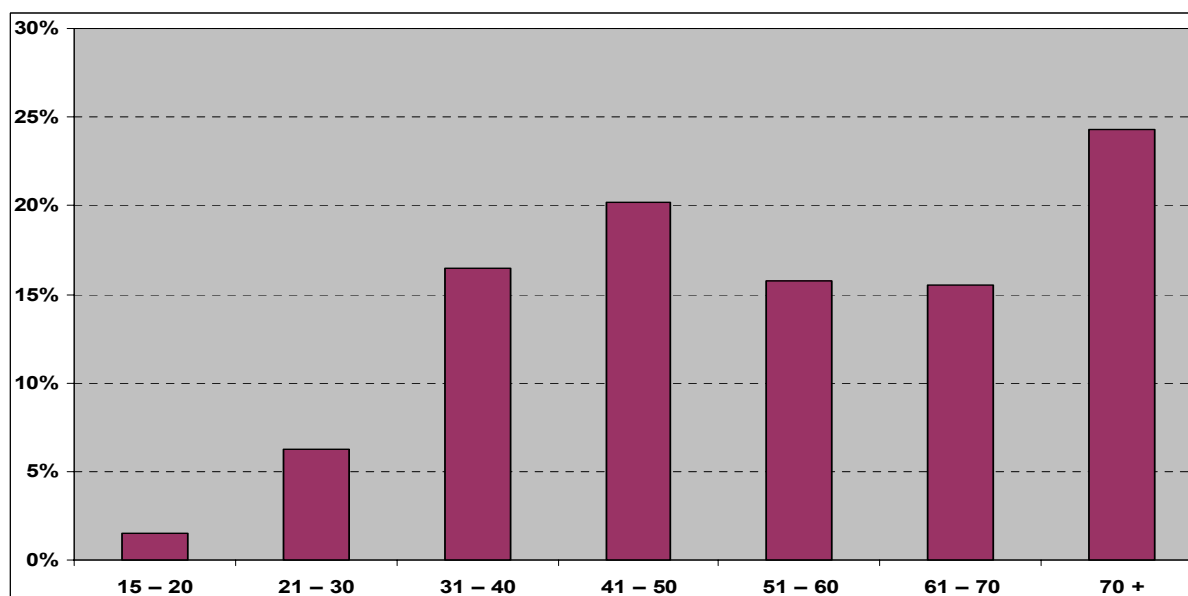
**Figure 8. Head of household by gender, Survey of potential beneficiaries in Dangme West (2003), and national data**



Source: ILO-DWHIS Living Standards Survey (2003).

The proportion of female-headed households in the sample was significantly higher than the national equivalent, suggesting that female-headed households are more likely to be poor.

**Figure 9. Age structure of household head, Survey of potential beneficiaries in Dangme West (2003)**

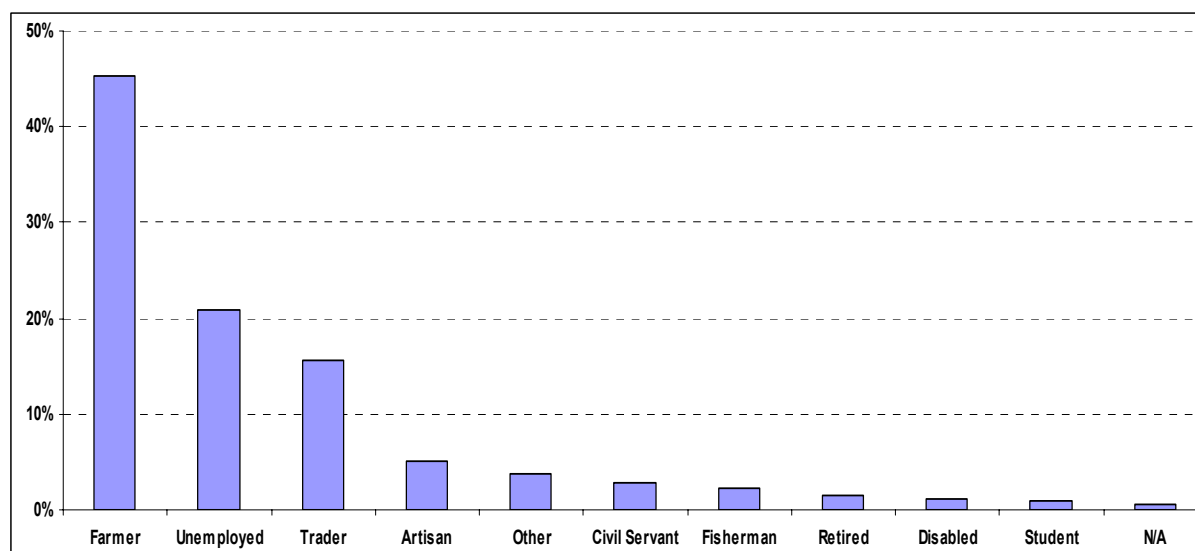


Source: ILO-DWHIS Living Standards Survey (2003).

With respect to the age of the head of the household, the incidence of older people among the sample group was significantly greater than that of the population as a whole; this might be expected as there is evidence that poverty increases with age. The average age of the survey heads of household was 57, significantly higher than the national average of 45.

## Employment and education status

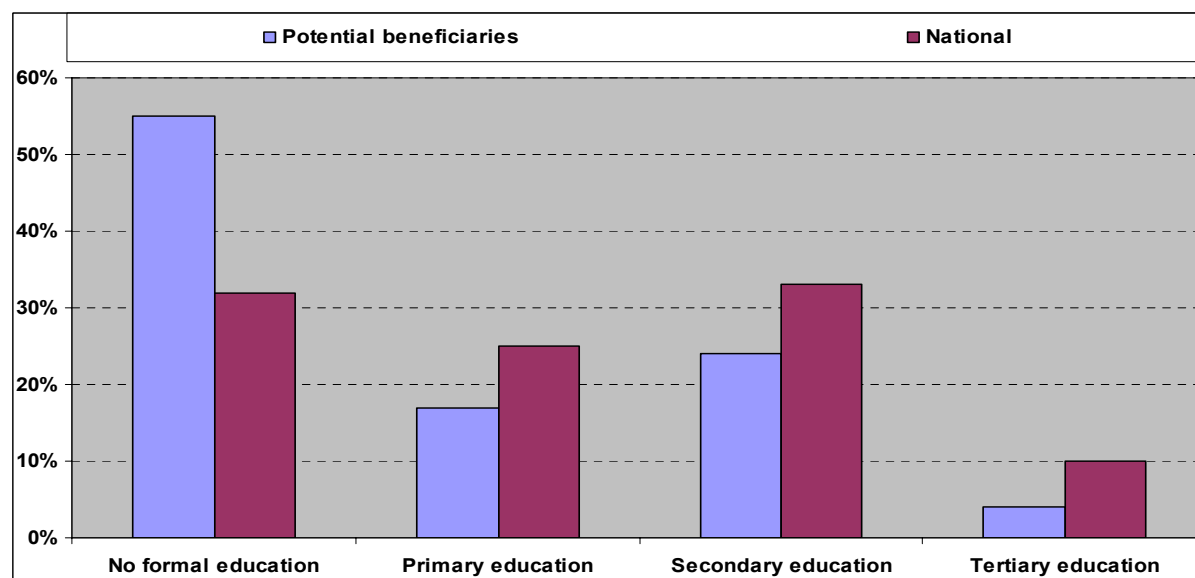
**Figure 10. Employment status, Survey of potential beneficiaries in Dangme West (2003)**



Source: ILO-DWHIS Living Standards Survey (2003).

Around a fifth of the sample was unemployed; while reliable national data is unavailable, this is probably broadly comparable to the national unemployment rate. Almost 70 per cent were employed in the informal sector, again reflecting the general situation. The high number of farmers is because the area is generally rural.

**Figure 11. Educational Attainment, Survey of potential beneficiaries in Dangme West (2003), and national data**

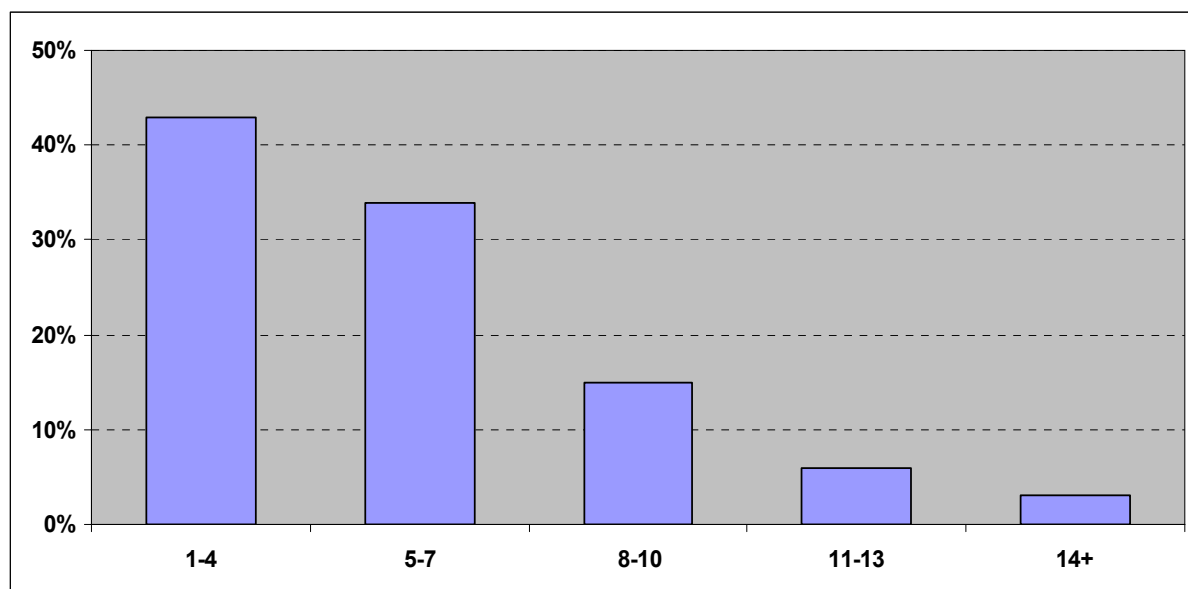


Source: ILO-DWHIS Living Standards Survey (2003).

Levels of educational attainment were also low, with over half the sample saying they had had no formal education. The reasons for this may be rooted in past difficulties in access to education (given the higher age groups in the sample), and the profile may change in coming years. As can be seen, the overall level of attainment was considerably lower than national figures.



**Figure 12. Number of persons in household, Survey of potential beneficiaries in Dangme West (2003)**

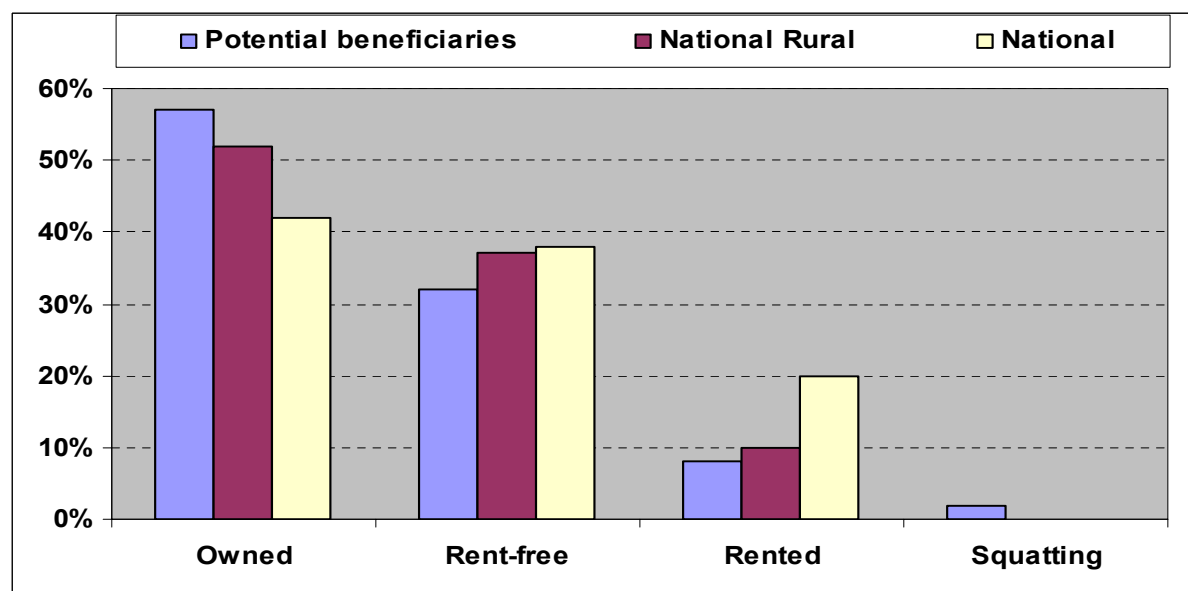


Source: ILO-DWHIS Living Standards Survey (2003).

The average household size in the sample was 5.5, somewhat higher than the national average of 4.7. The number of single person households (9 per cent) was about half the comparable national figure, and was closely correlated with older persons.

#### Housing and living conditions

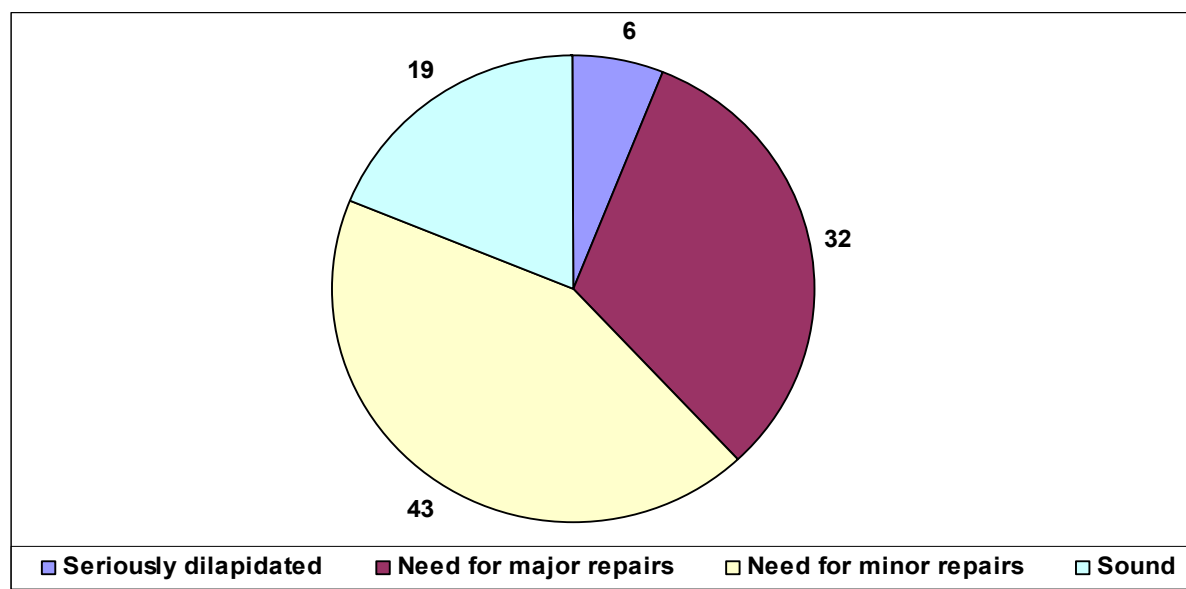
**Figure 13. Housing occupancy status, Survey of potential beneficiaries in Dangme West (2003), and national data**



Source: ILO-DWHIS Living Standards Survey (2003).

House ownership was high, although it should be taken into account that housing tends to be either inherited, or is continuously shared across several generations. Rent-free accommodation is usually provided by another family member. Occupancy status among the sample was reasonably close to comparable national rural data.

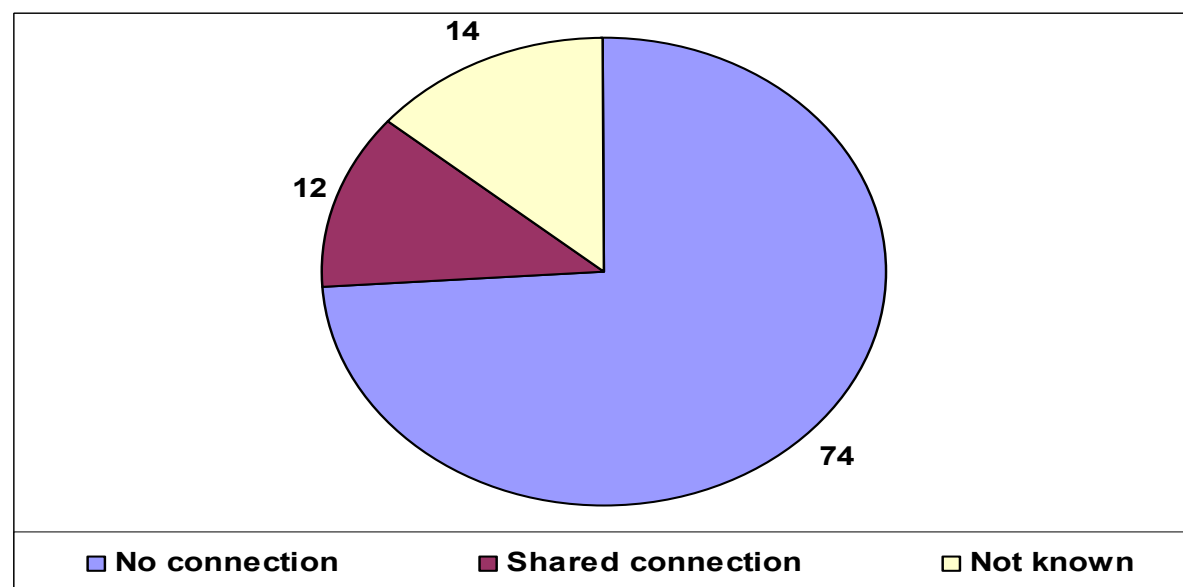
**Figure 14. State of dwelling, Survey of potential beneficiaries in Dangme West (2003)**



Source: ILO-DWHIS Living Standards Survey (2003).

As might be expected in a sample of the poorest, there was a significant proportion whose housing was in poor condition, with 32 per cent of dwellings in need of major repairs.

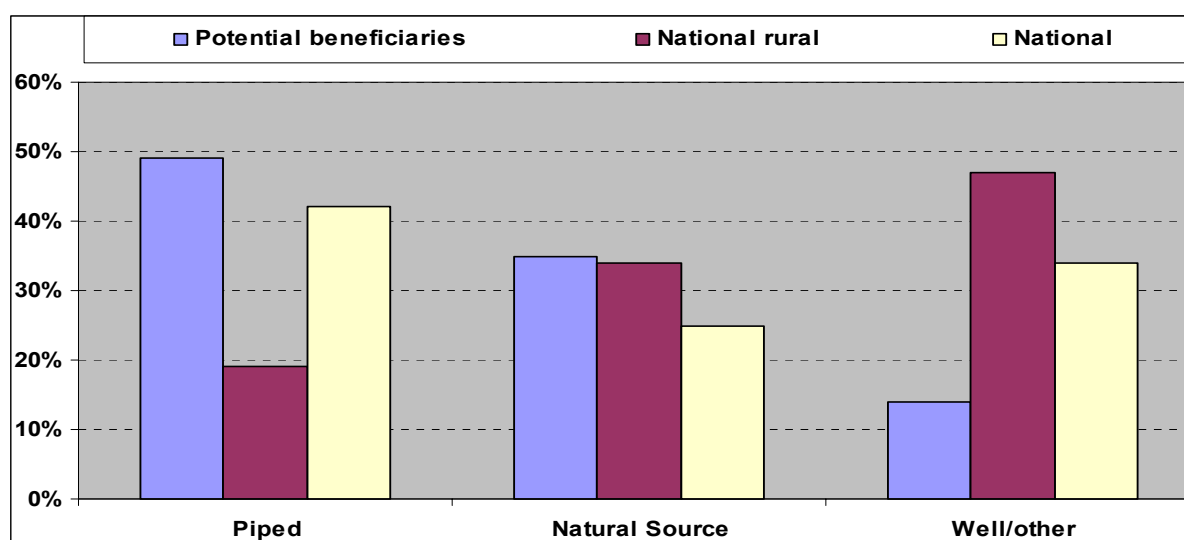
**Figure 15. Electricity supply, Survey of potential beneficiaries in Dangme West (2003)**



Source: ILO-DWHIS Living Standards Survey (2003).

The proportion of households without access to mains electricity (74 per cent) was considerably higher than the national figure of 61 per cent, but likewise it was lower than the average in rural areas of 83 per cent.

**Figure 16. Source of drinking water, Survey of potential beneficiaries in Dangme West (2003), and national data**



Source: ILO-DWHIS Living Standards Survey (2003).

Access to safe water supplies was relatively good in comparison to national rural figures, perhaps as a result of the district's proximity to Accra. However, a third of the sample was reliant on natural sources of water, with all the obvious implications for health status and consequent ability to earn a living. The proportion of the sample without access to any toilet facilities was notably higher than both national rural and national figures, which again has implications for health status. It should be noted, too, that many of those who had access to a latrine, whether improved or otherwise, shared it with other households.

### Asset ownership

Generally speaking, ownership of consumable goods among the sample was comparable to rural national data, with the exception of radio ownership, which was considerably higher. It is not clear why that should be so, although it is likely that poor radio reception in rural areas further away from Accra probably means that people are less likely to own a radio there.

### Conclusion

Although only some of the information collected in the ILO/DWHIS living standards profile questionnaire is presented here, the analysis clearly shows that the potential beneficiaries of the premium subsidy present characteristic of hardship.

Further work has to be done following this survey to develop the findings into a useable set of objective indicators which can be used as part of the identification process; this is discussed further at Section 2.3.

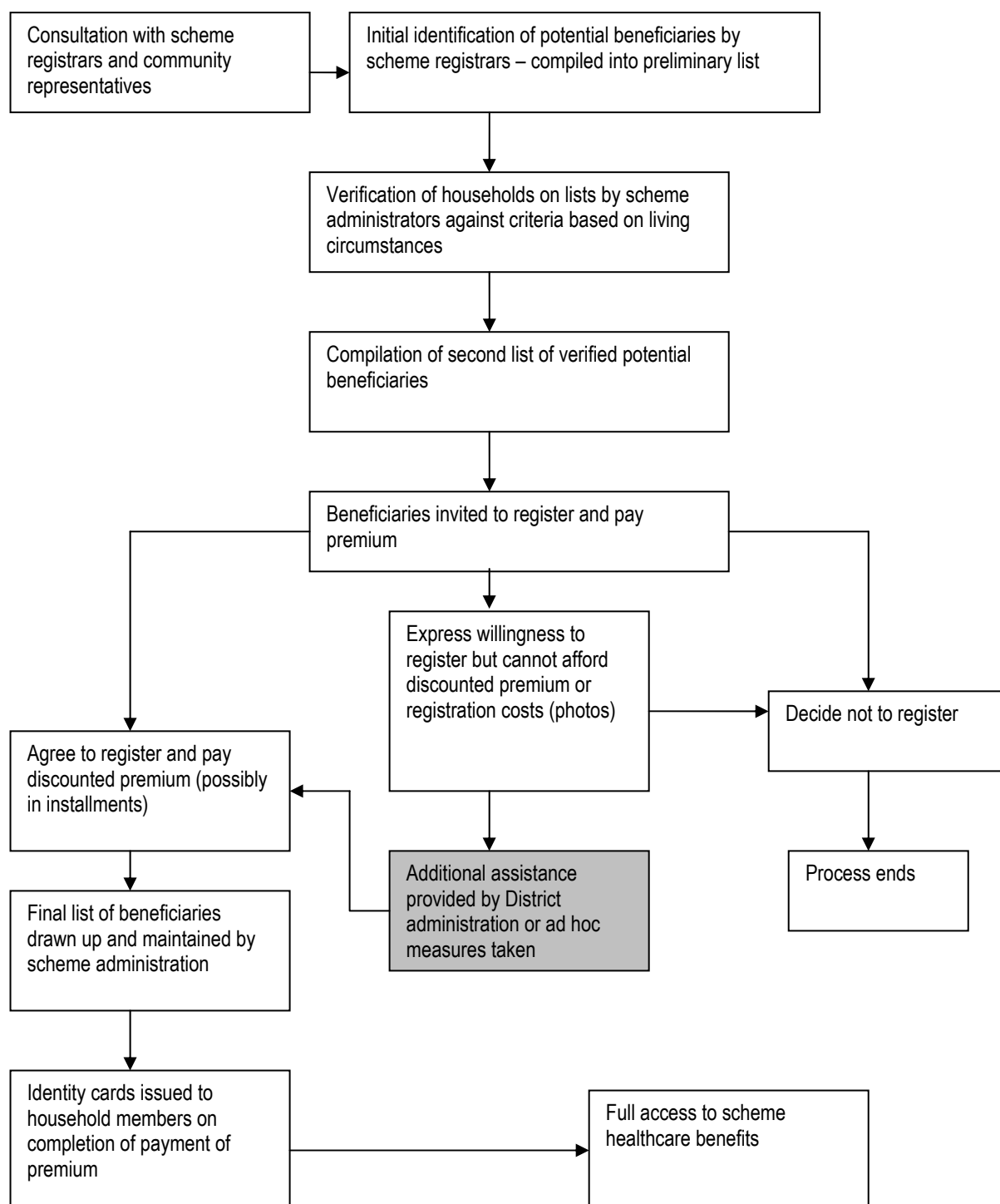
The number of households which appeared on the initial list, and then were removed is comparatively high. However, the reasons for their removal (double registering etc) do not present a serious difficulty, as these would normally emerge during the usual process of registering and collecting premiums, which takes place over a number of visits. The low number of households found not to be eligible is encouraging. It seems likely that once the system is bedded in, it would be more practical to verify a sample of households in future.

For the purposes of the project, it was decided that those identified as eligible for the subsidy would remain so for the duration of the payment period (three years).

## 1.7. Setting up the benefit delivery mechanism

Once the form of the benefit (premium subsidy) is established, the mechanism for delivering it is straightforward and could broadly be set out as: identification, verification, registration, award of benefit. The process, as carried out in the course of the project is set out in more detail at Figure 17 below.

**Figure 17. Delivery of benefit – project process**



Source: ILO

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In the course of the pre-pilot project, a number of points of interest emerged.

Firstly, it is important to set up a mechanism to ensure that the beneficiaries are integrated as far as possible into the normal administrative processes of the scheme in order to avoid excessive cost or bureaucracy. In addition, where potential beneficiaries know and trust those who are trying to encourage their participation, that participation is likely to be greater. In the model tested in Dangme West, registrars are community based and already work with district social development officers, and so efforts could be combined for the initial identification process. Once the list has been verified, then registration is also part of the normal process in the district; the registrar, when calculating the premium, makes the discount part of that calculation. Then, they collect the premium from beneficiaries at the same time as they are making collections from other scheme members. Finally, the identity card issued to each household member is the same as that issued to other scheme members. This avoids any stigma being attached to beneficiaries of the subsidy, and maintains a suitable level of confidentiality, since they are only identified as beneficiaries within the scheme records.

Some areas, of course, require further development. Whilst the process has been reasonably successful at drawing in a previously excluded group, if those who are identified choose not to participate then obviously they are still excluded. If the reason for that choice is that they cannot afford even the discounted premium, then a scale may have to be applied at some time in the future which permits some people free access to health care – indeed, the Government is already considering such a scale, ranging from a zero premium for the core poor to a comparatively high premium (around cedis 480,000 i.e. US\$57) for the wealthy; although definitions of poor and wealthy, and points in between are unclear. Furthermore, such a scale would add an undesirable degree of administrative complexity.

Another area which has caused disproportionate difficulty is the provision of photographs for identity cards. This is a one-off cost, but it is often beyond the means of beneficiaries. The DWHIA took ad hoc measures for the first year of operation and contracted a photographer. However, there remained considerable problems in getting people to come along to have the photograph taken. This has been the single most disruptive factor in completing registration. Delays in registering the beneficiaries have also meant that most were not registered until over a quarter of the way into the insurance year.

The timing of registration can also have an effect on the ability of beneficiaries to pay. Originally, the Dangme West scheme registered members at the beginning of the calendar year. However, they discovered that people had difficulty paying at that time, because for many their time of greatest cash liquidity was at harvest time or at the height of the fishing season – around August/September. The scheme therefore moved its registration period to the last quarter of each calendar year and had considerably greater success in registering members. In the second year of operation of the pre-pilot, the scheme administrators anticipate that many more people will be able to afford the reduced premium.

The final number of households which were registered in the first year was just over 700. The DWHIA is confident that this will rise to 800 before the first year ends; and that the remaining 800 will be registered in the second year.

Clearly all the reasons for the delays in registering beneficiaries will have to be explored in the course of evaluating the first year's operation. However, initial indications are that when people are deciding on whether, for example, to have their photo taken or to work, even if there is no cost for the photo, they will opt not to attend. If people are paying a premium, then they are more likely to either provide photos or attend a photo session, because they will otherwise not benefit from the insurance. If people do not believe the benefits of insurance outweigh the cost in time and effort, they will not attend.

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We would suggest that word of mouth may work as an effective incentive for those who have not yet registered to do so. Once beneficiaries of the project have received health care, and tell others of the related advantages, then those who have not understood the benefits are more likely to make the effort to register.

However, there is a risk that if treatment is difficult to obtain, or is perceived to be of poor quality, then people will not consider the advantages of health care access to be worth the effort. These, again, are issues to be explored in the evaluation phase of the project.

## 2. Outcomes and next steps

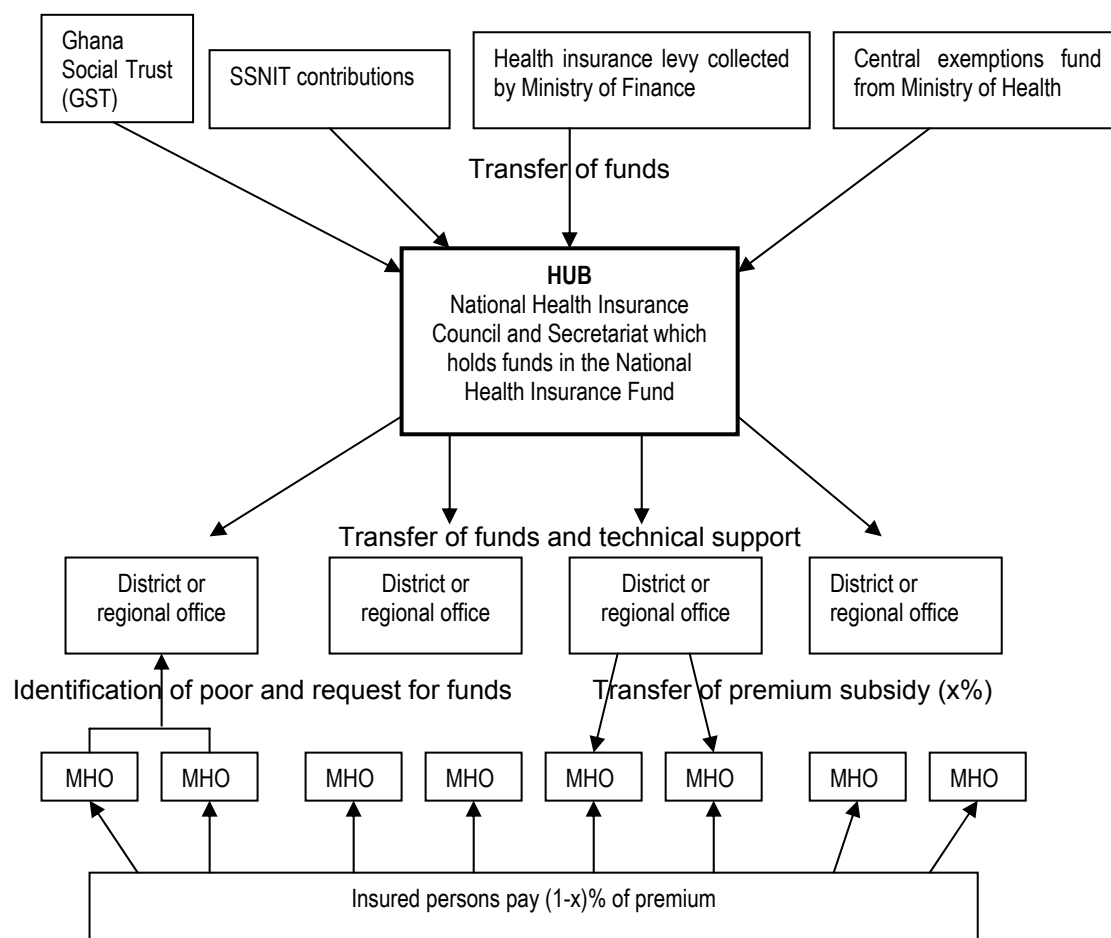
### 2.1. Introduction

The experience of the project has been that the basic structures outlined in the original concept appear to be sound, and require modification only to adapt to local circumstances. The fundamental hub-satellite structure is the most appropriate to deliver the benefit, and a methodology has been established to identify beneficiaries.

### 2.2. Administering the benefit

The hub-satellite model required modification, taking into account developments in legislation for and implementation of the new NHIS. This included the establishment under the Act of a NHIC, and its Secretariat, which is the appropriate hub body and has been assigned that function explicitly by the Act; proposals for district offices of the Council; and the emerging consensus that the role of SSNIT will remain, as it has been, to collect and administer contributions. The satellite schemes are the DMHI schemes which are the only schemes that according to the Act will receive subsidies from the NHIF. A revised model in line with the effective legislation - is presented in Figure 18.

**Figure 18. A revised model for a satellite health insurance system in Ghana**

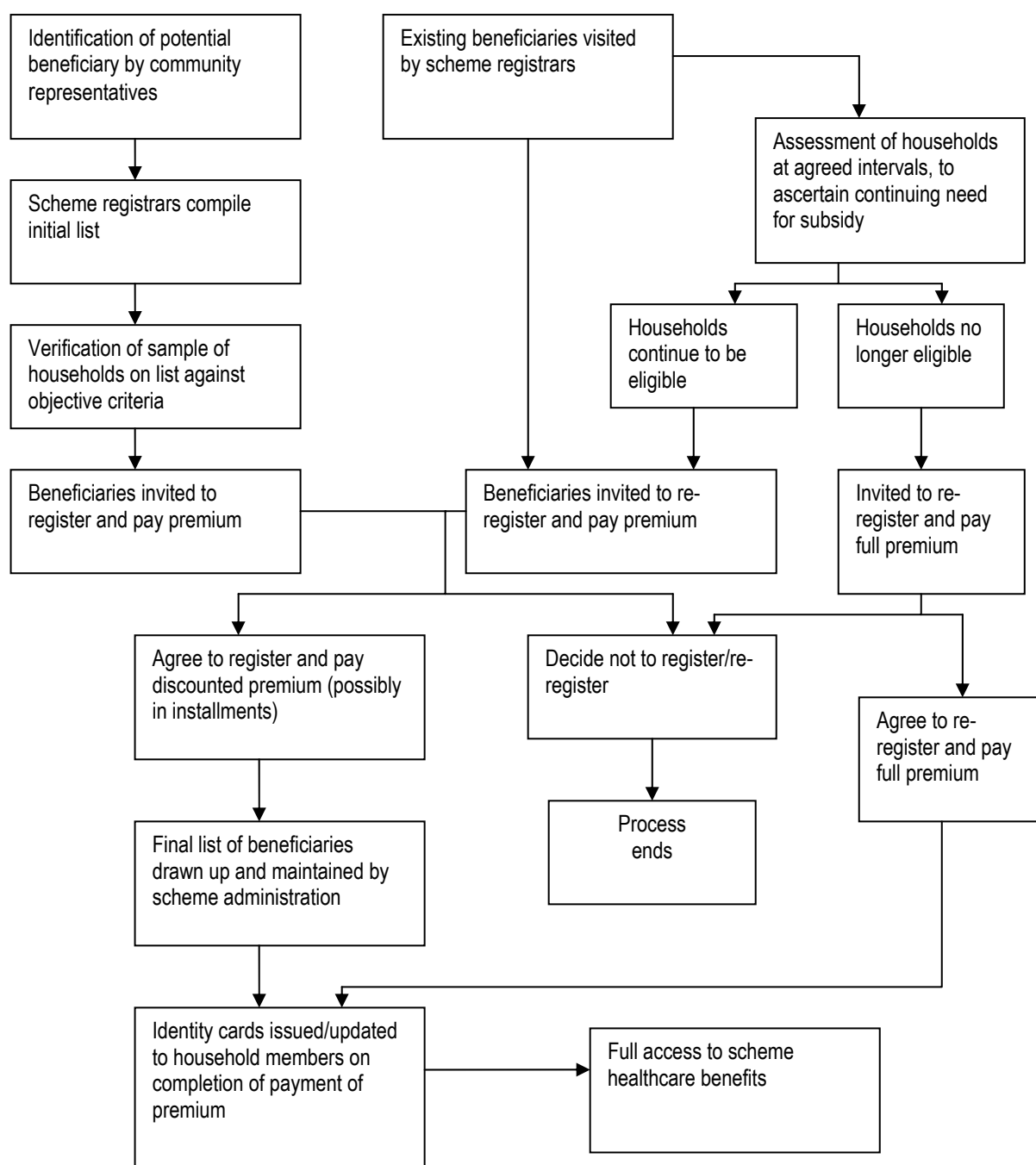


Source: ILO

In the revised model, the NHIC is responsible for calculating the level of premium subsidy to be applied, based on demographic information and available funding. The district or regional offices supply the necessary information to the NHIC.

In terms of the final benefit delivery mechanism, we would expect it to be more or less the same as that of the pre-pilot: the process is set out at Figure 19.

**Figure 19. Delivery of benefit in steady state system**



Source: ILO.

In this steady state, the process will have to take into account the registration of new beneficiaries as well as the continuation of existing ones. In the latter case, some checks will be required to ensure that the subsidy continues to go to those most in need, but it will be necessary to decide whether eligibility is re-assessed annually or, as in the pre-pilot, every three years (or another period). In any event, re-assessment can be integrated into the



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process at the relevant period. Households which are no longer eligible for the subsidy would, of course, be encouraged to remain in the scheme, but pay the full membership premium.

### **2.3. Developing the selection criteria**

As stated earlier, further work needs to be done to develop objective selection criteria that can be used to assist the process of selection of beneficiaries in conjunction with subjective local knowledge. Such work presents a number of challenges. Firstly, a simple lack of hard cash is not necessarily an indication of need, although the criteria will need to include an assessment of cash income.

Secondly, indicators such as building materials for homes, and fuel used for cooking can be useful, but in some communities all homes are made of mud, and everyone uses wood as fuel.

Thirdly, there are important cultural aspects to be borne in mind. In Ghana there is a strong tradition of community support, and if an outside party is involved in trying to help the poorest this can be seen as both stigmatizing the poor themselves, and reflecting badly on a whole community which can't "look after its own".

In drawing up the criteria, a differentiation also has to be made between the causes of poverty, and the indicators. In some cases these can be separated, but in others a single factor may be both a cause and an indicator: for example, unemployment.

Also if everyone in a given area lives in houses with mud walls and thatched roofs, for example, then other factors have to be used, such as considering access to utilities, the physical state of dwellings and ownership of assets.

Another issue is the difference between conditions in rural and urban areas. In rural areas particularly, ownership of livestock and the ability to farm even a small area of land can alleviate severe poverty, although this has to be measured with other factors to ascertain the ability to realize cash for health insurance premiums.

The data collected in the course of verification of the list of beneficiaries offers some useful guidance towards potential indicators, particularly when the outcomes are set against national figures (or national rural data as appropriate).

We suggest that some of the criteria that might be considered indicators of poverty are:

- marital status (widowed or divorced with children);
- employment status;
- state of dwelling;
- access to utilities (water, toilets, electricity);
- non-ownership of land (in rural areas);
- ownership of livestock (principally in rural areas, although this would apply to some extent in urban areas; and based on sheep, goats and poultry);
- access to transport in rural areas;

- ownership of consumer goods;
- disability.

Other factors which might be useful are school attendance, health and nutritional status and non-attendance by family members at funerals.<sup>18</sup>

The ILO will produce a paper, based on the outcomes of the Dangme West project, which will offer advice to the Government on a potential methodology for selecting the poor.

## 2.4. Long-term financial sustainability considerations

One major issue of the NHIS is to ensure its financial sustainability. While interim financing for some future pilots might be secured through international donors, ultimately the resources for funding the district (satellite) mutual health insurance schemes will have to be provided through either social health insurance contributions or general tax revenues.

One possible source of financing is the funds freed up through the debt relief arrangements for Heavily Indebted Poor Countries (HIPC). At present, Ghana's PRS has allocated US\$121.46 million from 2003-2005 for ensuring sustainable financing arrangements that protect the poor within the health sector, of which the HIPC funds constitute US\$17.85 million. Much of that will be targeted at maternity provision, to tackle the comparatively slow progress in reducing maternal, infant and under-5 mortality. Another priority area will be health care for the elderly poor.

The latter areas are presently covered, at least in part, from the exemptions fund, which is around US\$2.625 million per annum. According to ILO information the government is planning to increase the subsidies for premia of the poor to around US\$ 7.5 million per annum (i.e. cedis 63 billion) once the new NHIS has reached its stationary state.<sup>19</sup> This estimate is based on an assumed poverty rate of 5 per cent and a full subsidization of the premium.

It appears, therefore, that there is scope within the available funds to provide the necessary subsidy for the poorest of the poor through the NHIS itself.

However based on the project experience and other poverty estimates, the proportion of people that would require some form of premium subsidization is more likely to be in the order of 10 per cent rather than 5 per cent of the total population. It is presently difficult to project whether the NHIS would be able to shoulder the additional burden.

If we make a rough estimate of how much will be needed to subsidize an additional 5 per cent of the poor along the lines of the Dangme West model, we arrive at:

<sup>18</sup> Traditions surrounding funerals in Ghana can mean considerable expense, not only for the family of the deceased, but for all members of the community. It is expected that adult community members contribute to the costs of the funeral; and that they attend the various ceremonies, usually in new clothes bought specially for the occasion. Often the poorest do not participate, as they cannot contribute and cannot afford the clothes, and there is considerable anecdotal evidence that non-attendance at funerals is an indication of significant poverty.

<sup>19</sup> See estimates in ILO: *Preliminary resource allocation in the Ghana National Health Insurance System, A supplementary technical note to Discussion paper No. 6* (Geneva, September 2004).

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Proportion of poor in excess of 5 per cent:	5 per cent
Cost of premium:	cedis 72,000 per adult (US\$ 8.6)
Subsidy level:	75 per cent
Population:	20,000,000
Cost:	<i>US\$ 6.4 million per annum.</i>

The above is only a crude guess. In particular the proportion of 10 per cent of the population being eligible for premium subsidy is uncertain. It follows, therefore, that a more detailed long-term financial plan has to be worked out; and, in particular, further work is needed to assess any overlap between the PRSP funds and those proposed in the health budget for protecting the poor, and to establish the precise amount available.

In the case of Dangme West, around 8 per cent of the population appear to qualify for a premium subsidy. However, in some other regions of Ghana this might be expected to be much higher (in the Northern Region, for example, around 70 per cent of the population is estimated to be living in extreme poverty). We might therefore assume that around 30 per cent of the total population may need some form of subsidized premium, but not all of them will require a subsidy of 75 per cent, so the above order of magnitude for additional premia subsidies to the poor appears a reasonable indicator of additional immediate resources needed.

The government plans to increase the overall level of subsidies within the envelope outlined in the PRSP, and partly financed from HIPC resources, leaves the use of these resources unclear. The support of all poor, elderly and children in the NHIS alone requires, according to ILO estimates, about US\$ 36 million per annum.

If the exemptions fund is used, as at present, to support services (such as maternity provision) then significant reworking will be necessary to establish clear lines of funding. The funds can also only be calculated effectively if the mechanisms to support the poor are developed fully and can be implemented at the district level.

Nonetheless, if the long-term government plans are realistic and some more resources can be mobilized from the HIPC process, it appears possible that the subsidies to the poor could be maintained in the medium to long-term by national resources through careful planning and adaptation of the funding to come from the three principal sources (SSNIT contributions, health insurance levy and premium payments). This is discussed in more detail in section 3.1. Therefore, at least to some extent long-term sustainability appears possible, and longer-term international subsidies do not appear to be necessary. However, there is a clear need for interim international subsidies to

- (a) assist to fully establish a functioning subsidization mechanism across the whole country,
- (b) top-up the subsidies of the NHIF to reach all the poor till the government's resource allocation to subsidies is fully operational.



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### **3. Activities to support the establishment of a pluralistic national health protection system**

In addition to the main project activity, the ILO has been active in offering support to the Government of Ghana in several areas relating to the health sector reforms.

#### **3.1. Health budget**

Health care financing is a major and challenging issue for every government. Introducing a national health insurance scheme, with its related financial and governance issues, is even more complex. The ILO, in partnership with the Government of Ghana therefore carried out a financial study which provided an assessment of the evolution of the costs involved in providing public health care and its financing during the next decade.

For this exercise a health budget model was developed. The health budget model is a tool for evaluating different health care outcomes resulting from various policy options. The result was a first preliminary version built on a limited database. The ILO will incorporate feedback received from experts in Ghana and other competent institutions and develop a more detailed version over the coming months. The resulting paper<sup>20</sup> quantified the amount that the Government and the new NHIS would spend on health care.

The model was developed by considering all sources of income flow into the public health care system and the total costs involved in providing health care. The public health care budget is aggregated in an income and expenditure statement in order to present national health expenditure and its financing sources in one statement. The model is essentially a budget model, relying on exogenous assumptions on the future development of utilization and the cost of units of care. The model allows for simulations of alternative financial scenarios and should serve as a planning tool for timing the introduction of various elements of the NHIS.

Although the results presented in the report are inevitably tentative due to the number of assumptions that had to be made in lieu of actual data, there are some genuine trends that can be discerned with some degree of confidence from the simulations and projections.

The report concludes that it must be assumed that public health-care expenditure will grow rapidly over the next ten years. Revenues of the public health care delivery system will also increase. This is intended, as the NHIS sets out to mobilize new resources to the health sector. However, the expected increase in utilization by insured persons will lead to a subsequent increase in overall expenditure that will outpace the growth of resources and hence create a financing gap. The faster the extension of actual insurance coverage the earlier that imbalance could emerge. However, it seems that with realistic expectations as to the achievable progress of population coverage and a realistic assumption regarding the increase in the utilization of the insured persons there would be a period of around four to five years during which the overall system would remain in surplus. This should provide some breathing space to fine-tune the financing system and install effective cost containment mechanisms.

A critical condition for financial equilibrium during the coming years is that the government will not reduce its financial commitment to the health sector and hence all new

<sup>20</sup> Yankah, B; Léger, F.: *Financial analysis of the national public health budget and of the National Health Insurance System*, Discussion paper No. 4 (Geneva, ILO, February 2004).

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sources of revenues (SSNIT contributions, health insurance levy and premiums of the insured persons) are truly additional resources. Should the government attempt to reduce its commitment to the health sector, the deficit will emerge much faster. Deficits in health insurance schemes will lead to reduced quality of care or rapidly increasing contributions. Both will undermine the credibility of the new NHIS. The same would be the case if deficits had to be covered by (re)introducing sizeable co-payments at the point of delivery.

In the longer-term future, the Government of Ghana will probably either have to bear a higher share of the public health expenditure bill, or it will have to introduce – which is the more likely case – higher premiums to the DMHI schemes, higher formal sector contributions and/or a higher health insurance levy or a suitable combination of the three. This would need to be accompanied with a fair policy of exemption from contribution payments for the needy. From the present results the amount of new revenues to be mobilized till the end of the decade appears manageable.

A copy of the full health budget paper is at Annex 2.

### **3.2. Policy Advice to the Government on the National Health Insurance System**

In addition to the health budget, the ILO has produced a series of discussion papers relating to the Ghana Social Trust pre-Pilot Project, and to the national health insurance reforms. The papers are:

*A draft concept developed by the Ghana Social Trust Pilot Project, Discussion paper (Geneva, ILO, February 2003)*

This paper laid down the objectives of the Ghana Social Trust Project which aims to complement and support the Government's health insurance policy. Based on an analysis of the problems and policy developments in Ghana and the performance of typical community based health insurance schemes the project team proposed a concept based on a hub-satellite approach and proposed a benefit in the form of a subsidy of health insurance premium for selected groups. Amongst others it also discussed the organizational structure, the functional pattern and the financing of the proposed concept.

The discussion paper formed the basis of the discussion at the workshop in February 2003, and set out the objectives of achieving consensus on the Global Social Trust concept; assessing the compatibility of the project in Ghana with the Government's plans; and seeking the acceptance of participants of the proposed project.

*Comments on the planned National Health Insurance System in Ghana, Discussion paper No. 2 (Geneva, ILO, March 2003) by M. Cichon, C. Normand and F. Léger*

This paper built on the first, and offered an initial policy checklist for the development of the NHIS, covering a wide range of relevant issues, from objectives and design to financing risk equalisation. The paper supported the Government's plans for the NHIS, but outlined some initial concerns over the medium- to long-term financing of the system.

*An annotated checklist for the implementation of the National Health Insurance System in Ghana, Discussion paper No. 3 (Geneva, ILO, December 2003) by F. Kilpatrick and M. Cichon*

This paper provided a proposed road map of key activities necessary to implement the new NHIS following the passage of legislation. It identified five key areas of strategic activity which would have to be addressed if the implementation of the new system were to be successful. These were:

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- the establishment of a health insurance implementation master plan: the paper pointed out the necessity of such a plan for the effective operational implementation of the system, and recommended that it be drawn up by a planning group with full executive authority for its subsequent implementation;
  - National Health policy design and infrastructure planning: the paper stated that underpinning the national network of health care provision there must be a central governing structure to oversee national policy, practice and planning. That structure could be made up of more than one body, and these bodies would have responsibility for establishing national frameworks and financing, and for the overall governance of the system;
  - setting up the NHIC and the NHIF: the paper identified these as first order tasks of implementation, as they were key governing and financing structures of the new system;
  - defining the main tasks of the NHIC: once established, the NHIC would have to take forward many of the strategic activities of implementation, and manage the new system. These activities would range from governing and managing relations between Government, providers and health insurance schemes to training the necessary staff,
  - defining scheme based activities: in parallel with the activities of the NHIC, insurance schemes would have to either be set up or adapt their existing structures to fit the national system. Schemes were also the main interface between the new system and individual Ghanaians, and would have a crucial role to play in promoting health care access to citizens. The paper therefore included this area among the key activities.

*Financial analysis of the national public health budget and of the National Health Insurance System, Discussion paper No. 4 (Geneva, ILO, February 2004) by B. Yankah and F. Léger*

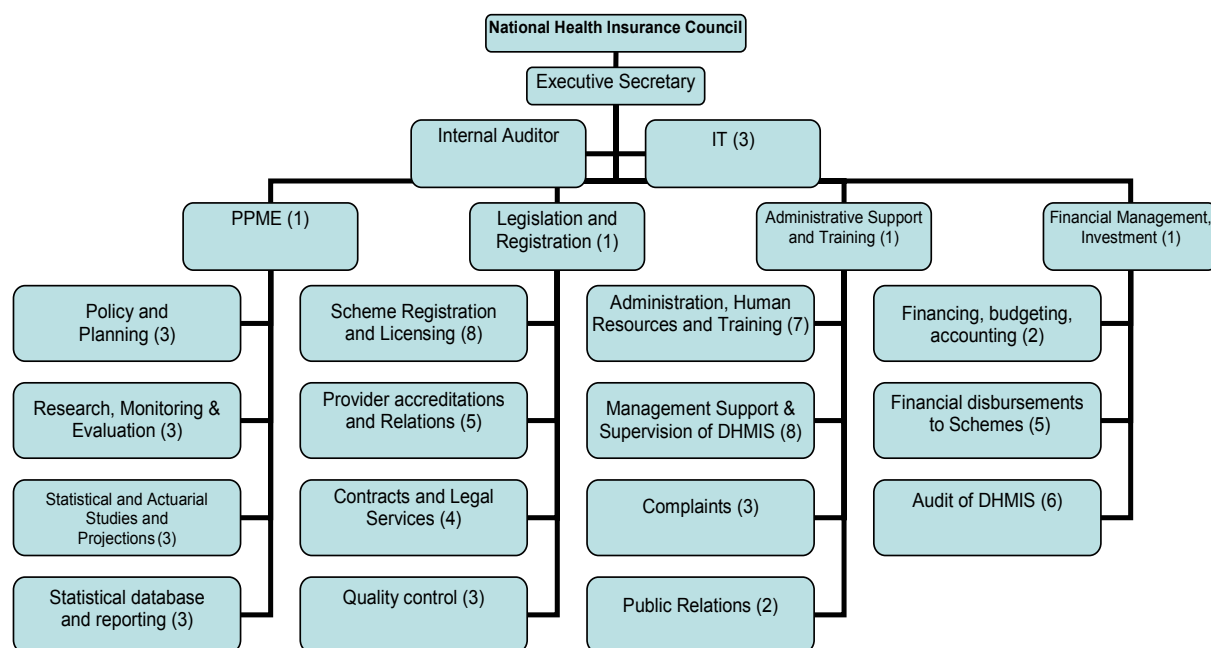
As discussed in Section 3.1, this paper summarized the findings of the exercise on the health budget model for a variety of scenarios.

*The organizational structure of the Ghana National Health Insurance Council, Discussion paper No. 5 (Geneva, ILO, February 2004) by F. Kilpatrick and M. Cichon*

This paper was prepared at the request of the Government of Ghana and contained an organogram for the Secretariat to the NHIC, and model job descriptions for the Executive Secretary and the Secretariat Directors. The basic organogram is at Figure 20 below.

The paper formed the basis for discussions at a workshop in July 2004, when the organogram and job descriptions were developed further. The ILO provided technical support at the workshop.

**Figure 20. Proposed structure of the National Health Insurance Council Secretariat**



Note: The figures in bracket in the boxes are tentative numbers of professional staff.  
 PPME: Policy, planning, monitoring and evaluation;  
 IT: Information technology

*Risk Equalisation within the Ghana National Health Insurance, Discussion paper No. 6 (Geneva, ILO, February 2004) by R. Wagener*

Also prepared at the request of the Government, this paper offered an initial proposed risk equalisation formula for the NHIS. The paper defined risk equalisation as “*the use of information to calculate the expected contributions and health expenditures of individual consumers over a fixed interval of time (e.g., a month, a quarter, or a year) and set subsidies to district mutual health insurance schemes to improve efficiency and equity.*”

It then summarized the general objective of the risk equalisation as being to *promote universal access to health care* by:

- providing equal resources to all members, regardless of their ability to pay;
- compensating those DMHI schemes with high risk profiles; and
- promoting geographical equity in the access to health care and improving services in poor and deprived communities.

In addition, the risk equalisation procedure should also take into account:

- *Cost Containment*: the procedure should not present disincentives to health insurance schemes to maximise efficiency and control costs.
- *Practicality*: the procedure should be reasonably easy to understand and practical to operate and revise.

The paper went on to develop formulae for risk equalisation on both the revenue and expenditure sides, and set out the data that would need to be collected in order for the formulae to be applied effectively. The paper concluded that risk equalisation of health insurance, through subsidies from the NHIF to the schemes, with a formula is based on three parts. The first two components complete the contributions received by the schemes



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by paying contributions for every exempted member and equalise the average contributions of the schemes. As the schemes receive a contribution for every member, either directly from the member or indirectly through the subsidy, the number of dependent insured persons does not need to be considered separately within the risk equalisation procedure. The parameters for controlling the first two components of the risk equalisation on the revenue side of the schemes are the rules for determining the contributions, those determining the categories of members exempted from paying contributions and the means test used for indigence. Furthermore the average contribution across all DMHI schemes used in the two components could be replaced by a different amount.

The third component of the risk equalisation formula is the one meant to equalise the risk for the schemes concerning the health expenditure side. Compared to the first two components this third component would probably need to be adapted rather frequently by improving gradually the definition of the risk factors and groups so that they take better into account differences in health care consumption and needs.

*Preliminary resource allocation in the Ghana National Health Insurance System: A supplementary technical note to Discussion paper No. 6 (Geneva, ILO, September 2004)*

This paper was prepared, again at the request of the Government, to offer advice on a possible mechanism for transferring funds from the NHIF to DMHIs in the first year to eighteen months of the new system, as full risk equalisation could not be calculated from day one. The paper specified that in the first year to eighteen months there had to be a simple mechanism to transfer funds to DMHIs to cover those who were exempted from contributions, and those who were entitled to insurance by virtue of their SSNIT contributions.

The paper identified certain minima which had to be in place, notably standardization on the expenditure side (a national fee schedule) and basic data to be collected on scheme operations and membership. The preliminary formula was, essentially, the product of average contribution for all schemes by the number of exempted members of any individual scheme, with an additional standard amount for administrative cost.

*Comments on the planned bi-partite Private Mutual Health Insurance Scheme of the Ghana Federation of Employers and the Ghana Trades Union Congress, Discussion paper No. 7 (Geneva, ILO, October 2004) by M. Cichon, F. Kilpatrick and F. Léger*

This paper was prepared at the request of the GEA and the TUC, who are considering the establishment of a PMHI scheme to serve their members, many of whom already have access to health care packages set up by collective agreement. The paper identified four possible options for the social partners:

- *Option One:* to continue with the *status quo*.
- *Option Two:* to establish a bi-partite PMHI as proposed which would not benefit from subsidies from the NHIS and which would not have access to the 2.5 per cent contribution of SSNIT members.
- *Option Three:* to establish a PMHI which would have access to the 2.5 per cent contribution of SSNIT members.
- *Option Four:* to negotiate with DMHI schemes on a district-by-district basis to provide an enhanced package of care.

The paper concluded that while the proposed bi-partite insurance scheme offered certain advantages, it did not improve significantly on the *status quo*, which could be continued at no real extra cost. In addition, the paper advised that social partners would have to consider carefully the administrative burden of complying with legislation, and the additional costs

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implied by the need to form what would have to be a sizeable organization to run the PMHI.

There were particular concerns with regard to options 2 and 3, these being that:

- (a) the new PMHI would lead to additional administrative cost in the health sector through the setting up of a new essentially nationwide insurance scheme;
- (b) would offer no financial advantage to employers and workers under the current law;
- (c) might be used to shift some of the cost of the negotiated employer provided health care to the workers and their families (for whom access to employer based facilities is so far free of charge in most cases); and
- (d) could be potentially damaging to the NHIS and its capacity to subsidize the poor through the downsizing of the risk and income pool of the public DMHI schemes.

From an overall efficiency and equity point of view it appeared preferable to find arrangements with the NHIC and DMHI schemes which allowed for the present beneficiaries of employer based health provision to be covered under DMHI schemes without a major loss of the quality of care available to them.

The policy papers are at Annex 2.

### **3.3. Development of follow-up activities**

In the course of the project and parallel activities a number of follow-up activities emerged. The first, which had in any event been anticipated, was the need for the monitoring and the evaluation of the project in the three year period following the finalization of the principal project activities. The second was a need for training and capacity building among future managers of the NHIS, and the third was the necessity of costing the benefit package of the NHIS.

#### ***Monitoring and evaluation***

A project proposal was prepared to carry out the monitoring and the evaluation of the original project activities, with scope to offer further technical support to the Dangme West scheme and make adjustments to the benefit subsidy and identification mechanism as appropriate given the evidence and experience of the project. However the monitoring project will probably now be subsumed into a broader Pilot for the Global Social Trust.

#### ***Training and capacity building***

Work was carried out on a proposal to design and deliver a training programme for health insurance scheme managers at the request of the Government of Ghana. It became apparent, however, that the scale of the work required that it be split into two phases, and so a revised proposal was presented for a more restricted project which would assess training needs and design a programme, along with recommendations for its delivery as part of a second phase.

Further work was then carried out on a more streamlined version of the proposal based around the existing document, *Training of Trainers Manual for Mutual Health*

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*Organisations in Ghana* <sup>21</sup>, which was written in September 2000 with the support of DANIDA, USAID and Partnerships for Health Reform (PHR).

### **Costing the benefit package**

Also at the request of the Government, a project proposal was prepared to cost the national minimum benefit package. This work is clearly necessary to the effective financial management of the NHIS at national level. The project has been awaiting the finalization of the national benefit package, and will begin when that is available.

### **3.4. Capacity-building of SSNIT**

In the past few years the ILO has been assisting SSNIT to build capacity in the actuarial and budget areas. This has been partly achieved by the completion by a number of SSNIT personnel of the Masters in Social Protection Financing at the University of Maastricht, which is a collaborative programme of the University and the ILO.

In addition ILO-FACTS staff have spent eighteen months working with a SSNIT actuary to develop a health budget model for Ghana. SSNIT has already indicated that they wish to continue to work with the ILO in the future, both on assessing the sustainability of the fund, and on the feasibility of a proposed long-term savings scheme.

<sup>21</sup> Atim, C. (ed.). *Training of Trainers Manual for Mutual Health Organisations in Ghana* (September 2000).



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## **4. Conclusions and recommendations**

### **4.1. Relevance of the project to the Government's National Health Insurance Plans**

The project was originally conceived with the aim of developing methodologies for the extension of social protection benefits to excluded members of society especially in the informal sector. At that time this was underpinned by the need to test those methodologies in a suitable socio-economic environment. Whilst the Government of Ghana had already spent some time considering ways of improving provision of, and access to, health care, its eventual commitment to ensuring access to health care by the poorest in society provided a particularly good policy environment for the project.

As the Government took forward its health sector reforms, there was a unique opportunity not only to test the possibility of improving access by the poor, but also to ensure that the knowledge and experience gained was built into the Government's plans through the timely provision of advice and support from the ILO project team.

Put simply, the Government knew what it wanted to achieve, but in some aspects it lacked the expertise to design the implementation. The ILO was in a position to give the Government a properly tested option to achieve its aims.

### **4.2. General policy implications**

The Government's overarching policy commitment to increase access to health care by the poor has been set out in legislation, and it has been the role of the ILO to support the Government, on request, in identifying the most effective way of implementing the policy.

More broadly, it is our belief that the outcomes of the project in Ghana have broad implications for other developing countries that are trying to build up and enhance social protection.

The first of these is through demonstrating the importance of proper budgeting and planning. An in-depth assessment of funding and expenditure can identify duplication in spending, and gaps in funding and thus provide a sound basis for the effective reorganization of social budgets to maximize the number of beneficiaries and the benefits. The ILO has considerable experience in this area.<sup>22</sup> Whilst a full social budgeting exercise has not been carried out in Ghana, much work has been done on the health budget which has given the sound information base needed for effective policy development and planning.

The second is the demonstration of simple, community-based methods for identifying the poor, which we believe may be used in other countries. It is often fairly straightforward to identify a need and address it on a limited scale. The establishment of this methodology, however, offers a means of identifying those in most need on a national basis, while retaining close links to community knowledge and concerns. More work needs to be done to develop the methodology in an urban context, where community structures may be weaker, but the foundation has been laid for the full development of a working tool which can be adapted to local and national circumstances.

<sup>22</sup> Scholz, W. et. al.: *Social Budgeting* (Geneva, ILO/ISSA, 2000).

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As a first step, we believe that the project could be expanded to other districts in Ghana under the ægis of the Global Social Trust Pilot. The project team has already investigated the possibility of engaging with DMHIs in the Brong Ahafo region, where a great deal of work has already been carried out with the support of GTZ. The DMHIs have responded positively, and we await further developments on the funding side before proceeding.

### **4.3. Opportunities and challenges**

The principal gain in this work has been the creation of a working methodology for identifying the poor. But in the course of the project, a network has been established that has allowed the sharing of knowledge and experience at all levels of society: community, district, region and national government. Stakeholders have been fully engaged in the process, and the concerns from everyone, from remote rural smallholders, through medical professionals, administrators, international experts and central policymakers have been fed into the process. This has allowed for the effective development of ideas into sound working practice, and equally for the elimination of early ideas which were based on erroneous premises.

A number of challenges were presented. Firstly, resource constraints prevented a proper assessment of a wider range of potential participating health insurance schemes. While Dangme West has a significant proportion of poor people, it is far from being in the poorest regions of Ghana. Further work needs to be carried out, particularly in the Northern, Upper West and Upper East regions to assess the incidence of poverty. Some work has already been done in these areas by DANIDA, who have begun a small project to identify the poor in the Saboba district of the Northern Region. It would be useful to collaborate further in order to compare outcomes.

Secondly, the mobilization of potential beneficiaries was particularly challenging. The problem of obtaining photographs for identity cards is dealt with in depth in Section 1.7. However, this does not completely explain the anomaly that has arisen between the number who said they were willing to participate (almost all the original 1,600 households) and those who eventually did so. This will require further work in the evaluation phase of the project.

Thirdly, difficulties arose at a political and institutional level. The small number of expert staff in the Government has meant that much of the policy development is concentrated in a very small group of perhaps three or four people. The Government has made good use of stakeholder participation to try to overcome this, but delays have arisen because of competing priorities. There is also no clear overall plan of implementation (notwithstanding the ILO's contributions in this area), and a certain lack of transparency in the general arrangements. This occasionally made it difficult to get accurate information to underpin the ILO's work. It also put a strain on relations between the Government and some other donors, as the latter felt their concerns were being ignored. On the other hand, the donors sometimes took an overly prescriptive approach to presenting their concerns, which contributed to poor relations.

In addition, there was considerable opposition to the proposed NHIS from the social partners. This was based on concerns that the transfer of SSNIT contributions would have an adverse impact on the long-term sustainability of the pension fund; and that the social partners had not been sufficiently consulted. The tension that arose between, on the one hand, the comparatively small number of formal sector workers who felt their money was being appropriated, and, on the other, the democratically elected Government who were trying to fulfill their stated pledges, at one point placed the legislation at risk. This might have been avoided through more thorough consultations.

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#### **4.4. Implications for the Global Social Trust concept**

The findings of the project were also analyzed in order to fine-tune the Global Social Trust concept. The conclusion can be summarized as follows:

- Government commitment is a sine-qua-non condition, in order to ensure that the extended social protection is compatible with overall Government policy, and that the long-term financial sustainability of the protection is secure.
- General technical support for the design and operation of new social protection schemes needs to play a much bigger role in the concept of the Global Social Trust. Put simply, money and goodwill are not enough to drive forward progress, and many host countries will require technical support to design and implement additional protection.
- Benefits that target the poor can be delivered to the poor if the identification process is based on community involvement. The community involvement has to be organized by existing institutional structures, and initially the actual delivery of benefits requires a fairly close supervision through local and external arrangements.
- Significant preliminary research and careful planning are necessary to ensure that additional social protection schemes build on existing structures and do not duplicate existing work or attempt to replace structures that are working reasonably effectively in the local environment.
- The involvement of stakeholders at all levels – national, regional, community – is essential to reach the consensus and will be necessary to take work forward. Failure to engage all stakeholders can cause delay, and may endanger progress if some sectors feel that their concerns are being ignored.

With respect to concrete follow-up in Ghana, it is estimated here that ideally the resource base needed to fully implement a robust health protection system for the poor is in the total order of US\$ 20 million over the next five years. Annual cost would not be uniform as the government share of subsidies is expected to increase during the project period. The peak would be in the order of US\$ 8 million. This includes a maximum of about US\$ 6 million for premium subsidies during a transition phase. On average about 50 per cent of that peak amount would be needed annually. These resources could be used to implement a subsidization mechanism for those people that clearly qualify as poor but are not included in the narrow definition of poverty by the Government, and at the same time provide substantial technical advisory services, which would ensure that the subsidization mechanism is implemented in an efficient manner throughout the country. Some of the resources can come from bundling existing donor support. It is hoped that about 20 per cent can come directly from the GST Pilot Project which is currently being brokered by the ILO between the social partners in Luxembourg and the Government of Ghana.

#### **4.5. Recommendations**

Taking the outcomes of the project into account, the project team recommends that:

- The project be expanded to further test the methodology of identification of the poor in other districts in Ghana; and that this work form the Pilot for the Global Social Trust.

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- That should this work be carried out, close consultation be maintained with DANIDA to compare results from their project on identifying and subsidizing the poor in the Northern Region.
  - That further work be done on the development of a full working tool to put the methodology into practice on a national basis.
  - That work be taken forward on related projects to cost the minimum benefit package; design a training programme for health insurance administrators; and carry out extensive monitoring and evaluation of the Dangme West project.



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## **Annex 1. Report on the workshop to launch the Ghana Social Trust Pilot Project**

### **The workshop**

The ILO, through its Ghana Social Trust Pilot Project organized the workshop, in collaboration with the Ministry of Manpower Development and Employment (MMDE), Ministry of Health (MOH), and the Social Security and National Insurance Trust (SSNIT).

### ***Specific objectives***

1. To review and modify the Ghana Social Trust concept on a consensual basis;
2. To ascertain that the Ghana Social Trust concept is compatible with Ghana Government's plans on future health financing, and
3. To ascertain that all stakeholders unanimously accept the actual piloting of the concept.

### ***Participants***

Participation in the workshop was drawn from various stakeholder organizations such as:

- Ministry of Manpower Development and Employment (MMDE);
- Ministry of Health (MOH);
- Ministry of Finance ((MOF);
- Social Security and National Insurance Trust (SSNIT);
- Ghana HealthCare Company;
- Donor Institutions in Ghana : DANIDA, UNFPA, UNICEF, DFID;
- District Assemblies (DCEs);
- Traditional Rulers (e.g. Chiefs);
- Mutual Health Organizations (MHOs);
- Diplomatic Missions in Ghana;
- The Social partners;
- ILO, The Media and The General Public.

### ***Papers presented***

- “Statements by the Various Stakeholders/Social Partners”;
- “Government’s Policy on Social Health Insurance”;
- “Performance and Challenges of MHO’s in the Provision of Health Care”;
- “Role of NGOs and Local Communities in Health Care Financing”;
- “The Role of International Financing in Health Care Provision”,
- “Observations on the Ghana Social Trust and its compatibilities with National Health Policies”.

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## Opening session

Mr. Bapuuroh, Acting Chief Director, Ministry of Manpower Development and Employment, welcomed all participants to the workshop on behalf of the MMDE and its Partners and thanked participants for honouring the call to come together to deliberate on evolving strategies and methodologies for understanding and further developing the Ghana Social Trust concept.

He urged participants to feel free to make contributions that will help in increasing access to enhanced social protection (specifically health care) for all Ghanaians and for the informal sector in particular.

## Chairman's remarks

The morning session was chaired by Mr. Samuel Owusu Adjei, Acting Chief Director MOH. In his opening remarks he said that, in the Ministry's efforts to improve access to quality healthcare through a National Health Insurance System (NHIS), the MOH welcomes all development partners that wish to assist in reaching this objective. That is why the Ministry welcomes the Ghana Social Trust concept and wish together with all present and other stakeholders to discuss how best to marry the concept with existing plans. Indeed, he said, the concept fits very well with its grassroots approach to developing a NHIS.

## Statement by ILO Area Director – Mr. Cornelius Dzakpasu

The ILO area director expressed his pleasure at the ILO's innovative concept of a Global Social Trust, part of which was being launched in Ghana. According to him, this is yet another effort by the ILO to support the government's development plans. There have been, and still are on going projects in various sectors; all of which aim at complementing government's effort at improving the life of the Ghanaian. These include, Decent Work, HIV/AIDS in Work Places, all aimed at Poverty Reduction.

He noted that the idea of a Ghana Social Trust was conceived at the International Labour Conference in June 2001 which recommended the exploration of the possibility of supporting the development of national social protection systems through international financing.

He stated that the pilot studies for the feasibility of the GST received the support of the ILO's Governing Body in September 2002, and during that same month a Mission was in Ghana to lay the ground for the pilot study.

The mission of the Global Social Trust Network he said, is to systematically reduce poverty through a partnership arrangement that invests in, and sponsors the development of sustainable national protection schemes for people and groups which have to a large extent been excluded from the economic benefits of development. Based on the underlying principles of Social Responsibility and Social Partnership.

The target of the Trust according to the ILO Area Director, is to reach 80 to 100 million people in the least developed and low – income countries.

He made reference to a recent study in Ghana, which revealed that there were approximately 1.36 million, people over 60 years old. The study also showed that SSNIT provides pensions for 38,500 whilst other insurance companies cover 35,000. This meant

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that there were about 1.288 million peoples over 60 years old who were without any formal social protection.

The ILO Area Director said that going by the above figure, Ghana needs about US\$464 millions annually to support this group, assuming they got US\$1 a day.

He stated that, though the MOH had an exemption policy that catered for children under 5 years, 70 years and above and pregnant women, it was not enough to solve the problem.

He commended government's efforts to replace the 'cash and carry' system with a NHIS. However, he said, it would not resolve the problem of the poor who cannot afford the cost of Health Care. There is the need therefore for a Health Distress Fund to cater for the healthcare needs of this group. The GST Pilot Project seeks to assist in providing care for the poor.

He stressed the ILO's commitment in working with Government, Employers, the TUC as well as NGOs and other Development Partners.

### ***The GST concept and progress of the project in Ghana***

***Mr. Michael Cichon – ILO Social Protection Sector***

Mr. Michael Cichon presented the GST Concept (see Preamble) to participants. According to him, over 1.3 billion people in the world live in deep poverty, i.e. live on less than US\$1 a day and only about 20 per cent of the world enjoys social protection. But the world community has committed itself to halve this figure by the year 2015 (First Millennium Development Goal).

He said the Global Trust aims to:

- collect voluntary contributions from individuals and organizations in richer countries;
- invest contributions in the build up of basic social protection schemes for the poor in developing countries;
- sponsor concrete benefits until the Social Protection Schemes are self-supporting;
- in Ghana, the Ghana Social Trust will contribute to the design of coverage mechanisms for the poor within the National Health Policy Framework, particularly, the NHIS;
- the Ghana Social Trust will initiate a Pilot to provide subsidies for 5000 people in two localities for three (3) years,
- in the medium-long term, the government should take over to provide subsidies for the poor.

He outlined again, the objectives of the workshop and called on all participants to discuss with the objective of improving healthcare delivery to the informal sector, which is the largest segment of Ghana's economy.

### ***Statement by Director General of SSNIT –***

***Mr. Kwesi Osei***

The SSNIT over the years has sought ways to provide social protection for the informal sector, which covers approximately 90 per cent of the working population in Ghana. The

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plans to do so are far advanced and the company will soon commence providing for this sector.

SSNIT as an institution is aware that social protection involves more than old age and invalidity pension. It is in recognition of this fact, and the desire to develop a robust and sustainable social protection system that the company set up the Ghana HealthCare Company (GHC) which is a special purpose company to help deepen the growth of the health insurance sector. GHC will operate as a Mutual Health Insurance Company. Though it will initially operate in the Accra/Tema area, it will eventually achieve national coverage.

To show the commitment of SSNIT to support and collaborate with the ILO on the Ghana Social Trust project, it has made available offices and personnel and has pledged the use of its regional offices and the SSNIT network.

The Director General expressed the hope that the ILO and the Ghana HealthCare Company will collaborate extensively in implementing the Ghana Social Trust.

### ***Statement by MOH –***

***Dr. Antwi Boasiako (on behalf of Minister of Health)***

The search for alternatives to health care financing has long engaged the minds of policy makers particularly the MOH. This search was necessitated by the realization that:

1. A large section of the population had no access to healthcare, especially the informal sector.
2. Certain geographical areas had no health care facilities to cater for the health of the people.
3. People were denied basic care or turned away because they did not have the ability to pay.
4. Most people postponed care till their health condition was critical, leading to high demand for expensive and complicated inpatient care.
5. People were detained at healthcare facilities because they could not afford the cost of treatment received.

To help correct these anomalies and to provide better health care for Ghanaians the exemption policy was introduced. The policy provides free care for children below 5years and older person of 70years and above. The government has also built more hospitals and health facilities.

However, the exemption policy has not helped to increase coverage. The poor continue to be denied access to healthcare.

Thus, after many years of research, consultations and discussions, the MOH has proposed the establishment of a NHIS. This will be a social insurance scheme that operates on the principle of risk pooling, solidarity and cross subsidization.

The MOH therefore lends its full support to the GST Project.

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## **Keynote address by H.E. the Vice-President – Alhaji Aliu Mahama**

Hon. Cecilia Bannerman, Minister MMDE, read the Keynote address on behalf of the H.E. the Vice President. In his address, he thanked the ILO for the various projects it has undertaken and continues to implement in the country.

He reiterated government's commitment to provide quality and affordable universal basic healthcare for all Ghanaians and to remove the burden of paying for health care at the point of delivery; which often limits access to healthcare.

According to the Vice President, the GST Project could not have come at a better time, because it complements the government's effort at reducing the anxiety of the poor in accessing healthcare. And falls in line with the multi-scheme approach adopted by government (District-Wide Health Insurance Schemes).

Presently, 42 schemes are in operation in various regions. The Government intends to achieve 30-40 per cent coverage in the short term and 50-60 per cent coverage in the medium to long- term, eventually, the government aims to achieve national coverage.

This phased approach to implementing a NHIS, has been necessitated by a number of factors, to name a few:

1. limited government resources;
2. difficulty in identifying the poor;
3. the need to develop benefit packages that address the basic healthcare needs at affordable cost,
4. the need to institute a proper framework that will ensure the proper implementation and regulation of implementing organizations (MHOs and others) etc.

He then said the ILO – GST project will be of tremendous benefit to Ghana, as it will not only provide financial assistance but will help in capacity building and serve as a learning experience in Ghana's NHIS implementation.

He concluded by thanking the ILO on behalf of the government and people of Ghana, and on his own behalf for this humanitarian effort that will benefit the poor of the world.

He then declared the GST Pilot Project, launched.

## **Closing of launch**

Mr. David L. Tumwesigye – Chief Technical Advisor (ILO, GST Office), thanked all present for coming to the launch and called that they discuss the technical issue with the same enthusiasm.

## **Working session**

The working session was chaired by Prof. Agyeman Badu Akosa, Director General- Ghana Health Services.

Mr. Tumwesigye gave a brief overview of the activities of the GST office since September 2002. He said the project office, since September has held consultations and discussions with various stakeholders. These have helped in refining the GST Concept as well as make it country-specific. Some Satellite MHOs had been identified for the initial pilot (Dangme

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West and Okwawuman Health Insurance Schemes). Although a hub has not yet been identified, the GST office will serve as a hub in the interim.

*Phase 2 will involve*

- continue dialogue with donors, government, employers, TUC, NGOs etc.;
- operationalise the concept;
- actuarial and financial cost analysis;
- develop quality standards,
- negotiate contractual agreements with MHOs and government.

*Phase 3*

- implementation of benefit for two satellite MHOs;
- technical and Admin support;
- develop evaluation standards and methods
- testing of Pilot's ability to achieve set goals of increasing access to health care for the informal sector.

He then outlined the proposed benefits to be provided. These include:

***Government policy on Social Health Insurance***

*by Dr. Sam Akor – Director Policy planning monitoring and evaluation, MOH*

Over the years, government has sought to find alternative forms of financing healthcare as a means of increasing access/coverage. Various policies have been pursued in this direction e.g. Free Care, Co-payment, Cash and carry and exemptions. None of these has yielded the desired result indeed, data shows that access to health care has declined.

It is government's determination and desire to improve healthcare that led to the many consultations, deliberations and discussions that culminated in the proposed NHIS.

The basic aim of the NHIS is to institute equitable universal access to healthcare and an acceptable package of quality service for all residents of Ghana.

A Multi-scheme model i.e. Mutual, Social and Private Health Insurance will be adopted. This will be implemented at the district level, where there will be District-Wide MHOs for both formal and informal sectors.

A National Health Fund (NHF) will be established to serve as a pool for financing the MHOs. The Funds for the NHF will be generated from Government, Donors, Exemption Fund and contributions. Government will provide subsidies for premiums of the poor. A National Health Insurance Council will be the governing body and will see to the regulation of the NHIS.

The ILO/GST project concept and objectives fits very well into government's framework and will complement government's efforts at increasing access to healthcare, particularly for the informal sector. The MOH and its Departments and Agencies will give the project all the necessary support.



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## **Presentation by MHOs on the field**

Three MHOs from different districts gave presentations on their experience on the ground. The presentations were:

- “Performance and Challenges of MHOs in the Provision of Health Care” – *Dangme-West Health Insurance Scheme and The Nkoranza Health Insurance Scheme experience,*
- “Role of NGOs and Local Communities in Health Care Financing”- *Okwawuman Health Insurance Scheme/Holy Family Hospital.*

Although the MHOs were from different districts, their experiences and challenges seem to be the same except for a few district and Administration -specific differences.

All schemes are donor-funded therefore services provided are heavily subsidized. The services provided cover the 20 per cent out of pocket payment for health services.

Members to the scheme have photo identification, are registered according to households to prevent adverse selection, operate a gatekeeper concept, and provide in-patient care. There are limits and exclusions to benefits provided.

The schemes talked about extensive pre-implementation research, consultations with communities and their leaders, education and sensitization.

\* Continued research and education is key to the success of the scheme.

One element that was emphasized was the need to be able to determine community readiness and to achieve buy-in. In communities where the people expressed a need for a system of prepayment for health services, it was much easier to deliver the service.

Premium collection period was initially set to coincide with the harvesting season to ensure that members had enough funds. However, over time, it has been realized that the people find it difficult to understand and appreciate a year that does not begin in January and end in December.

According to the MHOs although their operations have helped to improve access to and increased coverage, there are many challenges that still need to be addressed. These include:

- low enrollment after many years of operation, skepticism (communities have a “wait and see” attitude), mistrust of scheme operators;
- difficulty in identifying the genuinely poor for subsidies;
- poverty and seasonal income of informal sector;
- adverse selection is still on the increase, as households do not register all members but those who need healthcare services most;
- lack of understanding on the principles that govern operations e.g. difficulty in understanding the difference between hospital detention and admission;
- misconception of what health insurance is – thinks that HI means free care (paid for in total by government or other);

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- problem of logistics,
  - problem of equity and accessibility to the “hard core” poor still not answered.

New lessons are being learnt daily and these help to improve the schemes.

### ***The role of international financing in healthcare provision –***

***Ms. Helen Dzikunu, DANIDA***

DANIDA’s assistance to Ghana in the area of healthcare financing covers the support to government’s health budget and the setting up and support to various community-based healthcare schemes.

Between 1999-2002, DANIDA has set up 13 district schemes that are fully operational and 14 schemes that are gestating. This brings to a total of 27 schemes in Ghana.

DANIDA’s support draws from the Danish Experience, which began in the C19th with the establishment of Sickness Funds, that later achieved government recognition and subsidies, their development into regional coalitions and eventually, national health insurance (in 1974 after a decade of the schemes operation).

The Model of Health Insurance proposed by government for Ghana is similar to the Danish example. That is, the spirit of “collective voluntarism” based on the principle of “help to self help” (solidarity), beginning at the grassroots – District-Wide and later achieving national coverage.

Specifically, DANIDA has assisted in Policy development, Awareness creation, Setting up of schemes, Provision of logistics and Training and capacity building.

There have been many challenges especially with identifying the genuinely poor. However, DANIDA will continue to support efforts at achieving better healthcare for the poor. Its future plans include:

1. strengthen the management capacity of the schemes;
2. designing strategies for identifying the poor to support with exemptions or subsidies;
3. support the development of regional coalitions to increase the awareness creation;
4. strengthen the schemes in negotiating with providers for quality of care as well as cost of treatment;
5. continue strengthening the capacity of districts and subdistrict health delivery system, and
6. the general support to the health sector budget.

### ***Observations on the Ghana Social Trust and its compatibilities with national health policies – Prof. Charles Normand***

Delivering his observations to participants, Prof. Normand of the London School of Hygiene and Tropical Medicine, said, “having listened to discussions for the past two days, I have gathered that:

- there is a recognition by government and other stakeholders that access to quality care is limited to the poor, especially in the informal sector;

- people are deterred by actual or perceived quality issues and financial barriers;
- total funding of the health sector is low, government budget is tight,
- current position must be causing avoidable morbidity and mortality.

The key government policies are:

1. to end current system of co-payment;
2. extend access to the poor;
3. provide a NHI Framework;
4. to Focus on MHOs as the vehicle for widening access;
5. provide subsidies for premiums and services as needed;
6. achieve 30 per cent coverage in the short-term;
7. ensure better regulation and governance;
8. ensure stronger management of MHOs,
9. adopt a Multi-scheme (pluralism) approach to funding and supply.

According to Prof. Normand, there are inherent difficulties in pursuing these policies. For example, MHOs may improve delivery, widen access and provide local voices but will not generate enough funds to cover all /even basic healthcare needs.

Some of the challenges any health insurance scheme may face, include: defining the poor, how to design, implement and manage exemptions for the poor, how to avoid high management costs, ensure efficient operation and how to ensure that incentives go to those they are intended for.

He made the following recommendations:

- (a) develop a simple finance model to allow analysis of options for pace and scope of development;
- (b) use the plan to seek support locally and with development partners;
- (c) cost and specify service packages;
- (d) develop regulatory and legal framework,
- (e) develop low cost ways of disbursing funds, etc.

He concluded that the issue is not to show certainty of success but to demonstrate that it can be done (feasibility).

## General discussion

The workshop at various stages discussed issues raised in the presentations and the concept. Some of the major issues discussed were:

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## ***Who is poor?***

Participants discussed the problem of defining the poor extensively. Suggestions of possible criteria included: employment status, income level, family size, Geographic area etc. It was also suggested that each Community should be allowed to define its poor.

However, there are inherent problems with community definition as it hinders uniformity of definition and poses a problem of having to develop various evaluation schemes and methods.

Participants recommended that the GST office access research works that have been done in this area as a guide.

## ***What family type?***

Participants sought clarification on GST's definition of family. Is it nuclear, extended or household?

## ***Increasing quality and access***

The need to marry quality of care and service with increasing coverage was also emphasized. Participants stated that, many a time, emphasis had been placed on increasing access/coverage while quality of care and service delivery had been neglected.

## ***Sustainability***

Sustainability of the project after the three year Pilot phase i.e. when ILO – Funds have been withdrawn is a very critical issue that must be considered alongside developing the project. This requires building mechanisms to enhance internal inflows to the Fund by the government.

## ***Support of community political systems***

Participants stated that the support of District political systems is essential especially where the Pilot and government Health Insurance Schemes are modeled on a District-wide basis. The GST office said that this had been factored in, there had been deliberations and discussions, but continued dialogue is being pursued as evidenced by the presence of DCEs, Chiefs and local government officials at the workshop.

## ***Checking fraud***

According to participants, a key issue is to put in place mechanisms that will help reduce if not eliminate Fraud in the distribution of the Funds to implementing agencies.

## ***Level of care***

To ensure that communities understand what they are entitled to under the scheme, it is important to define the level of care to be delivered; and to state clearly whether the social insurance scheme will cover out patient care, in-patient, basic, secondary or tertiary care?

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## ***Ensuring take up***

Some participants asked the question “how do we tackle the issue of perceived ‘lower care’ or ‘poor care’, which currently acts as a barrier in current schemes and therefore limits take up of the scheme”? In this direction participants recommended that MHOs should evolve marketing strategies that will ensure take up and continued patronage.

Discussing this further, participants from MHOs stated that there are already systems in place and most MHO’s in operation have seen almost 100 per cent growth.

## ***Sensitization***

As a follow up to the issues of take up and quality of care, participants recommended that communities and health personnel be sensitized to identify and appreciate efforts at improving access to, and quality of services provided.

The training of health personnel was recommended.

## ***Ownership***

Communities need to feel that the MHOs belong to them, this requires developing marketing strategies that involve using communication tools that are understood and appreciated by communities.

Education in the principles of health insurance in general, and the operations of their particular MHO will also go a long way to ensure community ownership.

## ***Management cost***

A detailed study of the operations of MHOs and administrative cost should be carried out to prevent the situation where funds released go to finance management and administrative cost rather than for the purpose for which it was intended. This will also help in factoring in such costs at the planning stages, and to determine the feasibility or otherwise of the District-Wide MHO concept.

## ***Regulations***

Participants called on government and all stakeholders to establish transparent and fair regulatory mechanisms that make it easy for other operators to monitor each other.

## ***Challenges in the health delivery system***

The challenges in the Health Care delivery system that limits access to care and compromises the quality of care were then discussed. Some major factors mentioned were quality of service delivery, continued exodus of trained personnel, limited and inadequate working tools, poor work conditions and environment etc.

Participants from the Ghana Health Service said that they have embarked on a crusade to increase quality of care. And measures are being put in place to check some of the issues raised. But they do know that, it takes time, effort and support of all stakeholders. They therefore called on all stakeholders to assist in improving the healthcare delivery system, without which, it will be difficult to achieve any appreciable gains from the NHIS, and other donor interventions.

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## Conclusion

At the end of the workshop participants, resource persons, and the organizers, were of a consensus that, the timing of the GST Project is appropriate and will help complement national efforts at increasing access and coverage of healthcare for the formal and informal sectors, particularly for the poor and vulnerable.

There are many challenges, in reaching this objective; some of which include; the problem of identifying the poor, ensuring equity and fairness, winning the support of beneficiaries, avoiding high management costs, and designing packages that will best serve the needs of the people at an affordable cost.

These challenges notwithstanding, participants were optimistic that, with proper planning, consultation, and sustained and patient implementation (“hasten slowly”), Ghana will enjoy tremendous benefits from the project.

## Participants list

### Press

No.	Name	Institution
1	Adjoa Yeboah	Metro TV
2	Akuamoah B.	GBC
3	Benedict Eshun	GBC
4	Christian Y. Gyampo	ISD Gh. News Bulletin
5	Emily Nyarko	GNA
6	Enoch	News
7	Fred	Crew
8	Fred Avornyo	Joy FM
9	Irene Ata-Donto	GBC
10	Kwasi Bamfo	Atlantis Radio
11	Linda Akrafi	Chronicle
12	Owula E. T. Mangortey	Presenter Unique FM
13	Peter Adofo-Asante	The Statesman
14	Rowland Philips-Addo	Free Press
15	S. F. Mensah	GBC
16	Stanley Opere	T. V.
17	Yaw Obeng Manu	Top Radio

## Participants

No.	Name	Institution
1	Abigail Ocquaye	GHS
2	Alex Ofori Mensah	OHIS (Nkawkaw)
3	Beatrice Ntow-Manu	GRMA
4	Ben M. Yankah	GST
5	Bernice Welbeck	MMDE
6	Collins Danso Akuamoah	OHIS (Nkawkaw)
7	D. A. Akuamoah-Boateng	Okwahuhene
8	David A. Mantey	ILO/IPEC
9	David Tumwesigye	GST
10	Dr. A. K. Badohu	Private Medical Practitioner
11	Dr. Alex Dodoo	University of Gh., Medical Sch.
12	Dr. Antwi-Boasiako	MOH
13	Dr. E. Appiah-Denkyira	GHS, ER
14	Dr. Gifty Addico	UNFPA
15	Dr. Margaret Gyapong	Dangme West
16	Dr. S. A. Akor	MOH
17	Dr. Sam Adjei	GHS
18	Edna Donkor	GHS (Atibie)
19	Eric A. Okrah	ILO/IPEC
20	Eric Osei	GHC
21	Felicia Dagadu	Nurses & Midwives Council
22	G. Kumi Kyeremeh	GHS
23	George P. Ntumba	ILO/IPEC
24	Hanne Thorup	DANIDA

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<b>No.</b>	<b>Name</b>	<b>Institution</b>
25	Helen Dzikunu	DANIDA
26	I. O. Yeboah	GES
27	Irene Akua Agyepong	GHS - Dodowa
28	Jemima Allotey	MMDE
29	Joyce E. Anson-Yevu	Ridge Hospital
30	K. Ayenor	Commodity
31	K. Danso-Acheampong	TUC
32	K. Osei Bonsu	ILO/JFA
33	K. T. K. Agban	Dangme West
34	Kwabena Awuku	GST
35	Kwaku Adu	Ghana Healthcare
36	Kwamina Sakyi	MMDE
37	Kwasi Osei	SSNIT
38	Kwesi Eghan	MSH
39	Mr. J. K. Bapuroh	MMDE
40	Mr. Paul Mishaelsen	DANIDA/HSSO
41	Mrs. Harriet Adu-Mante	NBSSI
42	Oduraa Boateng	FIDA
43	Opoku Brobbey Stephen	Nkoranza Health Inst.
44	P. K. Nyame	MDC, Accra
45	Priscilla deGraft Johnson	GHS
46	Prof. Agyeman Badu Akosa	GHS
47	Ralph Ameyaw	CIBA
48	Rose K. Anang	GEA
49	Samuel Gbologa	NUGS
50	Sandra Baldwin	DFID
51	Stanley Diamenu	WHO
52	Sylvia Hinson-Ekong	ILO/IPEC
53	Tetteh Carboo	GST
54	Victoria Churchill Koomson	CEWEFIA (NGO)
55	W. K. Siaw	SSNIT
56	Wuni Mahamadu	GEA
57	Elizabeth Danso	MMDE
58	Mary Offei	MMDE
59	Vivian Aubyn	Maub

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# Draft agenda for the workshop to launch the Ghana Social Trust Pilot Project (11-12 February, 2003 at Golden Tulip, Accra)

## Theme: linking community initiatives to national institutions

### Day 1

Time	Activity	Action by
9.00 am	Arrival/Registration of Participants	Secretariat
9.45	Arrival of other Invited Guests	
9.55	Arrival of H.E. The Vice-President	
10.00	Introduction of Chairperson	Chief Director, MMDE
<b>Opening Ceremony Chair: Chief Director, Min of Health</b>		
10.05	Chairperson's Opening Remarks	Mr. Samuel Awusu-Agyei
10.15	Statement by ILO Area Director	Mr. Cornelius Dzakpasu
10.25	Presentation of the GST Concept and progress of the project in Ghana	Mr. Michael Cichon
10.40	Statement by SSNIT	Director-General
10.50	Statement by Dutch Embassy	Ambassador
11.00	Statement by Ministry of Health	Minister
11.10	Statement by Ministry of Finance	Minister
11.20	Address by H.E. The Vice-President & launching of the Project	H.E. Alhaji Aliu Mahama
11.50	Vote of Thanks	
11.55	<b>Ed of part one – V.P. and other invited guest depart</b>	
12.00	Lunch Break	
<b>Afternoon Session: Chair: Prof. Agyeman Badu Akosa</b>		
1.30pm	Discussion of the GST Concept; progress of the project	Mr. David Tumwesigye
3.15	Presentation by Ministry of Health: <i>"Government Policy on Social Health Insurance"</i>	Dr. Sam Akor
4.00	Coffee Break	
4.15	Plenary Discussion	Michael Cichon / F. Léger
5.30	Selection of Drafting Group	
6.00	Cocktail/Dinner	Mr. Tetteh Carboo
20.00 -till open	Drafting group: summary of the day	Mr. David Tumwesigye

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## Day 2

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### Morning session Chair: Florian Léger

Time	Activity	Action by
8.00	Arrival of Participants	
8.15	Address by Kwahuhene (Local Chief)	
8.30	Presentation by DWHIS: "Performance and Challenges of MHOs in the provision of health care"	Dr. Irene Agyepong Amarteayfio
9.00	Presentation by OHIS: "Role of NGOs and local communities in Health Care Financing"	Mr. Alex Ofori Mensah
9.30	Presentation by Donors (DANIDA): "The role of international financing in Health Care Provision"	Ms. Hellen Dzikunu
10.00	Presentation by Nkoranza Health Insurance scheme: "The experience of Nkoranza Health Insurance Scheme"	Mr. Brobbey Stephen Opoku
10.30	Coffee Break	
10.45	Observations on the Ghana Social Trust and its compatibilities with national health policies	Prof. Charles Normand
11.45	Reactions from the plenary	
12.30	Lunch Break/Drafting group session to arrive at draft conclusions	Ben Yankah/ Chinedu Moghalu
<b>Afternoon session: Chair: Michael Cichon</b>		
3.00	Drafting Group: Presentation of draft conclusions	Chairperson
3.45	Coffee Break	
4.00	Report and discussion on draft conclusions	M. Cichon
4.45	Adoption of draft conclusions/Closure	David Tumwesigye/ Florian Léger

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## **Annex 2. Discussion Papers Nos. 1-7**

### **The Ghana Social Trust Pilot Project**

**The International Labour Organization**



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# **A draft concept developed by the Ghana Social Trust Pilot Project**

## **(Discussion paper No. 1 – February 2003)**

### **1. Context and background**

#### **Institutional context and limits of the project**

The 89<sup>th</sup> International Labour Conference (ILC) in June 2001 concluded a general discussion on social security with a renewed commitment of the International Labour Organization (ILO) to the extension of social security coverage and the improvement of the governance, financing and administration of social security.<sup>23</sup> The conclusions and recommendations of the ILC also call for “innovative approaches in the area of social security to help people moving from the informal to the formal economy”.

In line with the recommendations of the 89<sup>th</sup> ILC, the Director General of the ILO requested the exploration of the possibility of supporting the development of national social protection systems through international financing. The ILO's International Financial and Actuarial Service (ILO-FACTS) has developed an innovative concept for a *Global Social Trust Network* (here also called “*The Global Social Trust*” or “*TRUST*” for short) which connects the global, national and community levels of financing for social security. An initial feasibility study on this concept was conducted and following a tripartite meeting held in May 2002 to decide on the way forward, recommendations were made to the ILO's Director General and the ILO's Governing Body to go ahead with its exploration. The ILO's Governing body authorized the further study of the concept through a major pilot project. The ILO is presently preparing such a major pilot project.

The Ghana Social Trust project was already conceived within the framework of ILO's feasibility study on a Global Social Trust and thus technically speaking still belongs to the feasibility study.

The Ghana Social Trust project thus serves a double purpose:

- first, it seeks to support the establishment of a pluralistic national social protection system in Ghana, and
- secondly, it will provide further experience for the development of the overall Global Social Trust concept.

The establishment of a pluralistic national social protection system in Ghana will necessarily combine schemes that service the formal sector workforce and schemes that predominantly service the workforce and their dependants in the informal economy. The approach pursued here is to link the formal and informal sector schemes in a “hub-satellite relationship”. This concept envisages in general that an established public agency acts as a partner and sponsor of smaller community based social security schemes in the informal sector. The project will limit itself to the support of the extension of health care coverage to the informal sector. The project seeks full compatibility with the emerging overall national vision on the future National Health Insurance System that is emerging in the

<sup>23</sup> See ILO (2001): *Social security – a new consensus*, page 1 ff “resolution and conclusions concerning social security, International Labour Conference, 89<sup>th</sup> session, 2001, paragraphs 17 to 19.

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country as spelt out in the draft act “instituting a national health insurance programme” which is presently under consideration by Cabinet and could shortly be submitted to Parliament. The promotion of a National Health Insurance System through the Ministry of Health and the progress made has lead to a basic re-orientation of the project during its initial phase. The project now seeks to support and complement that initiative.

## **The Ghanaian context**

Ghana's economy is predominantly agrarian, with agriculture dominating in terms of employment, revenue and export earnings. It accounts for 50 percent of the labour force and 42 percent of GDP. Other major exports are minerals (notably gold, diamonds bauxite and manganese). The Tourism industry is however becoming an important foreign exchange earner.

Per capita income is in the order of only US\$ 360. Five out of the ten regions in Ghana had more than 40 percent of their population in poverty in 1999. The worst affected regions include the Upper East, Upper West and Northern regions where nine, eight and seven respectively out of ten people were classified as poor. Central and Eastern regions had five out of ten people classified as poor.

The economic situation is difficult. The new Government inherited a US\$ 7.2 billion national debt (US\$ 5.9 billion external and US\$ 1.3 billion domestic). The national currency depreciated recently by almost 100 percent. Inflation is spiralling and presently stands at 41 percent. Foreign exchange reserves are almost depleted and are presently just enough to cover approximately one month of imports. The dismal economic situation is the cumulative effect of poor terms of trade arising from sharp falls in world market prices of Ghana's two major exports, gold and cocoa, coupled with a three-fold increase in petroleum prices and less than optimal monetary and fiscal policies under previous administrations.

The present budget situation is fairly dramatic. Revenues in 2001 covered apparently only 72.6 percent of total expenditure. The deficit amounted to é 3.2 billion in 2001, which should represent approximately 9 percent of GDP. Debt relief schemes will probably ease some of the stress.

The above situation presented the new Government with four key socio-economic challenges:

- (a) micro-economic management and stability;
- (b) poverty reduction/economic rejuvenation;
- (c) enhancing access to quality basic services, particularly, education and health;
- (d) strengthening democratic governance.

As part of its debt management strategy, the Government opted for the Highly Indebted Poor Country (HIPC)) status in March 2001. IMF's initial debt sustainability analysis, indicated that Ghana could benefit from debt relief of up to US\$ 2.1 billion, representing a reduction of about 55 per cent of the debt stock, provided grant resources are mobilized to ensure sustainability of external debt after HIPC relief. Already payments of about US\$ 200 million in interest have been suspended and there are indications that there could be a total debt write-off from G-8 member countries, who are Ghana's main creditors.

The medium term poverty relief strategy represents comprehensive policies to support growth and poverty reduction over a three-year period - 2002 to 2004. These include the

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enhancement of delivery of social services, particularly with regard to education and health services. The latter involves the development of health centres for every district in the country and the phasing out of the current “cash and carry” system.

Government spending on social programs for poverty reduction and in the area of health constitute only 2.0 percent of GDP with a disproportionate amount of the resources being used for personnel emoluments and administration. It is planned that special programmes for the vulnerable and excluded will establish systems and provide resources to improve conditions of extreme poverty and social deprivation. Interventions will include the extension of social security coverage to those who are excluded from formal social protection programmes and the introduction of health insurance schemes to cover the majority of the working population.

## **2. Health policy environment**

Although some improvements have been made in many health indicators including mortality and morbidity, crude indicators still demonstrate the need for major improvements. Life expectancy in 1999 was only 54.2 for males and 55.6 for females. Due to the impact of HIV/AIDS more recent developments are expected to point downwards. Under five mortality is high, i.e. 118 per 1,000 for males and 109 for females. Public expenditure on health at the end of the 1990s was only in the order of US\$ 11 per capita and year of which more than 50 percent were borne out of pocket.

Access to and use of health facilities has been low and declining. A survey conducted by the Ghana Statistical Services revealed that 42.5 percent of the urban population and 54.7 percent of the rural population were not consulting medical personnel in 1992 in times of illness or injury. This low level of medical consultation increased to 46.6 percent urban and 69.2 percent rural in 1998. This trend can likely be linked to the increasing health care user fees over recent years.

The Government of Ghana has realised the problems associated with the current out of pocket health financing system (“cash and carry”). Consequently, the government has decided to abolish this financing mechanism and replace it with health insurance. The objective is to pool the risks, reduce the individual burden and achieve better utilization rates, as patients do not have to pay out of pocket at the point of delivery. The declared objective is that at least 50-60 percent of residents in Ghana will belong to a health insurance scheme within the next 5 to 10 years.

The system being proposed is a fusion of Social Health Insurance and Mutual Health Organization concepts. It will be based on a district based Mutual Health Organization approach covering both the formal and non-formal sectors. It is assumed that the scheme is formally mandatory for all residents. De facto the formal sector workforce will probably after some transition period be covered on a mandatory basis. Community level and non-formal occupational groups will be encouraged and supported to collect premiums from the non-formal sector to be paid to the district MHOs. Recent developments seem to favour a district based organization of the whole system. As noted in the Ministry of Health’s policy framework for the establishment of a National Health Insurance System in Ghana, tax revenues will continue to form part of the overall health financing strategy for a long time to come. The MOH through the Ghana Health Service will continue to finance the major part of the cost of the public sector health service delivery system. Currently, 80 percent of expenditure in public facilities is through tax revenue and donor funds while 20 percent is from internally generated funds through the “cash and carry” system.

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### 3. Objective of the Ghana Social Trust project

The Ghana Social Trust Project will complement and support the Government's health insurance policy. The logical objective of the project is to support the government in developing models for a rapid extension of health insurance coverage and the development of effective tools for good governance in a dis-aggregated health insurance model.

Social health insurance for formal sector workers may pose a variety of governance and financing problems in a developing country context. However, these problems are relatively well known. Major efforts to establish sound and not over-ambitious benefit entitlements, a tight administration, clear-cut financing and provider payment rules will be necessary. However, this project will focus on the even more complex task to enhance the coverage and the quality of services provided to the informal sector population.

Realistically, health insurance coverage in informal sector environments will always be de-facto voluntary. On the one hand mandatory enrolment is hard to police. On the other hand, a major part of the population in the informal economy will not have enough regular income to afford membership. The latter phenomenon is called the "poverty obstacle" to full population coverage. This project sets out to explore ways to overcome that poverty obstacle (or a wider adverse selection problem of the schemes) while at the same time aiming to maintain a system of checks and balances that ensures good quality in the community based local health insurance scheme.

### 4. The concept of a Ghana Social Trust (GhST)

Based on an analysis of the problems and policy developments in Ghana and the performance of typical community based health insurance schemes the project team has developed the following concept.

#### (1) *Basic idea*

It is envisaged that a national organization (The Ghana Social Trust) will act as a *hub* and partner for *satellite* Mutual Health Organizations (MHOs) that are presently being set up in the informal sector under the aegis of the national government and which will form the backbone of the National Health Insurance System. The Ghana Social Trust will provide a cash benefit, i.e. a straightforward subsidy of the insurance premium of MHOs. Members who would be eligible for a subsidy are those:

- who are too poor to afford the full premium of such schemes;<sup>24</sup>
- who could otherwise be excluded from health coverage due to pre-existing health conditions (although that is not current practice in the existing MHOs), and
- who prove that they insure the whole family in an approved MHO.

The effective cost of insurance coverage would thus be reduced. It can be assumed that due to the expected high elasticity of demand for insurance coverage to the price of such coverage, the population coverage of the MHOs would be considerably increased. The ILO

<sup>24</sup> These are mostly people belonging to the informal sector. However, many common service workers in the formal economy such as labourers, cleaners etc i.e. those in temporary employment have no social security and earn in the region of C 200,000 – C 300,000 a month. They should also qualify for a subsidy.



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report on the feasibility of the Global Social Trust estimated <sup>25</sup> that a reduction of the insurance premium could multiply the population coverage of MHOs in rural areas. The subsidy should be administered by an independent agency (The Ghana Social Trust) and not the MHO. This is in the interest of constructing a sound system of checks and balances. If the MHOs at the local and district level were to identify the poor and hence could trigger premia subsidies (which would be financed by the central government), the system could easily lead to collusion between the insurer and the insured persons. The insurer and the insured persons would have an incentive to increase the total subsidy bill for the government.

## **(2) Organizational structure**

The Ghana Social Trust (Working title of the organization) - if the concept were to be accepted by the government – could be an organization that is administered either directly by the government or on behalf of the government by the SSNIT or on behalf of the government through the Ghana Health Care Corporation. The Ghana Social Trust office would assume the following responsibilities:

- (1) it would identify eligible poor families or families that have been excluded from coverage on health grounds (such as HIV/AIDS incidence or other pre-existing conditions);
- (2) channel premia subsidies to eligible families;
- (3) accredit community based Mutual Health Organizations to provide coverage to sponsored families;
- (4) maintain quality of care and performance audits of accredited schemes (hence ensuring a minimum quality standard for participating MHOs) based on written agreements.

That way the government would have a normative influence on the quality of health care coverage and the efficiency of its provision. Moreover, the government would thus - instead of executing a direct management role - assume a more indirect and administratively lighter role in the provision of health care coverage.

## **(3) Functional pattern**

The following figure provides an overview of the envisaged function of the Satellite Health Insurance system in Ghana. It is suggested here that The Ghana Social Trust (organized by the government) as a hub will offer either through SSNITs regional offices (acting under contract of the Ghana Social Trust) and/or possibly new local structures a premium subsidy to poor families or to families who are de-facto excluded from health coverage due to pre-existing health conditions (if such situation can occur under the concept of mandatory coverage).

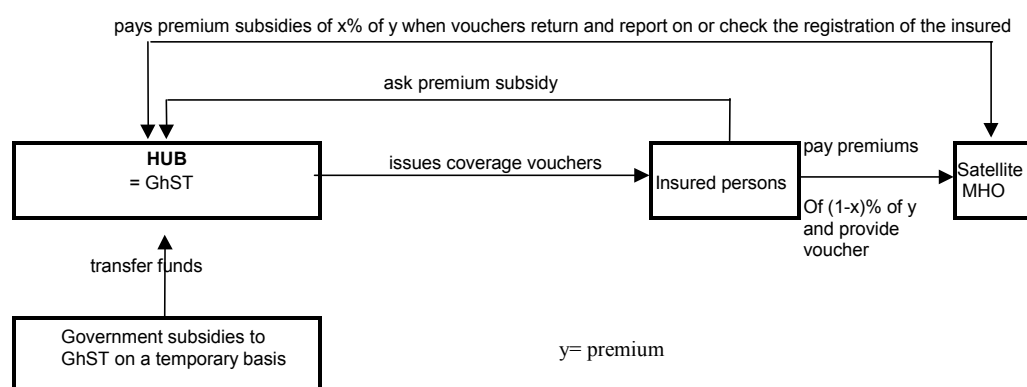
The hub or any other central body may not adequately identify the poor. The identification of the poor has to be done as close as possible to where they live and work and possibly through responsible community leaders. A strategy and a process to carry out this decentralized identification of the poor and make the information available to the hub has to be developed. The criteria are likely to be locality specific and may need periodic revision. Similarly, poverty may be transient and each year the status of benefiting families

<sup>25</sup> See ILO: A Global Social Trust network: Investing in the World's Social Future – report and documentation of a feasibility study; ILO (2002), page 53.

needs to be reviewed. The process of poverty assessment itself requires periodical review with the assistance of local NGOs and other competent experts.

Eligible families will be issued with coverage vouchers, which can be used only as premium payments in accredited community based MHOs. Vouchers would return to the Ghana Social Trust Office and premium subsidies would be paid directly to the respective MHO. The local structures/offices of the Ghana Social Trust would continue to monitor the quality of the services provided to the beneficiaries. If beneficiaries are not receiving the quality of care that the Ghana Social Trust considers adequate, the premium subsidies would be reduced or at worst discontinued – without permitting the MHOs to exclude the poor members.<sup>26</sup> The MHOs thus have a clear incentive to maintain a minimum level of quality.

**Figure 1. A tentative outline of a satellite health insurance system in Ghana**



#### (4) **Financing**

While interim financing for the concept of some pilots might be secured from international donors, ultimately the resources for funding the satellite health insurance system will have to be provided realistically by the country, through either social health insurance contributions or general tax revenues. The project team has come to the conclusion that long-term tax financing could be secured in the process of debt relief arrangements for HIPC countries. If one were to assume that about one third of the Ghanaian population would in theory be eligible for premium subsidies, and one could motivate through subsidies about 50 percent of the poor to join a scheme and the subsidy would be in the order of US\$ 15 per annum per family (or US\$ 3 per person) then the benefit system in the stationary state would cost probably around US\$ 10 million including some administrative fees. The latter estimate is built on the assumption that:

- (1) the local and regional offices of SSNIT could host and execute the Ghana Social Trust activities and thus economies of scale would be made in the administration of the benefit;

<sup>26</sup> As long as the new National Health Insurance System is not in full legal force (and MHO membership is still voluntary), members can still be excluded in case of discontinuance of contribution. Premium subsidies could be replaced by the partial reimbursement of user fees in local health centres and government hospitals and by the reimbursement of a small list of essential drugs if these were purchased on prescription.

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- (2) the average per capita and per annum premium to the MHOs would not exceed c 30,000, and
  - (3) that the subsidy for the poor would be for two thirds of their premium.

A financial burden in this order of magnitude would thus require in the stationary state an increase in government expenditure of about 0.6 per cent or a fraction of the resources that could be freed by the expected debt relief. The Ministry of Health also proposes to have the amount allocated to the present exemption fund increased from the current US\$ 2,625,000 to US\$ 22,125,000 once health insurance is introduced. If this type of arrangement were to materialize and some of these funds could be used to finance the Ghana Social Trust then the project can be assured of sustainability in the long-term. While a more detailed long-term financial plan has to be worked out during the project, it appears that the scheme could be maintained in the medium- to long-term by national resources, i.e. the long-term sustainability appears possible. Longer-term international subsidies do not appear to be necessary at this point.

## **(5) *Prerequisites for success***

The success of the project depends on the success of the government's health insurance plan itself. The workshop on the first version of the concept for the Ghana Social Trust clearly identified a number of conditions for a successful implementation and sustainability of the health insurance system, which includes a financial plan, a service/infrastructure development plan and some quality improvement in health services.

## **5. Activities and outputs of the Ghana Social Trust Pilot Project**

The key objective of the pilot project is to demonstrate that the above approach could operate successfully before the government considers a nationwide implementation. In order to explore the feasibility, the arrangements will be piloted with SSNIT (The Ghana Social Trust Pilot Project office) acting as a hub on a pilot basis and two community health care schemes acting as satellites.

The project team recommends that the Dangme-West and Okwawuman Health Insurance Schemes participate in the pilot. This does not only spread the risks involved in supporting either of them but it gives a wider experience for the pilot. The two schemes operate in different regions, provide different benefits and have different socio-economic profiles. Both schemes together cover presently around 16,000 people. More details are provided in Annex 1.

The pilot project will establish the administrative procedures necessary for the operations of the hub-satellite relationship between the two schemes and the SSNIT by September 2003. These procedures include the identification procedure for eligible people, payment mechanisms and quality control mechanisms. In the last quarter of 2003 the project team in the GhST Pilot Project office together with local SSNIT units will start to identify eligible families. During 2004, 2005 and 2006 benefits will be paid to about 5,000 persons per year on a trial basis.

The Pilot Project duration is about 4.25 years. However, the main Pilot Project activities (the planning phase) will end at the end of 2003. Some follow-up (follow-up trial phase) will hopefully be provided by the present GhST Pilot Project office during three further years (2004-2006). The pilot project will provide the Government of Ghana and other stakeholder in the health sector with the following outputs:

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- (1) A contribution to a pluralistic national health insurance system, which brings together the formal social insurance scheme SSNIT (possibly represented through the Ghana Health Care Company), the National Health Insurance System (to be established), and the Mutual Health Organizations into a hub-satellite partnership arrangement, which would work towards extending coverage to hitherto uncovered parts of the population.
  - (2) The initialisation of a national dialogue on the concept as facilitated by one or two national seminars on the subject in 2003.
  - (3) Contributions to the knowledge base for the implementation of the health insurance plan, such as:
    - survey in the two districts that tests the willingness and ability to contribute to a community-based health insurance scheme,
    - a financial plan (Ghana Health Service will provide essential inputs to the study, such as a proper costing of services and minimum benefit packages).
  - (4) An operational pilot project testing the concept in two pilot MHO regions with about a total of 5,000 insured beneficiary persons per year. It is assumed that the financing of the pilot (i.e. the sponsoring of the premium subsidy of US\$ 3 per insured beneficiary person per year) for three years will be financed from the project. 5000 people are estimated to be about 10 per cent of the poor in the two pilot regions.
  - (5) Production of a detailed final report basically containing the following:
    - a blueprint for the administrative and managerial operationalisation/implementation of the concept and specifying a concrete quality standard stipulating the minimum performance requirements for participating MHOs;
    - a detailed financial and actuarial study of a potential nation-wide introduction of the concept covering the possible developments of potential future costs as well as alternative financing proposals.

At the end of each year during the follow-up trial phase (2004-2006) the ILO's International Financial and Actuarial Service will review the pilot project's performance. Should further trials be necessary the ILO will try to seek donor funding. However, it is expected that at the end of the follow-up trial phase, the government will be in a position to determine whether it will take the model over into national financing. In any case a transitional arrangement will have to be found for the trial group. Most likely, the exemption fund planned to be increased under the government's health insurance plan can be used for that purpose.

## **6. Objectives of the workshop**

The objectives of the workshop are:

- (1) To review and modify the above concept on a consensual basis;
- (2) To ascertain that the above concept is compatible with the government's plans on future health financing; and
- (3) To ascertain that the actual piloting of the concept is unanimously accepted by all stakeholders.

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## Annex 1. Community based MHO profiles

### Dangme-West Health Insurance Scheme

The scheme began operation in 2000. It is a Government supported scheme and the participating clinics are all government facilities run by Government of Ghana staff. Two doctors and one anthropologist (PhD.) supervise the scheme. The scheme does not have its own administrator; it is still managed by the health centre.

Currently the scheme has 7500 registered members compared to 3081 as at 30 September 2001. This is about 7.8 percent of the population of Dangme West District.<sup>27</sup>

The registration period is between September and November and the insurance year runs from October to September. The full year's premium for all household members is payable before coverage begins. (Instalment payments are accepted between September and November). The premiums for the current year are c 15,000 (c 12,000 in the first year) per family member between ages 5 and 69. Children under 5 and persons 70 or over contribute c 6,000. The scheme encourages family registration; if the family chooses not to register all members, those registering would have to pay twice the amount of the premium. This mechanism is meant to guard against adverse selection.

Benefits include:

- free treatment in any participating primary care clinic of the patients choice;
- treatment provided at participating hospitals outside the district on referral from any primary care clinic within the district:
  - while there are no co-payments, hospital bills are covered up to c 400,000 per referral - member must pay the excess;
  - cost of transportation to hospital provided for acute emergencies only;
  - babies born to insured mothers are automatically covered for the current insurance year;
  - there is presently no coverage for members who fall ill while outside the district.

A donor has agreed to cover any deficit in the first 4 years if the deficit is genuine and not a result of mismanagement. The major problem facing the scheme is the quality (or lack of) of care. A survey carried out among the members revealed that they would consider the premium to be valid if they were getting a better quality of service. Previous studies also suggest that compared to the average household expenditure on health, the premiums were quite acceptable.

<sup>27</sup> 2000 Mid- year population estimate based on the results of the 2000 census.

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## The Okwawuman Health Insurance Scheme

This scheme which follows along the lines of the Nkoranza Health Insurance Scheme, is district wide and provides unlimited coverage for only in-patient care and out-patient in excess of c 200,000. The founder hospital has handed over the management of the scheme to a 9-member board of trustees, a manager (paid with assistance from DANIDA), an accountant (seconded by the hospital) and a part time data entry clerk. The supreme body of the scheme is the General Assembly consisting of all subscribing members.

The scheme has so far registered 8441 members. Members started enjoying benefit from the scheme from the 1st of June after observing a two months waiting period (April – May). The current membership is about 4 percent of the potential population.

The premiums for 2001/02 and 2002/03 were c 15,000 and c 25,000 respectively. The rates have been raised in anticipation of DANIDA's withdrawal. Each member pays a registration fee of c 5,000. Members have a 3 months registration period in which to pay their premiums after which registration is closed.

An insured member who presents his/her ID card to their service providers either at Holy Family Hospital at Nkawkaw or Kwahu Government Hospital at Atibie enjoys the following benefits: coverage of admission costs and coverage of OPD cases c 200,000.00 and above.

The scheme has benefited from substantial DANIDA support and has a computer and Database Management software to handle registration and hospitalisation data as well as member identification information. The Hospital has also computerized its operations.

It is worth noting that there is a problem of adverse selection reflected in the nature of claims/treatments. Cases of Hernia, Diabetes and Hypertension are significant among the claims, which may suggest that registration is linked to health status.

The Scheme's management believes that the low coverage is due to an unfavorable registration period (Dec-March) which coincides with the Christmas season. Furthermore, the scheme also took a longer than expected time to become operational.

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# **Comments on the planned National Health Insurance System in Ghana**

## **(Discussion paper No. 2 – March 2003)**

Michael Cichon, ILO  
Charles Normand, London School of Hygiene and Tropical Medicine  
Florian Léger, ILO  
David Tumwesigye, ILO

### **1. Introduction and objective**

The President of Ghana has stated categorically that the present “Cash and Carry System” of health care in Ghana has to be abolished by 2004. The Government seeks to replace it by a National Health Insurance System (NHIS) that aims at universal coverage of the population. The ILO has just (February 2003) launched a technical co-operation projects (“The Ghana Social Trust Project”) that aims at supporting the build-up of the national insurance system. It will pilot test a cash benefit system that subsidizes the insurance premia for the poor. The project thus aims at easing access to insurance by the poor through removing the financial obstacles to enrolment. When the project was launched the government plans for the introduction of the health insurance system were analysed to ensure the compatibility and complementarity of the project objectives with the policy framework set by the government. The expert mission that visited Ghana from ILO headquarters analysed the health insurance plans and was asked to comments on the plans from an international perspective.

This discussion paper contain the comments of the mission. These comments do not seek to second-guess the numerous analyses of the Ghana health care system that have been undertaken to date. They are rather kept in form of a checklist of policy areas that still need to be clarified or elaborated further in the present government plan. The paper aims at providing fruit for thought and support to the health insurance planners. After all, introducing and operationalising a national health insurance system is one of the most complex and difficult logistical and financial tasks that one can undertake in social governance.

### **2. Context and background**

The economic situation in Ghana is difficult. The new Government inherited a US\$ 7.2 billion national debt (US\$ 5.9 billion external and US\$ 1.3 billion domestic). The national currency is depreciating and inflation is spiralling. Foreign exchange reserves are almost depleted and are just enough to cover approximately one month of imports. The dismal economic situation is the cumulative effect of poor terms of trade arising from sharp falls in world market prices of Ghana's two major exports, gold and cocoa, coupled with a three-fold increase in petroleum prices and less than optimal monetary and fiscal policies under previous administrations.

The budget situation is fairly dramatic. Revenues in 2001 covered apparently only 72.6 percent of total expenditure. The deficit amounted to é 3.2 billion in 2001, which should represent approximately 9 percent of GDP. Debt relief schemes will probably ease some of the stress.

Government spending on social programs for poverty reduction and in the area of health constitute only 2.0 percent of GDP with a disproportionate amount of the resources being

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used for personnel emoluments and administration. It is planned that special programmes for the vulnerable and excluded will establish systems and provide resources to improve conditions of extreme poverty and social deprivation. Interventions will include the extension of social security coverage to those who are excluded from formal social protection programmes and the introduction of health insurance schemes to cover the majority of the working population.

Although some improvements have been made in many health indicators including mortality and morbidity, crude indicators still demonstrate the need for major improvements. Life expectancy in 1999 was only 54.2 for males and 55.6 for females. Due to the impact of HIV/AIDS more recent developments are expected to point downwards. Under five mortality is high, i.e. 118 per 1,000 for males and 109 for females. Public expenditure on health at the end of the 1990s was only in the order of US\$ 11 per capita and year of which more than 50 percent were borne out of pocket.

Access to and use of health facilities has been low and declining. A survey conducted by the Ghana Statistical Services revealed that 42.5 percent of the urban population and 54.7 percent of the rural population were not consulting medical personnel in 1992 in times of illness or injury. Medical consultation increased to 46.6 percent urban and 69.2 percent rural in 1998. This trend can likely be linked to the increasing health care user fees over recent years.

The Government of Ghana has a clear understanding of the problems associated with the current out of pocket health financing system (“cash and carry”). Consequently, the government has decided to abolish this financing mechanism and replace it with health insurance. The objective is to pool the risks, reduce the individual burden and achieve better utilization rates, as patients do not have to pay out of pocket at the point of delivery. The declared objective is that at least 50-60 percent of residents in Ghana will belong to a health insurance scheme within the next 5 to 10 years.

### **3. A policy checklist for the proposed health insurance system**

The system being proposed is a fusion of Social Health Insurance (SHI) and Mutual Health Organization (MHO) concepts. It will be based on a district based Mutual Health Organization approach covering both the formal and non-formal sectors. It is assumed that the scheme is formally mandatory for all residents. De facto only the formal sector workforce will probably (after some transition period) be covered on a mandatory basis. Community level and non-formal occupational groups will be encouraged and supported to collect premiums from the non-formal sector to be paid to the district MHOs. Recent developments seem to favour a district based organization of the whole system. As noted in the Ministry of Health’s (MOH) policy framework for the establishment of a National Health Insurance System in Ghana, tax revenues will continue to form part of the overall health financing strategy for a long time to come. The MOH through the Ghana Health Service will continue to finance the major part of the cost of the public sector health service delivery system. Currently, 80 percent of expenditure in public facilities is financed through tax revenue and donor funding while 20 percent is financed from internally generated funds through the “cash and carry” system.

The introduction of a National Health Insurance System (NHIS) only makes sense if it facilitates the attainment of national health policy goals and/or health financing and/or wider public finance objectives. Health policy goals and public finance objectives are linked through health care budget objectives. Health policy goals cannot be achieved without resources. Resources can come from different sources such as general revenues, earmarked taxes, contributions, foreign aid and out-of-pocket outlays. To ensure a rational use of these resources – in line with health policy objectives and priorities – an overall



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medium term health care budget or medium term financial plan for health is needed. This budgeting exercise must be compatible with the country's public finance objectives. Before the design of a NHIS can be analysed in more detail it first has to be established which wider health policy goals, health budget objectives and public finance objectives it serves. Once this is done this section analyses the main characteristics of the design of the systems as proposed in the framework paper of the Ministry of Health (of March 2002),<sup>28</sup> the draft National Health Insurance Act of 2002 as well as verbal explanations given by Dr. Akor of the Ministry of Health during the ILO workshop in February 2003.

### **3.1. Macro-policy objectives**

#### **3.1.1. General health policy objectives**

The obvious prime objective of all health care is the achievement of health gains for the population. Health gains can be made by various means within and outside of the health system. The decision makers in the health system usually are limited to use policy tools that lie within the realm of the health care system, i.e. the improvement of access to and quality of health care available. The declared objective of the introduction of the NHIS is the improvement of access to care for all Ghanaians. The present cash and carry system with the payment of user fees at the point of delivery of care is said to deter up to 80 per cent of Ghanaians who need care from using the health care delivery system. Health insurance is interpreted as a pre-paid co-payment system that spreads the cost of paying user fees across the sick and the healthy (or better non users) rather than the sick only as the in case of the present cash and carry system.

The barrier to utilisation that can be presented by insurance premia is assumed to be removed by the provision of premia subsidy for the poor financed through the maintenance of the present exemption fund. There is no clear analysis why the exemption fund today is apparently ineffective in increasing utilisation. One reason may be its small size (about 2.6 mill US\$), another reason may be cumbersome administration. There is no a priori reason to assume that the exemption fund will be more successful in increasing utilisation under an insurance scheme. The ILO project is designed to establish whether premium subsidies can be administered efficiently and whether they can increase enrolment effectively.

This figure of 80 per cent appears high. At present about 75 per cent of the total population are thought to belong to the informal sector. It might be assumed that the formal sector population requires health care to about the same extent as the rest of the population and is able to afford the user fees. If that is the case, then one can conclude that virtually the total informal sector population is not utilising the health care delivery system. That is obviously not true. This again means that there may be other barriers to utilisation, such as perceived low quality of services, the unavailability of service, too big geographical distances to the next provider unit or too high transportation cost. The issue deserves further study in order to sharpen the policy solutions to effectively increase the access to care.

#### **3.1.2. Health budget and public finance objectives**

The health care financing and public finance objectives of the proposal appear unclear. The concept paper states explicitly that:

- the government will maintain the ratio of 80 per cent of general revenue financing cum external aid at overall health expenditure, and

<sup>28</sup> See Government of Ghana, Ministry of Health (2002).

- that it seeks to replace the 18 to 20 per cent of total public health expenditure that is presently financed through user fees through income from insurance contributions.

Most countries that contemplate the switching from a Public Service Health Service System (such as the one in Ghana) to health insurance system, aim at increasing the overall national resource base of the health sector or at “off-loading” some of the government-financing share to the insured persons. If additional resources are sought, this is generally done to improve access and the quality of care. Increasing the overall resources base for health care is not specified as an explicit objective in the Ghanaian proposal. There is also no explicit overall health care budget or a medium-term financial plan.

This is more than a trivial omission. The new system could become a victim of its own success. If the current arrangements indeed deter 80 per cent of potential utilisation and if insurance were able to reduce that percentage considerably then the maintenance of 80:20 financing rule might quickly create budgetary difficulties for the Ministry of Health. The policy framework foresees the current level of public financing but it is not clear if this really implies that it would automatically finance 80 per cent of the variable cost triggered by additional utilisation. If the MOH would not receive sufficient funds then overall financial resources available per capita might decline (unless insurance premia are increased). Quality might go down, which in turn might deter utilisation.

There should be a clear overall health financing scenario (in form of a national health care budget and/or a medium-term financial plan) and a more explicit public finance objective or commitment. In the absence of a financial planning exercise the government budget objectives face additional implicit risks. If these risks materialise, then other expenditure would have to be curbed in order to keep the budget at an acceptable deficit level. Thus such implicit risks pose a threat to all other government financing, such as financing of other poverty reduction strategies.

## **3.2. Health insurance design issues**

### **3.2.1. General social health insurance principles, access, rights and benefit package**

A social insurance or public insurance scheme is more than a cost spreading cost-recovery mechanism and as such has consequences for providers and the ultimate underwriter of the insurance, i.e. the government. Social health insurance is a contract between contributors and the state. The contributor pays contributions to a public institution on a regular basis in accordance with her/his ability to pay (as expressed in contributions paid as a percentage of insurable earnings) and irrespective of his or her health needs or those of his or her family. The public institution in turn finances a defined benefit package in case of need of the contributor or his or her family. The benefit package has to be stipulated in full detail by law or regulation. Access to the benefits specified in the defined package is a right of the covered persons. This is a marked difference from the present cash-and-carry public service system provides services or goods “if available” in the public facilities and leave patients to their own devices when services and goods are “no longer” available because a health provider unit exhausted its stocks or medical workers are overloaded. An insured person can take the insurance to court if services to which that person is entitled to are not available in case of need. That means that if public health centres, clinics and hospitals are the preferred providers of the new NHIS then their logistics and their delivery capacities have to change.

If there is no guaranteed access to the legally defined benefit package, compliance in the formal and informal sectors alike will decline over time. The benefit package to be provided by the insurance system in Ghana is not well defined in the concept. It is assumed to be “realistic” in view of economic constraints and should “focus on the top 10 diseases”

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that constitute 80 per cent of all diseases prevalent in Ghana. While realism is clearly desirable, the exclusion of 20 per cent of the diseases goes against part of the purpose of the introduction of the insurance – as it would implicitly re-introduce out of pocket payments for certain services.

It would be more rational to not limit the scope and simply stipulate that all goods and services available in public provider units (which have to be defined exactly) would be covered. This would thus exclude expensive care only provided in the private sector or care available abroad. The decision what care will be available to the general public would then remain in the responsibility of the Ministry of Health. Keeping the decision on the benefit package de facto in the Ministry of Health would help to both to contain the cost in the health insurance scheme and the budgetary outlays of the Ministry for the provision of services in public provider units.

### 3.2.2. General organisational structure

The suggested organisational structure is innovative. A fusion of a Social Health Insurance (SHI) concept and the Mutual Health Organisation (MHO) concept into one National Health Insurance System (NHIS) concept has never been tried before. The organisational structure is not fully determined and is to some extent still emerging. Recognising the difficulty to implement the final organisation en bloc, the designers of the system expect that the ultimate system will emerge over an unspecified time. It appears that the initial organisation will consist of two major branches: A nationwide SHI and a district or community based disaggregated system of MHOs. The branches would be merged later into a system of District Based MHOs covering both the formal and the informal sector. Private insurers would be allowed to register as MHOs and be allowed to compete in the market – probably for the richer clients. The ultimate goal appears to be to ensure that all Ghanaians have to be insured in a health insurance scheme, but they would be free to select the one they prefer or can afford. All insurers must provide at least a standard minimum benefit package.

At least in the earlier stages the whole system would be governed through a national health council. The Council will assume the following functions:

- policy planning and development;
- licensing and regulation of insurance schemes;
- management of the national health insurance fund;
- administration of complaints and grievances.

It is not clear whether the central administration of a national health insurance fund is still upheld. Initially it was planned to create an NHI fund which would receive nationally collected resources and allocate them to the MHOs ensuring risk equalisation, re-insurance and cross subsidy. Apparently there is mounting opposition against the centralised fund and funding will have to be decentralised to district level. It remains unclear how social insurance contributions or earmarked national taxes can be decentralised without first being centrally collected.

It is also not entirely clear who would accredit providers and whether public and private providers would be involved in the delivery of care. The association of private doctors pushes for an inclusion of private providers.

The organisational set-up reveals several problems that would need to be ironed out before the system can become operational.

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It is difficult to envisage that a national Social Health Insurance scheme that is fully established and functional will be disaggregated at a later stage and merged with district MHOs. It is also not clear how the community based MHO that are springing up at present can be merged into a district MHOs. At present, the government is apparently opting for complete pluralism. That means that all schemes whether profit, non-profit, community based or others are allowed in and will benefit from a certain degree of protection through the National Council as long as they provide a minimum benefit package. That strategy certainly avoids immediate conflicts with the existing community based schemes as well as private schemes as the existence of these schemes is not directly threatened by the NHIS plan. Pluralism in itself is not necessarily a hindrance for an effective governance of a National Health Insurance Systems as the disaggregated systems in Germany and elsewhere show. There may be efficiency losses but these may be a necessary sacrifice in order to achieve consensus on the system as a whole. However, such efficiency losses have to be contained.

If too many little and inefficient schemes spring up and all are kept alive through central health insurance fund subsidies, then artificial support of inefficient administration actually crowds out resources that could otherwise be spent on the improvement of the quality of care. Allowing alternative types of systems, i.e. community based schemes, social health insurance schemes and private insurance schemes into the system might also create incentives for moral hazard. The freedom of choice of the insured persons would have to be restricted. The private schemes might attract the best risks and the richest to the detriment of the social insurance scheme. If the MHO benefits to a large extent consist of government sponsored high quality public care then people in the formal sector will rather join the cheaper MHOs than their social insurance scheme. They will economise on contributions by paying the one or two dollars per year to the MHOs rather than paying at least 2 or 3\$ per month to the social insurance scheme. Thus they would not contribute to the social insurance scheme and thus helping to cross-subsidize the poor. MHOs while not covering de facto the total population might try to avoid the registration of bad risks – if risk equalization mechanisms are not designed flawlessly. In the end the poorest and the sickest might not find any scheme to join and would have to depend on government sponsored fall-back schemes or arrangements. A full range of detailed regulation would be needed to ensure that national solidarity can actually be achieved.

The organisational set-up of the system that has to be proposed to Parliament simultaneously has to allow for

- an immediate enrollment of all formal sector employees,
- a gradual extension of the population coverage in the informal sector, and
- easy portability of insurance coverage when people move between the formal and informal economies.

In the light of these requirements an organisational differentiation between a social health insurance organizations and district MHOs may not be useful. It is assumed here that on the appointed day of the health insurance law all formal sector employees (registered with SSNIT) will commence paying contributions. SSNIT should collect on behalf of the NHIS. All residents should be entirely free to join any MHO or private insurance on the same day. They would then report to the NHIS council which insurance they belong to and the NHIS would provide the respective premium minus a charge for risk-equalisation, re-insurance and subsidisation, and management services to the respective insurance. In case of a private insurance company marketing a better than minimum care package the insurance would have most likely to collect additional premia from the individual. In case of an MHO providing an agreed minimum package no additional premia would be due.

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The government has to ascertain that from day one in each district at least one MHO capable of enrolling the expected number of insured persons is operational. That means the government has to create one fall-back public district MHO for all people that want or are forced to buy coverage. That fallback district MHO could also function as the executive arm of the NHIS to avoid conflict of interest. This District MHO would not be a threat to other MHOs that are created or already exist. It provides an alternative and an insurer of last resort. The decentralised health insurance system in Germany, for example, only functions because the local sick funds which have to exist everywhere to fulfill that role. There appears to be no need to create a disaggregated SHI scheme in parallel to the system of (fall-back) district MHOs.

### 3.2.3. Coverage and incentives

Statutory mandatory social insurance schemes anywhere in the developing would suffer from low compliance. Voluntary community based insurance schemes suffer from low take up due to the fact that many of the poor cannot afford the premia. If the presently envisaged plan of the NHIS is being implemented these two phenomena may become interrelated in Ghana.

The strategy in Ghana is obviously to use formal sector contributions in part to cross-subsidize the MHO caring for the informal sector. In order to do this effectively high compliance has to be assured. High compliance requires incentives to join the SHI. The best incentive is the perception of having guaranteed access to good quality care. If SHI members are getting:

- the same care as today paid by co-payments which on average will be less per year than the contributions, and
- they are getting the same quality care that the MHO members receive who are paying probably less than 10 per cent of the SHI contributions,

then they have no incentive to join the scheme. Enforcing membership will lead to substantial administrative cost. If compliance is low and/or enforcement cost are high then the amount of resources for cross subsidization is small.

Take up rates in the informal sector can only be increased from the low level that the existing MHO experience today if:

- mandatory membership is credibly enforced, and
- premia for the poor are effectively subsidized.

Both are likely to trigger substantial administrative cost that will increase the schemes premia with a detrimental effect on coverage. This situation would be made worse if the resources for cross subsidization remain small – due to low compliance in the formal sector.

The combined negative effect on coverage can be reduced if there was a severe cost to non-compliance, such as very high co-payments at the point of use for non-insured patients. However, this will deter utilization of the sickest and the poorest. If differentially better care cannot be provided at the outset of the scheme to socially insured persons then the only way to ensure a minimum membership in the SHI is to collect the contributions together with SSNIT contributions and not offer a de facto choice to SSNIT members as to whether or not they want to pay SHI contributions.

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### 3.2.4. Benefit package and provider accreditation

The principal question, mentioned already in the last point in the context of enrolment incentives, is whether the NHIS has to provide for one uniform benefit package for all insured persons or whether there could be differential packages. The government appears to aim at the standardization of a minimum package (on top of which individual insurer could offer additional benefits) rather than the making the benefit package uniform.

It is obvious that different insurers could offer in theory different benefit packages. However, it is not clear how the public health care delivery system that will deliver the bulk of the care could provide different packages for different insurers. In particular that would mean that public health centres or public hospitals might provide types of care for SHI members that they would deny to MHO members. If SHI schemes were allowed to purchase better care for their members from the private sector then they would have to meet the full cost of care not just the 20 per cent of the full cost that are presently covered by the fees charged in the public sector. That means the contributions envisaged at the moment (say 2 per cent of the insurable earnings) would not be enough to cover the cost let alone to cross-subsidize the MHOs. Private health insurance schemes would also provide for packages that would require premia levels (which might be a factor of 10 to 20 times higher than the present rates charged in the MHOs) that would make it hard to force them to contribute to cross-subsidisation. In effect that means allowing unregulated different benefit packages might jeopardize the planned financial architecture of the system. Envisaged risk equalisation and benefit subsidisation has to refer to a defined benefit packages. Otherwise, simply offering better and more expensive care might crowd out the financial room for cross-subsidisation in the case of some insurers.

A directly related question is whether the NHIS would in principle allow participation of private providers. They would have to be paid on a full cost basis and would thus require contribution rates for the insurer which would most likely endanger some of the envisaged cross-subsidisation. One way to solve the problem would be to exclude private providers from the delivery. However, private providers are needed to cope with expected increasing demand, then the only systemic way out would probably be to offer all insurers (SHI, MHOs and private insurance) to offer two premia tracks: One would only buy access to care in the public system and one would buy access to private providers. The premium of the latter would probably be in the order to five times the premium level charged for the public track.

### 3.2.5. Provider payment systems

The provider payment system easiest to administer would be a capitation system where a gatekeeper provider with whom all insured persons would register would be paid a lump-sum amount per year for each insured person. This could logically be a primary care provider, i.e. a clinic or a health centre, or a physician in private practice. Inpatient treatment could be paid on a per day or per case basis upon referral by the primary care provider. However, as long as the population coverage is not complete a parallel fee-for-service fee schedule would have to be maintained for the non-insured users of health care facilities. That fee-schedule might be used to calculate the capitation payments (even if less than full fees might be taken into account in the calculations).

The payment of private providers - should they be allowed to participate – will be a key steering elements in the overall system. If their fees are too high they are likely to lure staff away from public sector facilities or alternatively push up indirectly staff cost in public facilities. If their fees are too low, the private sector will probably charge under table payments that could have the same effects. The staff crowding-out-effect will not be completely avoidable. However, a minimum supply of medical professionals in the public sector could possibly be achieved by a minimum bonding of professional after their publicly financed professional education.

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### 3.2.6. Financing system

As said earlier the introduction of a NHIS system in the national health care financing system requires an overall health care budget and financial planning of the sector, to ensure that the additional administrative cost incurred through the introduction and the maintenance of the NHIS actually leads to real improvements of access and quality of care. There is a real risk that the introduction only facilitates access by groups who already access the health care delivery systems and that the quality of care actually deteriorates if the overall budget of the sector does not increase. The health budget thus needs to stipulate explicitly the target level of additional resources that are planned to be used in the sector. It also needs to specify who the financiers of the additional resources are. It must show that the additional resources do not simply feed additional medical inflation rather than finance better quality and improved access.

The present design of the scheme envisages a variety of resources for the financing of the system ranging from social insurance contributions of the formal sector to earmarked taxes and levies (on alcohols and tobacco, gross investment of SSNIT, the care sticker revenue) plus a variety of other sources. These resources will go in total or in part into the National Health Insurance Fund from where they will be allocated to the participating insurers. The allocation is planned to include risk-equalisation payments, re-insurance and cross subsidisation. This requires further analysis, as none of these mechanisms is easy to administer.

#### (1) *Risk equalisation*

Risk equalisation mechanisms aim at adjusting the income of insurance schemes in such a way that the admittance of bad risks (i.e. for example persons with chronic diseases or high utilisation, such as the elderly or HIV/AIDS affected persons) does not make them worse off than other schemes with fewer bad risks. This can, for example, be done by the procedure described in the following box.

### Box 1. A simple risk equalisation mechanism

#### (1) Step one: Calculation of average minimum per capita cost and premium

Total average cost per capita for the minimum package of services (AMC) provided in public sector facilities and incurred through the payment of public provider fees (f) is calculated for the whole country. Augmented by an administrative cost surcharge (a) this is equal to a national average minimum insurance premium per capita. This is the premium that each insurer should charge as a minimum for each covered person.

$$(1.1) \quad AMC = \sum_i f_i$$

$$(1.2) \quad P = AMC * (1 + a)$$

where i denotes a running index of all fees paid in the county and  
a is the percentage surcharge for administration.

#### (2) Step two: Calculation of risk specific per capita costs

On the basis of a national survey the average national per capita costs (Ci) (as triggered by the payment of fees in public sector facilities) by risk category, that means by age and sex as well as average per capita cost of bad-risk cases are calculated. These will be adjusted in line with the overall national average cost.

#### (3) Step three: Calculation of the normal minimum cost per scheme

Based on the number of insured persons at each age and the number of bad risks cases and an administrative surcharge the total normal minimum annual cost (TC) are calculated for each insurer x.

$$(3.1) \quad TC_x = \sum_i C_{i,x} * Ins_{i,x}$$

where Ins denotes the number of insured persons in insurer x in risk category i.

#### (4) Step four: Calculation of the equalisation amount

From the total normal minimum cost the amount of total minimum premia is deducted. The results is the equalisation amount (EA). If the amount is negative, the insurer pays that amount into the equalisation fund. If it is positive then the insurer is eligible for a reimbursement from the equalisation fund.

$$EA_x = TC_x - P * Ins_x$$

It is important to note that all the above formulae apply to average cost of the minimum benefit package only. This principle has to be strictly adhered to; otherwise the system is wide open for manipulation through individual insurers, who would try to recover some of the cost of additional services through the cost equalisation facility.

The effect of the above procedure is obvious. If an insurer is forced to insure a lot of bad risks or expensive persons then it will get an average reimbursement for the excess cost as long as it only provides for the minimum basket of care and it charges at least the minimum national average contributions. If it chooses to provide better care, the differential cost to the minimum package will not be compensated. Likewise if it chooses not to charge the minimum premiums (for example because it has another sponsor) then it likewise will not be compensated for that additional loss. This mechanism could be applied across all three categories of insurers (i.e. MHOs, SHI and private insurance). The risk equalisation procedure would thus compensate each insurer for the potential loss that could be triggered by the fact that the law forces it to insure all persons regardless of their personal risk and cover at least the minimum benefit package.



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(2) *Re-insurance*

Even after risk equalisation the insurer might face financial problems if he faces an abnormal high utilisation in a given year by all some groups of insured persons; say for example, due to a malaria epidemic in the region. In this case he should either draw down his own contingency reserve and only after that has been reduced below a certain minimum level it could file for a further compensation through a central re-insurance. The insurer would have to demonstrate the total cost of services (belonging to the minimum care package) of the last year financed for its members minus the equalisation payments - if any – still was higher than the national average cost. The re-insurance arrangements at the national level could then reimburse a part of the difference. In order to pay such differences the National Health Insurance Fund would have to maintain a national contingency reserve. Since the risk is actually determined by the actual level of fees in public sector provider units, which do not cover the full cost of actual services rendered, that contingency reserve might be relatively small (say in the order of one third of the national annual minimum normal cost).

(3) *Cross-subsidisation*

Each insurer will be forced to also insure a number of poor people that cannot afford the premium. These people will receive a premium subsidy from the NHI which will amount to a certain percentage of the minimum premium as calculated in the above box. The modalities of this subsidy administration are being explored by the ILO's pilot project.

All the above mechanisms are administratively complex. They require extremely clear accounting systems in all participating schemes as well as thorough audits by the National Health Insurance Council. The introduction of these mechanisms inevitably takes time.

At least two of the three central functions (risk equalisation and cross-subsidisation, the re-insurance function might be to some extent replaced by requiring a substantial level of reserves by the individual scheme) described above are indispensable to ensure a smooth functioning of the pluralistic system. Without a minimum of central supervision, quality control and financial protection the MHOs are not likely to survive and the poor will not be able to afford insurance cover.

### **3.3. Basic financial problems of the NHIS design**

The calculations portraying a simplified quantitative mapping of the envisaged NHIS reveal some of the structural problems identified in the previous sections. The following table 1 presents a simplified but structurally correct picture of the present national health care budget (for care provided in public facilities) based on data supplied the ILO project team by the Ministry of Health. However, much more detailed health budget analyses including basic projections are needed to support the government decision to introduce the NHIS.

According to the data provided to the team, at present the health care delivery system is used by about 50 per cent of the population, i.e. about 10 million people. Per capita cost are at a level of about US\$ 16.40 - only about one third higher than the absolute minimum calculated by the WHO's macro-economic commission for health. Total expenditure on publicly provided health care is in the order of 2.5 per cent of GDP. Government resources only account for 55 per cent of the total financing of care in public facilities which is equivalent to about 5.8 per cent of total general revenues. Overall public health spending,

as well as the share of the government's budget, are low by the standards of many other developing countries.<sup>29</sup>

**Table 1. Total estimated health expenditure in Ghana in 2003**

Care financed by	Bill. Cedis	US\$ (mill)	In % of total
Regular budget	763.00	90.83	55.29
External aid	389.00	46.31	28.19
Coypayments (Cash and Carry)	228.00	27.14	16.52
Total	1,380.00	164.29	100.00
<b>Key structural data</b>			
GDP	58,500	6,964.286	
<i>Status quo</i> Health exp. in% of GDP	2.36	2.36	
Estimated general revenues	13,250	1,577.38	
<i>Status quo</i> govt. health exp. In % of gen. Revenues	5.76	5.76	
<b>Average annual expenditure amounts per user</b>			
	<b>Cedis</b>	<b>US\$</b>	
Regular budget	76,338	9.09	
External aid	38,919	4.63	
Co-payments (Cash and Carry)	22,811	2.72	
Total	138,069	16.44	
<b>Estimated population access</b>			
<i>Population</i>	Million		
Formal sector population	5		
Informal sector population	15		
Total	<b>20</b>		
<i>People with access</i>	rate		
Formal	1	5.00	
Informal	0.333	5.00	
Total	0.49975	10.00	

### *Some model calculations*

The following Table 2 simulates in round figures what would happen to the health sector if the health insurance system as presently planned had be introduced without transition period in 2003. This means, technically speaking, the calculations assume an ad hoc transition to the stationary state on the day the new system becomes effective. This is hypothetical but still useful to illustrate structural weaknesses of the design if the NHIS. The key assumptions in this model calculation are:

- the cost of care and the present fees are not changing;
- the abolishment of the co-payments at the point of delivery would increase the utilisation of people by about 50 per cent (i.e. in technical terms the price-elasticity of utilisation is 50 per cent), and
- the scheme would cover all people in the formal and informal sector.

<sup>29</sup> See for example WHO (2000), Annex Table A8.

**Table 2. Simulation health insurance (2003)**

Structural assumptions			
Assumed increase of utilisation due to abolishment of user fees			50%
Coverage			Rate
Formal			100%
Informal			100%
		Number of persons (millions)	
Formal			5
Informal			15
Total			20
Contributions			
Formal sector		cedis	US\$
average monthly wage		860,000	102.38
compliance rate		100%	100%
Contribution rate		2.00%	
Informal sector		cedis	US\$
average annual contribution		24,000	2.86
Estimated expenditure		Bill. Cedis	Mill. US\$
Formal		1,035.52	123.28
Informal		3,106.55	369.83
Total		4,142.07	493.10
In % of GDP		7.08	7.08
Financing			
Pres.Govt. con		763.00	90.83
Pres.Ex. Aid		389.00	46.31
Contributions			
Formal sector		206.4	24.57
Informal sector		360.0	42.86
Deficit		2,423.67	288.53
In % of general revenues		18.29%	18.29%
Potential financing of deficit			
	Additional % points		
General SSNIT	2	206.4	24.57
Vat	2	459.2	54.67
Remaining surplus/deficit		-1,758.07	-209.29

The table demonstrates that if:

- the government were to maintain the present level of its financing;
- external aid would remain at the present level;
- formal sector workers would contribute 2 per cent of their insurable earnings together with their employers to the NHIS;

- people in the informal economy would contribute 24,000 Cedis per person and year,

then the scheme would still incur a deficit of 2400 billion Cedis which is equivalent to 18 per cent of the current general revenues. It would be very difficult to close that gap through other types of incomes. Even a 2 per cent-point increase of the VAT and a subsidy by the SSNIT of 2 per cent points of their present contribution would not solve the problem. These figures have to be confirmed by an explicit health budget analysis which the ILO will undertake in the coming months, but it appears that there is no way that the government could afford a 100 per cent population at the short run. Further calculations show, that if general revenues were to increase in real terms by about 3 per cent per annum, then the system could be financed in 10 years – if the government were willing to devote about 40 per cent of the additional revenue to the health care sector.

### *Some sensitivity testing*

The following table 3 shows that the country could possibly afford the extension of coverage to 50 per cent of the informal sector to begin with, provided it can collect 2.5 per cent health insurance premium from the formal sector, can add 2 per cent -point to the VAT and shift 1 per cent point of SSNIT to health care and – what is uncertain - could contain the additional increase of utilisation per capita to about 25 per cent.

If, however, utilisation were to increase by 50 per cent then a deficit of about 440 billion Cedis would occur which would be more than half of the present government expenditure on health care. If one could limit the per capita utilisation to about one third (inter alia through rationing measures), charge a contribution rate of 8 per cent from the formal sector, shift 2 per cent of SSNIT contributions to health and increase VAT by 2 per cent and increase the informal sector contributions to Cedis 48,000 per capita and year then one could possibly balance the books in the stationary state. Even if crude these calculation confirm the rule of thumb that a health insurance with a full range of benefits would have to cost in the order of 10 per cent of insurable wages.

One warning is due in this context. When reviewing all these figures some readers might think it might be easier to simply abolish the present user charges and pay the present income from these by two additional VAT points. However, due to the automatically increasing population coverage and utilisation the government's additional financial burden would most likely skyrocket and based on the above assumptions it would probably take an increase of VAT by 12 per cent-points to close the gap.

In short, if the introduction of health insurance – as presently set up –were to be a success and take-up and compliance were increasing rapidly then government would have to be prepared to mobilise additional resources for health care. As said earlier it would be a victim of its own success. The national health insurance system thus has to be phased in.

**Table 3. Modified Simulation Health insurance (2003)**

<b>Structural assumptions</b>			
<b>Assumed increase of utilisation due to abolishment of user fees</b>			25%
<b>Coverage</b>			<b>Rate</b>
Formal			100%
Informal			50%
			<b>Number of persons (millions)</b>
Formal			5
Informal			7.5
Total			12.5
<b>Contributions</b>			
<i>Formal sector</i>		<b>cedis</b>	<b>US\$</b>
average monthly wage		860,000	102.38
compliance rate		100%	100%
Contribution rate		2.50%	
<i>Informal sector</i>		<b>cedis</b>	<b>US\$</b>
average annual contribution		24,000	2.86
<b>Estimated Expenditure</b>			
	<b>Bill. cedis</b>	<b>Mill. US\$</b>	
Formal	862.93	102.73	
Informal	1,294.397	154.09	
<b>Total</b>	2,157.33	256.82	
In% of GDP	3.69	3.69	
<b>Financing</b>			
<i>Pres.Govt. con</i>	763.00	90.83	
<i>Pres.Ex. Aid</i>	389.00	46.31	
<b>Contributions</b>			
Formal sector	258	30.71	
Informal sector	180	21.43	
<b>Deficit</b>	567.33	67.54	
In % of general revenues	4.28%	4.28%	
<b>Potential financing of deficit</b>			
	<b>Additional % points</b>		
General SSNIT	1	103.2	12.29
Vat	2	459.2	54.67
<b>Remaining surplus/deficit</b>		-4.93	-0.59

#### 4. Implementation issues

As said in the beginning, introducing a health insurance system of this order of magnitude is one of the most complex task in social and fiscal governance. Anywhere else, planning for system like this has taken several years and even then the schemes normally only increase their coverage slowly. Korea achieved full population coverage in record time but

it still took at least 12-13 years (from 1977 to 1989). However, in Korea the informal sector was already comparatively small at that time.

Actual implementation of an ambitious programme like the one in Ghana, takes substantial logistical preparatory work. National consensus has to be built, regulations have to be prepared, an implementation plan has to be set up, specific characteristics of the new system may have to be pilot tested, a national awareness campaign has to be started and a crew of at least 300-400 managers and financial experts have to be trained and district organisations have to be set up. A preparation time of 12 month from the day that the system has been approved by parliament would be record time.

## 5. Conclusions and recommendations

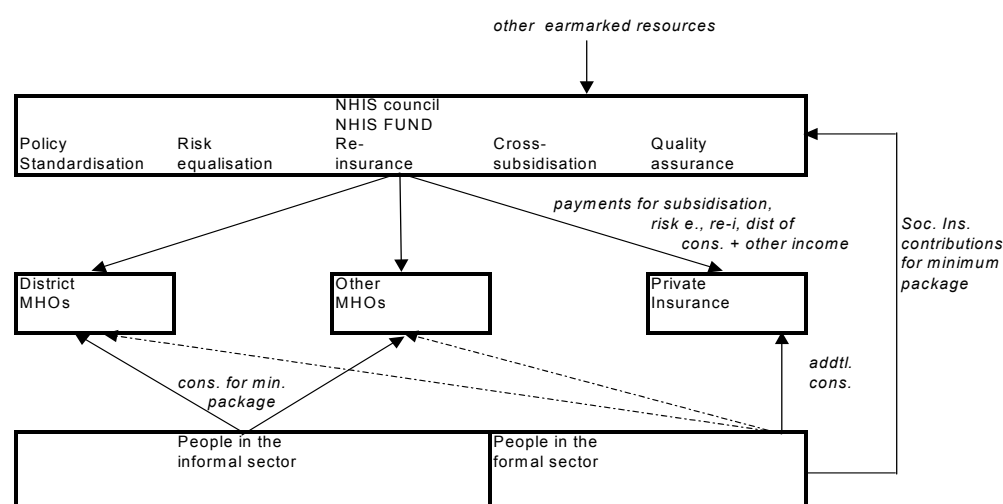
Based on the above analysis the ILO project team reckons that NHIS plan as it stands now appears to require improvements in the following direction:

### (1) Organisational structure

While pluralism of insurance carriers should be maintained to maintained societal consensus on the concept. The organisational structure as described now requires some simplification. There appears no need for a separate organisational structure of the social health insurance and the MHO system. SSNIT should collect contributions on behalf of the SHI and the MHOs should provide the insurance cover. In any case, it appears unavoidable that the government sets up at least one public MHO per district, that can absorb all insured persons that do not find coverage elsewhere. This automatically implies that formal and informal sector members receive the same benefits unless the richer ones opt for a second – better quality track that also MHOs could offer. Formal sector workers would probably have to be given the opportunity to choose between the MHOs and private insurance. Since private insurance carriers would be part of the nationwide risk equalisation facility for a minimum benefit package, the negative side effects of “cream skimming” of the best risks by private insurance would be reduced.

Even if there is resistance to the creation a National Health Insurance Fund, that provides for a risk-equalisation facility, re-insurance as well as cross-subsidisation, appears indispensable if universal coverage and access, equity, minimum quality standards and pluralistic choice are policy objectives that are to be pursued simultaneously. The following figure 1 provides an overview of the suggested organisational structure.

Figure 1. Suggested organisational for the NHIS in Ghana



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## **(2) Basic benefit package**

It is essential that the minimum benefit package will apply to all insurers. Government has to maintain full control of the contents of the basic package. That basic package should be identical with the basket of goods and services provided in public facilities. Without a uniform minimum benefit package neither the risk equalisation facility nor re-insurance nor a meaning full subsidization of the insurance premia for the poor could function. However, in order to be attractive for all persons in Ghana the system has to permit each insurer to market at least two benefit package tracks: one based on public provision only and one based on an inclusion of the private sector.

## **(3) Financing**

A fully blown national health budget exercise is necessary to

- stipulate the per capita amounts that the government wants to spend on health care during the next decade;
- determine how this expenditure will be financed within government budget constraints and possible constraints on new sources of income for the sector ( i.e. insurance premia),
- assess at what pace the population coverage under the new health insurance system can be increased over the coming decade.

## **(4) Implementation**

Once the health budget is established an implementation master plan has to be established. Social and governmental consensus on the plan has to be achieved. The achievement of realism with respect on a possible timetable towards full population coverage is absolutely necessary. The most urgent activity is to start training health insurance management and financing experts.

The NHIS plans in Ghana are ambitious. They have the potential to increase the access and quality of care of the population in the medium- to long term run. As such it deserves the full support of all stakeholders. It may make the difference between a decent and a miserable life for millions of Ghanaians.

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# **An annotated checklist for the implementation of the National Health Insurance System in Ghana**

(Discussion paper No. 3 – December 2003)

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## **1. Introduction and objective**

The President of Ghana has stated categorically that the present “Cash and Carry System” of health care in Ghana has to be abolished by 2004. The Government seeks to replace it by a National Health Insurance System (NHIS) that aims at universal coverage of the population. In August 2003 the Ghanaian Parliament passed a National Health Insurance Bill which sets out the legislative basis for this reform. The task now facing the Government of Ghana is how to implement the new law.

In parallel, the ILO is carrying out a technical co-operation project (“The Ghana Social Trust Project”) that aims to support the build-up of the national insurance system. It will pilot test a cash benefit system that subsidizes health insurance premia for the poor. The pilot aims to improve access to insurance for the poor by removing financial obstacles to enrolment. When the project was launched the government plans for the introduction of the health insurance system were analysed to ensure the compatibility and complementarity of the project objectives with the policy framework set by the government.

This discussion paper examines the legislative framework set out by the new law and the existing proposals for implementation, and offers comments. It highlights the key areas to be addressed and suggests modes of operationalisation, including alternative methods of implementing policy where those exist.

The paper does not seek to second-guess the numerous analyses of the Ghana health care system that have been undertaken to date. Rather, it offers a checklist of strategic activities that will need to be developed in the government plan. The paper aims to provide guidance and support for health insurance planners. We recognise, and have said in earlier discussion papers, that introducing and operationalising a national health insurance system is one of the most complex and difficult logistical and financial tasks that one can undertake in social governance.

At Annex I is a short summary of the socio-economic context within which this work takes place. At Annex II is a table with the checklist of strategic activities.

## **2. An implementation checklist for the health insurance system**

### **2.1. *Background to the new health insurance system***

The system being implemented as a result of the legislation is a fusion of Social Health Insurance (SHI) and Mutual Health Organization (MHO) concepts. It will be based on a district based Mutual Health Organization approach covering both the formal and non-formal sectors, and will be formally mandatory for all residents. De facto only the formal sector workforce will probably (after some transition period) be covered on a mandatory basis. Community level and non-formal occupational groups will be encouraged and supported to collect premiums from the non-formal sector to be paid to the district MHOs. In addition, a scheme will be put in place to subsidise the premiums of the poorest.

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Tax revenues will continue to form part of the overall health financing strategy for a long time to come. The MOH through the Ghana Health Service will continue to finance the major part of the cost of the public sector health service delivery system. Currently, 80 percent of expenditure in public facilities is financed through tax revenue and donor funding while 20 percent is financed from internally generated funds through the “cash and carry” system.

## **2.2. The starting point and principal strategic tasks**

As is often the case, Ghana is not starting from a zero point. There are existing healthcare facilities, MHOs and private insurers. Legislation has been designed, insofar as is possible, to allow all these existing entities to be incorporated into, or to run alongside, the new national health insurance scheme.

At the root of the new scheme is the guarantee of access to healthcare for all Ghanaian citizens. But within that guarantee is the flexibility for citizens to join MHOs or to take out private insurance. For those who can afford neither, there will be supported access, through subsidies.

The challenge of implementation is how to put in place all these measures, making full use of the existing structure, and adapting and expanding it to meet current and future needs. This paper identifies five key areas, or groups, of strategic activity which must be covered if implementation is to be successful. They are:

- *The establishment of a health insurance implementation master plan*

A logistical endeavour of the nature and size of the introduction of a new health care financing system requires a sound planning instrument that organises and monitors in a logical fashion the timely delivery of many different activities and sub-activities that need to be undertaken by a variety of different players. That master plan should be developed and implemented by a planning group with full executive authority over the entire process.

- *National Health Policy Design and Infrastructure Planning*

Underpinning the national network of healthcare provision there must be a central governing structure which oversees national policy, practice and planning. That structure may be made up of more than one body, and in the case of Ghana the legislation anticipates that the main bodies will be the Ministry of Health, a National Health Insurance Council with its Secretariat, the Ghana Health Service and the Social Security National Insurance Trust (SSNIT). These bodies will have responsibility for establishing national frameworks and financing, and for the overall governance of the system.

- *Setting up the National Health Insurance Council (NHIC) and the National Health Insurance Fund*

One of the first tasks of implementation will be the establishment of the key governing and financing structures of the new system. This work will be closely integrated with activity under the first strategic activity.

- *Defining the main tasks of the NHIC*

Once established, the NHIC will have to take forward many of the strategic activities of implementation, and manage the new system. These activities will

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range from governing and managing relations between Government, providers and health insurance schemes to training the necessary staff.

- *Defining scheme based activities*

In parallel with the activities of the NHIC, insurance schemes will have to either be set up or adapt their existing structures to fit the national system. Schemes are also the main interface between the new system and individual Ghanaians, and have a crucial role to play in promoting healthcare access to citizens.

This paper will examine these groups in detail, outlining the tasks in each group and the issues which must be addressed. It will link, where possible, the activity to existing provision made in the National Health Insurance Act (2003), henceforth referred to as “the Act”, and all legislative references are to sections of that Act.

As a first step, the Government of Ghana has set up a Technical Review Committee to oversee implementation in the first six-nine months before the NHIC and Secretariat become operational. Under the Committee are six technical Task Teams planning for: the national minimum health benefit package; scheme design; accreditation of schemes; training and capacity building; public education; and monitoring and evaluation. The task teams presented their initial proposals in these areas at a stakeholder workshop in November 2004, and those are addressed in the relevant areas below.

The Government has undertaken to consult as widely and openly as possible, particularly through a Stakeholder Consultative Group. The Government has also said it is committed to transparency in the specification of technical assistance needs and the processes for acquiring that assistance.

### 2.2.1. The establishment of a health insurance implementation master plan

<i>Action:</i>	Health Insurance Implementation Planning
<i>Actors:</i>	Planning group in the Ministry of Health, reporting to the Ministries of Health and Finance
<i>Timing:</i>	Immediate and ongoing throughout the implementation process
<i>Legislation Ref:</i>	N/A

The present health insurance group in the ministry of health may serve as a nucleus for this organisation. It should serve as a secretariat for the Technical Review Committee. However, additional staff experience in major operational planning would need to be hired. The main task of the group would be:

- to develop and keep up-to-date a CPM (critical path) network which establishes production times and logical interactions between different activities (for example, the definition of the minimum benefits package and the establishment of a central subsidy mechanism for District Mutual Health Insurance schemes);
- to manage the national and external resources that will have to be earmarked for execution of diverse technical projects; and
- to monitor and ensure the keeping of established timetables for individual activities and the operation as a whole.

The group should be headed by an executive director who is responsible for the overall implementation process. S/he may draw on international and national experience and advice as needed.

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## 2.2.2. National Health Policy Design and Infrastructure Planning

<i>Action:</i>	Health Policy Design
<i>Actors:</i>	Initially the Ministry of Health, but as the system is implemented, some responsibilities will be covered by the NHIC and the Ghana Health Service
<i>Timing:</i>	Immediate and ongoing
<i>Legislation Ref:</i>	S2(2)(h) and (i)

At national level the Government will need to continue to decide on the overall direction and priorities of health policy. This is essentially a continuation of existing activity, but will need to be adjusted to take into account all the agencies and providers who will be involved in delivering policy. Once priorities are established, they will need to be incorporated into the national minimum benefit package. For example, if the Government decides to focus on the prevention of HIV infection, they will need to take into account how that might be achieved, the role of providers in prevention, the importance of health education, the possible impact on other areas (e.g. sexually transmitted diseases), possible provision of prophylactics and so on. This will have to be done for all areas of healthcare.

Whilst the setting of priorities and design of policy is ultimately the responsibility of Government, it will involve wide consultation of medical experts, providers, health insurers and other stakeholders. It is therefore necessary to ensure that everyone is aware of what the structures are, and that those structures are stable, accessible and transparent.

It is also vital that the overall goals of health policy are clear and understood by all relevant actors. The new health insurance system is a means to obtaining those goals and not an end in itself. If the guiding policy is unclear, then health insurance alone will not achieve those goals. In order to ascertain the actual implementation of health policy goals through an efficient sharing of work between the different players in the health sector, the policy formulation process also has to establish the roles and responsibilities of the MOH, the Ghana Health Service, the National Health Insurance System and provider associations for the attainment of health policy goals. This is best done in form of organisational mission statements.

<i>Action:</i>	Health Infrastructure Planning
<i>Actors:</i>	The Ministry of Health, but in wide consultation with district administration, health insurers, NHIC and Ghana Health Service
<i>Timing:</i>	Immediate and ongoing
<i>Legislation Ref:</i>	N/A

The health infrastructure is the framework within which work is carried out to achieve the goals of policy. It encompasses the physical infrastructure of the system (buildings, staff and so on) and the administrative infrastructure. The latter means establishing procedures, and lines of responsibility and accountability, within the system for achievement of policy goals. Performance will have to be monitored and evaluated, to measure progress and inform future policy and action.

The current physical infrastructure of the system will have to be assessed to identify those areas where improvements or additions are needed to ensure that all citizens have access to healthcare facilities. At present, evidence points to insufficient capacity in the existing system to deliver the reforms, and it is therefore particularly important that early action is taken to ensure the services to which insured people are entitled are available, and that there is sufficient preparation for an increase in demand for services. The Government will have to decide what minimum provision has to be put in place: for example, what facilities should there be in each administrative district? What is the maximum reasonable distance which citizens have to travel to attend a primary healthcare facility, and a hospital? Are

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there sufficient staff in place to implement the new system, and do those staff have the necessary skills and capacity? Is there a need for significant investment in infrastructure? What will be the maintenance requirements of existing and future facilities?

There are presently a number of players involved in the development of physical infrastructure: Government, social partners, providers, health insurers and development partners. At this point it would be wise not to incorporate new players until the existing system is consolidated and further development established on a firm and sustainable footing. This would not preclude opening up the system to new players in the future at a time when that was considered appropriate.

The procedures and administrative structures for decision making are, again, at least partially in place. They are, to some extent, an extension of the policy-making organs, but it cannot be assumed that they will somehow slip into place naturally as a result of policy-making. It will require active intervention to establish structures and ensure that at each level everyone is aware of their responsibilities and tasks, and to whom they are accountable and must report on their performance and progress. The framework must be absolutely clear about what is required, to ensure a sufficient measure of equity across the whole country, whilst, at the same time building in flexibility to allow for innovation in practice. In addition, it must be accepted that not everything will be perfect from day one, and there may need to be scope for experimentation – perhaps piloting methods of delivery in single or multiple districts – and that, in some cases, failure may be a necessary step along the way of learning and building up a system that is responsive to the specific needs of Ghana. This has to be made clear in public information campaigns, in order to manage expectations and prevent public disengagement if the system is not all that they imagined.

<i>Action:</i>	Establishment of an annual health budget and budgetary procedures, capital investment plans.
<i>Actors:</i>	The Ministries of Health and Finance, including SSNIT; the NHIC; the Ghana Health Service; and district assemblies
<i>Timing:</i>	Immediate and ongoing
<i>Legislation Ref:</i>	S76-S91

Again, many of the procedures are, to some extent, already in place. These need to draw together all the financing schemes for healthcare and be developed to ensure adequate financial planning for the national health budget. This activity is closely linked to policy planning, where current and future priorities and needs will have been assessed and costed. The policy will then have to be compared to available funding, and decisions made about where available funds are to be spent. It may be that not all needs can be met; hence the need to identify priorities and concentrate on those. As with overall health policy planning, the national health budget should remain the responsibility of the Ministry of Health.

Of course, a great deal of work has already gone into financial planning for the new system, and initially those plans may only require some fine tuning. The ILO has also provided technical support and advice for the production of a national health budget, which can be extended. There is also substantial discussion of health budgeting in Ghana in the ILO's second discussion paper on the Ghana Social Trust Project.<sup>30</sup>

<sup>30</sup> "The Ghana Social Trust Project: comments on the planned National Health Insurance System in Ghana", Cichon et al., April 2003.

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### 2.2.3. Setting up the National Health Insurance Council (NHIC) and the National Health Insurance Fund

<i>Action:</i>	Establishment of the National Health Insurance Council
<i>Actors:</i>	The Minister of Health, in consultation with social partners and health council stakeholders
<i>Timing:</i>	As soon as possible
<i>Legislation Ref:</i>	S1, S3

The establishment of the NHIC is crucial to almost every aspect of the implementation of the Act, as is clear from the high priority it was accorded in the Act itself. Since the composition of the NHIC is set out in the Act, and the Minister for Health has been designated the responsible party for appointing members, the activity should be carried out as soon as possible.

It should be made clear how candidates are nominated for the Council. Some will be ex officio members, but others will presumably be nominated by the institutions which they are to represent. This process should be as open and transparent as possible.

<i>Action:</i>	Roles and Terms of Reference of the National Health Insurance Council
<i>Actors:</i>	The Minister of Health, NHIC members
<i>Timing:</i>	Immediate
<i>Legislation Ref:</i>	S2, S74, S92-100

The principal object and functions of the NHIC are set out in the Act. These should be translated swiftly into the terms of reference for the Council. Moreover it is important to appoint the Executive Secretary and establish as soon as possible the Secretariat and secretariat Departments, including the inspectorate foreseen in S74 of the Act, to support the Council in its work, and to execute the decisions made by the Council. The Secretariat should bring together experts in health policy, social financing, and health insurance and administration.

For the Council members there should be a clear explanation of their personal and collective accountability. The same is true of the Secretariat and its departments, where it should be clear whether they are accountable to the Council itself, to the Executive Secretary, or directly to the Minister of Health. The most practicable arrangement would be for the Executive Secretary to be accountable to the Minister for all activity carried out by the staff of the Secretariat, thus making them accountable to the Executive Secretary. The Council would be independent of this line of accountability, and accountable in its own right to the Minister.

The Act provides for the establishment of district offices of the Council. These offices will be an important point of contact between insured members of health schemes and the Council itself. They will also be key in establishing and maintaining relations with district assemblies and local communities.

Among the responsibilities of the Council and the Secretariat yet to be developed is the collection and analysis of statistical data; this will be explored more fully, along with other activities, in section 2.2.3 of this paper.

<i>Action:</i>	Recruitment and appointments
<i>Actors:</i>	The Minister of Health, NHIC members
<i>Timing:</i>	Immediate
<i>Legislation Ref:</i>	S3(2), S95

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The Act sets out the framework for appointments and working relations between public servants and staff of the Council. All that remains is to recruit staff as soon as possible.

#### 2.2.4. Main tasks of the National Health Insurance Council

Many of the main tasks of the NHIC are laid out in Section 2 of the Act, and are set out below in accordance with that Section.

##### *Registration, licensing, regulation and supervision of schemes*

<i>Action:</i>	Administrative procedures at national level
<i>Actors:</i>	Ministry of Health, in consultation with NHIC
<i>Timing:</i>	As soon as possible
<i>Legislation Ref:</i>	S13-21, 49, 56-58, 60-61, 68, 70-75

It is important that clear procedures are put in place at national level to allow the system to operate effectively and equitably across the whole country. Health insurers must be able to apply for licenses and operate in a stable framework, and to know that the same rules and procedures apply to all.

The framework for registration, licensing, regulation and supervision of schemes is laid out fairly comprehensively in the abovementioned sections of the Act. Within that framework it will be necessary to design procedures and produce comprehensive guidance for both NHIC staff and for insurers, possibly in the form of a manual. There is a balance to be struck between making procedures comprehensive, but not excessively bureaucratic or time-consuming.

For the provision of information by insurers, whether it be for registration or otherwise, there are two options. One is to set out the information required and then allow insurers to provide it in whatever format they choose, perhaps with some guidance on a model format. This would allow existing insurers to work within their existing administrative frameworks, but it would mean that Secretariat staff would have to deal with a plethora of different documents, and would have to develop the skills to extract the necessary information. The alternative is, of course, to design a standard set of forms. This might mean that insurers have to adapt, but it would ensure that all the necessary information is elicited, and would facilitate the gathering of information for Secretariat staff. It would also have the advantage of marking the beginning of the new system and give it a clear, national, standard identity. On balance we would recommend the latter option.

Among the procedures to be developed are those for: registration, suspension, renewal of license, and dealing with rejected applications. All these are contained in outline in the Act.

##### *Accreditation of healthcare providers*

<i>Action:</i>	Establishment of accreditation criteria
<i>Actors:</i>	Ministry of Health, District Assemblies, providers, schemes, community stakeholders, HNHC
<i>Timing:</i>	In first three months
<i>Legislation Ref:</i>	S70

Healthcare providers are clearly essential to the effective implementation of the new system. The starting point for accreditation will be closely linked to overall health policy and infrastructure planning. The Ministry, in consultation with other stakeholders, will need to decide how many provider units will be needed and the composition of those units (primary care, in-patient facilities, ambulatory units etc) (see also the section of health infrastructure planning above). The level of service required in each district will have to be determined. The Act states that these issues will be addressed through regulations; action

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will again need to be taken quickly to consult and put regulations forward, as, without accredited providers, the system will fail.

The actual criteria for accreditation will have to address such areas as quality standards, staffing ratios, equipment standards and so on. This will have to be linked back to infrastructure planning for public providers, since those providers will have limited influence on their staffing and budget compared to independent providers.

One alternative would be to exempt public providers from the accreditation process, at least for a transitional period, whilst investing to bring them up to standard. This carries a high risk of installing a two-tier system, with healthcare provision differing according to where a person lives. It also denies independent providers a level playing field on which to apply for accreditation if they are in the same area as a public facility. Inconsistent provision also risks losing public engagement with the new system, if people who rely on public provision believe they are getting a poorer service for their money. That, in turn, would imply charging lower premiums for schemes which use public providers, which might threaten the financial viability of the system in some areas. It may therefore be desirable to plan for significant investment in public provider facilities to ensure an equitable standard of care across the country.

The relevant task team has set out a programme of work which includes a series of workshops with providers to develop tools to accreditation. In principle, accreditation tools have two elements: the determination of the required volume and structure of services to be available in a district or a community and the ascertainment of the qualification of interested providers to meet those needs. The outcome of those workshops will be a series of recommendations. There will then be developed, as well as the accreditation tools, a training programme, guidelines, and a database format. This is a sensible way forward, and the team has recognized the challenges ahead, including delays that may occur as a result of trying to accredit thousands of existing providers. It is important that the training programme is compatible with that being provided for insurance administrators, and it might be worth considering joint training sessions in those areas where the work of insurers and providers dovetail, notably in the negotiating of service contracts, and processing of claims.

### ***Budget, funding and accounting frameworks and conventions***

<i>Action:</i>	Establishment of financing mechanisms, including those for intra-Government transfers
<i>Actors:</i>	Ministries of Health and Finance (including SSNIT), NHIC
<i>Timing:</i>	In first three months
<i>Legislation Ref:</i>	S76-91

The Act sets out clearly how funds will be raised and transferred into the newly-established National Health Insurance Fund. This will essentially be through the monthly transfer of two and a half percentage points from the Social Security and Pension Schemes fund; and a levy of two and a half per cent on a variety of commercial and service transactions. In addition, of course, there will be the contributions made by members of health insurance schemes.

Building on the mechanisms which legislation prescribes, procedures for the proper accounting of funds will have to be put in place. The prescribed mechanisms mean that, for example, the collection of funds will lie with more than one agency (SSNIT for the SSPSF, and a yet-to-be established agency for the health insurance levy). In both cases, actual collection of the funds will ultimately be the responsibility of the Minister of Finance.

Nevertheless, the NHIC has responsibility to “collect or arrange to be collected monies lawfully due to the fund”. This implies that the NHIC must work closely with the Ministry of Finance to ensure that the latter meets its responsibilities in collecting funds, and that



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they are then transferred to the NHI Fund within the time limits laid down by the Act. Adhering to those time limits will be important, as regular or long delays will jeopardize the running of the whole system. In this context, it is also important that the statutory duty of the Government to “make good” any default or shortfall in transfers from the SSPSF may be carried out quickly.

*Action:* Establishment of accounting frameworks and budgetary procedures  
*Actors:* Ministries of Health and Finance (including SSNIT), NHIC  
*Timing:* In first three months  
*Legislation Ref:* N/A

Accounting frameworks will have to be put in place for providers, schemes, the NHI Fund and central administration. Accounting frameworks are indispensable for sound financial governance of the schemes and the system as a whole. Sound accounting is obviously paramount for the credibility of the system and the schemes. A whole interconnected and self-balancing hierarchy of accounts has to be built on all levels of the NHIS. In parallel budgeting, procedures that allow for financial planning of the National Fund as well as the individual schemes have to be developed. Without budgeting procedures contribution rates and premium levels cannot be established in advance.

*Action:* Establishment of subsidisation procedure and formula  
*Actors:* NHIC  
*Timing:* In first three months  
*Legislation Ref:* S77(2)(a), S79, S81

The Act stipulates that it is the duty of the NHIC to submit annually to Parliament a formula for the subsidization of health insurance schemes. This task is absolutely crucial, since the whole financial viability of the scheme depends on it – the health insurance schemes will rely on this subsidy to offset the costs of, for example, insuring high risk patients. The challenges of risk equalization mechanisms, reinsurance, and cross subsidization are examined more fully in the earlier ILO policy paper.<sup>31</sup>

The criteria for the formula itself will have to be established by taking into account epidemiological and health economic information, along with available funds. It will also have to be determined whether the subsidy is paid on a capitation basis (which seems the most straightforward) and, if so, whether there will be regional variations to allow for particular prevalence of certain ailments in some areas eg malaria.

The procedures for allocating the subsidy, and how health insurance schemes will be able to obtain it, will have to be established. This implies also establishing accounting procedures for the flow of funds.

The ILO has undertaken to carry out work on a risk equalization formula to assist in the development of the subsidy formula, and other aspects of financing the new system.

*Action:* Establishment of procedures for subsidising indigents  
*Actors:* NHIC, Minister of Health  
*Timing:* Within the first year  
*Legislation Ref:* S2(2)(j), S38

<sup>31</sup> “The Ghana Social Trust Project: comments on the planned National Health Insurance System in Ghana”, Cichon et al., April 2003.

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The Council is charged in the Act with providing advice to the Minister on the prescription of a means test to determine which people may be classified as indigents. An indigent is defined as “a person who has no visible or adequate means of income or who has nobody to support him or her”.

There are two key issues at stake here. The first is how best to identify those who might be classified as indigents; and the second is how best to support their access to health insurance.

The ILO is currently piloting a scheme to support access to health insurance for the poorest in the Dangme-West District. Our experience suggests that the identification of indigents must rely on objective indicators of poverty (which may be linked to the socio-economic status of indigents, including their standard of housing, fuel use, cash income, education levels and health status); and subjective local knowledge of, for example, community development workers, healthcare workers and community leaders (chiefs, ministers of religion, teachers etc). Such a method requires cross-checking on a sample basis (to limit administrative costs and time).

The ILO project is supporting access to health insurance by subsidizing the health insurance premiums of those who have been identified as indigents, at a rate of 75 per cent of the premium. The subsidy will be provided for three years, but preliminary information will be available within a matter of months and we will share this with the Government of Ghana. We believe that the Dangme West project may prove a useful model for a mechanism to provide help to the poorest.

#### *National level provision of contributions for DHMIs*

<i>Action:</i>	Setting the contribution rate
<i>Actors:</i>	NHIC, DMHI schemes
<i>Timing:</i>	Within the first six months
<i>Legislation Ref:</i>	S34

The Act establishes that contribution rates will be set by Regulations. In addition, it stipulates that where a person’s contribution to the Social Security Pensions Scheme Fund is equal to or greater than the health insurance premium, they will have to make no further payment; and that pensioners will be exempted from contributions. Our understanding is that family members of SSNIT contributors will also be covered.

The contribution rate will have to be set at a level which makes joining a health insurance scheme attractive. Whilst there is an element of compulsion in that all citizens shall be obliged to join a scheme, if the rate is too high then many will not. Those who will not should not be the poorest (for whom special arrangements apply) but those who have low incomes.

It may be necessary to establish a contribution rate cap at national level to ensure equitable access, assuming that DMHI schemes will be able to vary their premiums.

<i>Action:</i>	Additional payments by scheme members
<i>Actors:</i>	NHIC, DMHI schemes
<i>Timing:</i>	In line with establishment of contribution rates
<i>Legislation Ref:</i>	N/A

Preliminary work on the proposed minimum benefit package suggests that co-payments will be introduced to discourage “excessive prescription and consumption of drugs”. It is proposed that the co-payments will be in the form of a nominal fee payable by patients for each visit to a health facility.

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In addition, the draft says that schemes will have the option to decide whether or not they set a financial ceiling for in-patient services.

These provisions do not present any serious difficulties, and it remains only for the “nominal fee” to be determined. However, it will be necessary to present this fee in a positive way, as many people may ask why, if they are paying an insurance premium, they also have to pay a fee.

### ***Definition of minimum benefit package***

*Action:* Defining the national minimum benefit package

*Actors:* Minister of Health on advice of NHIC

*Timing:* Within the first six months

*Legislation Ref:* S64

Whilst the NHIC has yet to be set up, preliminary work on the benefit package, which should ultimately be made available nationally to all citizens, has been carried out. It addresses all the key areas, with the possible exception of preventive care. In addition, some provision (such as certain immunizations) is not included, because it is already covered by existing publicly funded programmes.

It remains to develop the proposed package further, with greater detail on the types of care that will be covered. It is vital to complete this work early on, as it has wide impact on planning and budgeting, as well as on assessing infrastructure needs. At present, there are no existing providers or insurers who can meet the requirements of the proposed package, and a great deal of work and investment will be needed to bring them all up to the national minimum standard.

Some costs containment measures (such as co-payments and possible ceilings on in-patient care) are suggested in the package.

### ***Benefit eligibility and portability***

*Action:* Establish eligibility criteria

*Actors:* Ministry of Health, NHIC, DHMIs

*Timing:*

*Legislation Ref:* S31

Eligibility for insurance coverage is defined as every person resident in Ghana. Payment of contributions is set out as a condition of membership of a health insurance scheme, with the exception of SSNIT members, pensioners and indigents for whom special conditions apply (as described elsewhere).

Eligibility for benefits is not defined in legislation. However, there must be an assumption that anyone who is a member of an insurance scheme must be eligible for the minimum benefit package, and would also be eligible for any further benefits for which they had paid a premium.

Work in this area will need to concentrate on the detail of definition of “dependants” who are entitled to access. There will also have to be an assessment at national level of the funding available, the level of service that can be offered, and how that relates to demand. If demand exceeds the level of service that is available (as seems probable, since this occurs in almost all public health services), then the responsible authorities will have to consider whether some provision may need to be rationed, and whether waiting times will have to be defined for some treatment.

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*Action:* Establish level of portability of benefits  
*Actors:* Ministry of Health, NHIC, DHMIs  
*Timing:*  
*Legislation Ref:* S37, S81(e)

The Act provides for the transfer of membership when a person changes their residence. It also stipulates that MHOs must make arrangements for portability of benefits, without setting out those arrangements in detail.

Arrangements will therefore have to be put in place to allow members of health insurance schemes to have access to accredited healthcare providers in other areas. At this stage, it may be desirable to limit that access to emergency care only, as any wider provision might encourage people to use facilities in other areas which perhaps provide better service, thus over-burdening them. This might impact on equity of access across all areas, which is a necessary component to ensure citizen engagement.

In theory, since schemes are paying accredited providers, there is no reason why they should not be able to do so when the provider is outside the area they cover. This depends, of course, on the cost of care, and how prices are fixed. If this done by schedule (see comments on provider payment mechanisms), then it would allow for a degree of mobility.

Schemes could, of course, also set in place reciprocal arrangements for other benefits with other schemes. This would be complex, but could be part of packages which offer more than the statutory national minimum.

Portability will also depend on a national identity card system being in place (qv).

### ***Provider payment mechanisms***

*Action:* Determine approved provider payment mechanisms  
*Actors:* NHIC, DHMIs and provider representatives  
*Timing:* Within the first six months  
*Legislation Ref:* N/A

Mechanisms to pay providers will have to be developed so that guidance shows payment flows, payment units and fee schedules.

It will be necessary to decide whether payment is on the basis of capitation; per service; per item; per diagnosis; or per case for different categories of provider. For example: it may be that a capitation element is inappropriate in paying providers, since subsidies to insurance schemes might be on that basis (see subsidisation formula). The determination of units for which fees are paid will require a thorough analysis of present medical practice on the different provider unit levels. It further requires cost accounting model exercises unless existing fee schedules are simply accepted as an initial base. Even if they are, the exercises will still have to be carried out at a future date, so that fee schedules become more sophisticated and sensitive to actual costs.

When the units have been established, then fee schedules will have to be developed. These could initially be based on existing schedules, and then improved on the basis of further information and analysis, as described above.

*Action:* Determine a price setting mechanism  
*Actors:* NHIC, DHMIs and provider representatives  
*Timing:* Within the first six months  
*Legislation Ref:*

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As described above, the level of prices to be reimbursed, and unit costs, will have to be established. This will probably require an institutionalised annual negotiation process, probably managed by the NHIC with recourse to the Minister of Health should negotiations prove difficult or break down.

### *Statistics, monitoring and auditing*

*Action:* Activity reporting  
*Actors:* NHIC, MoH  
*Timing:* Within the first year  
*Legislation Ref:* S57-58, S85, S100

Basic provisions for annual reports and audits are laid out in the Act. It remains to develop a format for the report, which will have to include the type of information the reports from the NHIC and schemes should contain (although some of the content of the NHIC report is defined in the Act). That information should include some indication of performance, with benchmarking by indicators.

We recommend that DHMI reports be addressed to the district administration and insured persons, as well as being submitted to the NHIC. The NHIC report should include an assessment of the performance of DHMIs.

We also recommend that a common format be used for all reports in order to facilitate the collation of information by the NHIC secretariat.

*Action:* Definition and procedure of statistics to be collected  
*Actors:* NHIC, MoH, schemes and Statistical Office  
*Timing:*  
*Legislation Ref:* N/A

The collection of adequate statistics is vital to inform future planning for the health service. Among those statistics which should be collected to aid such planning are: health sector costs, administration costs, revenue, utilisation rates, diagnoses, and details of members. In addition the system will need to continue to collect epidemiological information, bearing in mind that as the system increases and improves, such information will become more accurate and helpful to planning.

Statistical frameworks based on scheme based data on individuals and providers and other scheme activities (process data) are the necessary basis to establish performance indicators for the activities of the schemes. These data frameworks have to be identical for all schemes in order to allow for benchmark comparisons where no objective performance criteria can be established. In order to take this work forward, it will be necessary to establish a statistical frame and hierarchy of data to be recorded, and the means of collection. Reporting channels will have to be defined. Responsibility for the collection of national statistics will have to be established. The ILO textbook of health care financing (1999) can provide some initial leads for the establishment of minimum statistical and accounting frames as well as budgeting procedures.

General health status and expenditure data can be collected from government sources. Process data for health insurance can be aggregated from accounts, individual records and provider records. Where records are computerised, it is worth making sure that software is compatible as far as possible.

We recommend that a small statistical committee be set up to handle this work, perhaps under the auspices of the NHIC, or jointly with the Ministry of Health where some

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expertise obviously already exists. The committee will also have to consider transitional arrangements to integrate new statistics with existing healthcare data.

*Action:* Auditing procedures  
*Actors:* NHIC, MoH  
*Timing:* Within the first year  
*Legislation Ref:* S57, S85, S99

The Act stipulates the auditing requirements for the NHIC and for schemes. It remains therefore to put in place procedures for internal and external audit at all levels: central administration, schemes and providers.

*Action:* Quality assurance indicators and performance reviews  
*Actors:* NHIC, MoH  
*Timing:* Within the first year  
*Legislation Ref:* S68

The Act sets out the framework for quality assurance in very broad terms. The key task ahead is to identify which areas are to be measured in terms of standards and quality of healthcare services, and determine indicators for those areas. Extensive research will be needed on different levels of indicators: health outcome measurements, delivery output measures and scheme and provider performance measures.

### *Fraud prevention*

*Action:* Prevention of fraud by scheme members  
*Actors:* NHIC, MoH  
*Timing:*  
*Legislation Ref:* S65-66

Measures to prevent fraud by scheme members are implied in the Act, where it states that scheme members will be issued with a Health ID card which will bear a unique, non-transferable number assigned to each scheme member.

Whilst the schemes will be responsible for issuing the card, it should be borne in mind that there are advantages to keeping the card as standardised as possible across the country. In that case, the Government may wish to consider producing the card and then passing it on to the schemes. They may also wish to include biometric data on the card, although this would increase costs, and initially a photo card may be the easiest to issue. It is important that blank cards are kept secure, and that only a restricted number of people have access to them.

*Action:* Prevention of fraud by schemes or providers  
*Actors:* NHIC, MoH  
*Timing:*  
*Legislation Ref:* S68-69, S74, S102

Whilst the monitoring and QA provisions in the Act provide some measure of fraud prevention, much of this is linked to the inappropriate or excessive use of drugs. It will be necessary to ensure that there is also control over all inappropriate treatment or interventions. In this respect, a number of previously discussed measures will be of help. A fee schedule rigorously applied should ensure that providers and schemes do not collude to recover more money than is necessary. In addition, schemes themselves have an important

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role to play in monitoring provision. The schemes are also, in turn, subject to inspection, which will have to be carried out effectively.

Effective gathering of statistics will also give indications of any abnormal use of provision, and this strengthens the case for an efficient statistics system.

### *Training*

*Action:* Initial and ongoing staff training  
*Actors:* NHIC, MoH  
*Timing:* To be initiated within the first six months  
*Legislation Ref:*

The Government has established, within its implementation procedures, a training Task Team. The role of this team will be crucial to ensuring that a sufficient number of staff with all the necessary skills is in place to implement the new system.

Staff will need to be equipped to manage the collection of contributions, support the process of identifying entitlement, arrange for access to the services to which members are entitled, and monitor the quality and appropriateness of care.

An incentive structure would have to be built to ensure that the trained staff actually stay and do their job and are committed to the success of the new system; and that there is a perceptible improvement in service delivery as a result. Improved service is important to attracting people to join the schemes or renew their premiums. Even in a mandatory scheme, compliance may be adversely affected if the buying of insurance does not attract commensurate improvement in quality and availability of minimum package of health care. Consequently, the administration costs would rise to a level where premiums rise and kill the advantages of risk pooling and affordability, thereby making it even harder to sustain the scheme.

The ILO has developed an initial training plan, and is currently in discussions with the Ministry of Health over how to adjust the proposal and put it into action. The ILO proposal is for an initial design phase, followed by a delivery phase of the training programme; the two phases lasting around a total of two years. There is a natural sense of urgency about proceeding with training, but it is important that high-quality, relevant training materials are developed, and that staff acquire a high standard of knowledge and skills. Cutting corners in this area of the new system will have an adverse impact on the overall implementation of the system.

There is also a need to maintain a long-term training facility for health insurance staff (which could be a branch of a wider National Social Insurance Training facility). We would also recommend that there be the opportunity for higher level conceptual staff to be trained externally. For example, the ILO has a training programme with the University of Maastricht, and is planning a further programme in Lausanne.

### *Disputes, complaints and sanctions*

*Action:* Establishment of dispute procedures  
*Actors:* NHIC  
*Timing:*  
*Legislation Ref:* S2(2)(g), S8

The Act charges the NHIC with putting in place a procedure for complaints, through the establishment of a committee of the Council called the Health Complaint Committee. The Committee will be responsible for hearing complaints from scheme members, schemes and healthcare providers.

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It is important that the Committee be seen as impartial, and that complaints procedures are kept as simple as possible. Access to the Committee should be open, and it would be useful to have a specialist who can help and advise scheme members in relation to their complaints. It may also be necessary to consider the appointment of a neutral outside party (a form of ombudsman) as the ultimate point of recourse.

*Action:* Sanctions  
*Actors:* NHIC, MoH  
*Timing:*  
*Legislation Ref:* S102

A schedule of offences and sanctions is contained in the Act. It is important, as with the complaints procedure, that the Council is seen to apply sanctions in an impartial manner. It is also important to establish the procedures for adjudging such cases: will they be on referral of the Health Complaint Committee, or will cases relating to these offences be brought directly to the full Council.

## 2.2.5. Scheme based activities

### *Enrolling members and maintenance of population coverage*

*Action:* Enrolment of members  
*Actors:* NHIC, schemes  
*Timing:*  
*Legislation Ref:* S31-32, S36(3)

The enrolment of members is important to building up the sustainability of MHOs and the overall scheme. In order to do so, it will be necessary to have awareness campaigns at national level, commensurate with the rate of implementation of the NHIS, to ensure that people are informed and ready to enrol at the right time. MHOs themselves have a key role to play in promoting schemes at district and community level, with the involvement of stakeholders and community leaders. Community knowledge is necessary to identify potential members, notable those who are not already members of MHOs; or those who may not have been reached by national campaigns. This is particularly relevant in remote rural areas.

Application procedures should be developed which are simple and accessible, bearing in mind variable literacy rates and multiple languages. Schemes will have to bear in mind that enrolment will have to be an active process to attract members, rather than passively waiting for people to apply (see extent of coverage, and health insurance promotion below).

*Action:* Establishing means of identification  
*Actors:* NHIC, schemes, providers  
*Timing:*  
*Legislation Ref:* S65

The Act establishes that members of health insurance schemes will be issued with identity card, and information on their rights, obligations and privileges; and the benefits they will receive. Each person will have a unique identification number.

The design and means of issue of the card have yet to be established. It is not absolutely necessary to have a single national card; and design and procedures for issue may vary. But it is important that there is a nationally established standard for the identification card,



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and that it is recognised across the country. This is necessary to ensure portability of coverage.

The design of the card will have to be such to keep down costs, while having documents which make fraud difficult. One way forward is to build on the experience of existing schemes. Photo ID may be the most practicable way forward unless there is an economic means of incorporating biometric data onto the card.

The issue of the card could be most practicably linked to the payment of contributions, but this will mean some way of recording payment on the card. In the long term, payment could be recorded on a national IT database.

Procedures will also have to be put in place so that service providers can be satisfied as to the eligibility of the card holder. This initially may be indicated on the card (as described above), and, again, in the long term a national database could be accessible by providers to verify eligibility.

*Action:* Establishing extent of coverage and inclusivity  
*Actors:* NHIC, MoH  
*Timing:*  
*Legislation Ref:* S81(d)

The Act clearly has as an objective universal coverage. It also stipulates that MHOs cannot exclude members for reasons of “physical disability, social economic or health status”, although private health insurers may still apply tighter conditions of membership.

This obviously means that MHOs will have to take on higher risk members; and because of that they will receive subsidies from the Government. It is therefore important to develop an adequate formula for risk equalisation, so that Government support will be adequate to meet the increased costs schemes will incur by insuring higher risk members.

As stated earlier, the ILO has undertaken to assist the Government in the development of a risk equalisation formula.

### ***Claims processing***

*Action:* Establishment of administrative procedures for claims processing and billing of schemes  
*Actors:* NHIC, schemes, providers  
*Timing:*  
*Legislation Ref:*

Claims processing procedures will need to include verification of claims, and checking of invoices and vouchers against criteria established in provider payment mechanisms. At this stage it is desirable to develop simple procedures for claims processing in order to complete claims as quickly as possible and ensure that funds are moving smoothly between Government, schemes and providers. It is equally desirable to have a standardised set of procedures nationally, including paperwork.

Ideally, simple software tools need to be developed, with claim processing software linked to a database on insured persons and providers. However, we recognise that this may take time, given the widely varying availability and reliability of the necessary ICTs across the country. As a first step, a manual system may be necessary, and should be kept as simple as possible to control the administrative burden.

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## Record keeping

<i>Action:</i>	Data on individuals
<i>Actors:</i>	NHIC in consultation with providers and schemes
<i>Timing:</i>	
<i>Legislation Ref:</i>	

Proper record keeping will be essential to the smooth running of the new system, as well as providing vital population and epidemiological data to contribute to national health statistics and planning.

It will therefore be necessary to establish standardised national data sets for individuals, and set up the relevant databases. These data sets should include information such as personal details, utilisation, payment of contributions and registration. In the medium term software should be developed at national level to help collect and store data. Again, there is a balance to be struck between keeping procedures as simple as possible, whilst collecting comprehensive information.

<i>Action:</i>	Data on providers
<i>Actors:</i>	NHIC in consultation with providers and schemes
<i>Timing:</i>	
<i>Legislation Ref:</i>	

Providers will also have to keep adequate records, and these should be set up to the same standard as those kept on individuals. These would be in addition to normal financial records and bookkeeping, and would complement the databases already mentioned above.

<i>Action:</i>	Deployment and use of scheme based statistical and accounting procedures and budgeting frameworks
<i>Actors:</i>	NHIC in consultation with schemes
<i>Timing:</i>	Early in the implementation process
<i>Legislation Ref:</i>	N/A

These are complementary activities to those mentioned at the NHIC level. They are largely confined to ascertaining that statistics, accounting and budgeting tools are understood and used as active means of results-based management not only by the NHIC for auditing purposes but also by local managers to ensure high levels of efficient performance of the scheme and providers.

## Promotion and communication

<i>Action:</i>	Health insurance promotion
<i>Actors:</i>	NHIC, MHOs, district and regional authorities
<i>Timing:</i>	Immediate and ongoing
<i>Legislation Ref:</i>	S2(2)(i)

Promotion and communication will be essential to making sure that people know and understand how the new system works, and to encouraging them to register. The Act states that public education on health insurance will be a function of the NHIC. However, the NHIC will have to work closely with all relevant actors to establish responsibility at all levels for the promotion of health insurance. Schemes in particular will have an important role to play in promoting themselves and extending membership.

Communication will have to take into account varying levels of literacy, and the remote and inaccessible locations of many of the potential scheme members. This will mean

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developing a range of communication tools, and involving community leaders and workers in outreach work.

### **3. Conclusions, timing and the way ahead**

The implementation of a national health insurance system in a short period remains a paramount challenge for the social governance system in Ghana. We expect that the scheme would need at least a one year preparation phase before the district schemes can go gradually “online”. Realistically, full or almost full population coverage can only be achieved over years: 10 years would not be an unrealistic time frame. More detailed timing can only be worked out when the Implementation Master Plan is developed.

Pragmatic interim solutions have to be found to ascertain that funds collected through the SSNIT from the formal sector are paralleled by immediate benefits for the contributing formal sector population and not just be perceived as a hidden tax. One interim solution would be to simply furnish all formal sector contributors with membership cards that entitle them to free care at government institutions and subsidised drugs. This helps to maintain the credibility of the plan. Without credibility any social transfer system is doomed to fail.

The next most important step for the government appears to be to appoint the planning group that act as – together with the Technical Review Committee - custodian of the Health Insurance Implementation Master Plan.

What then counts most is people. The NHIS can work, but how fast and how well it will work depends on the quality of the staff of the planning group.

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## Annex I. Context and background

The economic situation in Ghana is difficult. The new Government inherited a US\$ 7.2 billion national debt (US\$ 5.9 billion external and US\$ 1.3 billion domestic). The national currency is depreciating and inflation is spiralling. Foreign exchange reserves are almost depleted and are just enough to cover approximately one month of imports. The dismal economic situation is the cumulative effect of poor terms of trade arising from sharp falls in world market prices of Ghana's two major exports, gold and cocoa, coupled with a three-fold increase in petroleum prices and less than optimal monetary and fiscal policies under previous administrations.

The budget situation is fairly dramatic. Revenues in 2001 covered apparently only 72.6 percent of total expenditure. The deficit amounted to c 3.2 billion in 2001, which should represent approximately 9 percent of GDP. Debt relief schemes will probably ease some of the stress.

Government spending on social programs for poverty reduction and in the area of health constitute only 2.0 percent of GDP with a disproportionate amount of the resources being used for personnel emoluments and administration. It is planned that special programmes for the vulnerable and excluded will establish systems and provide resources to improve conditions of extreme poverty and social deprivation. Interventions will include the extension of social security coverage to those who are excluded from formal social protection programmes and the introduction of health insurance schemes to cover the majority of the working population.

Although some improvements have been made in many health indicators including mortality and morbidity, crude indicators still demonstrate the need for major improvements. Life expectancy in 1999 was only 54.2 for males and 55.6 for females. Due to the impact of HIV/AIDS more recent developments are expected to point downwards. Under five mortality is high, i.e. 118 per 1,000 for males and 109 for females. Public expenditure on health at the end of the 1990s was only in the order of US\$ 11 per capita and year of which more than 50 percent were borne out of pocket.

Access to and use of health facilities has been low and declining. A survey conducted by the Ghana Statistical Services revealed that 42.5 percent of the urban population and 54.7 percent of the rural population were not consulting medical personnel in 1992 in times of illness or injury. Medical consultation increased to 46.6 percent urban and 69.2 percent rural in 1998. This trend can likely be linked to the increasing health care user fees over recent years.

The Government of Ghana has a clear understanding of the problems associated with the current out of pocket health financing system ("cash and carry"). Consequently, the government has decided to abolish this financing mechanism and replace it with health insurance. The objective is to pool the risks, reduce the individual burden and achieve better utilization rates, as patients do not have to pay out of pocket at the point of delivery. The declared objective is that at least 50-60 percent of residents in Ghana will belong to a health insurance scheme within the next 5 to 10 years.

## Annex 2. Ghana National Health Insurance Legislation: strategic activities list

Action	Tasks	Actors	Remarks	Issues to be addressed
<b>Activity Group I: National Health Policy Design and Infrastructure Planning</b>				
Establishment of a health insurance master plan	To develop a critical path network which establishes production times and logical interactions between different activities	Planning group in Ministry of Health, reporting to MoH and Ministry of Finance	Necessary to take forward implementation of new system	The group should be headed by an executive director who is responsible for the overall implementation process.
	To manage national and external resources			It will be necessary to contract experts, and draw on national and international expertise
	To monitor activities and ensure that timetables are kept			
Health Policy Design	Setting of healthcare priorities at national level	Ministry of Health, to determine the structure of responsibilities between the MOH, Ghana Health Service and the National health Insurance system	Necessary to ensure a stable framework within which different agencies and providers can operate; this is a complement/ adjustment to an ongoing activity in the MOH which takes the new organisational structure of the health system into account	This might mean focusing on eg prevention of HIV infection, or reduction in maternal mortality within the general framework of the minimum benefit package under health insurance (see below).
Health Infrastructure Planning	Determining district infrastructure compatible with Health policy goals; Lines of accountability/ responsibility for the achievement and monitoring of these goals to be established	MOH in consultation with districts, and DMHOs, Ghana Health Service	Should be an ongoing activity but infrastructure investment and maintenance decisions should not incorporate new players	New procedures/structures for decision making should be set up; Reporting and health status performance monitoring has to be established
Establishment of annual health budget and budgetary procedures; Capital investment plans	Financial planning of national health budget across all financing schemes, to ensure coherent and efficient national health financing planning	Ministry of Health, Ministry of Finance (inc SSNIT), NHIC, GHS and district assemblies	Existing plans to be fine-tuned. Use of extended ILO-sponsored national health budget.	Need to plan ahead and assess current and future needs. Who needs to approve budget? – District assemblies, national Parliament? Need to consider both essential and non-essential provision

Action	Tasks	Actors	Remarks	Issues to be addressed
<b>Activity Group II: Setting up the National Health Insurance Council (NHIC) and the National Health Insurance Fund</b>				
Establishment of National Health Insurance Council (NHIC)	Appointment of NHIC members	Minister of Health in consultation with social partners and HC stakeholders	Crucial to the implementation of the Act	Clarification of how members of the Council will be nominated.
Roles and Terms of Reference of NHIC	Establishment of roles and Terms of reference of NHIC and Secretariat, secretariat departments; lines of accountability have to be established	Ministry of Health/NHIC members	Roles and responsibilities of the council members; degree of personal accountability and responsibility to be determined; the future procedure for the determination /election of members of the council has to be established Responsibilities of major departments of secretariat outlined in NHI Act 2003; An organisation plan has to be drawn up and be analysed by health insurance managers from decentralised national systems; the schemes of service of the different departments have to be developed accordingly; Some lines of accountability already established in the act	Will NHIC be accessible through local offices, or will district assemblies provide a focal point?  Need to assess whether other responsibilities needed eg collection, collation and analysis of statistical data
Recruitment and appointments	Recruitment and appointment of staff of NHIC Secretariat in line with schemes of service	Initially Ministry of Health, then Ministry and NHIC council	Is the Civil Service Commission involved?	
<b>Activity Group III: Main Tasks of the NHIC</b>				
<i>Registration and Licensing of Schemes</i>				
Standardisation of administrative procedures at national level	Legal Instruments to outline admin procedures at national level	Ministry of Health in consultation with NHIC	Important that clear, standard procedures are in place nationally level to allow schemes to operate in an open, transparent environment	Key areas to include: Procedures, requirements and formats for registration Procedures for suspension Procedures for renewal of license Appeals procedure for rejected applications
	Manual of administrative procedures	Ministry of Health/NHIC		

Action	Tasks	Actors	Remarks	Issues to be addressed
<i>Accreditation of providers</i>				
Establishment of accreditation criteria	Definition of number and composition of accredited provider units needed to be determined in line with infrastructure planning; Consultations on level of service required in each district	Ministry of Health; District assemblies, providers, schemes, community stakeholders	Consultation with key stakeholders e.g., provider representatives needed.	
	Draw up accreditation criteria (quality standards, staffing ratios, equipment standards etc) to be used, for public and if needed private sector providers.	NHIC		Problems may be encountered with quality standards in case of public providers as providers have only a limited influence on their staffing and budget;
<i>Budget, Funding and accounting frameworks and conventions</i>				
Establishment of financing mechanisms	Fine tuning of financing mechanisms outlined in legislation	Ministry of Health, Ministry of Finance (inc SSNIT), NHIC	NHI Act 2003 defines use of proportion of SSNIT fund and purchase tax levy.	Need to ensure ring-fencing of funds? Proper accounting of funds
Mechanisms for intra-Government transfers	Need to establish mechanisms and timing for transfers	Ministry of Health, Ministry of Finance (inc SSNIT)		Will funds be transferred in advance or arrears? Monthly or at longer intervals?
Accounting frameworks	Establishment of frameworks and budgetary procedures for providers, schemes, NHIF and central administration	NHIC, Ministry of Health, Ministry of Finance		Need to ensure standard frameworks and conventions in place.
Subsidisation procedure and formula	Criteria (in terms of events triggering re-insurance and epidemiological and economic facts triggering subsidies); procedure and accounting formats for flow of funds from the NHIC to the accredited schemes	MOH in consultation with District authorities and DMHIS, NHIC	<i>This is a crucial issue for the success of the whole operation.</i>	The formula has to be established by an epidemiological and health economic (incentive structure) analysis; a broad principle has been spelled out in the ILO discussion paper

Action	Tasks	Actors	Remarks	Issues to be addressed
Subsidisation of indigents	Establishment of procedures for subsidising indigents	Ministry of Health, NHIC in consultation with schemes	Act charges Council with advising Minister on a means test for indigents.  ILO pilot project in Dangme West district will provide information and model mechanism.	Need to establish means of identification which is objective, but allows for community involvement.  Need also to establish best way of supporting access to healthcare by indigents.
<i>National contribution provisions for DMHIs</i>				
Contribution rate	Procedures for determination of contribution rate	NHIC, DMHI schemes	Provision exists in NHI Act 2003 for establishment of guidelines by NHIC	Need to establish contribution rate cap at national level to ensure equity of access
Additional payments by scheme members	Determination of possible additional payments	NHIC, DHMI schemes		Will all provision be free at point of treatment or will there be a cap on provision? Will scheme members need to contribute to eg prescription drugs? Will there be co-payments?
<i>Definition of Minimum benefit package</i>				
Definition of national minimum benefit package	Define minimum benefit package to be available nationally to all citizens; without such minimum obligation by providers no subsidisation process can be defined	Minister of Health on advice on NHIC	To be defined by LI according to NHI Act	Needs to include elements such as: Levels of primary and secondary care Pharmaceutical provision – list of approved drugs? Health education (to be provided by MoH? Or providers?) Preventive care Types of intervention Cost containment measures?
<i>Benefit eligibility and portability</i>				
Establish eligibility criteria	Define eligibility for insurance cover and benefits (rationing, waiting periods for certain benefits) at national level	Ministry of Health, NHIC, schemes	E.g., it has to be ensured that terms such as “family member” or “dependent” are clear	



Action	Tasks	Actors	Remarks	Issues to be addressed
Level of portability of benefits	Establish level of portability	Ministry of Health, NHIC, schemes	Portability could be linked to national minimum benefit level. NHI schemes could also make reciprocal arrangements for other benefits.	Need to ensure equity of access across the whole country
<i>Provider payment mechanisms</i>				
Determination of approved provider payment mechanisms for all participating schemes	Procedures, payment flows, payment units (acts, visits, days etc.), fee schedules (i.e. determination of all individual items) to be defined	NHIC, MHOs and provider groups	<p>Payment mechanisms can start from fairly crude systems and be fined tuned in annual negotiations over time (see next box);</p> <p>The determination of units (for which fees are paid) require a thorough analysis of present medical practice on the different provider unit levels; it further requires cost accounting model exercises unless existing fee schedules are simply accepted as an initial basis</p>	<p>Need to decide whether payment on basis of: capitation, per service, per item, per diagnosis, per case etc. for different categories of providers;</p> <p>A crucial problem will be encountered in the relationship to private providers; There fees would have to have a defined relationship to the fees in the public sector and yet cover at least all their cost (fees in the public sector are not covering the full cost).</p>
Price setting	Establish level of prices to be reimbursed, and unit costs	NHIC, providers, schemes	Institutionalised annual negotiation process will be needed.	Prices to be uniform or variable according to regional or other factors?
<i>Statistics, Monitoring and Auditing</i>				
Activity reporting	Development of formats for annual reports of NHIC and schemes; The addresses of the reports have to be determined	NHIC with MOH	Provision in NHI ACT of 2003; Addresses for the DHMI reports should be the district administration and assembly as well as insured persons, the national report should be submitted to Parliament	Formats will have to include type of information to be provided, the benchmarking of performance by indicators;

Action	Tasks	Actors	Remarks	Issues to be addressed
Definition and procedure of statistics to be collected	Establish statistical frame and hierarchy of data to be recorded and means of collection; reporting channels to be defined; Establish responsibility for collection of national statistics	NHIC, MOH, schemes and statistical office; statistical committee needed	General health status and expenditure data for be collected from government sources;  process data on health insurance can be aggregated from accounts, individual records and provider records	Examples of statistics: Health sector costs and revenues Administration costs Utilization rates Diagnoses Members  Also need to collect epidemiological information  Transitional arrangements to integrate new statistics with existing healthcare data
Quality assurance performance reviews	Indicators to be determined	NHIC, MoH, in consultation with schemes	Extensive research needed on different levels of indicators: health outcome measurements, delivery output measures, scheme performance measurements	
Auditing procedures	Establishment of procedures for internal and external audit at all levels – central administration, schemes, providers	NHIC and MOH	Provision in NHI Act 2003	
<i>Fraud prevention</i>				
Procedures to prevent fraud by scheme members	Development of robust means of identification for scheme members	NHIC, MoH, in consultation with schemes	Cf identity card for scheme membership	
Procedures to prevent fraud by schemes or providers	Robust application of monitoring and verification procedures	NHIC, MoH	Act mainly refers to inappropriate or excessive use of drugs.	Need to ensure application to all inappropriate treatment or interventions.

Action	Tasks	Actors	Remarks	Issues to be addressed
<i>Training</i>				
Initial staff training	Assessment of training needs and design of appropriate training provision for: NHIC members and secretariat Scheme and provider administrators	Ministry of Health, NHIC	ILO has developed initial training plan appended to this implementation plan, and currently under discussion with MoH and donors.	Necessary to strike balance between ensuring adequately trained staff in place as soon as possible, while also ensuring training, and subsequent knowledge and skills, are of the highest quality possible.
Ongoing staff training	The NHIC has to maintain a long-term training facility for HI staff ( a national HI academy, this could be a branch of a wider National Social Insurance Training facility		Higher level conceptual staff can be trained outside of the country, for example the ILO's training programmes with the Universities of Maastricht (ongoing) and Lausanne (planned)	
Disputes, complaints and sanctions				
Disputes and complaints	Establishment of dispute procedures	NHIC	These procedures would be for scheme members.	Need to ensure complaints procedures are accessible through a specialized person, with ultimate recourse to a neutral third party (ombudsman?) and are kept simple and not overly bureaucratic.
Sanctions	Establishment of schedule of sanctions for failure to meet standards, malpractice and other infringements of rights conferred under legislation	NHIC	Schedule by LI?	
<b>Activity group IV: Scheme based activities</b>				
<i>Enrolling members and maintenance of population coverage</i>				
Enrolment of members	Application procedures; identification of members; execution of national awareness campaigns	NHIC, schemes		

Action	Tasks	Actors	Remarks	Issues to be addressed
Means of identification	Design and issue of identity card; measures to ensure that eligibility and contribution payment can be verified at point of delivery	NHIC, schemes, providers	Experience of existing schemes can be built on	Procedures and cards may vary, but need to ensure nationally acceptable standard and recognition (for portability of entitlement)
Extent of coverage (inclusivity)	Measures to ensure/ maintain: - universal coverage - non-exclusion of bad risks	Ministry of Health, NHIC	Some provision Act; a labour intensive activity which may consume a major part of administrative cost; experience of existing community based schemes should be used	
<i>Claims processing</i>				
Claims processing and billing of schemes	Establishment of administrative procedures	Schemes, providers, NHIC	Desirability of standardization of procedures nationally, including paperwork, but experience of schemes is crucial here, simple software tools to be developed., claim processing software needs to be linked to data base on insured persons and providers	Procedures will need to include verification of claims, checking of invoices and vouchers against criteria established in provider payment mechanisms.
<i>Record keeping</i>				
Data on individuals	Establishment of data sets for individuals, setting up and developing of data bases	NHIC, in consultation with providers and schemes	Desirability of a national minimum group of data sets; software developments should proceed at a national level, simple procedures to be developed	Data sets should include eg: personal details, utilization, payment of contributions, registration
Data on providers	Establishment of records to be kept by providers, data bases as above	NHIC in consultation with providers and schemes		These are in addition to financial records, and include activity records

Action	Tasks	Actors	Remarks	Issues to be addressed
Scheme-based statistical and accounting procedures and budgeting frameworks	Deployment of such procedures and frameworks	NHIC in consultation with schemes	Complementary activity to that at national level.	Need to ascertain that statistics, accounting and budgeting tools are understood
<i>Promotion and communication</i>				
Health insurance promotion	Establish responsibility for promotion of health insurance; design of constant communication channels with membership	Tools to be developed by NHIC but applied by DHMIs and district authorities	Essential to ensure engagement of citizens, and to manage expectations.	Schemes will provide their own promotion, but NHIC will have to run initial/ongoing campaigns to encourage people to take up their entitlement, particularly indigents.



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# **Financial analysis of the national public health budget and of the national health insurance scheme**

(Discussion paper No. 4 – February 2004)

Ben Yankah, GSTPP  
Florian Léger, ILO

## **1. Introduction**

Health care financing is a major and challenging issue for every government. Introducing a national health insurance scheme, with its related financial and governance issues, is even more complex. The current economic environment in Ghana and the Government's determination to make health care accessible to all residents constitute a considerable challenge. A major contributing factor to the low utilization of health care is the out-of-pocket payment for health services at the point of delivery. This system of healthcare financing automatically eliminates the poor and the rural who constitute about 57 per cent of the country's population.<sup>32</sup> High levels of poverty, especially in rural areas, and increasing costs of health care in recent years have resulted in a decline in the already low utilization of health care facilities. The present Government has pledged to abolish the direct out-of-pocket payment or 'cash – and-carry' system and replace it with a universal health insurance scheme. The passing of the Health Insurance Act in 2003 was an important step towards this objective.

The ILO has initiated the Ghana Social Trust Pilot Project (GSTPP) to complement and support the Government's health insurance policy. The project is currently developing models to facilitate the extension of health insurance coverage to sub-groups of the population hitherto excluded from formal social protection. The project is currently evaluating the feasibility of providing assistance to needy members of communities in the form of an insurance premium subsidy to enable them to register with community-based health insurance schemes. This project is complementary to efforts being undertaken by the Government and is at the same time consistent with the Government's health policy goals.

At a national conference in February 2003, where the GSTPP team held consultations with major stakeholders, it was felt that the pre-requisite conditions for the successful implementation of the government's plans for a national health insurance (NHI) scheme were still lacking. The project therefore offered to undertake a costing of the public national health budget. Mr. Ben Yankah, GSTPP actuary, and Mr. Florian Léger, ILO actuary, were appointed to this task. Work started in March 2003 with the collection of data from different sources and construction of the model. Mr. Yankah spent a month in Geneva with Mr. Léger in September 2003 to validate the data and the model and to begin their report. Results of the modelling were completed and the draft report finalised in October and November 2003. They have benefited from the support and collaboration of the Policy, Planning, Evaluation and Monitoring Division of the Ministry of Health, and in particular its Chief, Dr. Samuel Akor.

<sup>32</sup> Ghana Statistical Services – 2000 Population and Housing Census.

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## **2. Objective**

This financial study entails an assessment of the evolution of the costs involved in providing public healthcare and its financing during the next decade. This paper will therefore quantify the amount that the Government and the new NHI will spend on healthcare. The effects of increased utilization of health care facilities as a result of the introduction of health insurance will also be examined.

## **3. Historical background of healthcare financing**

At the time of independence, Ghana had a health delivery system that provided free medical services in public health institutions to its citizens; the total costs of health care were at that time fully covered by the Government. However, expanding population and worsening economic conditions placed much pressure on the limited resources available to the Government, resulting in the establishment of a cost-sharing mechanism when the Ministry of Health introduced user fees (out-of-pocket-payments) at all public health facilities in 1985. A cash-and-carry system - with drugs charged at full cost to patients - was introduced in 1990; it included an exemption policy, with an entitlement to free medical services for antenatal care, children under 5 years, adults of 70 years and over, and emergency cases where patients could not immediately pay for the services.

The introduction of user fees had a negative impact on the utilization of health services. Despite an increase in the country's population between 1973 and 1987, annual hospital attendance declined from about 11 million to 5 million respectively. It is estimated that only 20 per cent of around 18 per cent of the population who need healthcare at any given time actually have access, implying that some 80 per cent of the population who need healthcare cannot afford to pay for the services.<sup>33</sup> Other sources estimate that about 50 per cent of the population has effectively no access to care.

Paying out-of-pocket for health services in time of need not only imposes a strain on many families and individuals but is quite simply unaffordable to the vast majority of the population who are rural poor and do not earn regular income. The present Government is determined to make health services available and affordable to all Ghanaians by abolishing the cash-and-carry system and introducing a national health insurance system based on district-wide Mutual Health Organizations. Pilot projects in 45 districts in the country have already been initiated.

In order to achieve the long-term health policy objective of ensuring equitable universal access to basic healthcare for all residents, the Government aims to cover about 30 to 40 per cent of the population in the immediate future whilst in the medium term (5 to 10 years) the coverage target is between 50 to 60 per cent of the population.

## **4. Demographic profile**

The population of Ghana was 18,912,079 in year 2000 with 49 per cent males and 51 per cent females. The population growth rate is 2.4 per cent and population density is about 79 persons per square meter. Ghana's population is very youthful with about 41.3 per cent in the age cohort 0–14 years, 53.4 per cent in the 15–64 year age cohort and about 5.3 per cent at 65 years or older. Although there have been improvements in life expectancy over

<sup>33</sup> Sam A. Akor: Establishing health insurance in Ghana – The district-wide mutual health organization approach (November 2002).



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the years, it still remains low at birth at 57.24 years. Life expectancy at birth for males and females is 55.86 years and 58.66 years respectively.<sup>34</sup> The total fertility rate is 4.5 children per woman and the average household size is 5 persons.<sup>35</sup>

## **5. Economic policy background**

Ghana is well endowed with natural resources but still remains heavily dependent on international support in terms of financial and technical assistance. The major sources of foreign exchange are gold, timber and cocoa.

Achieving macroeconomic stability and accelerated real Gross Domestic Product (GDP) growth were the main manifesto commitments of the New Patriotic Party (NPP) prior to taking office. The Ghana Poverty Reduction Strategy (GPRS) has outlined five medium-term priorities – development of infrastructure, modernization of agriculture and rural development, improvement in social services with particular emphasis on health and education, good governance, and private sector development.

## **6. The health model**

This health model is a tool for evaluating different health care outcomes resulting from various policy options. The method adopted in the development of the model is presented in the next section. The model used is a first preliminary version built on a limited database. The ILO will incorporate the feedback received from experts in Ghana and other competent institutions and develop a more detailed version over the coming months. The present model results should thus be considered preliminary.

### **6.1. General methodology**

The national health budget was developed by considering all sources of income flow into the public healthcare system and the total costs involved in providing healthcare. The public health care budget is aggregated in an income and expenditure statement in order to present national health expenditure and its financing sources in one statement. The model is essentially a budget model, relying on exogenous assumptions on the future development of utilization and the cost of units of care. The model allows for simulations of alternative financial scenarios and should serve as a planning tool for timing the introduction of the NHIS.

Health care costs are driven by the utilization of health services. Age-specific data on health services utilization for Ghana was not available and thus the “J-curve”, a mathematical model developed by the International Financial and Actuarial Service of the International Labour Office (ILO FACTS), was applied to estimate health care utilization profiles by age. The cost of care is then established by projecting these profiles into the future on the basis of various assumptions on utilization trends and unit cost.

Health services utilization is dependent on the age structure of the population. The ILO population projection model (ILOPOP), again developed by ILO FACTS, was applied to estimate the base year (2003) population of Ghana as well as to project population for the next decade (2004-2013).

<sup>34</sup> UN Human Development Index 2000.

<sup>35</sup> 2000 Population and Housing Census.

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## **6.2. Health services utilization and cost per case**

Utilization of health care services is one of the major determinants of the cost of health care. However, data on health-care services utilization for Ghana by age and sex was not available. Data on utilization of outpatient and inpatient care were likewise unavailable to a sufficient degree of disaggregation.

It was thus decided to construct a global utilization indicator, i.e. “number of contacts with the health care delivery system per person per year”. The starting value derived from national surveys and statistics was 0.49. That global value was hypothetically disaggregated by age using the J-curve pattern,<sup>36</sup> assuming a minimum annual utilization at age 20 and a maximum annual utilization at age 100 which would be in the order of 4.5 times the minimum level. The disaggregation of the overall utilization indicator into an age-specific pattern permits the adjustment of projected annual expenditure per annum for demographic change.

Each year a new overall age-adjusted utilization indicator is calculated and the rate of change of that aggregate indicator compared to the previous year is applied to the amount of expenditure. Expenditure is further adjusted for price increases in health care services by applying annual inflation and additional medical inflation rates. The method of projection is thus a “driver-” based budget approach whereby overall expenditure amounts are projected into the future by using as drivers the rate of change of utilization and the rate of change of per-case cost. As long as the rates of change are reflecting more or less accurately changes of utilization and per-case cost, the projected amounts of expenditure should be in the right order of magnitude.

This is a relatively crude projection methodology that should be disaggregated once reliable utilization and cost data for individual categories of care by age and by sex become available. As such data will be needed for a range of other purposes (for example the subsidization mechanism for individual District Health Insurance schemes), it is of paramount importance that efforts to collect such data are initiated as soon as possible.

## **6.3. Scope of the model**

The model involves the entire national public health system. It takes into consideration the new national health insurance system, which aims at fusing social health insurance and mutual health insurance concepts, as well as the residual cash and carry system which the government seeks to abolish. This will enable a complete analysis of the health policy goals and envisaged health policy options. Projections are performed over a ten-year period, i.e. from 2003 to 2013.

## **6.4. Sources of data and limitations**

The data and information used in this paper were based on reports and statistics from various sources. These included the Budget Statement and Economic Policy of the Government of Ghana (several years), technical/financial and statistical reports from the Ministry of Health, statistical reports published by the Ghana Statistical Services, and the Social Security and National Insurance Trust (SSNIT) operational reports.

<sup>36</sup> See Cichon et al. (ILO 1999), pp.155-156, typical utilization patterns can be found in the statistical annex.

Utilization data by age and region were provided late in the development process and will be incorporated in the next version of the model.

## 6.5. Assumptions

The assumptions made in the model are presented in Table 1. These assumptions were based on data and information from the various sources mentioned above.

Average salary increase, rate of increase of membership and compliance for SSNIT are from forecasts provided by SSNIT for the entire projection period. As they are the only sources of information available for the entire projection period, assumptions on GDP and inflation were also taken from SSNIT and are therefore consistent with SSNIT's salary and membership developments. These assumptions are different to those behind the Medium-Term Expenditure Framework for 2003-2005 and might create a small bias in the results. The assumptions used in the Medium-Term Expenditure Framework were not available.

Medical inflation was assumed to be the average of price and wage inflation. The rate of increase of Mutual Health Organization (MHO) membership is an exogenous assumption, as is the administrative expenses of MHOs. Two scenarios on the rate of increase of MHO membership are presented in this paper.

**Table 1. Various projection assumptions, 2003-2013 (in per cent)**

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Health Insurance Contribution Rate	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Average Salary Increase per annum (real)	1.8	1.9	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8
Rate of Increase of SSNIT membership	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4
Compliance level (formal sector)	82.6	86.0	88.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Medical inflation (real)	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
GDP growth rate (real)	5.1	5.2	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6	4.5
Average Inflation (CPI)	25.0	20.0	17.5	15.0	14.0	13.0	12.0	11.0	10.0	9.5	9.0
Rate of Increase of MHO membership, base scenario	20.0	300.0	100.0	50.0	40.0	40.0	40.0	30.0	20.0	20.0	10.0
Rate of Increase of MHO membership, high scenario	20.0	4,000.0	50.0	30.0	25.0	20.0	15.0	10.0	10.0	5.0	2.5
Administrative expenses of MHO's as % of premium	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0

Note: The above assumptions were based on data and information from various sources, including the Health Insurance Bill, SSNIT Operational Report, Ghana Statistical Services, Ministry of Health and The National Budget and Economic Policy of the Government of Ghana (several years).

## Other assumptions

- Donor funding of health care is taken from the Medium-Term Expenditure Framework until 2005 and driven by inflation thereafter.
- Healthcare income from general taxation is taken from the Medium-Term Expenditure Framework until 2005 and driven by GDP growth thereafter.
- Average healthcare treatment costs and insurance premiums are driven by medical inflation.

Utilization by insured persons was assumed to be higher than for the non-insured (see section 6.7.3.). Thus, for the base year, utilization by insured persons was assumed to be two or three times that of the non-insured. This was done to show the effects of possible increases in utilization for the formerly non-insured following the introduction of the national health insurance scheme. In 2004 and 2005, utilization by the insured was increased by 10 per cent per year and was thereafter maintained over the projection period.

## 6.6. Population projection

### 6.6.1. Base data

The projection of the national population was necessary to determine the evolution of healthcare costs in the future. The latest country-wide census was carried out by the Ghana Statistical Services in the year 2000. A summary of the results is presented in Table 2 below.

**Table 2. Summary of year 2000 Population Census of Ghana**

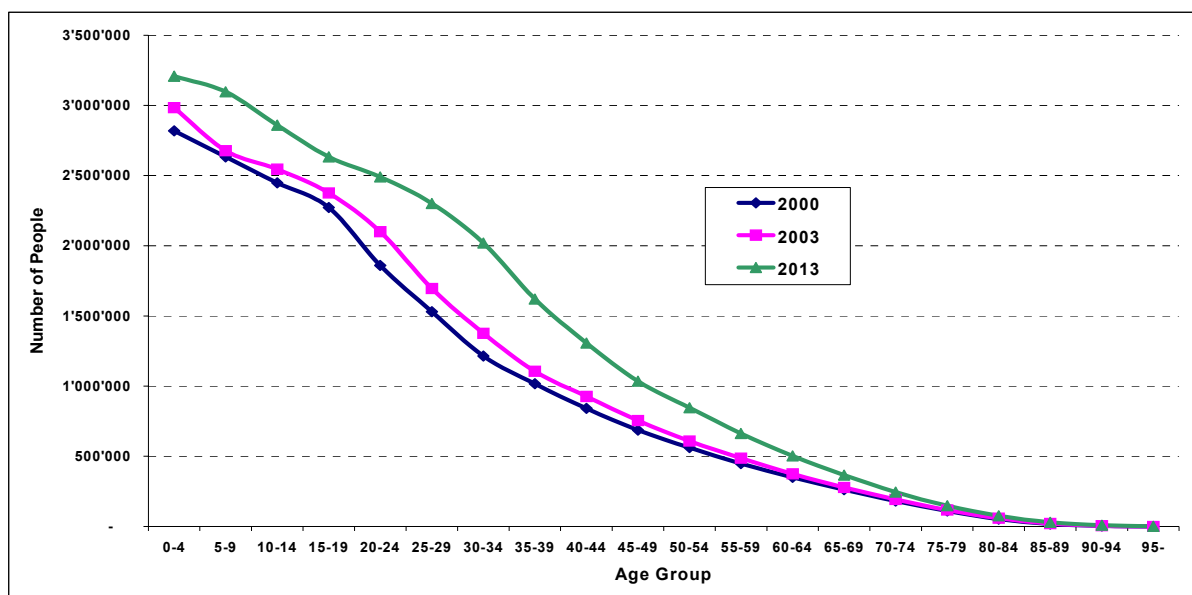
	Male	Total (%)	Female	Total (%)	Total
Total population	9,357,382	49.5	9,554,697	50.5	18,912,079
Adult population	4,937,749	48.9	5,168,547	51.1	10,106,296
Dependent population	4,419,633	50.2	4,386,150	49.8	8,805,783
Economically active	4,170,609	50.3	4,121,505	49.7	8,292,114
Employed	874,990	68.9	395,585	31.1	1,270,575
Self-employed	2,818,753	46.7	3,220,204	53.3	6,038,957

The results of the census indicated that the total population of Ghana in the year 2000 was 18,912,079 comprising 9,357,382 males and 9,554,697 females, representing 49.5 per cent and 50.5 per cent respectively of the total population.

### 6.6.2. Projection results

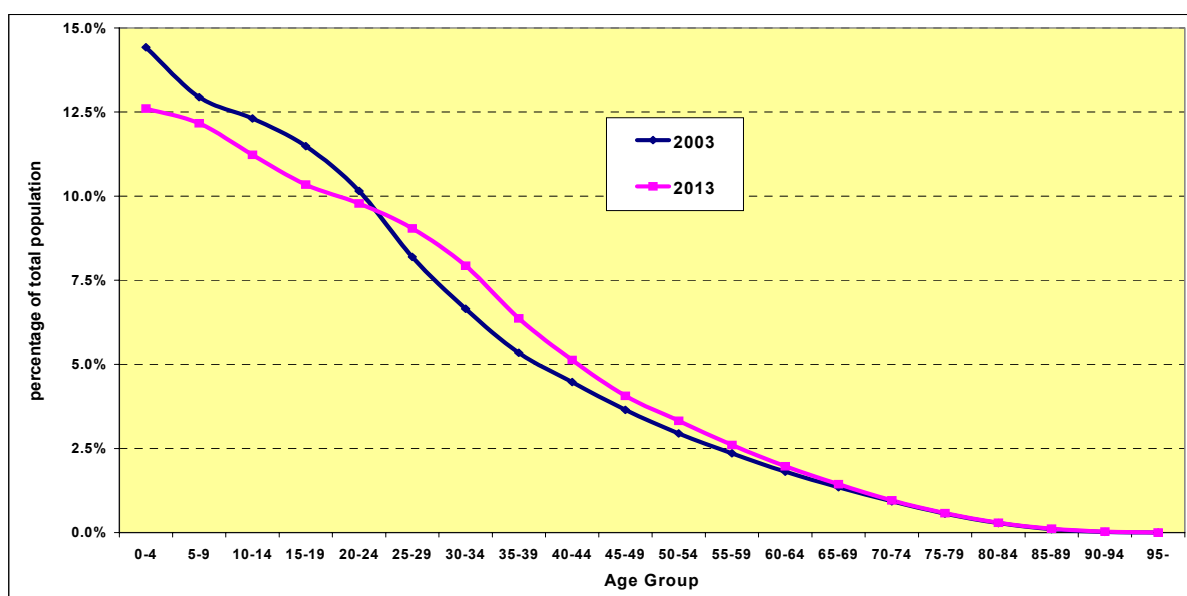
The demographic profile of a country greatly influences the consumption of healthcare since utilization of health services varies with age. In order to estimate future healthcare utilization, it is necessary to project the future population structure. The population of Ghana was therefore projected by age using ILOPOP. A summary of the results of the population projection is presented in Charts 1 and 2.

**Chart 1. Population of Ghana by age group in 2000, 2003 and 2013**



The above chart shows a comparison of the population of Ghana in the years 2000, 2003 and 2013. Although the population structure appears quite similar, the statistics nevertheless show evidence of some degree of ageing of the population (refer to Chart 2). It is projected that between the years 2003 and 2013 the percentage of the national population within the age cohort (0–24 yrs) will decline whilst the percentage of the national population within the age cohort 25 years and above is expected to increase. For example, the proportion of the total population within the age cohort (0–4 yrs) is projected to decrease from 14.4 per cent in 2003 to 12.6 per cent in 2013 whilst the proportion of the total population within the age cohort (30–34 yrs) is projected to increase from 6.7 per cent to 7.9 per cent. The chart below provides a comparison of the population structure in 2003 and 2013 in terms of the proportion or percentage of the various age cohorts in the total population.

**Chart 2. Comparison of the population structure in 2003 and 2013**



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## **6.7. Detailed projection methodology**

### **6.7.1. Income sources**

#### **6.7.1.1. Employee Contributions**

The National Health Insurance Act (2003) makes provision for the transfer of 2.5 percentage points from the social security pension scheme administered by SSNIT to the National Health Insurance fund.<sup>37</sup> This means a mandatory contribution for all workers covered under the SSNIT scheme.

From 2004, employee contributions were based on 2.5 per cent of salary, computed as the product of the average salary and the number of active contributors of the SSNIT pension scheme and the applicable compliance level.<sup>38</sup> Over the projection period, SSNIT active membership and average salaries were projected by applying scheme-specific growth rates.

#### **6.7.1.2. Government Funding/Donor Support**

Government and donor funding have been a major source of financing for the health sector. Currently government (tax revenue) and donor funding caters for about 80 per cent of the cost of health care, implying that around 20 per cent of healthcare is financed through out-of-pocket payments popularly known as the cash-and-carry system.

The total public sources of finance considered in this model include funds from general tax revenues and the proposed health insurance levy of 2.5 per cent on all expenditures and transactions. The latter is also provided for in the Act, starting in 2004. It is assumed here that the present level of government financing (from general taxation) is maintained in the future. Values for 2003, 2004 and 2005 are taken from the Medium-Term Expenditure Framework and are thereafter assumed to grow with GDP. It is also assumed that this includes the Government premium subsidy for the poor.

Donor financing for health care delivery for 2003, 2004 and 2005 are likewise taken from the Medium-Term Expenditure Framework, and are assumed to be driven by inflation throughout the projection period as of 2006.

It should be noted that the 90 millions US\$ World Bank release for the Health Sector have not been taken into consideration in these calculations.

#### **6.7.1.3. Insurance Premiums**

Insurance premiums were based on membership of MHOs and a minimum annual premium amount of 36,000 cedis.<sup>39</sup> A survey of health financing schemes in Ghana

<sup>37</sup> 2.5 per cent of the contributions of SSNIT workers translates to about 0.4375 per cent (17.5 per cent\* 2.5 per cent) of the salaries of workers which may be inadequate to meet government expectations of health insurance contributions from workers. It is therefore clear that the statement is referring to 2.5 percentage points of the contributions, which is equivalent to 2.5 per cent of gross earnings.

<sup>38</sup> Not all covered members of the SSNIT scheme pay their contributions. The compliance rate shows the proportion of the expected covered members who pay contributions. Beyond 2004, the compliance rates applied conform to the targets set by SSNIT (Strategic Plan).

<sup>39</sup> The model does not assume that additional premium shall be paid by SSNIT members to cover their family when the 2.5 per cent of the salary is smaller than the premium for spouse(s) and children above 18, as it is believed that few people will fall into that category.

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conducted in 2001 by Chris Atim et al.,<sup>40</sup> revealed that the total membership of MHOs in Ghana was about 86,822. This figure was assumed to have increased by 20 per cent in the year 2003. The annual premium was projected to grow by medical inflation, computed as the mean of inflation (consumer price index) and wage inflation.

#### 6.7.1.4. *Internally Generated Funds (IGF)*

The introduction of the national health insurance scheme would affect the revenue to the health sector from out-of-pocket payments. The reduction in funds to be generated from out-of-pocket payments will depend on the rate of coverage of the informal sector workers and their families and also the rate of medical inflation, which was assumed to drive the cost of healthcare. It should also be noted that the model implicitly operates on the basis of the existing fee structure which may have to change in the future to provide an incentive for the non-insured to join the system. There are no co-payments assumed for insured persons.

Health care funding generated from out-of-pocket payments for 2003 was based on the actual IGF amount of 196 billion cedis for 2002 projected by applying an expected IGF increase of 35 per cent.<sup>41</sup> In year 2004 and beyond IGF revenue was projected based on the assumption that medical inflation drives the average IGF payment for the non-insured who may have to pay out of pocket for health services.

In estimating the IGF revenue for 2004, the average IGF payment for 2003 was initially computed by dividing the estimated IGF inflow for 2003 by the number of non-insured people who accessed public health facilities. The number of non-insured persons who accessed health facilities from year 2004 and beyond was computed by reducing the total number of informal sector workers and their families by the number of insured in this same category (i.e. number of individuals in the informal sector registered with MHO's) for each year. This is multiplied by the expected healthcare utilization for this group to determine the expected hospital contacts to be made in each year. The average cost per contact for 2004 and beyond was estimated by applying a growth rate equivalent to medical inflation to the estimated average cost of contact for year 2003. The expected IGF revenue for 2004 to 2013 was computed as the product of the estimated average cost per contact and the expected number of contacts.

#### 6.7.1.5. *Investment Income*

Investments were based on the current year balance and the reserve from the previous year. In the base year and throughout the projection period, income from investments was based on a 2 per cent real rate of return. Investment income can also be negative. This means that –if the overall Government budget is negative- the Government would have to borrow money to fulfill its obligations. The interest on the emerging debt would be interpreted as “negative returns” in the model.

### 6.7.2. Treatment cost

The cost of treatment was calculated based on the total cost of healthcare delivery, that is the total expenditure incurred by tertiary, regional and district hospitals and all public health centers – personnel emoluments, administration, service expenses, investments made plus IGF. Based on the 2002 average national healthcare utilization rate (indicator)

<sup>40</sup> Chris Atim et al, A survey of health financing schemes in Ghana, September 2001.

<sup>41</sup> MOH, Financial Analysis Report for the National Health Insurance Scheme, August 2002.

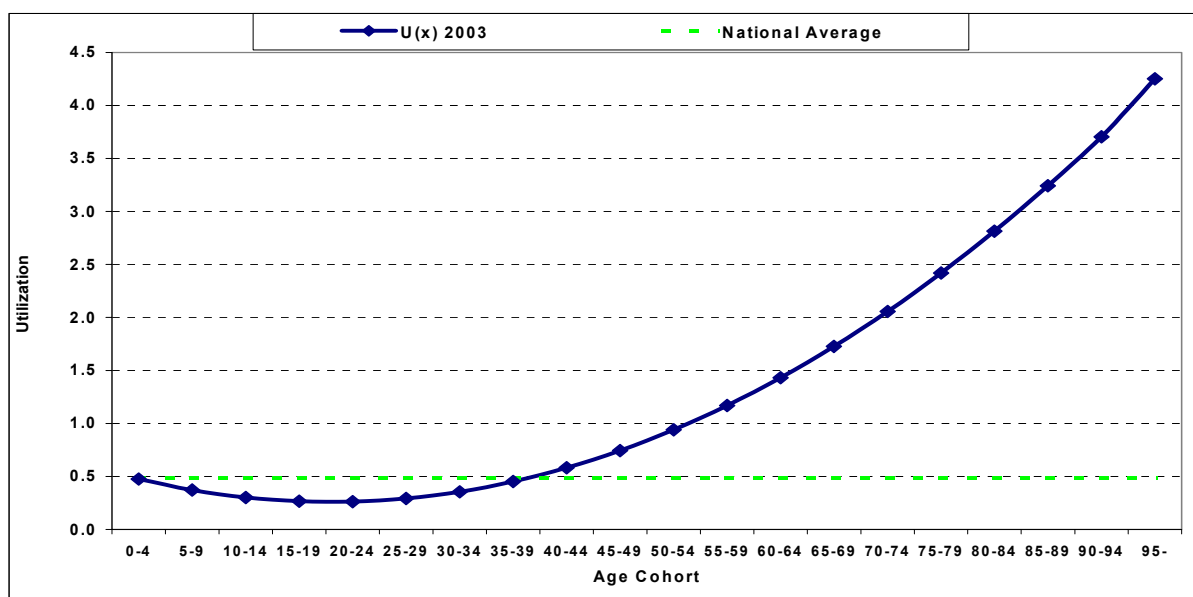
of about 0.49,<sup>42</sup> the expected number of contacts at hospitals or clinics was calculated for the total population for the base year. The average cost of contact was then obtained by dividing total costs by the number of contacts.

Treatment cost was then calculated for the insured population (SSNIT contributors and families plus insured informal sector workers and families) and the non-insured population based on the assumption on coverage of the informal sector workers.

### 6.7.3. Utilization indicator

Utilization of healthcare is a major determinant of the cost of healthcare. The estimated healthcare utilization by age developed by ILO FACTS as presented in section 6.2. is shown in the chart below. In the initial years of life, health consumption is relatively high, usually around 150–200 per cent of the lowest age-specific consumption rates. The lowest level of healthcare consumption is usually observed around age 15 for females and around age 20 for males. The 5-year age differential between the male and female age of minimum consumption is attributed to higher female consumption resulting from fertility around age 15. Beyond the age of minimum consumption, healthcare utilization increases to a level usually between four and seven times the minimum healthcare consumption level.

**Chart 3. Estimated values of the J-Curve for healthcare utilization, by age**



## 7. Health insurance coverage and utilization of health care

### 7.1. Coverage outcome based on stated assumptions

The policy framework for the establishment of health insurance in Ghana prepared by the ministerial task team on health care financing in March 2002 indicated that efforts will be made to achieve at least 30-40 per cent nationwide coverage in the short term (within the next five years). The medium term objective (for the next 5 to 10 years) is to cover at least 50-60 per cent of the entire population. Assumptions on the coverage of the informal sector population for the base scenario were made in such a way that the short and medium-term

<sup>42</sup> Annual Review of the Health Sector, 2002.



objectives of the Government are met (see Table 1). Thus, by the year 2008 it is expected that about 35 per cent of the population will be covered whilst by the year 2013 coverage is expected to reach 54 per cent as indicated in Table 3 below.

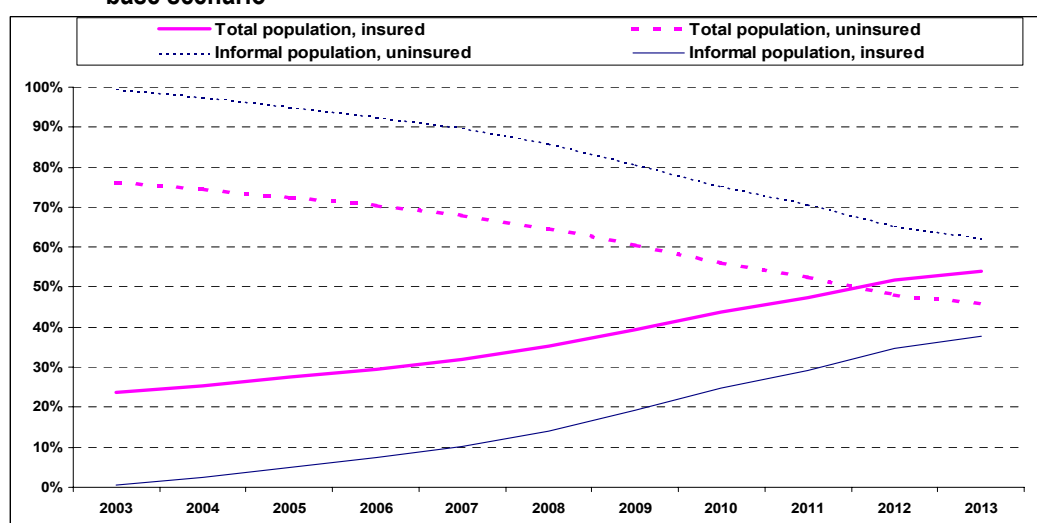
**Table 3. Expected health insurance coverage, base scenario**

Year	Total population			Formal population			Informal population			
	Number	Insured		Insured		Number	Insured		Not insured	
		Number	Per cent	Number	Per cent		Number	Per cent	Number	Per cent
2003	20,682,777	4,891,932	23.7	4,787,746	100	15,895,031	104,186	0.7	15,790,844	99.3
2004	21,154,823	5,365,385	25.4	4,948,639	100	16,206,184	416,746	2.6	15,789,439	97.4
2005	21,631,124	5,950,186	27.5	5,116,694	100	16,514,429	833,491	5.0	15,680,938	95.0
2006	22,110,080	6,542,132	29.6	5,291,895	100	16,818,185	1,250,237	7.4	15,567,949	92.6
2007	22,591,828	7,224,751	32.0	5,474,420	100	17,117,408	1,750,332	10.2	15,367,077	89.8
2008	23,074,767	8,114,432	35.2	5,663,968	100	17,410,799	2,450,464	14.1	14,960,335	85.9
2009	23,557,377	9,290,949	39.4	5,860,300	100	17,697,077	3,430,650	19.4	14,266,428	80.6
2010	24,038,195	10,523,085	43.8	6,063,240	100	17,974,955	4,459,845	24.8	13,515,111	75.2
2011	24,515,825	11,624,342	47.4	6,272,528	100	18,243,296	5,351,814	29.3	12,891,483	70.7
2012	24,989,963	12,910,309	51.7	6,488,133	100	18,501,830	6,422,176	34.7	12,079,654	65.3
2013	25,459,214	13,774,221	54.1	6,709,827	100	18,749,387	7,064,394	37.7	11,684,993	62.3

Chart 4 shows the figures of Table 3 and compares total population coverage and the extent of coverage of the informal population. Total population coverage is expected to increase gradually from about 24 per cent in 2004 to about 54 per cent in the year 2013. Informal population coverage portrays a very low insured population of 0.7 per cent (i.e. less than 1 per cent) in year 2003. However this low initial coverage is projected to reach around 38 per cent in 2013 in order to meet the Government's objective of covering at least 50-60 per cent of the entire population.

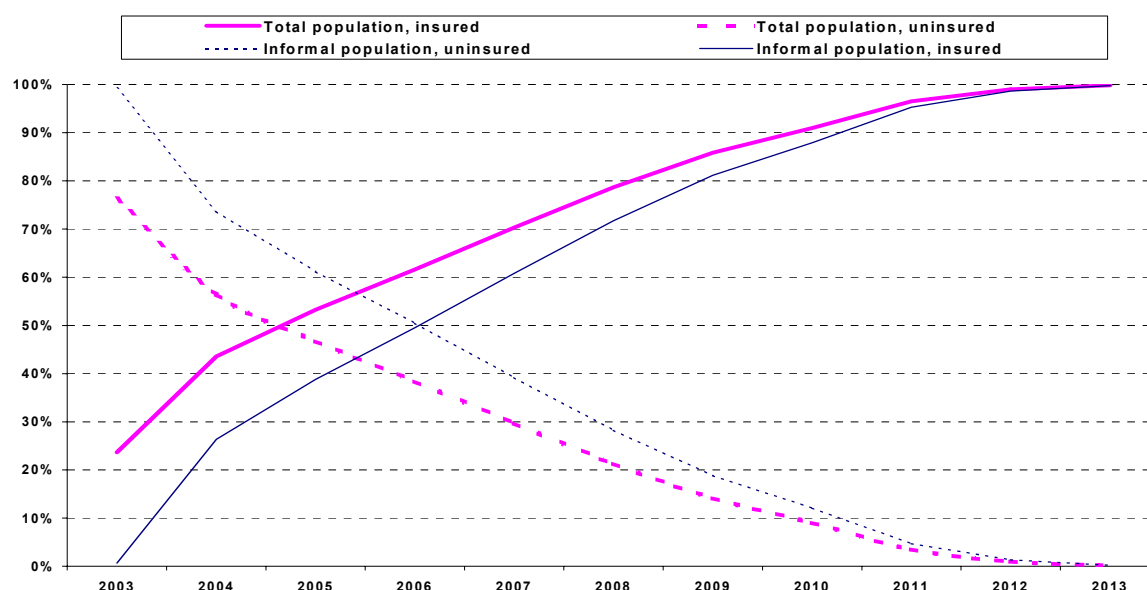
Under the high, scenario, it is assumed that registration of insured will be much faster than under the base scenario. Table 4 repeats table 3 under that other scenario. Likewise, chart 5 recapitulates these figures under the high scenario.

**Chart 4. Development of insured and non-insured, total and informal populations, 2003-2013, base scenario**



**Table 4. Expected health insurance coverage, high scenario**

Year	Total population			Formal population		Informal population				
	Insured			Insured		Insured			Not insured	
	Number	Number	Per cent	Number	Per cent	Number	Number	Per cent	Number	Per cent
2003	20,682,777	4,891,932	23.7	4,787,746	100	15,895,031	104,186	0.7	15,790,844	99.3
2004	21,154,823	9,220,282	43.6	4,948,639	100	16,206,184	416,746	26.4	11,934,542	73.6
2005	21,631,124	11,524,158	53.3	5,116,694	100	16,514,429	833,491	38.8	10,106,966	61.2
2006	22,110,080	13,621,598	61.6	5,291,895	100	16,818,185	1,250,237	49.5	8,488,483	50.5
2007	22,591,828	15,886,548	70.3	5,474,420	100	17,117,408	1,750,332	60.8	6,705,280	39.2
2008	23,074,767	18,158,522	78.7	5,663,968	100	17,410,799	2,450,464	71.8	4,916,245	28.2
2009	23,557,377	20,229,037	85.9	5,860,300	100	17,697,077	3,430,650	81.2	3,328,340	18.8
2010	24,038,195	21,868,851	91.0	6,063,240	100	17,974,955	4,459,845	87.9	2,169,344	12.1
2011	24,515,825	23,658,700	96.5	6,272,528	100	18,243,296	5,351,814	95.3	857,124	4.7
2012	24,989,963	24,743,613	99.0	6,488,133	100	18,501,830	6,422,176	98.7	246,350	1.3
2013	25,459,214	25,421,694	99.9	6,709,827	100	18,749,387	7,064,394	99.8	37,520	0.2

**Chart 5. Development of insured and non-insured, total and informal populations, 2003-2013, high scenario**

## 7.2. Difference between insured and uninsured

The introduction of health insurance is likely to improve utilization substantially provided the people receive the quality and type of service they desire. Health service utilization is a major determinant of the cost of health care.

It was also assumed that we are basically dealing with two sub-groups of the population, SSNIT contributors (or the formal sector) and their families, and non-SSNIT members (mainly informal sector workers) and their families. Some formal sector employees have employer-based schemes where their medical needs and that of their families are either catered for by their employers or subsidized. For example, the Government (the largest employer) reimburses the medical bills of civil servants who constitute nearly half of

SSNIT contributors. For SSNIT contributors with some form of employer support for healthcare, we do not expect a significant increase in utilization except where there is an appreciable increase in the quality of care. However for the majority of informal sector workers and the unemployed whose utilization today may be hampered for financial reasons (and is known to be very low) we expect quite a significant increase in utilization when they become insured.

Thus, the difference in utilization of those who are insured to those who are not covered by insurance in the year 2003 was assumed to be two (2) or three (3) times. Moreover, utilization of the insured was also assumed to increase by 10 per cent each year in 2004 and 2005. Such an increase is justified by the Health Insurance Act, which stipulates that formal sector employees and their family (SSNIT members) will get health insurance coverage. It should be repeated that this is not today the case as there are workers contributing to SSNIT for pensions who do not have health insurance coverage. Nevertheless, this increase in utilization is very difficult to quantify as it is not well known how many persons are involved, nor it is yet known what kind of insurance system they will get. The model assumes utilization globally for all SSNIT members and they are all allocated under the insured category.

In this light, it is assumed, in one of the scenarios, that in 2003 the utilization of the insured (formal sector workers + MHO members) is about three times that of the non-insured (mainly informal sector workers). Consequently, when an informal sector worker registers with an MHO and thereby becomes insured, his/her utilization is assumed to increase three fold or 200 per cent with this example. If additionally it is assumed that the utilization of the insured will increase by 10 per cent in 2004 then a transition from non-insured status in year 2003 to insured status in 2004 will result in an increase in utilization equivalent to 230 per cent.

Expressed mathematically,  $U_i / U_{ni} = 3 \Leftrightarrow U_i = 3 * U_{ni}$  (in 2003).

In 2004,  $U_i = 3 * U_{ni} * (1 + 10\%) \Leftrightarrow U_i = 3 * U_{ni} * (1.1) \Leftrightarrow U_i = 3.3 * U_{ni}$

$\Leftrightarrow U_i = U_{ni} + 2.3 * U_{ni} \Leftrightarrow U_i = U_{ni} + 230\% * U_{ni}$ , where  $U_i$  and  $U_{ni}$  represents utilization of insured and non-insured respectively.

This means that the initial assumption of the insured and non-insured utilization rates influences the increase in utilization as one moves from non-insured status to insured status. Table 5 presents a summary of the increase in utilization as the non-insured members of the population become insured.

**Table 5. Change in utilization resulting from transition from non-insured to insured status**

	Assumptions on base year (2003) utilization			
	$U_i / U_{ni} = 3$	$U_i / U_{ni} = 2.5$	$U_i / U_{ni} = 2$	$U_i / U_{ni} = 1.5$
2004	230%	175%	120%	65%
2005 – 2013	263%	203%	142%	82%

Note: It is also assumed that the insured will experience an increase in utilization of 10 per cent each in year 2004 and 2005.  
 $U_i$  = Utilization of insured.  $U_{ni}$  = Utilization of non-insured.

Table 4 above shows that in when it is assumed that the utilization of the insured is three times that of the non-insured in the base year (2003), it is expected that those without any form of medical insurance will experience an increase in utilization of about 230 per cent when they are insured in 2004. If they get insured between 2005 and 2013, they will experience a utilization increase of about 263 per cent.

When it is assumed that the utilization of the insured is twice that of the non-insured in 2003, the non-insured will experience an increase in utilization of about 120 per cent when they are insured in 2004. If they become insured between 2005 and 2013, then the projected increase in utilization is 142 per cent.

From Table 4, it is evident that if the utilization of the insured ranges between 1.5 to 3 times the utilization of the non-insured in year 2003, and if additionally the insured experience an increase in utilization of 10 per cent each in the years 2004 and 2005, then we can expect an increase in utilization ranging between 65 per cent and 230 per cent when the non-insured become insured in 2003. If they get insured between 2005 and 2013, the projected increase in their utilization is between 82 per cent and 263 per cent.

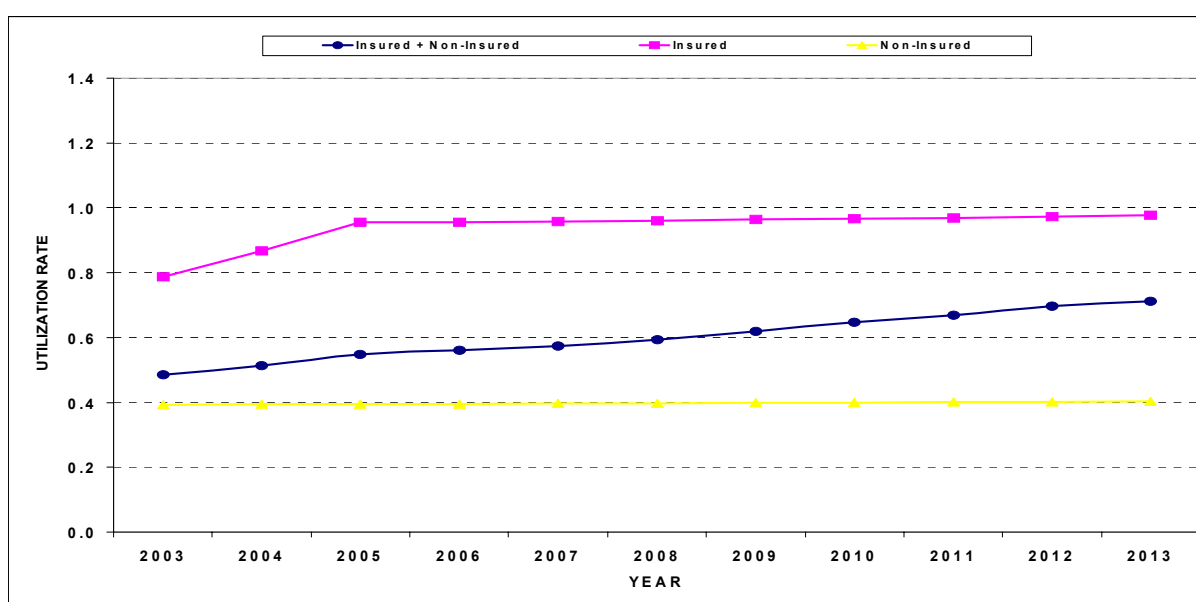
The increases in utilization that are anticipated once people get insured have financial implications. The evolution of the cost of health care during the next decade is discussed in section 8.

### 7.3. Resulting effects on utilization

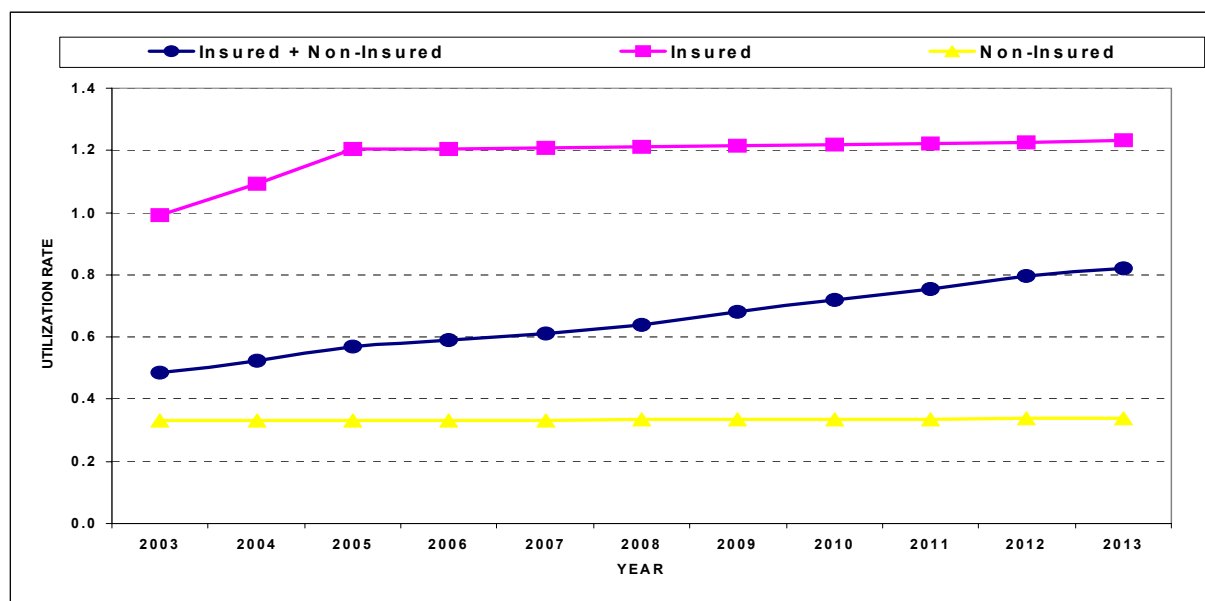
As discussed in previous sections, the model allows for different scenarios for health insurance coverage and the global utilization factor. The global utilization factor is obtained as the sum product of the utilization factors of insured and uninsured that are weighted by the respective number of insured and uninsured. Therefore, the global utilization factor not only depends on population structure and an assumed increase in utilization but also on the share of insured respective to uninsured.

The following Chart 6 presents the development of the utilization factors of insured and uninsured as well as the global utilization indicator when the ratio of utilization of the insured and uninsured is assumed to be 2 under the base scenario; Chart 7 presents the same development when the ratio is assumed to be 3, still under the base scenario. Chart 8 shows the development with a ratio of 2 under the high coverage scenario.

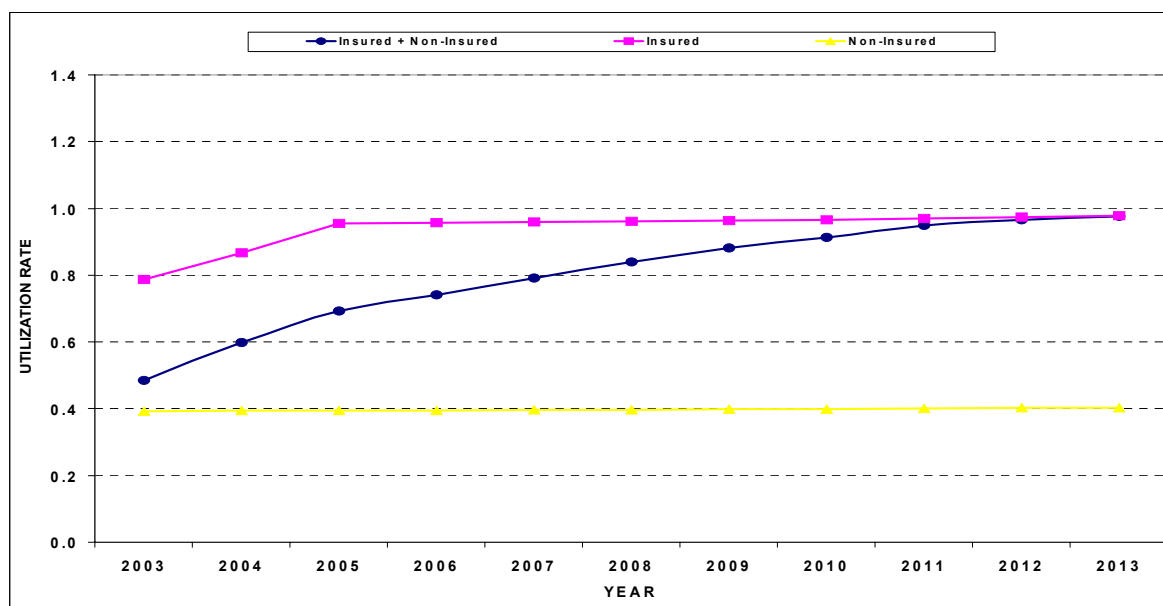
Chart 6. Development of utilization,  $U_i/U_{ni} = 2$ , base scenario



**Chart 7. Development of utilization,  $U_i/U_{ni}=3$ , base scenario**



**Chart 8. Development of utilization,  $U_i/U_{ni}=2$ , high coverage**



The global utilization factor navigates between the utilization of uninsured (bottom line) and the utilization of insured (upper line), the main driving force for its development being the respective share of insured and uninsured (a parallel can be drawn with Charts 4 and 5). Nevertheless, the assumption on the ratio of utilization between insured and uninsured is not negligible as the difference in global utilization in both scenarios is 15 per cent in 2013 (it would be 13 if no additional increase in the utilization of insured was assumed in 2004 and 2005).

## 8. Results of the model projection

### 8.1. Starting budget of 2003

The income expected from the various sources, namely, government (general taxation), donors, insurance premiums from MHOs and IGFs is estimated at 1,423.75 billion cedis in year 2003 as indicated in Table 6 below. Estimated expenditure amounted to 1,419.36 billions cedis.

As of 2004, cost of health care is split between insured and non-insured. This was done by assuming that average contact costs are the same in both cases; only the utilisation factors are different. They allow for calculating the number of contact for both categories and therefore their respective costs. Personnel emoluments grow with average SSNIT salary cumulated with the increase in utilization. Administration costs follow medical inflation. Expenditure on services increase in line with SSNIT salary and investments are linked to GDP and the growth of health care cost.

**Table 6. Estimated consolidated public health budget for the base year 2003 (in cedis)**

<b>Income</b>	<b>1,421,387,525,845</b>
Government Funding ( <i>from 2003 Government of Ghana Budget</i> )	893,413,000,000
Donors, Support ( <i>from 2003 Government of Ghana Budget</i> )	261,205,000,000
2.5 per cent contribution from SSNIT ( <i>payment assumed to start in 2004</i> )	-
Health Insurance Levy ( <i>payment assumed to start in 2004</i> )	-
Insurance Premiums from MHOs ( <i>calculated 24,000 cedis * 104,186 members</i> )	2,500,473,600
Internally Generated Funds ( <i>2002 value of 195,754,853,515 increased by 35 per cent</i> )	264,269,052,245
<b>Expenditure</b>	<b>1,419,356,094,324</b>
Cost of Healthcare	658,699,593,172
<i>(2003 IGF value of 264,269,052,245 + 2003 Government of Ghana budget value of Gvt/Donor expenditures on hospitals and health centers of 394,430,540,927</i>	
Government & Donors <sup>1</sup>	759,906,359,072
Personnel Emoluments (only by Gov,t) ( <i>from 2003 Government of Ghana Budget</i> )	504'499'096'688
Administration ( <i>from 2003 Government of Ghana Budget</i> )	60'111'055'640
Service ( <i>from 2003 Government of Ghana Budget</i> )	149'591'321'887
Investments ( <i>from 2003 Government of Ghana Budget</i> )	45'704'884'857
General Admin. Expenditure of MHO,s ( <i>assumed to be 30 per cent of premiums</i> )	750,142,080
<b>Balance</b>	<b>2,031,401,521</b>

<sup>1</sup> Refers to healthcare expenditures by government /donors which are not directly related to treatment costs.

### 8.2. Scenario 1: Utilization of insured is two times that of the uninsured

The development of the health budget until 2013 is presented in Table 7. As the 2.5 percentage points from SSNIT members and the health insurance levy on Value Added Tax (VAT) start in 2004, the supplementary inflow of income creates a positive balance in the first five years of projections. However, from 2004, part of these new sources of revenue is eaten by an assumed increase in health care consumption. After a few years, the increase in utilisation overtakes the increase in revenue and deficits start appearing in 2010, becoming more significant each subsequent year.

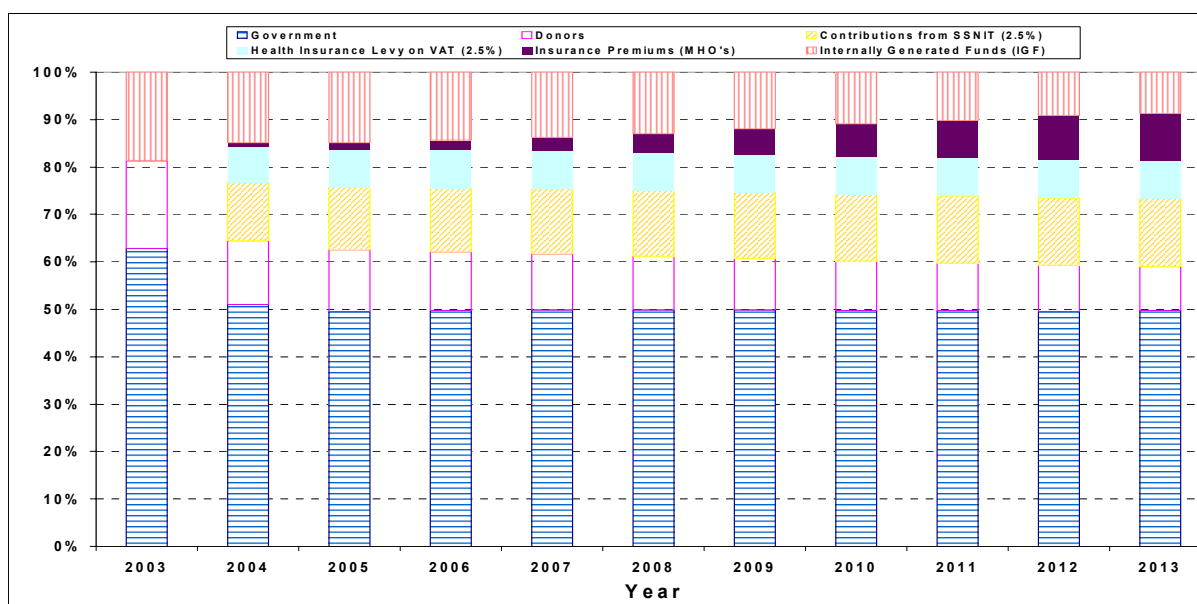
**Table 7. Estimated development of the public health budget under scenario 1, 2003-2013 (in billion cedis)**

	Base year					Extended projection						
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Income	1,421.39	2,178.60	2,615.41	3,154.08	3,756.26	4,423.29	5,149.93	5,918.38	6,711.36	7,560.11	8,425.89	
Government Funding	893.41	1,095.97	1,257.22	1,510.68	1,798.92	2,122.54	2,481.04	2,872.80	3,294.81	3,758.72	4,265.39	
Donors' Support	261.21	286.25	328.74	378.05	430.98	487.01	545.45	605.45	665.99	729.26	794.90	
Contributions by Employees (SSNIT)	-	262.18	331.73	410.77	492.92	586.25	691.03	807.07	933.87	1,075.32	1,231.93	
Health Insurance Levy	-	165.68	203.37	244.37	291.00	343.35	401.34	464.71	532.97	608.02	689.98	
Insurance Premiums (MHO's)	2.50	15.00	36.30	64.53	104.82	168.72	269.19	395.24	530.85	706.52	857.96	
Internally Generated Funds (Co-payments)	264.27	320.08	377.32	435.33	495.10	550.60	594.64	632.37	671.20	696.87	743.70	
Investment income	-	33.43	80.73	110.34	142.53	164.82	167.24	140.74	81.65	(14.61)	(157.97)	
Expenditure	1,419.36	1,845.28	2,377.35	2,892.45	3,502.16	4,239.23	5,140.01	6,178.57	7,314.67	8,668.03	10,079.45	
Cost of Healthcare	658.70	861.20	1,114.32	1,352.01	1,629.99	1,961.33	2,359.98	2,810.56	3,291.74	3,852.44	4,417.03	
Insured		366.43	531.08	679.09	864.69	1,110.25	1,440.82	1,833.08	2,254.23	2,775.26	3,267.46	
SSNIT contributors & family		337.70	456.05	548.32	653.74	772.89	905.92	1,052.48	1,211.91	1,389.35	1,585.57	
Informal sector workers & family		28.73	75.02	130.78	210.95	337.36	534.90	780.59	1,042.33	1,385.91	1,681.89	
Non-insured												
Informal sector workers & family		494.77	583.24	672.91	765.30	851.08	919.16	977.49	1,037.50	1,077.19	1,149.57	
Government & Donors <sup>1</sup>	759.91	979.58	1,252.14	1,521.08	1,840.73	2,227.28	2,699.28	3,249.44	3,863.67	4,603.63	5,405.04	
Personnel Emoluments (by Gov't)	504.50	649.65	829.07	992.67	1,181.15	1,403.12	1,667.41	1,961.98	2,271.44	2,628.89	2,982.04	
Administration	60.11	72.72	86.19	99.99	114.97	131.02	147.98	165.62	183.69	202.79	222.81	
Service	149.59	182.41	218.07	255.21	295.94	340.10	387.34	437.11	488.78	543.96	602.43	
Investments	45.70	74.80	118.81	173.21	248.67	353.04	496.55	684.73	919.76	1,227.99	1,597.75	
General Administrative Expenditure of MHO's	0.75	4.50	10.89	19.36	31.44	50.62	80.76	118.57	159.26	211.96	257.39	
Balance (Surplus/Deficit)	2.03	333.32	238.07	261.63	254.10	184.06	9.91	(260.19)	(603.31)	(1,107.92)	(1,653.57)	
Note: <sup>1</sup> It was assumed that Utilization (insured) / Utilization (non-insured) = 2, and the utilization of the insured increased by 10 per cent each year in 2004 and 2005.												

Note: <sup>1</sup> It was assumed that Utilization (insured) / Utilization (non-insured) = 2, and the utilization of the insured increased by 10 per cent each year in 2004 and 2005.

Chart 9 below shows the proportion of the different income items during the projection period. The government of Ghana is expected to provide about half the expected funds whilst donors are expected to contribute around 10 per cent. The new sources of revenue represent together about 20 per cent of revenue at the beginning of the projection and almost 25 per cent at the end of the projection (with about 15 per cent for SSNIT and 8 per cent for VAT). While IGF revenues stagnate, insurance premiums from MHOs significantly increase and the share of both items in total revenue becomes slightly higher at around 19 per cent.

**Chart 9. Development of revenue structures (without investment income), 2003-2013**



As a result, Chart 10 presents the development of income, expenditure and their difference, i.e. the balance. Surpluses are generated between 2004 and 2009. However, from 2010, growing deficits occur and by 2013, the deficit represents almost 20 per cent of income.

**Chart 10. Development of income, expenditure and balance, scenario 1, 2003-2013**

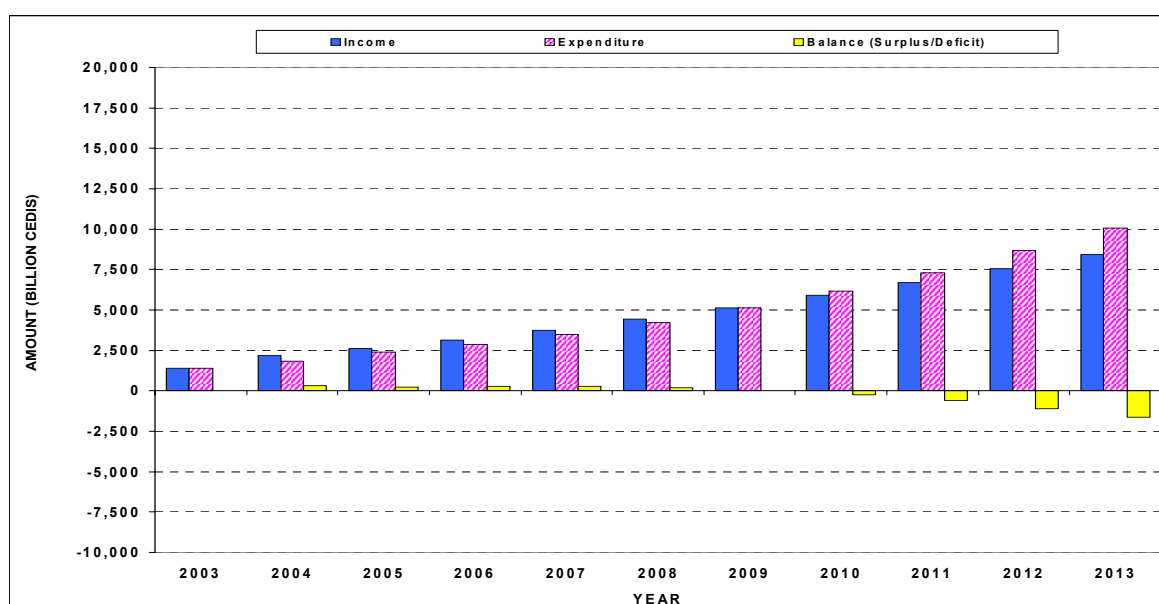
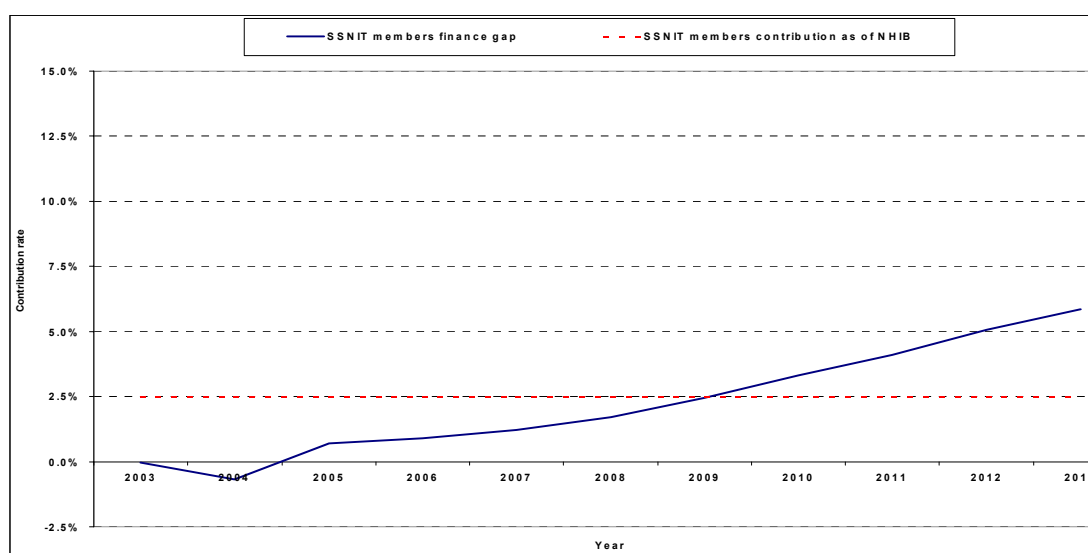




Chart 11 below shows a crude overall cost indicator for the health system that would be required. The bold line indicates how the present 2.5 per cent contribution of SSNIT members would have to develop if SSNIT members were to cover the emerging gap between income and expenditure in the public health budget alone. It should be noted that the increase is not too sharp because underlying assumptions on the development of the SSNIT salary base (membership and average salary) are rather positive. While the balance of the health budget remains positive, the PAYG rate to balance the gap is smaller than the 2.5 per cent contribution rate created by the NHI; however, once the balance becomes negative in 2010, this rate is no longer sufficient and rises to almost 6 per cent in 2013.

**Chart 11. Pay-as-you-go contribution rate, scenario 1, 2003-2013**



### **8.3. Scenario 2: Utilization of insured is three times that of the uninsured**

It is assumed here that utilization by the insured is three times that of the non-insured. The income expected from various sources is not directly affected. However investment income varies because it depends on the reserve available, which also depends on the level of expenditure. Table 8 presents income and expenditure developments under this scenario.

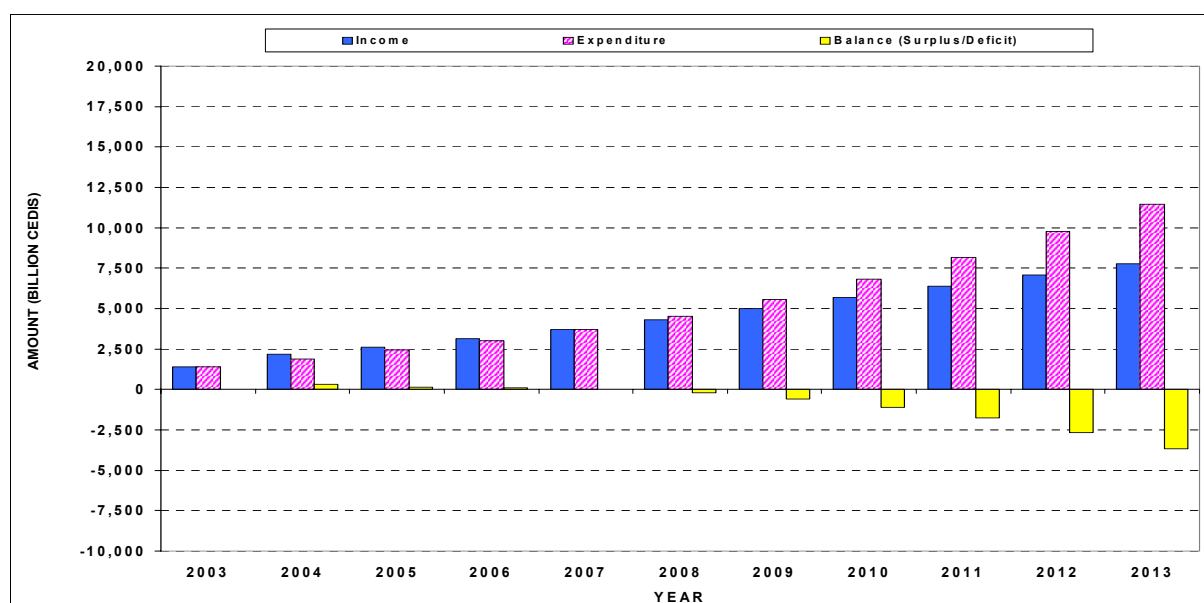
Expenditure is directly dependent on utilisation. As this scenario implies higher utilisation of health care, expenditure develops faster than in scenario 1 and the ultimate deficit in 2013 - depicted in Chart 12 - is more than twice that of scenario 1.

**Table 8. Estimated development of the public health budget under scenario 2, 2003-2013 (in billion cedis)**

	Base year projection					Extended projection					
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Income</b>	1,421.39	2,175.24	2,600.62	3,120.51	3,693.40	4,318.55	4,986.40	5,676.13	6,371.29	7,083.82	7,782.32
Government Funding	893.41	1,095.97	1,257.22	1,510.68	1,798.92	2,122.54	2,481.04	2,872.80	3,294.81	3,758.72	4,265.39
Donors' Support	261.21	286.25	328.74	378.05	430.98	487.01	545.45	605.45	665.99	729.26	794.90
Contributions by Employees (SSNIT)	-	262.18	331.73	410.77	492.92	586.25	691.03	807.07	933.87	1,075.32	1,231.93
Health Insurance Levy	-	165.68	203.37	244.37	291.00	343.35	401.34	464.71	532.97	608.02	689.98
Insurance Premiums (MHO's)	2.50	15.00	36.30	64.53	104.82	168.72	269.19	395.24	530.85	706.52	857.96
Internally Generated Funds (Co-payments)	264.27	320.08	377.32	435.33	495.10	550.60	594.64	632.37	671.20	696.87	743.70
Investment income	-	30.08	65.94	76.77	79.68	60.08	3.71	(101.51)	(258.42)	(490.90)	(801.54)
<b>Expenditure</b>	1,419.36	1,875.79	2,461.31	3,022.16	3,696.07	4,530.41	5,578.87	6,803.60	8,146.03	9,771.95	11,440.96
Cost of Healthcare	658.70	877.88	1,159.84	1,421.84	1,733.50	2,115.21	2,589.22	3,132.82	3,714.27	4,404.55	5,085.97
<i>Insured</i>		462.01	669.60	856.22	1,090.23	1,399.83	1,816.62	2,311.19	2,842.20	3,499.12	4,119.70
SSNIT contributors & family		425.78	575.00	691.33	824.26	974.48	1,142.21	1,327.00	1,528.00	1,751.73	1,999.13
Informal sector workers & family		36.22	94.59	164.89	265.97	425.35	674.41	984.19	1,314.19	1,747.39	2,120.57
<i>Non-insured</i>											
Informal sector workers & family		415.88	490.24	565.62	643.27	715.38	772.60	821.63	872.08	905.43	966.27
Government & Donors <sup>1</sup>	759.91	993.41	1,290.59	1,580.96	1,931.12	2,364.58	2,908.90	3,552.21	4,272.51	5,155.45	6,097.60
Personnel Emoluments (by Gov't)	504.50	662.03	862.66	1,043.61	1,255.75	1,512.72	1,828.80	2,186.24	2,562.21	3,004.72	3,432.62
Administration	60.11	72.72	86.19	99.99	114.97	131.02	147.98	165.62	183.69	202.79	222.81
Service	149.59	182.41	218.07	255.21	295.94	340.10	387.34	437.11	488.78	543.96	602.43
Investments	45.70	76.25	123.66	182.16	264.46	380.74	544.78	763.24	1,037.82	1,403.98	1,839.72
<b>General Administrative Expenditure of MHO's</b>	0.75	4.50	10.89	19.36	31.44	50.62	80.76	118.57	159.26	211.96	257.39
<b>Balance (Surplus/Deficit)</b>	2.03	299.45	139.31	98.35	(2.66)	(211.86)	(592.47)	(1,127.47)	(1,774.74)	(2,688.14)	(3,658.64)

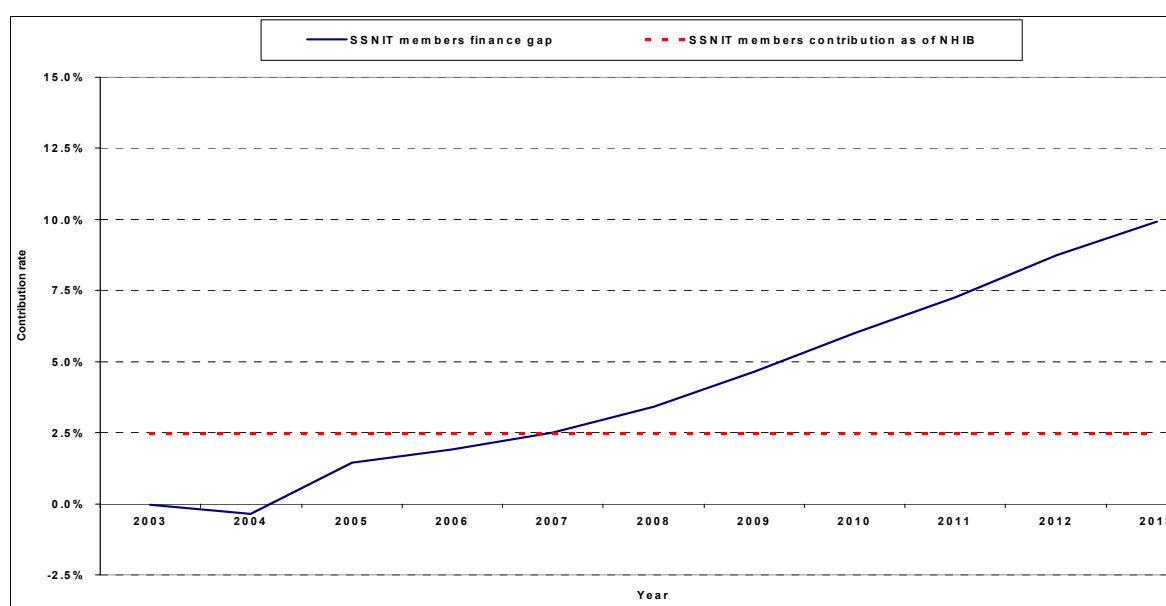
Note: <sup>1</sup> It was assumed that Utilization (insured) / Utilization (non-insured) = 3, and the utilization of the insured increased by 10 per cent per year in 2004 and 2005.

**Chart 12. Development of income, expenditure and balance, scenario 2, 2003-2013**



Similarly, the necessary Pay-as-you-go contribution rates from SSNIT to cover the emerging financial gap are much higher than under the previous scenario (see Chart 13).

**Chart 13. Pay-as-you-go contribution rate, scenario 2, 2003-2013**



#### 8.4. Scenario 3: High coverage

Covering the entire population is clearly not an easy task especially in the immediate future. However, this analysis is being made to evaluate the solvency of the scheme in the event of a faster population coverage. Here it is assumed that already in 2004; almost 30 per cent of Ghanaian families in the informal sector is insured in an MHO and pays the corresponding premium. The analysis is also based on the assumption that the utilization of the insured is two times that of the non-insured in year 2003, with the increase in utilization for insured persons of 10 per cent per year in 2004 and 2005. Results are presented in Table 9.

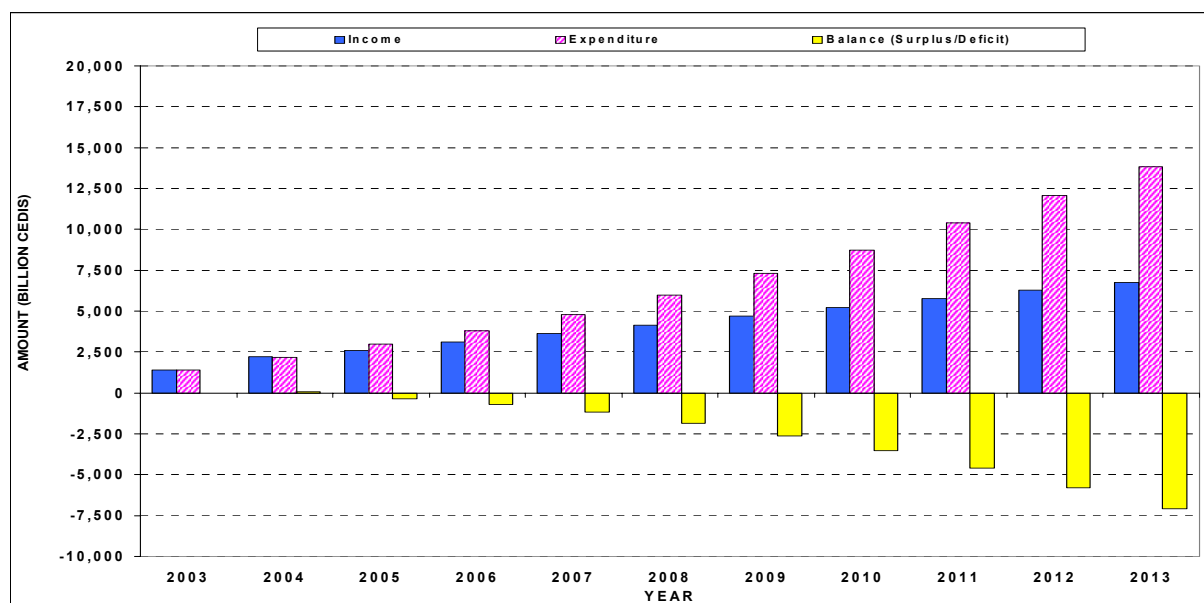
**Table 9. Estimated development of the public health budget under scenario 3, high coverage, 2003-2013 (in billion cedis)**

	Base year		Extended projection								
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Income</b>	1,421.39	2,211.98	2,620.82	3,106.95	3,614.31	4,143.65	4,682.95	5,221.81	5,781.62	6,269.76	6,741.81
Government Funding	893.41	1,095.97	1,257.22	1,510.68	1,798.92	2,122.54	2,481.04	2,872.80	3,294.81	3,758.72	4,265.39
Donors' Support	261.21	286.25	328.74	378.05	430.98	487.01	545.45	605.45	665.99	729.26	794.90
Contributions by Employees (SSNIT)	-	262.18	331.73	410.77	492.92	586.25	691.03	807.07	933.87	1,075.32	1,231.93
Health Insurance Levy	-	165.68	203.37	244.37	291.00	343.35	401.34	464.71	532.97	608.02	689.98
Insurance Premiums (MHO's)	2.50	153.78	279.04	429.95	623.51	860.29	1,127.45	1,400.74	1,724.56	2,008.34	2,272.53
Internally Generated Funds (Co-payments)	264.27	241.94	243.20	237.37	216.03	180.94	138.73	101.50	44.63	14.21	2.39
Investment income	-	6.19	(22.47)	(104.24)	(239.05)	(436.74)	(702.08)	(1,030.46)	(1,415.21)	(1,924.11)	(2,515.31)
<b>Expenditure</b>	1,419.36	2,153.61	2,994.62	3,810.80	4,806.95	5,983.77	7,314.82	8,741.71	10,380.22	12,055.94	13,816.86
Cost of Healthcare	658.70	1,006.15	1,408.71	1,786.54	2,242.53	2,772.73	3,360.69	3,975.79	4,667.04	5,350.85	6,044.18
Insured		632.18	1,032.79	1,419.63	1,908.60	2,493.04	3,146.25	3,818.90	4,598.06	5,328.88	6,040.49
SSNIT contributors & family		337.70	456.05	548.32	653.74	772.89	905.92	1,052.48	1,211.91	1,389.35	1,585.57
Informal sector workers & family		294.48	576.74	871.31	1,254.86	1,720.16	2,240.32	2,766.41	3,386.15	3,939.53	4,454.92
Non-insured											
Informal sector workers & family		373.97	375.92	366.91	333.93	279.68	214.44	156.90	68.98	21.97	3.69
Government & Donors <sup>1</sup>	759.91	1,101.32	1,502.20	1,895.28	2,377.37	2,952.95	3,615.90	4,345.69	5,195.81	6,102.58	7,090.92
Personnel Emoluments (by Gov't)	504.50	758.80	1,047.74	1,311.20	1,624.34	1,982.74	2,373.49	2,774.35	3,219.30	3,650.22	4,079.34
Administration	60.11	72.72	86.19	99.99	114.97	131.02	147.98	165.62	183.69	202.79	222.81
Service	149.59	182.41	218.07	255.21	295.94	340.10	387.34	437.11	488.78	543.96	602.43
Investments	45.70	87.39	150.19	228.88	342.11	499.09	707.10	968.61	1,304.04	1,705.62	2,186.33
<b>General Administrative Expenditure of MHO's</b>	0.75	46.13	83.71	128.99	187.05	258.09	338.24	420.22	517.37	602.50	681.76
<b>Balance (Surplus/Deficit)</b>	2.03	58.37	(373.80)	(703.85)	(1,192.65)	(1,840.12)	(2,631.87)	(3,519.90)	(4,598.60)	(5,786.18)	(7,075.05)

Note: <sup>1</sup> It was assumed that Utilization<sub>(insured)</sub> / Utilization<sub>(non-insured)</sub> "2, and the utilization of the insured increased by 10 per cent per year in 2004 and 2005.

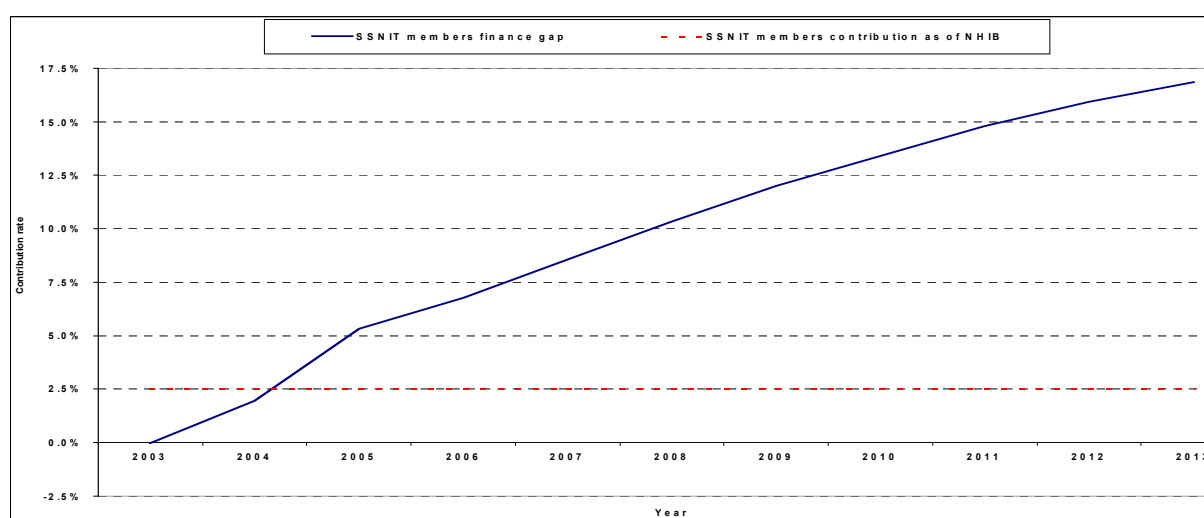
Basically, the differences compared to the base scenario are the results of timing effects. Revenues do not increase substantially as MHO premiums are rather low and barely replace revenue from IGFs. However, expenditure on health care increases more rapidly than in the base scenario. The different timing here means that deficits appear more rapidly and negative investment arises. About 35 per cent of the deficit of Chart 14 results from interest borne on the debt.

**Chart 14. Development of income, expenditure and balance, scenario 3, high coverage, 2003-2013**



It is evident from the scenario depicted in the chart above that if the larger group of residents were covered then the total pay-as-you-go contribution from SSNIT members to cover the financing gap would increase significantly, as illustrated in Chart 15.

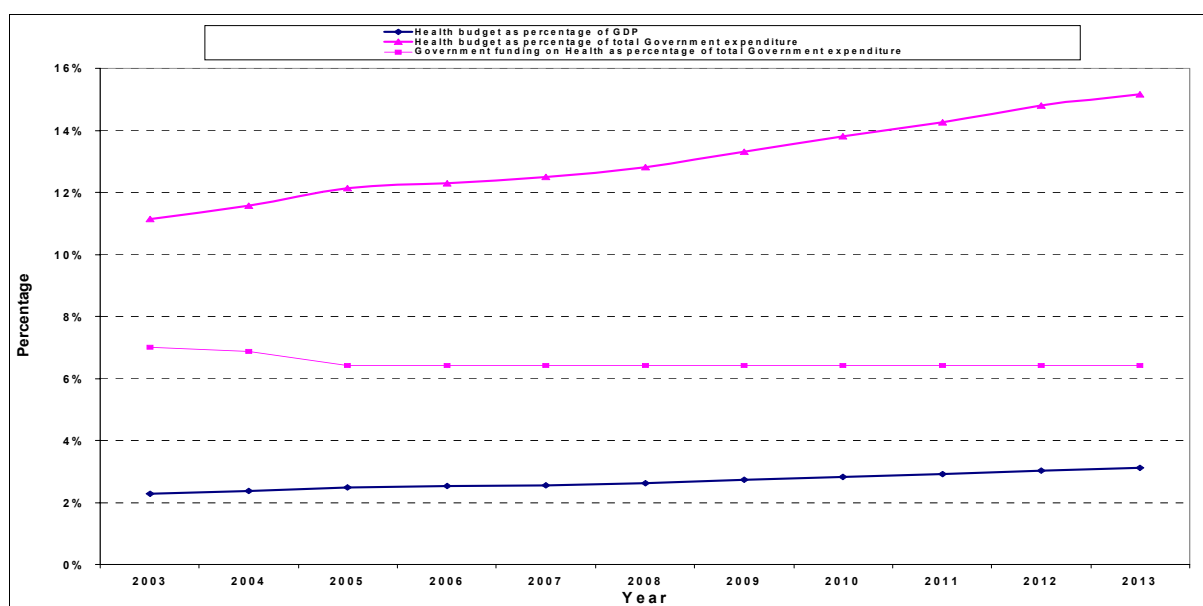
**Chart 15. Pay-as-you-go contribution rate, scenario 3, high coverage, 2003-2013**



## 8.5. Potential effects of health financing on the general government budget under scenario 1

Chart 16 below presents the results of section 8.2. in relation to the overall national development of GDP and Government expenditure. The amount of the health budget relative to GDP increases by about thirty five per cent in ten years (from 2.3 per cent to 3.1 per cent) as well as relative to Government expenditure (from 11.1 per cent to 15.2 per cent). However, the share of direct Government funding on health as a percentage of total Government expenditure is stable throughout the period. This shows that the introduction of the NHIS will probably allow the health sector to grow in financial terms. The real governance challenge for managers in the sector is to make sure that the increase of resources is commensurate with the increase in access and quality of care.

Chart 16. National health budget in percentage of GDP and Government expenditure



## 9. Conclusions

Although results presented in this report are inevitably tentative due to the number of assumptions that had to be made in lieu of actual data, there are some genuine trends that can be discerned with some degree of confidence from the simulations and projections. However, it should be noted that the statistical system of the public health care sector requires some upgrading – notable in respect of linking utilization data of facilities to cost data - to ensure a sound financial governance of the new health financing system.

It must be assumed that public health-care expenditure will grow rapidly over the next ten years. Revenues of the public health care delivery system (consisting largely of government provided care to insured and non-insured persons) will also increase. This is intended as the National Health Insurance Act sets out to mobilize new resources to the health sector. However, the expected increase in utilization of insured persons will lead to a subsequent increase in overall expenditure that will outpace the growth of resources and hence create a financing gap. The faster the extension of actual insurance coverage the earlier that imbalance could emerge. However, it seems that with realistic expectations as to the achievable progress of population coverage and a realistic assumption regarding the increase of the utilization of the insured persons there would be a period of around four to five years during which the overall system would remain in surplus. This should provide some breathing space to fine-tune the financing system and install effective cost containment mechanisms.

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A critical condition for financial equilibrium during the coming years is that the government will not reduce its financial commitment to the health sector and hence all new sources of revenues (contributions for SSNIT, levy on VAT and contributions of the insured persons) are truly additional resources. Should the government attempt to reduce its commitment to the health sector the deficit will emerge much faster. Deficits in the health insurance schemes will lead to reduced quality of care or rapidly increasing contributions. Both will undermine the credibility of the new health insurance system. The same would be the case if deficits had to be covered by (re)introducing sizeable co-payments at the point of delivery.

In the longer-term future, the Government of Ghana will probably either have to bear a higher share of the public health expenditure bill, or it would have to introduce – which is the more likely case – higher premiums to the district insurance schemes, higher formal sector contributions and/or a higher health levy or a suitable combination of the three. This would need to be accompanied with a fair exemption from contribution payments for the needy. From the present results the amount of new revenues to be mobilized till the end of the decade appears manageable.

This report represents the first attempt to evaluate the financial impact of the National Health Act. The model – as a tool of governance for the Ministries of Health and Finance – needs to be continuously developed and improved. The ILO is ready to continue its cooperation with the Ministry of Health on that issue and in particular will develop a second versions reflecting newly obtained data and in-depth modeling discussions with the Ministry of Health.

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# **The organisational structure of the Ghana National Health Insurance Council**

## **(Discussion paper No. 5 – February 2004)**

Fiona Kilpatrick, ILO  
Michael Cichon, ILO

### **1. Introduction and objective**

The President of Ghana has stated categorically that the present “Cash and Carry System” of health care in Ghana has to be abolished by 2004. The Government is replacing it with a National Health Insurance System (NHIS) that aims at universal coverage of the population. The National Health Insurance Act was passed in August 2003. The National Health Insurance system will be governed by a National Health Insurance Council and should commence operations early in 2004.

The ILO is supporting the implementation of the health insurance system through a technical co-operation project (“The Ghana Social Trust Project”). The Ministry of Health requested the ILO mission which visited the country in January/February 2004 to develop, in collaboration with the staff of the health insurance unit, a draft organisational structure for the National Health Insurance Council (NHIC) and its Secretariat. This discussion paper aims to facilitate the national decision-making process with respect to the structure of the Council and Secretariat. The rapid appointment of a core group of staff is the key to a swift implementation of the ambitious plan.

This discussion paper therefore contains the recommendations of the mission. They are kept short, as all the structures of a new social insurance agency are inevitably preliminary, and they will grow and be adapted over time. We recognise that introducing and operationalising a national health insurance system is one of the most complex and difficult logistical and financial tasks that one can undertake in social governance.

### **2. Functions of the Council**

The object of the National Health Insurance Council is defined by the Act as “to secure the implementation of a national health insurance policy that ensures access to basic healthcare services to all residents”. Some fourteen principal functions of the Council are set out in the Act, including the registration, licensing, regulation and supervision of health insurance schemes; the accreditation of healthcare providers; the determination of contributions; and the development of future policies. In addition the Council has various reporting, management and financial functions.<sup>43</sup>

The Council will be supported by a Secretariat, led by an Executive Secretary, which will effectively be the executive body for the management of the implementation of the new health insurance system.

<sup>43</sup> For full details, see The National Health Insurance Act 2003 (650), Section 2 and Part VIII.

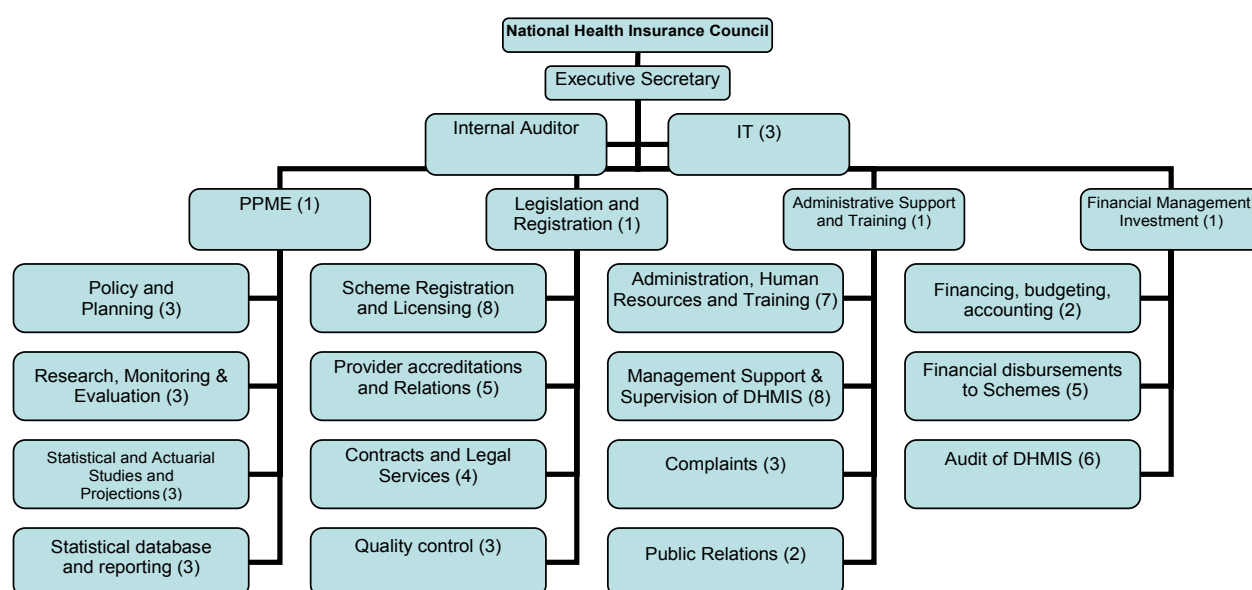
### 3. Proposed Organogram of NHIC and Secretariat

Based on a first draft of an organogram and the organisation structure stipulated in the Act (see S93) the ILO suggests a lean organisational structure consisting mainly of four departments, each containing a number of distinct units. It is important to draw a distinction between operational tasks (which will form the bulk of the work of the Secretariat) and conceptual work, which will principally involve the development of policy and future planning. We therefore suggest that the Policy, Planning, Monitoring and Evaluation Directorate take on the conceptual work, with the other three directorates bearing responsibility for operational and day-to-day management work.

The four departments are headed by technical Directors who report to the Executive Secretary. The proposed organogram is laid out in Figure 1. In addition there would be the office of the Internal Auditor, which would report directly to the Executive Secretary. It should also be noted that in the proposed structure, there is also an IT unit reporting directly to the Executive Secretary

The Executive Secretary and four Directors would effectively form the Management Board of the Secretariat.

**Figure 1. Proposed Organogram of the Council**



The figures in bracket in the boxes are tentative numbers of professional staff. The diagram thus foresees about 70 professional staff (including the Executive Secretary and the Internal Auditor). In addition 20 to 30 general support staff would probably be needed.

The Executive Secretary is accountable to the Council. It is suggested here that the Council itself should have three permanent committees:

- a policy, planning and budget committee;
- an investment committee; and
- a (health) complaints committee.

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The Complaints Committee is the only committee that is explicitly required by the Act (see S7-8). It is furthermore suggested that the Council form a temporary Implementation Committee that supports the Executive Secretary during the initial year of the existence of the scheme. It is also suggested that the Committee draw on the internal expertise of the Council as well as other national and international expertise in social health insurance management and administration.

#### **4. Tasks of the Executive Secretary, the Internal Auditor and the four main Departments**

The Executive Secretary is the administrative head of the council and serves the council as secretary. The Internal Auditor supervises and monitors all operations of the Council's departments and reports to the Executive Secretary.

The Director of the Policy, Planning, Monitoring and Evaluation Department supports the Executive Secretary in all questions of further development of the scheme and the evaluation of its achievements. S/he will also be responsible for the short and medium term budget and financial planning of the health insurance system. S/he would also act as Secretary to the Policy, Planning and Budget Committee.

The Department Director for Legislation and Registration acts simultaneously as the legal adviser to the Council and the Executive Secretary and as the manager of the Department, which carries out all work relating to registration of DHMIS and accreditation of providers.

The Director of the Administration Support and Training Department leads on and manages all work in relation to supporting the operation of DHMIS, human resources management and training. S/he is also responsible for communications to Government, Parliament and the general public, including the promotion of health insurance. In addition to supporting the Executive Secretary and Council, s/he supports, and acts as Secretary to, the Complaints Committee.

The Director of the Financing and Investment Department acts simultaneously as Actuarial Adviser to the Council and the Executive Secretary. S/he is responsible for oversight of revenue collection, disbursement of funds to DHMISs, for providing technical advice to inform budgeting and financial planning, and for managing investment of the National Health Insurance Fund. S/he would also act as Secretary to the Investment Committee.

More details about the tasks of the Executive Secretary and Departmental Directors are contained in the attached job descriptions.

#### **5. Timing**

The establishment of the NHIC is crucial to the successful implementation of the provisions of the NHI Act and the Council Secretariat will be the chief executive body responsible for the tasks engendered by implementation. We therefore recommend that Council members and the Executive Secretary be appointed no later than the end of March 2004, with Directors appointed no later than a month thereafter. We also recommend that the process of recruiting the first tranche of professional and general staff begin immediately, to allow time for the selection process, and to ensure that at least a core of staff is in place to support the Council and Executive Secretary as soon as they are appointed.

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## **Annex. Job descriptions**

### **(1) Executive Secretary**

#### **General Role in the Management of the Council**

Under general guidance and supervision of the Council, the Executive Secretary acts as the head of the administration of the Council. S/he is appointed by the President of the Republic. S/he ensures that the day-to-day operations of the National Health Insurance System comply with the mandate described in the National Health Insurance Act. S/he also develops - in close consultation with the Council - proposals for the future development of the system. S/he also acts as secretary to the Health Insurance Council.

#### **Detailed Tasks**

- (1) The management of about 70 professional and 20-30 general service staff
- (2) The supervision and management of four Departments, each of which will be headed by a Director:
  - Policy, Planning, Monitoring and Evaluation;
  - Registration and Accreditation;
  - Administrative Support and Training,
  - Financial Management and Investment.
- (3) Oversight of the arrangements for meetings of the Council, including the preparation of documents on matters for consideration by the Council.
- (4) Provision of advice to the Council on all matters relating to the implementation and running of the National Health Insurance system.
- (5) Management of the implementation plan for the new NHI system, including responsibility for setting and meeting deadlines, and the allocation of necessary resources.
- (6) Preparation and submission to the Council of an annual health budget and mid-term expenditure plan including estimated revenues.
- (7) Oversight of the preparation of the Annual Report of the Council.

#### **Qualifications required**

Qualified clinical professional, public health or insurance specialist or health care manager, with at least 15 years of professional experience in the public or private sector. Extensive experience in the management of a health care delivery system is indispensable. Comprehensive knowledge of the delivery infrastructure of the healthcare system in Ghana, and the administrative, financial and decision-making procedures of the Ministry of Health is essential. Comprehensive knowledge of the legal framework of the health care delivery and financing system and in particular the Health Insurance Act is likewise essential. Proven management capacity. Familiarity with all standard PC software.

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## Educational Background

University degree in medicine, health care administration or public health at Masters or doctoral level.

## **(2) Director of Policy, Planning, Monitoring and Evaluation**

### General Role in the Management of the Council

Under the general guidance and supervision of the Executive Secretary, the Director of Policy, Planning, Monitoring and Evaluation assumes the responsibility for policy relating to the implementation of the NHI scheme; the development of annual work plans as well as a medium-term strategic plan for the implementation and operation of the system; the development of tools and strategies to monitor and evaluate implementation and operation. S/he ensures that effective policy advice is delivered to the Council in order to enable members to fulfill their obligations under the Act; and that the decisions of the Council are incorporated into policy development. S/he is responsible for short to medium term budget and financial planning for the health insurance system. S/he will also act as Secretary to the Policy, Planning and Budget Committee.

### Detailed Tasks

- (1) The management of about 12 professional and (x) general service staff
- (2) The detailed development of a strategic implementation plan for the NHI system, including tools for delivery.
- (3) Preparation of advisory documents and other key documentation for meetings of the Council.
- (4) Preparation of discussion and advisory documents for the Policy, Planning and Budget Committee, as well as oversight of preparations for meetings of that Committee.
- (5) Co-ordination and drafting of the Annual Report of the Council.
- (6) Taking into account the advice of the Director of Financial Management, the establishment of regular short to medium term projections of the expected financial developments of the Health Insurance System and individual District schemes and the collation of that information in an annual actuarial report to the Council. The report shall indicate in particular whether expected revenues from current source will be sufficient to maintain the actuarial equilibrium of the system.
- (7) Development and delivery of a regular statistical reporting strategy.
- (8) The design of the disbursement formula of subsidies to the District Mutual Health Insurance Schemes.
- (9) Within the framework of the statistical reporting strategy, the development and maintenance of a statistical database for the health insurance system as a whole and for individual schemes including statistical reporting requirements for the disbursement of subsidies.

### Qualifications required

Comprehensive knowledge of the principles and practice of public healthcare administration, with a proven track record in policy development and project management

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in either the public or private sector. Comprehensive knowledge of the delivery infrastructure of the healthcare system in Ghana, and the administrative, financial and decision-making procedures of the Ministry of Health. Considerable knowledge of the legal framework of the health care delivery and financing system and in particular the Health Insurance Act.

### **Educational Background**

University degree in health care administration, economics or public finance at Masters or doctoral level. A medical or public health degree would be acceptable if combined with extensive subsequent study or experience in public finance and statistics.

## **(3) Director of Legislation and Registration**

### **General Role in the Management of the Council**

Under the general guidance and supervision of the Executive Secretary, the Director of Legislation and Registration will be responsible for managing policy and procedures relating to registration of District Health Mutual Insurance Schemes; and the accreditation of healthcare providers. S/he will be responsible for negotiations with schemes and providers, and the servicing of contracts. The Director will also act as Legal Advisor to the Council, and will present advice and draft legal instruments to the Council.

### **Detailed Tasks**

- (1) The management of about 20 professional and (x) general service staff.
- (2) The development and implementation of procedures for the registration of DHMISs, including guidance for issue to scheme managers.
- (3) The development and implementation of procedures for the accreditation of healthcare providers, including guidance for providers.
- (4) Oversight of negotiation of contracts with DHMISs and providers.
- (5) Provision of legal advice to the Council and the Executive Secretary.
- (6) Drafting of legal documents and legislative instruments.
- (7) The maintenance of a database of health insurance schemes and providers, including the publication of an annual list of accredited providers.
- (8) Development of a national tariff system to ensure equitable compensation to providers.
- (9) Development of procedures for claims payments in cases of portability of utilisation.

### **Qualifications required**

At least ten years' experience and practice of law, drafting of legislation and contract negotiation in a public sector context, with comprehensive knowledge of the principles and practice of public healthcare administration. Comprehensive knowledge of the legal framework of the health care delivery and financing system and in particular the Health Insurance Act. Good working knowledge of the delivery infrastructure of the healthcare system in Ghana, and the administrative, financial and decision-making procedures of the Ministry of Health.

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## Educational Background

University degree in law, or health care or business administration at Masters or doctoral level.

### **(4) *Director of Administrative Support and Training***

#### General Role in the Management of the Council

Under the general guidance and supervision of the Executive Secretary, the Director of Administrative Support and Training will be responsible for managing all issues relating to human resources in the Secretariat, as well as providing support services to the Secretariat and Council. S/he will also be responsible for providing management support to, and supervising, DHMISs.

The Director will also have responsibility for contributing to the development and delivery of a comprehensive training programme for DHMIS managers, and for the training of Secretariat staff.

In addition, s/he will act as Secretary to the Complaints Committee.

The Director is also responsible for developing and delivering an information strategy, both in terms of effective communications within the Secretariat and Government; and for dissemination of information about, and promotion of, health insurance to the general public.

#### Detailed Tasks

- (1) The management of about 20 professional and (x) general service staff.
- (2) The development and implementation of a human resources strategy for the Secretariat, including recruitment and placements.
- (3) The development and delivery of a training strategy, to include a programme of training for DHMIS managers.
- (4) The provision of operational guidance for DHMISs and the establishment of a focal point for queries and advice.
- (5) The preparation of advice and papers for the Complaints Committee, and oversight of arrangements for meetings of that Committee.
- (6) The development of procedures for handling and resolving complaints, including the establishment of the post of an independent adjudicator.
- (7) Development and delivery of a public information strategy.

#### Qualifications required

Comprehensive knowledge of the principles and practice of public healthcare administration, with a proven track record in human resources management in either the public or private sector. Comprehensive knowledge of the delivery infrastructure of the healthcare system in Ghana, and the administrative, financial and decision-making procedures of the Ministry of Health. Considerable knowledge of the legal framework of the health care delivery and financing system and in particular the Health Insurance Act.

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## Educational Background

University degree in human resources management, or health care or business administration at Masters or doctoral level.

### **(5) Director of Finance and Investment**

#### General Role in the Management of the Council

Under general guidance and supervision of the Executive Secretary the Director of Finance and Investments assumes the responsibility for all financial, actuarial and statistical questions within the mandate of the Council.

S/he also serves as actuarial adviser to the Health Insurance Council. In the capacity should act in compliance with the guidelines of actuarial practice in social security as laid out by the International Labour Office and the International Actuarial Association. With respect to general actuarial standards of practice he should comply with the guidelines of the Actuarial Association of Ghana. If the incumbent is not a qualified actuary he may delegate the role as actuarial adviser to one of his staff.

S/he also acts as secretary to the Investment Committee of the Council.

#### Detailed Tasks

- (1) The management of about 13 professional and (x) general service staff.
- (2) The supervision and controlling of the collection of contribution income from SSNIT and revenues from the health levy.
- (3) The supervision of the design and maintenance of proper accounting frames for the financial transactions of the Health Insurance Council. The accounting frame should comply with the accounting guidelines for public institutions as laid down by the competent Ghanaian authority (*The accountant General? The exact regulations have to be quoted*).
- (4) Advise on the establishment of the annual budget of the Council in close co-operation with the Chief of the Department for Policy, Planning, Monitoring and Evaluation and the Executive Secretary following the general guidance of the council.
- (5) The monitoring of the disbursement of subsidies to the District Mutual Health Insurance Schemes.
- (6) The conduct of other financial and actuarial risk analyses as may be requested by the board.
- (7) The supervision of the management of the fund and the maintenance of a contingency reserve. The provision of recommendations on the management of funds to the Investment Committee; the development of fund performance indicators for the Investment Committee.

#### Qualifications required

Qualified actuary or public finance specialist with at least 10 years of professional experience in the public or private sector. Experience in the financial management of a health care financing systems or a health facility would be an asset. Familiarity with



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accounting standards in the Ghanaian public service and familiarity with all standard PC software and standard statistical packages is also required.

### **Educational Background**

University degree in mathematics, statistics, actuarial science, economics or public finance at the masters or doctoral level, with further qualification in business audit.

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## **Risk equalisation within the Ghana National Health Insurance** (Discussion paper No. 6 – February 2004)

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### **Introduction and objective**

The 2003 National Health Insurance Act (Parliament of the Republic of Ghana 2003), hereafter called the “Act”, provides that in every district of Ghana a mutual health insurance scheme for residents of the district will be established. With the exception of the members of the Armed Forces of Ghana and the Ghana Police Service, every resident of the country has to belong to either a licensed private health insurance or to a district scheme.

Of course there are huge differences between the districts as to the number of the residents, the average income, the age structure and the morbidity of the population, as well as the provision of health care services and goods. In order to help the district mutual insurance schemes to provide health care services to their members the Act has created a National Health Insurance Fund (called hereafter the “Fund”) to provide a subsidy to the district schemes and to reinsure them against random fluctuation of their expenditure.

The present report aims at establishing the principles for defining the formula for distributing the subsidies of the Fund to the district schemes. According to the Act, the National Health Insurance Council (hereafter called the “Council”) has to submit every year to Parliament the formula for distributing the subsidies of the Fund. The 2003 Act gives some indications of how the distribution procedure has to be developed and some regulations that will influence it. These provisions are repeated in the next chapter.

Obviously the distribution of the subsidies has as its aim an equity objective allowing every member of every district scheme to have equal access to health care services and goods. Chapter 3 gives a tentative definition of “risk equalisation” in a context where health insurance schemes do not compete with each other. Chapter 4 develops a proposal for developing a risk equalisation formula for the Ghana Health Insurance. This formula has to take into account the availability of relevant statistical data. Quite obviously the formula has to be changed regularly to take into account changes over time on the income and expenditure side of the district schemes.

### **Distributing Subsidies of the Fund according to the 2003 Act**

The National Health Insurance Fund established by the National Health Insurance Act has as its aim to:

*“provide finance to subsidize the cost of provision of healthcare services to the members of district mutual health insurance schemes licensed by the Council”.*<sup>44</sup>

The subsidies provided by the Fund are mainly financed through two sources of income:

- the health insurance levy created by the Act, and

<sup>44</sup> Parliament of the Republic of Ghana 2003) Art. 77 (1).

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- the contribution of 2.5 per cent of the wage bill of the members of SSNIT.

According to the ILO discussion paper (Léger & Yankah, 2004) the Fund will receive in 2004 about 165.5 bn. cedis (billion cedis) from the health insurance levy and 262.2 bn. cedis from SSNIT. Together the levy and the SSNIT contribution provide the Fund with a total income of about 427.7 bn. cedis.

Besides these main sources of income the Fund may have financial revenues from its investments, further subsidies decided by Parliament, as well as donations or voluntary contributions from elsewhere.

In its article 77 part (2) the Act gives some specifications on the purposes for which the subsidies of the Fund to the district schemes have to be used:

“77. (2) For the purpose of implementing the object, the monies from the Fund shall be expended as follows:

- (a) *to provide subsidy of such level as the Council determine to district mutual health insurance schemes;*
- (b) *to reinsure district mutual health insurance schemes against random fluctuation on cost under conditions to be determined by the Council;*
- (c) *to set aside some monies from the Fund to provide for the health care cost of indigents;*
- (d) *to provide support to facilitate provision of or access to health service;*
- (e) *to invest in any other facilitating programme to promote access to health service as may be determined by the Minister in consultation with the Council.”*

This report discusses the points (a) (c) and partially (d) in the context of risk equalisation between schemes. Point (e) may be seen as that part of (d) which the Minister has determined to be the priority.

Before discussing risk equalization, it might be useful to comment very briefly on point (b), the reinsurance of schemes against random fluctuations of cost. Because of the irregular income and expenditure flows over the year, the district schemes will certainly need a contingency reserve of one third of their yearly expenditure. It will be very difficult for the schemes to finance ex ante the accumulation of this reserve. On the hand the Fund may easily provide this contingency reserve to the schemes, because at the initial stage of the introduction of the health insurance the financing of it will generate a surplus.

Of course it must be clearly understood that this contingency reserve has to be used only for short time financial difficulties and that it has to be reconstituted as soon as these difficulties have disappeared. Besides providing the contingency reserves of the district schemes, the Fund should also maintain a central contingency reserve of perhaps 10 per cent of its revenues to reinsure the schemes against expenditures due to circumstances, which could not possibly be foreseen (as an example on the income side: a drought in an agricultural district; on the expenditure side: a pandemic). Once the contingency reserves of the Fund and of the schemes have been accumulated, the Fund would only have to provide the financing of the yearly increase of these reserves.

Besides the financing of the contingency reserves the Fund would probably need to constitute a special fund for financing specific facilitating programmes to promote access to health service, as foreseen in article 77 (2) d and e of the Act.

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## **Risk Equalisation: definition and objective**

Many countries <sup>45</sup> use mechanisms to redistributive financial resources to health care schemes to increase the effectiveness and equity of the provision of health care services and goods to their population. Above all in countries with a competitive health care market, like the Netherlands or Germany, this kind of mechanism has been introduced to reduced risk selection by health care insurance schemes. But similar mechanisms exist also in countries with health insurance schemes organised according to a regional structure, like England, Scotland, Wales and Northern Ireland.

Quite obviously the objectives and methodology of the risk equalisation procedure depend on the organisation and basic characteristics of the different principles. In the case of Ghana the risk equalisation through the subsidies of the Fund is only with respect to the district schemes and does not include the private health insurance schemes. Furthermore the Act does not provide for a risk equalisation procedure including payments from one district scheme to another, nor from a district scheme to the Fund. Only subsidies from the Fund to the schemes are allowed. Therefore the risk equalisation procedure in Ghana has objectives that are similar to the procedures used in the constituent parts of the UK.

Almost always the risk equalisation considers only parameters referring to the expenditure for benefits. In the case of the Ghana health insurance it is necessary also to consider the income side of the schemes, because so many persons are exempted from paying contributions. But before studying the risk factors and developing a proposal for the risk equalisation procedure, it is useful to clarify the definition of the term “risk equalisation” and to clarify its objectives.

### **Definition of risk equalisation**

Although risk equalisation mechanisms are applied in many countries, the terminology used varies from country to country; besides “risk equalisation” these mechanisms are called for example “risk adjustment”, “reinsurance” (Australia) or “weighted capitation” (UK).

The definitions for risk equalisation used by (Parkin & McLeod, 2001) and (Van de Ven & P., 2000) are as follows:

- (1) "a mechanism used to redistribute or allocate resources to insurers (or other people at risk), in order to more accurately reflect the expected costs of the risk structure of the insured actually enrolled." (*Parkin & McLeod, 2001*), p. 3.
- (2) "the use of information to calculate the expected health expenditures of individual consumers over a fixed interval of time (e.g., a month, quarter, or year) and set subsidies to consumers or health plans to improve efficiency and equity." (*Van de Ven & P., 2000*), p. 758.

*Both definitions would be convenient to use in the context of Ghana, provided that the words “costs” and “health expenditure” are replaced by “contributions and health expenditures”. Nevertheless the second definition is more precise because it includes also the general objective of risk equalisation. Therefore we will use this second, slightly adapted definition:*

<sup>45</sup> For some international comparisons: (Parkin & McLeod, 2001) and (Van de Ven & P., 2000).

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*Definition: Risk Equalisation is the use of information to calculate the expected contributions and health expenditures of individual consumers over a fixed interval of time (e.g., a month, quarter, or year) and set subsidies to district mutual health insurance schemes to improve efficiency and equity.*

The definition given here determines the subsidies ex ante by calculating the expected contributions and benefit expenditures. It might be necessary to include also an ex post corrective mechanism if the real contributions and expenditures differ too much from those calculated ex ante.

### **Objectives of risk equalisation**

Countries use risk equalisation mechanism in order to reach quite a number of different objectives. In their country presentations (Parkin & McLeod, 2001) give the following objectives applicable in a non-competitive context similar to the one of the risk equalisation between district mutual health insurance schemes in Ghana:

- to preserve universal access to health care (Belgium);
- to provide equal resources to all members, regardless of their ability to pay (Colombia);
- to compensate those insurers with high risk profiles (Czech Republic);
- to achieve the goal of solidarity (Germany);
- to give health insurance funds with high proportions of the elderly, resources to provide for their care (Israel);
- to allocate resources equitably between health insurance schemes (UK);
- to promote geographical equity in the access to health care or "equal access for equal need" (England);
- to equalise differing geographical needs for Hospital and Community Health Services (Wales);
- to ensure a fair distribution of resources to each district health insurance scheme (Northern Ireland),
- part of the broader health objective of health equality in the country and the improvement of services in poor and deprived communities (Scotland).

There is of course some overlap between these objectives, and some are very general whereas others are more specific. Nevertheless they are all applicable to the situation of Ghana.

In summary the general objective of the risk equalisation is

- *To promote universal access to health care by:*
  - providing equal resources to all members, regardless of their ability to pay;
  - compensating those district schemes with high risk profiles,

- 
- promoting geographical equity in the access to health care and improving services in poor and deprived communities.

Besides these objectives of equity and equal access to health care the risk equalisation procedure should also take into account:

- *Cost Containment*: the procedure should not present disincentives to health insurance schemes to maximise efficiency and control costs.
- *Practicality*: the procedure should be understandable and practical to operate and to revise.

### ***Developing a risk equalisation formula***

The procedure for equalising risk between district public health insurance schemes through the subsidy from the Fund is developed hereafter in different stages, starting with a part addressing differences in the revenues of the schemes and concluding with the equalisation of the differences in health benefit risk factors.

It should be stressed beforehand that the risk equalisation given hereafter considers only the expenditure and the revenues for financing the nationwide minimum health care benefit package provided for by article 64 of the Act.<sup>46</sup> Therefore the schemes should have a well-identified contribution for the minimum health care package and a separate supplementary contribution for any supplementary benefits that they provide to their members on top of the minimum package.

### ***Risk equalisation on the revenue side***

The contributions to be paid by members to the district mutual insurance schemes are “determined by the schemes in accordance with guidelines provided by the Council” ((Parliament of the Republic of Ghana 2003), Art. 34 (1)), but some categories of members are exempted from paying contributions. Unfortunately at the present moment the Legal Instrument (L.I.) of the Act has not yet been published, so that this report has to be limited to some general hypotheses about the guidelines for establishing contributions and for determining the exempted categories of members, besides those already given in art. 34 of the Act. It seems probable that the guidelines will entail the obligation of a minimum contribution together with a scaled contribution depending on the income of the member.

### ***Risk factors***

With the exception of the categories of persons exempted from paying contributions, the right to benefits from the insurance schemes starts only after the contribution has been paid. Consequently for the schemes the risk factors on the revenue side are first of all the categories and number of exempted members. Furthermore the average income within the informal sector differs between the different districts. One should also observe that there are most probably specific problems for collecting contributions from farmers because of the distinctive seasonal income and expenditure flows in agricultural production.

As to the exempted categories, some are already stated in art. 34 and 38 of the Act:

<sup>46</sup> Parliament of the Republic of Ghana 2003, Art. 64: “Every licensed scheme shall provide to its members such minimum healthcare benefits as the Minister may on the advice of the Council by legislative instrument prescribe.”

- contributors to the Social Security Fund: <sup>47</sup> for 2004 the ILO report (Léger & Yankah, 2004) states that 979.728 persons are contributing to SSNIT;
- pensioners under the Social Security Pension Scheme: for 2004 the ILO report estimates that SSNIT pays benefits to 53.320 old age pensioners and to 600 disabled persons,
- indigent persons determined according to a means test prescribed by the Minister on the advice of the Council. <sup>48</sup>

According to art.34 (3) of the Act other categories of persons may be exempted by the way of regulations from paying contributions. Categories of persons that may be exempted are the following ones:

- children under the age of 18 years: 48.4 per cent of population, according to the 2000 census;
- elderly persons,
- disabled persons.

## ***Equalisation***

The equalisation procedure on the revenue side of the schemes proposed in this paper has two objectives:

- (1) to give a subsidy calculated according to the number of the members of the schemes who are exempted from paying contributions, so that the scheme receives a contribution for every member, either directly paid by this member or indirectly through the subsidy from the Fund;
- (2) to give a subsidy for equalising the average contribution amount of the schemes.

These two objectives can be reached in the following way:

- (1) In a first step the Fund calculates for every scheme an average subsidy per exempted member equal to the average contribution of all non-exempted members of all district schemes;
- (2) The difference between the overall average of the contributions for all schemes and the average contribution in a given scheme is eliminated through an additional subsidy or by reducing the subsidy calculated in the first step.

<sup>47</sup> Parliament of the Republic of Ghana 2003, Art. 34 (4) states that “Where the monthly contribution of a contributor to the Social Security Fund amounts to or exceeds the minimum monthly contribution required under a district mutual health insurance scheme, the contributor shall be entitled to the minimum health care benefits under the district mutual health insurance scheme without any further contribution to the district mutual health insurance scheme.” It seems very unlikely that the contribution of a member of SSNIT will be below the minimum contribution. Whereas the ILO discussion paper (Léger & Yankah, 2004) supposes that the minimum yearly contribution for 2004 is 36.000 cedis, the average yearly contribution of a SSNIT member to the Fund amounts to 311 166 cedis. Therefore this report will suppose that all SSNIT members are entitled to the minimum health care benefits.

<sup>48</sup> Parliament of the Republic of Ghana 2003, Art. 38 (1).



We suppose that the Legal Instrument will prescribe a minimum contribution, so that the average contribution will be above this minimum contribution per member.

To calculate the subsidy we need first to calculate the average contribution from the non-exempted members.

Let us first define the notations used:

$N_i^{contr}$	number of the members of the district scheme $i$ who are paying contributions
$N_i^{ex}$	number of the members of the district scheme $i$ exempted from paying contributions
$C_i$	total amount of contributions received by the scheme $i$
$N^{contr}$	total number across all schemes of members paying contributions
$C$	total amount of contributions received by all schemes
$c_i$	average contribution received by scheme $i$
$c$	average contribution across all district schemes.

Then the average contribution for scheme  $i$  is given by:

$$c_i = \frac{C_i}{N_i^{contr}} \quad (1)$$

and the overall average contribution for all schemes by the following formula:

$$c = \frac{\sum_i C_i}{\sum_i N_i^{contr}} \quad (2)$$

The first part of the subsidy  $S_i^1$  from the Fund to the scheme  $i$  is calculated by multiplying the average contribution for all schemes by the number of exempted members of the scheme  $i$ :

$$S_i^1 = c * N_i^{ex} \quad (3)$$

To eliminate the difference between the overall average contribution and the specific average contribution for scheme  $i$ , this first part of the subsidy  $S_i^1$  is corrected by a second component  $S_i^2$  which may be positive or negative:

$$S_i^2 = (c - c_i) * N_i^{contr} \quad (4)$$

It should be noted that by the given definitions the sum of the  $S_i^2$  across all schemes is zero:

$$\sum_i S_i^2 = 0 \quad (5)$$

Two comments have to be made concerning the members of SSNIT and the indigent persons.

It would be possible to pay a higher subsidy for every member of SSNIT belonging to a district scheme, for example the average contribution of a SSNIT member to the fund instead of the average contribution. But in this case the average contribution of some

district schemes will increase significantly with respect to others because the percentage of the population belonging to SSNIT is not equally distributed over the country. A region like Upper West where the private informal sector comprises 87.1 per cent of the population will not benefit so much from this subsidy than Greater Accra where the informal sector is 67.1 per cent.<sup>49</sup>

Concerning the indigent persons, the Act in art. 38 (4)<sup>50</sup> leaves open the way of how the provision of health care to these persons is financed. In fact there are two possibilities, either by reimbursing directly the expenditure for specific health care services and goods, or by paying contributions. The direct reimbursement of the health care cost would need to identify separately these persons and their specific benefits and would imply a high administrative cost. There exists also some danger of stigmatizing these needy persons through the explicit identification of their health benefits. On the other side by paying contributions for these persons through a subsidy from the Fund they become equal members of the scheme with the same rights and obligations as all the others. The determination of the subsidy for paying the contribution for an indigent is straightforward once the means test has determined that the criteria of indigence are fulfilled. Similar situations exist in other countries. For example in Luxembourg before 1992 the Government reimbursed directly part of expenditure for the health care benefits of the farmers through a subsidy from the State budget. After 1992 this direct subsidy was replaced by the payment out of the State budget of part of the contributions of the farmers.

### **Data needed**

The calculation of the risk equalisation procedure on the revenue side of the district mutual health insurance schemes is largely dependent on the regulations that have to be determined by the Legal Instrument of the Act. In order to compute the subsidy one has to know specifically:

- The guidelines according to which the schemes have to fix the contributions of their members, in particular, if provided by the guidelines, the minimum and maximum yearly contribution.
- The definition of the categories of members of the schemes exempted from paying contributions, especially the definition used for determining if a person is indigent.

The calculation of the subsidy is based on data to be collected by the district schemes. In order to establish in the future reliable forecasts of these data the collection of it should be done on a monthly basis. The data needed are the following:

- $N_i^{contr}$ , the number of contributing members of the scheme  $i$
- $C_i$ , the total amount of contributions
- $N_i^{ex}$ , the number of exempted members: this number should be disaggregated by categories of exemption (e.g. SSNIT members, pensioners, children, indigent persons).

<sup>49</sup> According to the 2000 Population & Housing Census (Ghana Statistical Services, 2000), Table 4).

<sup>50</sup> Parliament of the Republic of Ghana 2003), Art. 38 (4): “The Council shall in consultation with the managers of district mutual health insurance schemes determine the method to secure the provision of the minimum health care benefits to indigents.”

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At least once a year the membership and contribution statistics of every scheme should be disaggregated by age and gender.

### ***Risk equalisation on the expenditure side***

#### **Risk factors**

The needs for health care services and goods differ from one person to another. On the expenditure side the risk equalisation procedure tries to redistribute the revenues of the health insurance in such a way that those scheme which have a population with higher health care needs get a higher share than those with less needs. What are the variables, which characterise a population with higher health care needs? The most common variables used in countries with a risk equalisation system are gender and age. The Netherlands uses age and gender together with two more factors, one to take into the regional differences and another to take into account differences due to the socio-economic status. Some countries, like Germany or Belgium, use a factor measuring disability. Ireland adds to age and gender a variable “utilisation” measured by the number of “bed nights” of hospitalisation as a proxy of health status. The Irish authorities are trying to replace the “bed nights” proxy by a more complex utilisation measure based on a list of diagnoses. Israel uses a system of fixed payments, which schemes receive for members having a “severe disease”.

It is quite evident that a large number of variables will make the risk equalisation very complicated because of the huge amount of data needed. In the first place the data must be available for every scheme participating in the risk equalisation mechanism. In the case of Ghana quite a number of the districts have a population of less than 100.000 inhabitants. One should add that the risk equalisation mechanism for distributing subsidies to the district schemes has to start as soon as possible at a moment where the number of members of the schemes is very reduced and certainly less than half a million of persons. This implies that the number of risk classes has to be very reduced, at least at the beginning. Otherwise the number of persons of a scheme within a cell defined by a given value of every variable may be very reduced so that the evolution of the amount of health care services and goods may become very erratic.

As a starting proposal one may consider the following variables:

- Gender
- Age: 0 –4, 5 – 18, 19 – 59, 60+<sup>51</sup>
- Utilisation: outpatient benefits, Inpatient services.

Even with this reduced number of variables and values, the total number of cells is  $2 * 4 * 2 = 16$ . Adding a fourth variable with 2 values to take into account regional differences between urban and rural districts would double the number of cells to 32, and evidently double the number of data to be managed.

One word of caution is perhaps useful with respect to the variable “utilisation”. Indeed the abolishment of the “cash and carry” system of user fees and its replacement by the health insurance will bring along some changes on the utilisation of the health care system, and in

<sup>51</sup> The age 18 has been chosen so that it coincides with the supposed maximum age for exempted children. Just one group has been given for elderly persons, because only about 7 per cent of the population of Ghana are of age 60 and above.

particular may increase significantly the use of inpatient services. Before using this variable in the risk equalisation procedure it may be more cautious to observe its evolution during the first few years of implementation of the health insurance and include it in the equalisation procedure only in a second stage.

## Equalisation

To develop the part of the risk equalisation corresponding to the risks on the benefit expenditure side we start with a general theoretical formula corresponding to the procedure used in Switzerland.<sup>52</sup> This calculation is done in three steps.

The first step leads to the calculation of the average per capita health expenditure.

The notations used in the formula of this chapter are as follows:

$B_i(k)$  benefits paid by the district scheme  $i$  for risk group  $k$ .

$B(k)$  total benefits paid by all schemes for risk group  $k$ .

Therefore

$$B(k) = \sum_i B_i(k) \quad (6)$$

$N_i(k)$  the number of members covered by the district scheme  $i$  in risk group  $k$

$N(k)$  the total number of insured members across all schemes in risk group  $k$

So

$$N(k) = \sum_i N_i(k) \quad (7)$$

The average per capita health expenditure  $\bar{E}$  is then given by:

$$\bar{E} = \frac{\sum_k B(k)}{\sum_k N(k)} \quad (8)$$

The second stage of the procedure determines the positive or negative difference  $R(k)$  between the average per capita expenditure for risk class  $k$  across all district schemes and the average per capita expenditure  $\bar{E}$  across all district schemes and all risk classes:

$$R(k) = \frac{\sum_i B_i(k)}{\sum_i N_i(k)} - \bar{E} \quad (9)$$

Finally the subsidy part  $S_i^3$  corresponding to the equalisation of the health benefit risk factors for the district scheme  $i$  is calculated as follows:

$$S_i^3 = \sum_k R(k) * N_i(k) \quad (10)$$

From the preceding definitions it follows immediately that

<sup>52</sup> Parkin & McLeod, 2001, p. 59-60.

$$\sum_i S_i^3 = 0 \quad (11)$$

Indeed  $S_i^3$  is calculated on the base of  $R(k)$ , the difference between the average per capita expenditure for risk class  $k$  across all district schemes and the average per capita expenditure  $\bar{E}$  across all district schemes and all risk classes. So for some district schemes the part  $S_i^3$  will become negative and has to be subtracted from the parts  $S_i^1$  and  $S_i^2$  defined under the chapter on the risk equalisation on the revenue side. For the Fund on the global level of all district schemes the risk equalisation on expenditure side defined according to this formula will not entail any increase of the subsidies. What will happen is that the subsidies defined on the revenue side of the schemes will be adapted according to the health risk profiles of the schemes. This replaces the contributions that in other countries, like for example Germany or Switzerland, the insurers have to send to the risk insurance fund in the case where their risk structure is below the average.

## Data needed

In order to calculate the benefit expenditure part  $S_i^3$  every district scheme has to collect data disaggregated according to the decided risk groups. With the risk factors and classes proposed before, this means that all the statistics should be available by gender, separately for the four age groups and separately for outpatient and inpatient care. Most probably it will be very difficult to collect the statistics on a monthly basis. Indeed the providers will need some time to establish the information on health care services and goods provided to members of the schemes and to send it to the corresponding schemes. Furthermore the schemes will need to check the correctness of this information before establishing statistics. In order to allow the adaptation of the risk factors and classes taken into account by the risk equalisation procedure, the yearly statistics on insured members and health care benefits should be established in a much more disaggregated way, as for example by single age, subdistricts, and socio-economic categories and by a more detailed classification of health care services and goods.

If  $k$  is the risk group (in the proposal given here  $k = (\text{gender}, \text{age class}, \text{utilisation class})$ ) the statistics needed by quarter or at least by year and separately for every scheme  $i$  are the following ones:

- $N_i(k)$       number of members covered by the district scheme  $i$  in risk group  $k$
- $B_i(k)$       benefits paid by the district scheme  $i$  for risk group  $k$

With these data only it would not be possible to compare these statistics with those coming from providers like those published in (Adams, Darko and Accorsi, 2001b) and (Adams, Darko and Accorsi, 2001a), because the providers know only the number of patients to whom health care services and goods are provided, not the number of members of the schemes who may or may not be treated. Therefore the data collected should also include:

- $P_i(k)$       number of patients covered by the scheme  $i$

## Procedure for distributing the health care fund

The subsidy  $S_i$  of the Fund to the district mutual health scheme  $i$  is determined by adding the following three components:

- $S_i^1$ , for completing the contributions for the exempted members,
- $S_i^2$ , for equalising the average contribution to the overall average contribution for all schemes, and
- $S_i^3$ , for equalising the health benefit risk structure:

$$S_i = S_i^1 + S_i^2 + S_i^3. \quad (12)$$

The second and the third of these three components may be negative.

Two further conditions have to be fulfilled:

- As the Act does not foresee any contribution of the schemes to the Fund, the amount  $S_i$  has to be positive,
- Obviously the total amount of subsidies paid to the schemes must not be above the financial means of the Fund for providing subsidies to the district schemes. If this is not the case all the subsidies have to be reduced appropriately.

So, if  $S^{\max}$  is the amount at the disposal of the Fund for providing subsidies to the schemes, the subsidy  $S_i$  for scheme  $i$  is given by the following formula:

$$S_i = \min \left( 1, \frac{S^{\max}}{\sum_i \max(0, S_i^1 + S_i^2 + S_i^3)} \right) * \max(0, S_i^1 + S_i^2 + S_i^3) \quad (13)$$

In order to avoid an irregular flow of revenues on the side of the schemes, which creates inevitably cash flow problems, it is proposed that the Fund transfers the subsidy on a monthly basis to the schemes.

The subsidy due to a scheme could be recalculated periodically:

- every month to take into account the changes concerning the number of contributing and exempted members as well as the changes of the average contribution,
- every quarter to take into account the changes concerning the amount of benefits paid in every risk group.

Depending on the availability of data a periodical recalculation on a monthly / quarterly basis may be impossible. In that case the amount of subsidy due to a scheme should be estimated at the beginning of the year and corrected through the last monthly payment corresponding to the given year, or through the subsidy payments of the following year.

### ***Transitional procedure***

It will be very difficult at the initial period of the implementation phase to collect the data needed to compute the subsidy part  $S_i^3$  corresponding to the equalisation of the health benefit risk factors for the district scheme  $i$ . Therefore it seems to be advisable to distribute the subsidy during the first two or three years at least according to a formula composed only of the first two components referring to the categories of members and to the contributions:

$$S_i = \text{Min} \left( 1, \frac{S^{\max}}{\sum_i \text{Max}(0, S_i^1 + S_i^2)} \right) * \text{Max}(0, S_i^1 + S_i^2) \quad (14)$$

In this way the Council will get the time necessary to collect the data needed to determine the most significant risk factors and to define suitable risk groups.

## Conclusion

The proposal for the risk equalisation of the health insurance through the subsidies from the Fund to the schemes on a formula is based on three parts. The two first components complete the contributions received by the schemes by paying contributions for every exempted member and equalise the average contributions of the schemes. As the schemes receive a contribution for every member, either directly from the member or indirectly through the subsidy, the number of dependent insured persons, which in some countries is taken into account as a risk factor, does not need to be considered separately within the risk equalisation procedure. The parameters for controlling the two first components of the risk equalisation on the revenue side of the schemes are the rules for determining the contributions, those determining the categories of members exempted from paying contributions and the means test used for indigence. Furthermore the average contribution across all district schemes used in the two components could be replaced by a different amount.

The third component of the risk equalisation formula is the one meant to equalise the risk for the schemes concerning the health expenditure side. Compared to the first two components this third component will probably need to be adapted rather frequently by improving gradually the definition of the risk factors and groups so that they take better into account the differences in health care consumption and needs.

The first component determines almost completely the total amount of the subsidy transferred from the Fund to the schemes. The second and third component redistribute the subsidy calculate by the first component in such a way that the average contribution of the schemes is equalised and their differences of expenditure due to the risk factors are taken into account.

## Annex. Data frames for data collection

The two tables given here illustrate the data that need to be collected for calculating the risk equalisation formula given in the text. On the national level the collected data have to be entered into a statistical database, so that the data coming periodically from the district schemes can be used to compute statistical indicators comparing the district schemes to one another and analysing their evolution over time. In order to make the centralisation of the statistical data at the national level easier and avoid typing errors the district schemes should transfer their data to the Council under electronically in a way that could be entered easily into a statistical database.

The first table gives the data needed for the calculation of the first two components of the risk equalisation formula.

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**District Public Health Insurance Scheme xxxx**

**Date:**

**Year:**

**yyyy**

**Month:**

**mm**

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**Table 1. Monthly Report on Members and Contributions**

	Number of members on last day of month			Contributions received		
	Men	Women	Total	Men	Women	Total
Categories:						
Contributors						
Exempted Members						
Members of SSNIT						
Pensioners of SSNIT						
Children under age of 18 years						
Indigent members						
...						
Total number of members						

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The second table is about the data concerning the risk factor component of the risk equalisation formula. Obviously the data collected depend on the definitions of the risk groups. Over time the risk factors and the definition of the risk groups will change. Therefore it is advisable that according to a national statistical framework more data are collected from district schemes. As to the benefits, the schemes should establish a database, where the amounts of benefit are recorded individually, by provider, by patient and by benefit category. Furthermore the classification of benefits and providers should be compatible with the methodology of the System of Health Accounts as given in the manual of the OECD.<sup>53</sup>

<sup>53</sup> Organisation for Economic Co-operation and Development, 2000 and World Health Organization, 2003.



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**District Public Health Insurance Scheme xxxx****Date:****Year:****yyyy****Month:****mm**

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**Table 2.      Quarterly report on number of members and amount benefits by risk group**

	<u>Number of members on last day of month</u>				<u>Amount of Benefits received</u>		
	<u>Month 1</u>	<u>Month 2</u>	<u>Month 3</u>	<u>Average</u>	<u>Outpatient care</u>	<u>Inpatient care</u>	<u>Total</u>
Categories:							
Men							
Age 0 - 4							
Age 5 - 18							
Age 19 - 59							
Age 60+							
Women							
Age 0 - 4							
Age 5 - 18							
Age 19 - 59							
Age 60+							
TOTAL							

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## **Preliminary resource allocation in the Ghana National Health Insurance System**

(A supplementary technical note to  
Discussion paper No. 6 – September 2004)

### **List of accronyms**

DMHI	District Mutual Health Insurance (Scheme)
NHIC	National Health Insurance Council
NHIF	National health Insurance Council
PCHI	Private Commercial Health Insurance (Scheme)
PMHI	Private Mutual Health Insurance (Scheme)
LI	Legal Instruments



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## 1. Introduction and objective

The Government of Ghana plans to deliver the first services to the population insured under the 2003 National Health Insurance Act (Parliament of the Republic of Ghana 2003, hereafter called the “Act”) as of November 2004. The act provides that in every district of Ghana a mutual health insurance scheme will be established. With the exception of the members of the Armed Forces of Ghana and the Ghana Police Service, every resident of the country has to belong to either a licensed private health insurance or to a district scheme. Existing voluntary Mutual Health Insurance Schemes will continue to exist as licensed private mutual schemes or as District Mutual Health Insurance (DMHI) schemes. Only the District Mutual Health Insurance Schemes will receive subsidies from the National Health Insurance Fund (NHIF) that is administered by the National Health Insurance Council (NHIC). The National Health Insurance Fund has two major sources of income: the proceeds from the national health insurance levy (essentially a 2.5% VAT type tax earmarked for health) and a 2.5% contribution on the insurable earnings of members of the Ghana Social Security National Trust (SSNIT).

In the Discussion paper No. 6<sup>54</sup> the ILO suggested the principles for defining the formula for the equalisation of risks between the different DMHIs and the distribution of the subsidies from the Fund to the district schemes. According to the Act, the National Health Insurance Council (hereafter called the “Council”) has to submit every year to Parliament the formula for distributing the subsidies of the Fund.

The formula developed in that discussion paper largely deals with the principle of risk equalisation in the mature state of the development of the national health insurance system, i.e. when all district schemes are in existence and are fully operating. This is presently not the case and the District Mutual Health Insurance Schemes are at different stages of development. However, contributions have been collected from SSNIT members since the beginning of the year and the health insurance levy has been charged since the beginning of August 2004. Equity considerations demand that the payments of contributions is reciprocated by genuine access to the defined minimum benefit package that is guaranteed by the law and the legal instruments.

Thus this note aims at developing a preliminary formula that can be used to allocate resources of the NHIF to district schemes or district administrations during the build-up phase of the national system.

## 2. Distributing Subsidies of the Fund according to a preliminary formula

Discussion paper No. 6 developed a fully fledged risk equalisation formula for the national health insurance system which consisted of three elements:

- (a) the equalisation of revenue differentials due to different proportions of persons exempted from contributions between different DMHIs;
- (b) the equalisation of different general income levels (and affiliated premium levels for a standard national benefit package) between different DMHIs,
- (c) the equalisation of different morbidity risks between different DHMIs.

<sup>54</sup> Wagener, R. (ILO): Risk Equalisation within the Ghana National Health Insurance, Discussion Paper No. 6.

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As long as not all schemes are fully operational and the statistical systems that provide the minimum set of information needed for the equalisation formula are not in place, a preliminary resource allocation formula has to be found. That formula does not provide for a full risk equalisation. It is suggested here to limit the risk equalisation provisionally to equalising of the financial effects of different proportions of persons exempted from the payment of contributions as well as the transfer of contributions on behalf of the insured SSNIT members. Thus the preliminary formula limits the risk equalisation to part a) and a limited aspect of part c) of the above suggested fully fledged risk equalisation mechanism. Since the bulk of the resources of the DMHIs during the initial phase of the National Health Insurance System will consist of the centrally collected SSNIT premium and the health insurance levy the formula will allocate these incomes to the DHMIs in accordance with the number of persons for whom no direct contributions are receivable by the district schemes.

## **2.1 Some basic features of the preliminary resource allocation process**

While the preliminary resource allocation process requires some degree of pragmatism it should be transparent and should be built on a minimum standardisation of fees throughout the country.

### **Pragmatism**

At the initial stage of the National Health Insurance System the resource allocation formula has to be simple so that even very young DMHI schemes that are being set up only when the overall system will be launched in November 2004 are able to claim the proper allocation of resources. It is expected that up to 50% of the DMHIs will actually on the start up date only consist of a group of four to five administrative clerks in district administrations who will have to ensure that SSNIT members living in the district receive the “free” care they are entitled too, while they are at the same time building up the district health insurance scheme. In other districts health insurance schemes with three and more years of experience will already be in full operation. Due to that heterogeneity the administrative capacity and the data and information base of the different DMHIs will vary widely. The resource allocation formula thus can only use data and structural parameters that are available in all schemes. Some degree of pragmatic estimation is necessary at the beginning.

### **Minimum requirements**

However, a minimum of national standardisation on the expenditure side should be in place before the resource allocation process can begin. This minimum standardisation should consist of a preliminary fee schedule which contains uniform national fees of health care facilities at primary, secondary and tertiary care level. This means, for example, that an outpatient consultation fee at health centres should be uniform throughout the country. Consultation fees at outpatient departments of district and teaching hospitals can be different from fees in health centres but also should be equal for both levels of care throughout the country. However, this only leads to a fair price level for the different DMHIs if the gatekeeper function in the referral system work properly and avoid, for example, over-utilisation of tertiary care facilities by insured populations in districts where these facilities are located.

### **Time limits and monitoring**

The preliminary resource allocation formula suggested here should initially be applied for about 14 month (i.e. 1 November 2004 to 31 December 2005). It should be reviewed in November 2005 with a view to explore the possibility to introduce a more sophisticated

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formula for the budget year 2006. The financial effects of the formula on the financial situation of the DMHIs schemes needs to be monitored on a quarterly basis.

The minimum data that need to be collected for the first two months (November and December 2004) and each quarter thereafter (or any other 3 monthly period in line with the fiscal year in the country) during the initial phase when the preliminary formula is in effect are:

- (1) number of non-SSNIT persons registered and eligible for benefits;
- (2) number of SSNIT persons eligible for benefits;
- (3) number of people exempted and eligible for contributions and eligible for benefits;
- (4) volume of non-SSNIT contributions;
- (5) volume of contributors on behalf of SSNIT contributors;
- (6) fees paid to providers on behalf of non-SSNIT contributors;
- (7) fees paid to providers on behalf of SSNIT members and if possible;
- (8) volume of fees paid on behalf of exempted persons;
- (9) total contribution income of the scheme;
- (10) total income of the scheme;
- (11) total benefit expenditure of the scheme,
- (12) total expenditure of the scheme.

These data will act as an early warning system should the preliminary formula create any financial problems or the accumulation of unjustified amounts of reserves in district schemes.

Even after the initial phase the formula and its distributive effects need to be constantly reviewed and the formula is subject to parliamentary approval each year.

## **2.2. A preliminary formula**

The contributions to be paid by members directly to the district mutual insurance schemes are “determined by the schemes in accordance with guidelines provided by the Council” ((Parliament of the Republic of Ghana 2003), Art. 34 (1)), but some categories of members are exempted from paying contributions. Unfortunately at the present moment the Legal Instrument (L.I.) of the Act has not yet been promulgated, so that this note has to be limited to some general hypotheses about the categories of exempted persons drawn from early drafts of the LIs and those already given in art. 34 of the Act.

It seems probable that government will recommend a minimum contribution per member. A benchmark for the minimum contributions could be an amount equal to 2.5% of the minimum wage as that is the minimum contribution that has to be paid on behalf of a SSNIT member.

As to the exempted categories, some are already stated in art. 34 and 38 of the Act:

- contributors to the Social Security Fund: <sup>55</sup> for 2004 the ILO report; on whose behalf contributions are deducted at source (i.e. the 2.5% of their insurable wage and submitted to the NHIF); the estimated number is in the order of 1 million people;
- pensioners under the Social Security Pension Scheme: for 2004 the ILO estimates that SSNIT pays benefits to about 53,000 old age pensioners and to 600 disabled persons,
- indigent persons determined according to a means test prescribed by the Minister on the advice of the Council <sup>56</sup> as defined in the LIs.

According to art.34 (3) of the Act other categories of persons may be exempted by the way of regulations from paying contributions. According to the draft of the Lis, categories of persons that may be exempted are the following:

- children under the age of 18 years, if both parents are contributors or they belong to a single parent family;
- elderly persons over age 70,
- disabled persons without any earnings capacity.

The preliminary resource allocation formula proposed in this paper has the limited objectives:

- (a) to provide a subsidy to each DMHI scheme calculated according to the number of the members of the schemes who are exempted from paying direct contributions (including the SSNIT contributors), so that each scheme receives a contribution for every member, either directly paid by this member or indirectly through the subsidy from the Fund;
- (b) equalise some initial inequalities on the expenditure side, i.e. allow for differential per capita subsidies for the young, the middle aged and the persons over 70,
- (c) allocate enough resources to new schemes to permit a the set-up of a minimum administration regardless of the number of initial insured persons without creating disadvantages for schemes that have already build up their administrative structures.

That subsidy payment for a scheme should ideally be calculated as the sum of two elements: First, the product of:

<sup>55</sup> Parliament of the Republic of Ghana 2003, Art. 34 (4) states that “Where the monthly contribution of a contributor to the Social Security Fund amounts to or exceeds the minimum monthly contribution required under a district mutual health insurance scheme, the contributor shall be entitled to the minimum health care benefits under the district mutual health insurance scheme without any further contribution to the district mutual health insurance scheme.” It seems very unlikely that the contribution of a member of SSNIT will be below the minimum contribution. Whereas the ILO discussion paper (Léger & Yankah, 2004) supposes that the minimum yearly contribution for 2004 is 36,000 cedis, the average yearly contribution of a SSNIT member to the Fund amounts to 311 166 cedis. Therefore this report will suppose that all SSNIT members are entitled to the minimum health care benefits.

<sup>56</sup> Parliament of the Republic of Ghana 2003, Art. 38 (1).



- a) the average cost of the delivery of minimum defined benefit package per insured member (in the age category “under 18”, 19-69 and “over 70”), and
- b) the number of exempted members (including SSNIT members) per scheme,

and secondly an amount that covers the cost of a minimum administrative set-up.

Let us first define the notations used:

$N_{i,k}^{ex}$	number of the members of the district scheme $i$ exempted from paying contributions in age group $k$
$c_k$	national average “cost” (i.e. the sum of the fees charged for services rendered to a member of group $k$ during a year) of the minimum benefit package for persons presently insured in age group $k$
$sa$	is defined amount of a standard administrative cost for a scheme with a minimum administrative set up

The preliminary subsidy  $S_i$  from the Fund to the scheme  $i$  is calculated by multiplying the average contribution for all schemes by the number of exempted members of the scheme  $i$  and adding a standard amount  $sa$  for administrative cost:

$$S_i = sa + \sum_k c_k * N_{i,k}^{ex} \quad (1)$$

Without a standard administrative amount the existing DMHIs would be disadvantaged if the NHIC were to support the new starters by the provision of staff and non-staff start up cost. Since the cost of the minimum benefit package per age category is difficult to calculate based on the present data base and in view of the heterogeneity of the currently used fee schedules used it is suggested here to use the following proxies for the initial year or until the next review of the allocation formula:

$c_k$	is 72,000 cedis for the age group 19 to 69 (i.e. the figure presently discussed as minimum contribution, which is here interpreted as a per capita contribution for <i>one</i> adult person <sup>57</sup> ),
	54,000 cedis for the age group under 18 (i.e. 75% of the amount of the age group 19 to 69)
	144,000 cedis for the age group over 70 (i.e. 200% of the amount assumed for the age group 19 to 69)
	$sa$ should be an amount equal to the average salary of 5 administrative local staff plus a surcharge of about 100% for non-salary staff cost and other non-staff cost.

<sup>57</sup> This means that paying the 2.5 per cent contribution entitles a SSNIT member to coverage for himself and his children if her/his spouse is also paying contributions, i.e. either through SSNIT membership or as an informal sector contributor. The cost of covering the children will be covered through subsidies. This means that the amount cedis 72,000 is assumed here to cover the cost of the provision of the minimum benefit package for one adult member only. This is compatible with the calculation made in the context of the national public health budget.

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It should be noted that the amount of *sa* could also be paid in kind, i.e. through the assignment of staff from the NHIC and the direct provision of equipment, office space etc..

### **2.3. Tentative financial implications**

Before the above formula can be used at least a conservative estimate has to be established to ascertain that the total volume of transfer payments made in accordance with the formula will not exceed the total potential volume of transfer payments. The following table 1 provides such a conservative estimate.

For the purposes of this risk analysis it has been assumed, that

- (a) the maximum number of people on whose behalf transfer payments are made from the NHIF to the DMHIs consists of 1 million SSNIT members, 1 million poor, 2.25 million children of SSNIT members and 800,000 elderly including a number of about 55,000 SSNIT pensioners,
- (b) a standard administrative amount of 135 mill. cedis per DMHI per annum is adequate.

The table contains values for a full year of operations. The price and income base is that of 2004 largely defined by an annual average wage of 13. 5 million cedis and the above mentioned values for per capita transfers in the respective age groups. The result of the exercise shows that - on an annual basis and the basis of the chosen assumptions - there remains in the first year a comfortable margin for the administration of the NHIF and the build-up of a reserve which will be needed to maintain stable rates of the levy and contributions for the short to medium term future. The estimate can be considered conservative since

- a) not all persons eligible for exemption from contributions will be registered in the first year,
- b) the collection of SSNIT contributions since the beginning of the year and levy since 1 August already has created a sizeable reserve in the NHIF fund which provides for an additional margin of safety and is not used in the calculation, and
- c) interest income on the initial reserve has not been taken into account.

**Table 1. Crude estimate of the amount of annual transfers to DHMIS from the NHIF**

<b>Expenditure respect. income items</b>	<b>Number of beneficiaries or contributors</b>	<b>Per capita transfer resp. contribution amount in cedis</b>	<b>Total in bill cedis</b>
Expenditure on behalf of			
- SSNIT members	1,000,000	72,000	72
- the poor <sup>1</sup>	1,000,000	63,000	63
- elderly	800,000	144,000	115.2
- children under 18	2,250,000	54,000	121.5
Standard admin. support			16.2
Total	5,050,000		387.9
Expected income of the NHIF			
2.5 % SSNIT contributions	1,000,000	337,500	337.5
Health Insurance levy			175
Total			512.5
Surplus			124.6

Note: <sup>1</sup> Assumed that about 50 per cent of the poor are children and 50% are in age group 19 to 69 the elderly poor are included in the elderly.

### 3. Conclusion

The suggested formula for the preliminary resource allocation between the NHIF and the DMHIs can only be considered preliminary. It does not – and cannot at this stage - provide for a fair equalisation of risks between the DHMIs which should also take into account real differences in the morbidity structures and income levels of the populations that the different DMHIs cover.

The transfer amounts per capita are based on discretionary amounts. It is not clear whether they will really reflect a fair estimate of average cost for the minimum benefit package on the basis of the new (equally preliminary) fees that will be introduced in November. The formula will not likely jeopardize the financial equilibrium of the NHIF and probably leaves enough room to cover unexpected financial risks. However, the effects of the formula need to be monitored at least once every quarter to avoid financial shortages or excess reserves in individual DHMIs. The data that need to be collected for this specific purpose have been identified in section 2.1.

The preliminary formula should as soon as possible be replaced by the full risk equalisation method as described in discussion paper No 6. To enable that transition, all efforts should be made to establish the data base for the full equalisation mechanism as soon as possible, i.e. data according to the minimum data frame established in Discussion paper No. 6 have to be collected from day one of the operation of the National Health Insurance System.

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# **Comments on the planned bi-partite Private Mutual Health Insurance Scheme of the Ghana Federation of Employers and The Ghana Trade Union Congress**

(Discussion paper No. 7 – October 2004)

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## **List of accronyms**

DMHI	District Mutual Health Insurance (Scheme)
NHIC	National Health Insurance Council
NHIF	National Health Insurance Fund
PCHI	Private Commercial Health Insurance (Scheme)
PMHI	Private Mutual Health Insurance (Scheme)
LI	Legal Instruments

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## 1. Introduction and objective

In August 2003 the Ghanaian Parliament passed the National Health Insurance Act (Act 650). In accordance with section 103 of the Act the Minister of Health, in consultation with the National Health Insurance Council, has issued the National Health Insurance Regulation 2004 in the summer of 2004 (called the “legal instruments”).

The Act states that all Ghanaians have to join a licensed health insurance scheme (either a District Mutual Health Insurance Scheme (DMHI) or a private commercial health insurance scheme (PCHI) or a private mutual health insurance scheme (PMHI). The law also establishes a National Health Insurance Fund (“the Fund”) that will be administered by the National Health Insurance Council (NHIC). The Fund will provide subsidies to DHMIs, as part of risk equalisation and to support groups exempted from paying health insurance premiums (the elderly, indigents etc).

The main income of the Fund will consist of a transfer of 2.5 percentage points from the existing 17.5 per cent contribution from members of the Social Security National Trust (SSNIT); and a 2.5 per cent general health levy (i.e. a type of value added tax to on consumption of selected goods and services). District Mutuals, private commercial insurance schemes and private mutual insurance schemes will also collect contributions directly from their members. In DMHI schemes such additional flat rate contributions will only be paid by members who are not contributing to SSNIT, i.e. largely the population in the informal economy. The Fund will be subsidising the licensed DHMIs. PCHIs and PMHIs are not entitled to subsidies from the Fund.

Through its Social Trust Pilot Project the ILO has supported the development of the National Health Insurance scheme since September 2002. It has issued a set of discussion papers on critical issues in the implementation of the National Health Insurance System and is furthermore testing a mechanism to subsidize the insurance premium for the poor.<sup>58</sup> Employers and worker’s organisations in Ghana, as represented by the Ghana Employers Association (GEA) and the Trades Union Congress (TUC), are considering plans to offer a higher standard of healthcare than might be available to members of the formal sector workforce through District Mutual Health Insurance schemes, through the creation of a private mutual health insurance scheme. While the DHMIs are only obliged to provide a minimum benefit package to all their members the PMHI scheme would provide better quality of care to people in certain groups of formal sector employees. To some extent this would be a continuation of the previous situation where certain employers were providing relatively high quality health care to their workers under enterprise-based collective agreements.

The GEA and the TUC asked the ILO, in June 2004, to provide advice on the potential nature of such a private health insurance scheme. The ILO agreed to provide that advice in the context of the Social Trust Pilot project mission in August 2004. This discussion paper contains the observations of the mission.

## 2. The health financing policy context

The obvious prime objective of all health care policy is the achievement of health gains for the population. Health gains can be made by various means within and outside of the health system. The decision makers in the health system are usually limited to using policy

<sup>58</sup> See ILO Discussion papers Nos. 1 to 5.

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tools that lie within the realm of the health care system, i.e. the improvement of access to and quality of health care available. The declared objective of the introduction of the NHIS is the improvement of access to care for all Ghanaians. The present cash and carry system, with the payment of user fees at the point of delivery of care, is said to deter to some extent up to 80 per cent of Ghanaians who need care from utilising the health care delivery system.

The new NHIS can be interpreted as a pre-paid co-payment system that spreads the cost of paying user fees across the sick and the healthy (or non users) rather than only the sick as in the present cash and carry system. The barrier to utilisation that can be presented by insurance premia is assumed to be removed by the provision of a premium subsidy for the poor. The design of the NHIS contains various subsidisation mechanisms. Firstly, the NHIS will only cover about 20 per cent of the full cost of health services provided in public health care facilities. This figure reflects the average share of the present co-payments at the total cost per unit of services provided. In theory, the government's cost recovery rate can be increased in future via the fee schedule that will have to be agreed upon between the Ghana Health Service as principal provider of care and the NHI Council. However, one of the implicit policy objectives of the act was to increase the resource base of the public health financing system in general. This implies that the government should not seek to decrease the public expenditure for health care through the reduction of the budget of the Ministry of Health. In any case the prices paid by the NHIS for goods and services deliverable to all insured persons will remain heavily subsidised by general revenues. Secondly, cross-subsidisation of the premia for poor insured persons by regular contributors (through the 2.5 per cent contribution rate) and taxpayers in general (through the health levy) is an explicit feature of the act and the LI since the NHIF is required by law to provide subsidies for the premia of the poor. It is obvious that the latter cross-subsidisation requires a regular and reliable income of the NHIF from the 2.5 per cent contribution and the health levy.

The above figure of 80 per cent of deterred users appears high. At present about 75 per cent of the total population are thought to belong to the informal sector. It might be assumed that the formal sector population requires health care to about the same extent as the rest of the population and is able to afford the user fees. If that is the case, then one can conclude that virtually the whole informal sector population is not utilising the health care delivery system. That is obviously not true. This again means that there may be other barriers to utilisation, such as perceived low quality of services, the unavailability of services or geographical distances to the nearest provider unit being too great, or transportation costs too high. These issues may explain the fact that so far not many people in the formal economy are using the public system at primary and secondary levels of health care. Those who benefit from employer-financed care – negotiated through collective agreements – are likely to use it. However, most of them will revert to the public sector for tertiary care, which is generally not available in the private sector. It is obvious that workers in the formal private sector (according to TUC estimates about 50 per cent to 60 per cent of the about one million SSNIT contributors) would seek to maintain access to privileged facilities and quality of care. It is also obvious that they are critical of the contribution payments, which would not lead to a perceived improvement of their personal access to quality primary and secondary care. There is thus an inherent conflict between national solidarity and personal interest. The following sections analyse whether there can be rational solution to this obvious conflict.

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### 3. Legal context

The National Health Insurance Act 2003 (Act 650 – “the Act”) stipulates that:

“Every person resident in Ghana other than a member of the Armed Forces of Ghana and the Ghana Police Service shall belong to a health insurance scheme licensed under this Act.”<sup>59</sup>

This effectively makes membership of a health insurance scheme mandatory, but since all three types of health insurance scheme (DMHI, PMHI and PCHI) may be licensed under the Act, it also means that persons resident in Ghana may choose the type of scheme to which they want to belong.

The Act also states that: “Any group of persons resident in the country may form and operate a private mutual health insurance scheme.”<sup>60</sup>

Therefore, if the social partners did set up a licensed PMHI scheme, those who chose to join it would be meeting their mandatory requirement. However, the scheme would not be compulsory, and employers and employees would still have the options of joining the DMHI or making other arrangements with private schemes. The act provides that all schemes – whether DMHI, PMHI or PCHI) have to provide at least a defined minimum benefit package. Second tier private schemes providing top-up services to other schemes that provide the minimum benefit package thus seem not to be permitted under the act. This seems to limit seriously the policy options for the possible design of the PMHI that the GEA and the TUC are exploring.

### 4. Design options of bi-partite insurance scheme

#### 4.1. *Basic legal nature of the bipartite insurance scheme*

The proposed bipartite health insurance scheme would be a private mutual, which would draw together all workplace-based health insurance schemes into one administrative entity. Provision of services would include services delivered in existing workplace clinics and the scheme would negotiate with a variety of providers, both public and private, to establish a wide network of service delivery.

Such a PMHI would have to meet a variety of requirements under the terms of the Act in order to obtain a license. In particular, the NHIC could require the PMHI to maintain a reserve fund equivalent to six months’ operational income.<sup>61</sup> The PMHI would not qualify for any subsidies from the NHIF, since these may only be paid to DMHIs.

#### 4.2. *Links to the National Health Insurance system*

Under the Act, a PMHI must provide at least the minimum benefit package, although it may, of course, provide a package well in excess of that. Discussions with the Ministry of Health have indicated that it would not be possible for members to be registered with the

<sup>59</sup> National Health Insurance Act, S31(1).

<sup>60</sup> *Ibid.*, S47.

<sup>61</sup> *Ibid.*, S49(1).



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DHMI for the minimum package while the PMHI provided a top-up package. The letter of the law is not entirely clear on this point, but logically if a person were insured with two different types of scheme difficulties would arise over the type and quality of care, and possible waiting times. It would be in the interests of the DHMI to push as much provision as possible to the PMHI to reduce risk and costs; while the PMHI would have to ensure that all basic care were covered by the DHMI.

In particular, the fees charged by providers would raise some problems. It is our understanding that under the NHIS, the fee schedule will be binding for care under the minimum benefit package purchased through DHMIs. This does not preclude insurers of any type purchasing care under different conditions, whether that be care in excess of the minimum package, or care under the minimum package with a shorter waiting time or better quality; but the assumption is that the provider would then pass on the full extra cost to the insurer.

It should be noted that existing employer-provided packages are not homogeneous. Many offer limited care and rely on public provision for more complex cases. Under the *status quo* they could, in fact, reduce their costs, as employees registered with the local DMHI would benefit from care in such cases at no further cost to the employer. If the proposed PMHI were set up, it would have to agree collectively a benefit package at national level, and this might be unattractive to some employers who might choose to opt out.

#### **4.3. Potential coverage**

At present the TUC estimates that it has around 350,000 members who are contributing to SSNIT. The GEA estimates that around 800,000 workers may be eligible for cover. It is difficult to reconcile these figures, but if we make an assumption based on the midpoint; and allow for each worker to have four dependants (many of whom are covered under the current agreements) then we arrive at 2,875,000.

In terms of incentives to join, employees would have to consider that they already had access to the national healthcare package as SSNIT contributors. The incentive would be rooted in the fact that through the PMHI they would presumably have access to better healthcare, possibly paid for by the employer, and with coverage for dependents. On this basis, overall coverage would probably be high.

#### **4.4. Benefit package and provider accreditation**

The principal question mentioned already in the context of enrolment incentives in the last point is whether the NHIS has to provide for one uniform benefit package for all insured persons or whether there could be differential packages. The government appears to aim at the standardization of a minimum package (on top of which individual insurer could offer additional benefits) rather than insistence on a uniform benefit package across all schemes and sectors.

It is obvious that different insurers could offer in theory different benefit packages. It might therefore be possible for the TUC/GEA PMHI to negotiate with the Ghana Health Service to provide an enhanced benefit package, including care not provided under the minimum benefit package; higher quality providers; and reduced waiting times. Under such a package, the beneficiaries might have access to private providers, and workplace clinics could be accredited as providers under the NHIS.

However, it is not clear how the public health care delivery system that will deliver the bulk of the care will be able to provide different packages for different insurers. In particular that would mean that public health centres or public hospitals might provide types of care for the TUC/GEA members that they would deny to DHMI members. If

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schemes were allowed to purchase better care for the TUC/GEA members from the private sector then they would have to meet the full cost of care, not just the 20 per cent of the full cost that are presently covered by the fees charged in the public sector. That means the contributions envisaged at the moment (say 2 to 3 per cent of the insurable earnings) would not be enough to cover the cost let alone to cross-subsidize the DMHIs. The enhanced package would therefore assume premium levels which would at least be 5 times (but most likely much) higher than the present rates charged by DMHIs. If these premiums were in fact to be covered by employers alone these would obviously face a stark choice.

In addition, the overall level of service from public providers would be affected. Whilst in large urban areas there might be a variety of private providers who could be engaged in the enhanced package, in many rural areas there are only one or two providers, and those are public facilities. In those circumstances, if the TUC/GEA package provides an enhanced level of service, that supposes a worse service for “ordinary” DMHI members who will be pushed down waiting lists, and will naturally be less attractive to public providers than patients whose full costs are being met (as opposed to the 20 per cent under the NHIS). Thus, there is a risk that the reputation of the national public health insurance system could be damaged both through perceived and actual poor levels of service.

## **4.5. Financing**

### **4.5.1. Principal issues of national health financing**

DMHIs will essentially meet around 20 per cent of the costs of healthcare, replacing the current cash and carry element. This will be based on a national fee schedule, yet to be completed. DMHIs will receive from the NHIF subsidies for certain groups of people (notably the poor and the elderly) and will be compensated on a per capita basis for services delivered to SSNIT contributors. In addition they will receive equalisation payments to compensate for the different morbidity structures of the individual districts. The GEA/TUC PHMI would not receive any direct subsidies, although one may assume that substantial subsidies of PCHI and PMHI through government subsidies for public sector providers will remain, provided they are allowed to use the same fee schedule as DMHIs. The GEA/TUC may not use public facilities for regular services, but they will use tertiary care and there seem to be no reason why they should not benefit from preferential drug prices negotiated by the NHIF. Thus PCHIs and PMHIs will – even if they do not benefit from explicit subsidies through the NHIF – be able to benefit from public subsidies. The extent of these indirect subsidies depends on to what extent they will be able to use public facilities for their service delivery. As long as the GEA/TUC PHMI does not seek to recover the contribution of 2.5 per cent paid by its members to the NHIS, it does not appear that it would have a direct negative impact on the NHIS. Indirectly, the potential delivery of different benefit packages by public providers for different population groups may have detrimental effects on DHMI enrolment rates.

That issue changes, of course, if the GEA/TUC were to seek to recover the 2.5 per cent contribution rate from the NHIF to finance services exclusively for its members. In this case the NHIF would be deprived by an income of about 200 billion Cedis (or about 38 per cent) of the income from the health levy and the 2.5 per cent contributions. This would lead to an earlier deficit of the NHIF than presently expected. That deficit could only be reduced by requesting the GEA/TUC PHMI to cover the full cost of services purchased from the public sector. However, it cannot be expected that this would yield more than 20 to 25 billion Cedis of additional income. The net loss would thus remain substantial.

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#### 4.5.2. Breaking even: issues in financing private insurance

Based on ILO projections, the average full per capita cost of treatment is around 110,000<sup>62</sup> cedis in 2004. In high cost private sector delivery systems these cost can safely be assumed to double, so that a private insurance scheme on average may be faced with total benefit cost per capita of about 220,000 cedis. An assumed 10 per cent surcharge for administration this would lead to an average premium of 242,000 cedis.

If one further assumes:

- an average wage level of 13,500,000 cedis and
- a dependency rate per insured worker of a factor of 4,

then the full cost for insuring a whole family would be in the order of 1.21 million cedis per family. This amount would fall due if benefits were delivered exclusively in the private sector. We assume this for simplicity's sake. The premia de facto charged to individuals would be flat rate premia in cedis which would in line with usual private insurance practice graduated by age of entry into the insurance, so that in theory the premium can stay constant throughout the remaining lifespan of an insured person. More details on the method of calculating premia in private insurance schemes are provided in Cichon et al. 1999, Issue Brief 4.

The following table compares the tentatively estimated premium cost of the private GEA/TUC PMHI with the premium cost of a set of standard insured families under the NHIS. It is assumed that income earners in this family earn an average income of 13.5 million cedis annually. The calculations assume that the minimum contribution rate for the DMHI schemes is 72,000 cedis for an adult member and 36,000 cedis for a child.<sup>63</sup> It is furthermore assumed that the standard full cost premium for a middle aged adult will be 242,000 cedis in the PMHI (which is most likely underestimated) and the premium for a child is 50 per cent of that amount. Pensioners are assumed to pay the same rate in the PMHI scheme as adults, i.e. we assume that they joined at early ages and retain the contribution level of entry age during their insurance life.

<sup>62</sup> This includes the full cost of health services delivered by the NHIS and the per capita cost of the health services delivered in the public sector outside the NHIS to insured persons (without administrative cost and investment cost).

<sup>63</sup> This is not quite clear yet, as the LIs do not specify exact amounts of premia.

**Table 1. Comparison of estimated contributions of a standard types of contributors in the NHIS and the potential GEA/TUC PMHI**

Contributor family status	Total annual premia		Additional cost to 2.5% under present law	
	in NHIS (cedis)	GEA/TUC PMHI (cedis)	NHIS (cedis)	GEA/TUC PMHI (cedis)
single SSNIT member	337,500	242,000	0	242,000
married SSNIT member with non-SSNIT spouse	409,500	484,000	72,000	484,000
married SSNIT member with non-SSNIT spouse plus 1 child under 18	445,500	605,000	108,000	605,000
married SSNIT member with non-SSNIT spouse plus 2 children under 18	481,500	726,000	144,000	726,000
married SSNIT member with non-SSNIT spouse plus 3 children under 18	517,500	847,000	180,000	847,000
Married SSNIT couple	675,000	484,000	0	484,000
Married SSNIT couple with one child under 18	675,000	605,000	0	605,000
Married SSNIT couple with 2 children under 18	675,000	726,000	0	726,000
Married SSNIT couple with 3 children under 18	675,000	847,000	0	847,000
SSNIT pensioner	0	242,000	0	242,000

The grey shaded areas in the table highlight the cases where the PMHI has a cost advantage over the NHIS. It should be borne in mind that the comparison only refers to average income earners. Costs under the DHMI option change with income due to the proportionality of the premia (i.e. the 2.5 per cent) to total income subject to contributions. Generally, lower income earners are more likely to benefit from the DHMI than higher income earners.

However, for most of the cases of average earners, in particular for families with children and pensioners the DMHI has a cost advantage even if the 2.5 per cent contribution payment could be recovered by the PMHI. If the 2.5 per cent contributions cannot be recovered from the NHIS then the PHMI is not a good deal for any worker or employer. The above preliminary estimates have to be confirmed in much more detail by a more in-depth actuarial study.

## 5. Implementation issues

The amount of time taken to set up existing voluntary mutuals in Ghana has varied widely, but once a modus operandi was established, the average was around 18 months to two years from initiation to full operation. Most of these mutuals operate in a limited geographical area, typically within a district or part of a district.

The proposed bipartite PMHI would have the initial advantage of being able to register members with comparative ease, and would presumably have a network of existing providers. Nonetheless, in order to meet legal and operational requirements, it would still have to:

- 
- appoint a governing body;
  - establish a headquarters, and recruit sufficient competent staff to manage a scheme with national coverage;
  - set up a reserve fund;
  - obtain a license;
  - re-negotiate fee structures with existing providers and negotiate with new ones;
  - register members,
  - calculate premium

It seems unlikely that this could be achieved in less than a year to 18 months, leaving the additional task of setting up interim arrangements to continue health coverage for members.

## 6. Conclusions

In summary, there appear to be the following options for the GEA and the TUC to pursue their interest in providing better than standard health care for a groups of formal sector employees and their families:

- Option One: to continue with the *status quo*.

It should be taken into account that the de fact cost to both employers and employees is no greater than at present, and that - should employer provision be insufficient in case of tertiary care- there is a range of care available under the NHIS to which most will be entitled by virtue of their SSNIT contributions.

- Option Two: to establish a bi-partite PMHI as proposed which would not benefit from subsidies from the NHIS and which would not have access to the 2.5 per cent contribution of SSNIT members.

Set-up time and set-up cost could be substantial. Healthcare standards would probably be higher and many dependants would be covered, but the option would most likely lead to additional cost compared to *status quo*.

- Option Three: to establish a PMHI which would have access to the 2.5 per cent contribution of SSNIT members.

Access to the 2.5 per cent contribution would have to be pursued politically. It would lead to a substantial loss of the subsidisation potential of the NHIS scheme and would probably not lead to a financial advantage for most of the insured persons. However just as in option 2, better health care might be provided for a group of around 600,000 people.

- Option Four: to negotiate with DMHIs on a district-by-district basis to provide an enhanced package of care.

This would mean benefiting from the NHIF transfers, while having improved access to healthcare; but it would also involve considerable administrative work, and might have a negative impact on public health services. It should, however be possible to register most of the existing employer based delivery units as providers of the DHMI. The utilisation of

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these provider units could be linked to the payment of higher premiums by the group that is presently covered by the employer based delivery units.

## 7. Recommendations

Based on the above analysis the ILO project team believes that while the proposed bipartite insurance scheme offers certain advantages, it does not improve significantly on the *status quo*, which can be continued at no real extra cost. Indeed, by ensuring that SSNIT-contributing employees are registered with their local DMHI, employers could continue with their current provision and actually reduce costs in more complex and expensive cases by relying on the package provided by the DMHI.

In addition, the social partners should consider carefully the administrative burden of complying with legislation, and the additional costs implied by the need to form what would have to be a sizeable organisation to run the PMHI.

It is, of course, for the social partners to decide whether, on balance, they are prepared to assume these considerable responsibilities and burdens in the interests of the potential beneficiaries. However, the ILO project team does not believe that the gains would be sufficient to warrant the investment involved, and would incline to the maintenance of the *status quo* (option One) or a coverage of the potential members of the GEA/TUC PMHI scheme by an enhanced benefit provision provided by DHMIs (option Four), which both offer reasonable flexibility and acceptable coverage. The latter option would help employers and worker to benefit de facto from the 2.5 per cent contribution rate and would also provide better care to them at relatively little extra cost to employers. It may be possible to maintain some of the employer-based facilities. The terms of the latter would need to be negotiated with the NHIC or the DHMIs in question.

The team has concerns with regard to options 2 and 3, these being that:

- (a) the new PHMI would lead to additional administrative cost in the health sector through the setting up of a new essentially nation wide insurance scheme;
- (b) would offer no financial advantage to employers and workers under the current law;
- (c) may be used to shift some of the cost of the negotiated employer provided health care to the workers and their families (for whom access to employer based facilities is so far free of charge in most cases); and
- (d) could be potentially damaging to the NHIS and its capacity to subsidize the poor through the downsizing of the risk and income pool of the public DHMI schemes.

From an overall efficiency and equity point of view it appears preferable to find arrangements with the NHIC and DHMIs which allow for the present beneficiaries of employer based health provision to be covered under DHMIs without a major loss of the quality of care available to them.

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## **Annex 3. ILO Health Insurance Survey**

### **The Ghana Social Trust Pilot Project**

**The International Labour Organization**  
Geneva, December 2003



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## Executive summary

The survey was commissioned by the ILO in order to gather basic demographic and household data, and to assess attitudes to community based mutual health organizations in two administrative districts in Ghana. The data collected will be used to inform work on a project to pilot methodologies for extending health insurance to the poorest. The pilot has begun in the Dangme West which is part of the Greater Accra region and is mostly rural. It also lies partly on the coast. Kwahu South is part of the Eastern Region and is also broadly rural. The survey in 2003, covered a sample of 1,000 households, 500 in each district.

## Demography

The bulk of heads of household were male and fell in the 21-40 age range. Around two thirds were married, of whom most had only one spouse. Around 60 per cent fell into the lowest social class (DE), and about 63 per cent had children under the age of 18. These figures generally do not differ significantly from national averages.

## Education

A quarter of respondents had had no formal education; a further quarter had completed junior secondary education and a fifth had completed primary education. The remainder had attained at least senior secondary level, with around ten per cent completing tertiary education.

Of households with children, around 75 per cent had one or two of those children in school. Household heads were reluctant, however, to discuss whether all children of school age were attending.

## Employment

Most respondents (72 per cent) considered themselves to be self-employed, and just over 60 per cent of those in work were employed in trading, farming or fishing. 84 per cent of the employed were working in the informal sector. 7 per cent were unemployed and a further 5 per cent were retired. Of those respondents who were unemployed, 76 per cent had been so for a year or more.

80 per cent of employed spouses were working in trading, farming or fishing, with 88 per cent of their work in the informal sector. 37 per cent were unemployed.

## Incomes and assets

Half of the households had a monthly income of less than 300,000 cedis (roughly equivalent to the US\$1 per day level). 66 per cent had a monthly income of less than 500,000 cedis (around US\$2 per day); this figure rose to 75 per cent in Dangme West.

Employment and farming were cited as the principal primary sources of income, and also formed a high proportion of secondary sources. Remittances from abroad were an important source of primary or secondary income in 5-6 per cent of cases.

Only 39 per cent of respondents owned any land asset – significantly less in Dangme West, at 29 per cent.

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## Access to and use of health facilities

97 per cent of respondents had access to a health facility in their own town or village, and 91 per cent had access to a facility within 3km of their home.

For most people (89 per cent), however, the nearest facility was a chemist or pharmacist. 58 per cent had access to a herbalist, and 57 per cent to a government clinic. Only a quarter had access to a government hospital, and around 20 per cent had access to a private clinic or mission hospital.

57 per cent had had at least one member of the household fall ill the past 12 months, of which 42 per cent were children. In three quarters of cases, the illness lasted less than two weeks. 60 per cent of respondents had attended a government clinic or hospital to seek help. The cost of treatment did not exceed 50,000 cedis (US\$5.8) for half of respondents, but for a quarter the cost was over 100,000 cedis (US\$11.60). A fifth of respondents had had a household member admitted to hospital in the previous two years, the cost of which had exceeded 100,000 cedis for 54 per cent.

## Perceptions of quality of treatment

Around 85 per cent of respondents were satisfied or very satisfied with the treatment they had received, with levels of satisfaction slightly higher in Kwahu South than in Dangme West. For those who were not satisfied, the causes tended to be associated with drugs: either generics were prescribed rather than more expensive drugs; the quality of drugs was inadequate; or the drugs prescribed did not improve the patient's condition.

There were also concerns about the quality of assistance, either in terms of treatment or in the attitudes of hospital staff towards patients. Lastly, around 14 per cent felt that the bill for treatment was too high.

## Awareness of and attitudes to MHOs

Around three quarters of respondents were aware of an Mutual Health Organization (MHO) in their community, but only 13 per cent were members, with no significant differences in the two districts. Family membership of the MHO was 66 per cent overall, but this rose to 84 per cent in Dangme West as opposed to 53 per cent in Kwahu South. The principal reason for non-membership by families was the cost of the premium, cited in 51 per cent of responses.

The premium paid was in the range of 11,000-30,000 cedis (US\$1.25 - 3.50) annually in over 80 per cent of cases, with more people in Kwahu South paying the upper end of that range.

For 85 per cent of respondents this represented not more than 10 per cent of their monthly income. 65 per cent of respondents felt this level was about right, while 22 per cent thought it too high in absolute terms. However, only 50 per cent felt it was about right in relation to the cost of other household expenditure, while 38 per cent thought it high.

58 per cent felt that membership of the MHO had improved their access to healthcare, rising to 67 per cent in Dangme West. For those who did not believe access had improved, 35 per cent said this was because the quality of treatment had not improved: paradoxically, this rose to 58 per cent in Dangme West. One particular concern in Kwahu South was that health insurance did not cover the first 200,000 cedis (US\$23.25) of hospital costs.

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A small number of people had withdrawn from the MHO – a total of only nine of the sample of 1,000. A fifth had done so for financial reasons, with the remainder dissatisfied with various aspects of the service.

Asked what improvements they would like to see in MHOs, most people wanted to see schemes covering all costs of treatment (20 per cent overall, and 25 per cent in Kwahu South). They also wanted better treatment of patients by hospital staff – a recurring perception is that people with insurance come a poor second to those who pay cash for treatment. This was a particularly strong feeling in Dangme West (27 per cent response).

88 per cent of those who were not members were willing to consider joining or re-joining an MHO scheme. Of the remainder, almost half said the cost of the premium prevented them from joining. Generally, almost a third would like a premium of less than 10,000 cedis, and about 855 found a premium of less than 30,000 cedis acceptable.

Overall attitudes were fairly positive, with 43 per cent of members experiencing no serious problems with the MHO. Some 13 per cent thought treatment was of poor quality, rising to 22 per cent in Dangme West. Other complaints were only cited by small numbers of respondents (see Table 58). Over 90 per cent thought that MHOs solved at least some of the problems of cash and carry, with 28 per cent saying they solved all the problems. The comparable figures among MHO members were 96 per cent and 20 per cent respectively.

## **Exemptions**

84 per cent of respondents thought that at least some people should have free access to healthcare. 37 per cent thought this should apply to people with disabilities, and 28 per cent to people aged over 70.

When it came to assessing people who should qualify for free access, 79 per cent thought the government should make that decision. Only 7 per cent thought it should be a task for community leaders, although this rose to 14 per cent in Dangme West.

A variety of suggestions were offered as to how to increase MHO membership, notably more education (15 per cent) and effective implementation of the scheme (15 per cent) – see Table 66.



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## Background

The Ghana Social Trust Pilot Project, which is part of the Global Social Trust, was established to serve a dual purpose. Firstly, it seeks to support the establishment of a pluralistic national social protection system in Ghana. Secondly, it is developing methodologies for the extension of social protection benefits to excluded members of society especially in the informal sector. It will provide further experience for the development of the overall Global Social Trust concept. One such methodology is being piloted in the Dangme West District.

As part of the efforts to replace the cash & carry system of health financing with some form of Health Insurance, the Government of Ghana under the new National Health Insurance Act 650 has proposed the establishment of District Mutual Health Insurance Organizations (DMHI) countrywide to provide Health Insurance at community levels. As of February 2003, at least 42 pilot schemes were in operation. The full impact of the pilot schemes is not yet apparent.

In order to assess general attitudes to health insurance, and to establish baseline data on demography and employment, the ILO commissioned the present study in two districts (Dangme West and Kwahu South). The study aims to identify some of the challenges, constraints and opportunities facing the establishment of a national health insurance system in Ghana.

## Objectives

Within the Terms of Reference (TOR) the survey was conducted in two selected administrative districts namely; Dangme West in the Greater Accra Region and Kwahu – South in the Eastern region with a sample size of 500 each.

The main objective of the survey was to draw conclusions on the factors, which encourage people or prevent people from joining MHO's and on the potential criteria for identifying eligibility for reduction in or exemption from premiums from health insurance with the aim of increasing coverage.

The survey gathered information on the following areas:

- Household Size, Ages and Level of Education.
- Employment and Income of Household members.
- Access to Healthcare Provision.
- Recent Medical History.
- Awareness of Health Insurance with particular reference to Mutual Health Organizations (MHOs).
- Factors affecting membership of MHOs.
- Attitudes to exemptions from, or reductions in, payment for health Insurance Premiums.

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## Research methodology

A quantitative research based on face-to-face interviews was conducted in the homes of respondents. The respondents were selected using probability sampling procedure, thereby reducing any bias that might affect the findings of the study. Every respondent was given an equal and calculable chance of either being included or excluded from the sample. Respondents were heads of adult household who also had the responsibility of decision making in the household.

They were drawn from the A.B.C.D.E. Socio-Economic classification. (AB refers to the higher class, C the middle class and DE the lower class.) The sample included Ghanaians aged 15 above, resident in the country, in urban, peri-urban and rural areas.

In order to ensure the generation of a truly representative sample that was devoid of biases, while guaranteeing precise projection of survey results into the entire population within acceptable confidence limits, a stratified multi-stage random sampling technique was used. This sampling design attempted to maximize the precision through appropriate stratification of elements of the population into homogenous units. At the same time, the effects due to clustering were reduced to the barest minimum via effective sampling distribution across the strata of the population.

The sample in the selected districts was distributed in proportion to the size of that district in the total population. With the proportionate sample distribution in the 2 districts of 500 each, the sample was spread to cover the various towns in the districts.

In selecting the main urban locations in the district, the district capitals were assigned the probability of 1, that is, they were selected automatically. The peri-urban and rural areas in the selected districts were systematically arranged into a sampling frame, having its own ID number. The survey location was then randomly selected from the list.

Full details of the methodology are set out in Annex 1.

## Questionnaire

The Ghana Social Trust Pilot Project presented a draft questionnaire for the study. MRS piloted and fine-tuned it before the fieldwork began. The questionnaire was designed in English, but MRS had it translated by the Ghana Bureau of languages into the appropriate local languages for easy administration. A copy of the English version of the questionnaire is at Annex 2.

## Quality control

The need to maintain a high level of quality control for a study of this nature cannot be over emphasized. Thus, in order to ensure reliable and accurate results, the following quality reliance procedures were applied to the survey:

- training / pre-briefing and selection of only experienced interviewers;
- team leaders worked first in the field (during training) as interviewers before assuming responsibilities as team leaders in order to become familiar with the methodology and the intricacies of the study;
- during data processing, 25 per cent of all questionnaires were re-entered to ensure quality control.



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The responsibilities of the Team leader on the survey included:

- reviewing all completed questionnaire for legibility, accuracy and consistency;
- monitoring the accuracy of individual interviews;
- 20 per cent spot field checks of interviews to eliminate fraud, inaccurate form filling, etc.

A minimum of 20 per cent of every interviewer's work was personally back- checked by quality controllers in all the areas. Editors checked the quality of each questionnaire before data entry was done.

## **Main findings**

The main findings of the survey are presented under six sub-sections. The first describes the sample interviewed. The second measures employment type levels, categories of employment and the gross monthly income of the household.

Sub-section three describes the impact of health access and delivery on the family; it attempts to measure the medical history and Health facilities available.

An evaluation of the awareness of the Mutual Health Organizations, membership levels, amount of premiums paid and the quality of treatment given is presented in the fourth sub-section.

Perception of the populace on which categories of people should be exempted or have free access to Health Insurance was the subject of section five, which also includes suggestions from respondents on how to make Health Insurance more accessible and attractive. The last sub-section gives a comparison of some responses in urban and rural areas.

National data quoted is drawn from the report of the fourth round of the Ghana Living Standards Survey, carried out by the Ghana Statistical Services. This data, the most recent available, was collected in 1998-1999 and therefore comparisons cannot be exact, but it offers a useful point of reference for some of the district data collected in the course of this study.



## 1. Household profile

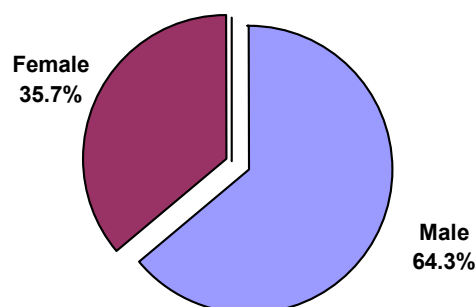
The household profile covered in this section includes age, marital status and the number of wives, sex of household head, number of children and dependents, children in school and level of formal education of respondents.

### Sex of respondent

Figure 1 gives the breakdown by sex of the sample interviewed. In the two districts together, almost 65 per cent were male and the remaining 35 per cent were female.

The proportion of females was higher in Kwahu South (40.6 per cent) than in Dangme West (30.8 per cent).

**Figure 1. Distribution of respondents by sex**



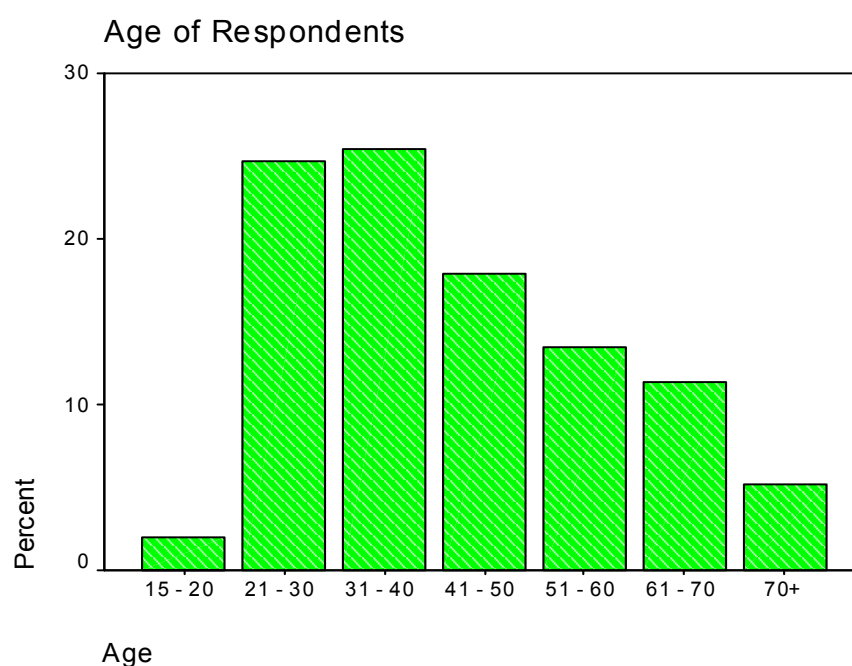
**Table 1. Distribution of respondents' sex**

Sex	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Male	643	64.3	346	69.2	297	59.4
Female	357	35.7	154	30.8	203	40.6
Total	1,000	100.0	500	100.0	500	100.0

### Age distribution of sample

The mode of the age groups was 31-40 years with 25.4 per cent in that age group. About 50 per cent were in the wider age group of 21 to 40 years, 31.3 per cent were in the 41 to 60 years age group and the remaining 16.6 per cent were over 60 years. Thus, 83.4 per cent of the respondents were in their active years. Generally the Kwahu South sample had more people aged over 50 (33.6 per cent) than in Dangme West (26.4 per cent).

**Figure 2. Age distribution of respondents**



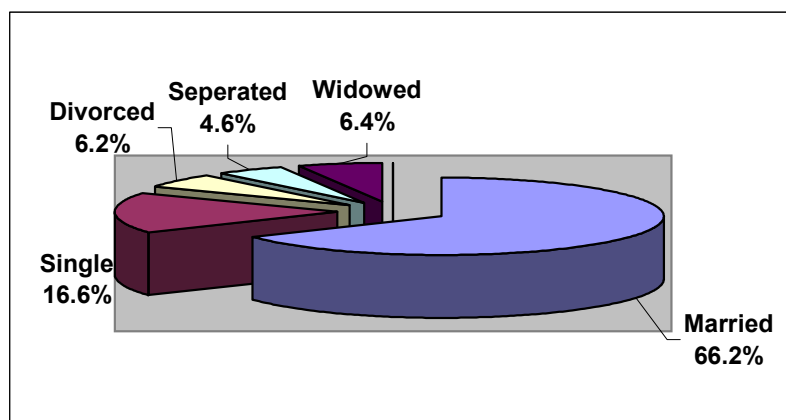
**Table 2. Age distribution of respondents**

Age group	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
15 – 20	20	2.0	16	3.2	4	0.8
21 – 30	247	24.7	143	28.6	104	20.8
31 – 40	254	25.4	123	24.6	131	26.2
41 – 50	179	17.9	86	17.2	93	18.6
51 – 60	134	13.4	63	12.6	71	14.2
61 – 70	114	11.4	49	9.8	65	13.0
70 +	52	5.2	20	4.0	32	6.4
Total	1,000	100.0	500	100.0	500	100.0

## Marital status

About two thirds of respondents in the two districts were married while some 16.6 per cent were single (Figure 3), 6.2 per cent were divorced and those who were separated and widowed were 4.6 per cent and 6.4 per cent, respectively. The distribution was broadly similar in both districts, with a slightly higher number of widowed people in Kwahu South, which probably is a reflection of the greater number of older people in the sample from that district.

**Figure 3. Marital status of respondents**



**Table 3. Marital status of respondents by districts**

*Q3. What is your marital status?*

Status	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Married	662	66.2	358	71.6	304	60.8
Single	166	16.6	80	16.0	86	17.2
Divorced	62	6.2	23	4.6	39	7.8
Separated	46	4.6	15	3.0	31	6.2
Widowed	64	6.4	24	4.8	40	8.0
Total	1,000	100.0	500	100.0	500	100.0

### Whether spouse has more than one wife

The vast majority of the married respondents had only one wife (84.5 per cent). Those who had more than one wife were 15.5 per cent (Table 4).

**Table 4. Respondent having more than one wife**

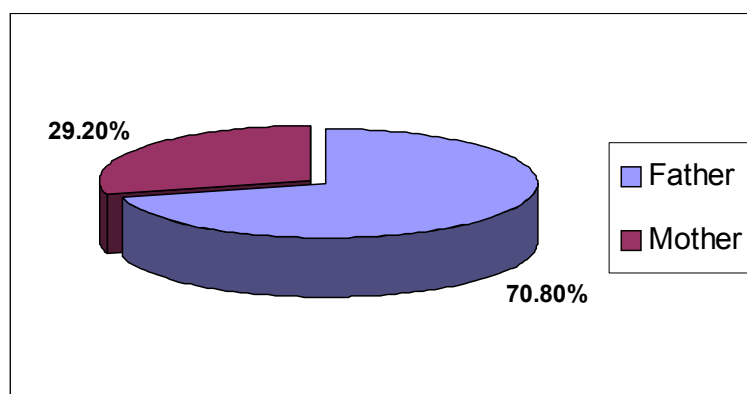
*Q4. If married, do you have more than one wife or is your husband married to more than one wife?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	120	15.5	62	15.1	58	16.1
No	652	84.5	349	84.9	303	83.9
Total	772	100.0	411	100.0	361	100.0

### Sex of head of household

A high proportion of the households in both districts were headed by males (over 70 per cent, Figure 5). The rest (29.2 per cent) were female-headed households. Reasons for females heading households were that some were widowed; others were separated, divorced or were not married.

**Figure 5. Sex of head of household**



**Table Q 5. Head of household**

*Q5. Who is the head of this household?*

Household head	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Father	708	70.8	352	70.4	356	71.2
Mother	292	29.2	148	29.6	144	28.8
Total	1,000	100.0	500	100.0	500	100.0

## Social class of respondent

The following parameters of income levels and occupation were used in determining the social class of respondents.

Gross monthly income				Class
2,000,000 – more than 10,000,000	--	high	--	AB
300,000 – 2,000,000	--	medium	--	C2D
50,000 – 300,000	--	low	--	DE

## Socio – economic measurements/Social class grouping

The Socio-economic classification of respondents is based primarily on the occupation of the head of household, although the type of property or dwelling place was also considered, particularly where the head of the household has no stated occupation and yet appears to be providing a certain standard of living for his household.

### AB. Upper and professional occupational groups

- should own a whole house (either a bungalow/detached house or a storied building);
- should be at the top of his/her profession;
- should have a domestic servant;
- should live in a low density area;
- should own a car;

- should own household durables like: Air conditioner, refrigerator, coloured TV, VCR, Decoder, Satellite dish, etc.

**C. Middle class occupational group**

- should be living in an apartment/flat: having separate facilities like toilet, kitchen, etc.;
- should be at least a middle level manager;
- should have household durables like: colour TV, VCR, refrigerator, air conditioner, etc.,
- must have a car (C1).

**D. Skilled and unskilled workers occupational groups:**

- should be living in a compound house where facilities are shared with other tenants;
- should live in a high density area,
- should be a skilled worker like mason, carpenter, technician, with a steady income.

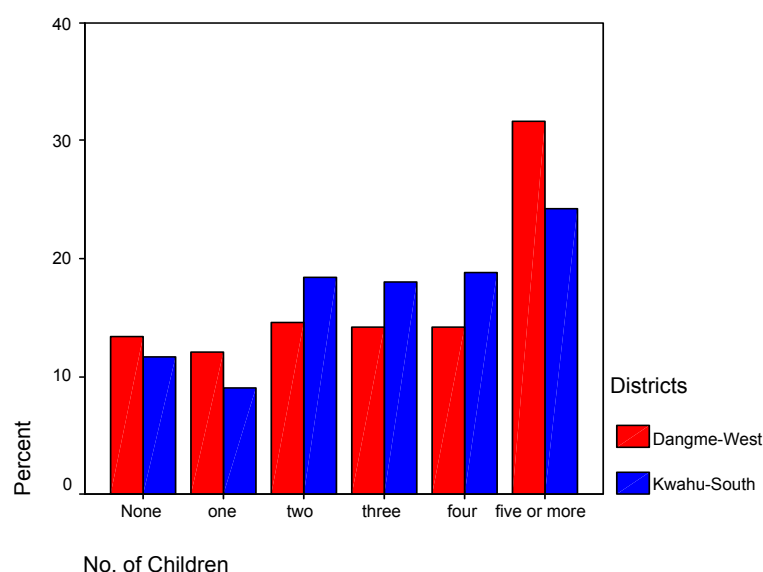
The Socio-economic profile was AB (3.6 per cent), C2D (36.2 per cent) and DE (60.2 per cent). The social class of respondents was determined by using occupation, income category and by observation by the interviewer of ownership of household durables e.g. television, refrigerator, hi-fi system, satellite dish, air-conditioning etc.

## Number of children of respondents

Most (87.5 per cent) of the respondents had children (Figure 6). About 27 per cent had one to two children, 32.6 per cent had 3 to 4 children and the remaining (27.9 per cent) had 5 or more children. In all, about 60 per cent had 3 or more children.

More of the respondents in the Dangme West had 5 and more children (31.6 per cent) than their counterparts in the Kwahu South (24.2 per cent).

**Figure 6. Number of children of respondents**



**Table Q 6. Number of children of respondents***Q6. How many children do you have?*

Number of children	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
None	125	12.5	67	13.4	58	11.6
One	105	10.5	60	12.0	45	9.0
Two	165	16.5	73	14.6	92	18.4
Three	161	16.1	71	14.2	90	18.0
Four	165	16.5	71	14.2	94	18.8
Five and more	279	27.9	158	31.6	121	24.2
Total	1,000	100.0	500	100.0	500	100.0

**Household size of respondents**

The average household size was 5.6 persons; this average was almost similar in both districts (5.5 in Dangme West and 5.7 in Kwahu South, Table 6a). However Dangme West has fewer large households with more than 10 people (4.6 per cent of the respondents) than their counterparts in the Kwahu South (8.6 per cent of the respondents).

**Table 6a. Household size***6a) What is the size of your household (how many people live with you and eat from the same pot)?*

People in household	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1	82	8.2	45	9.0	37	7.4
2	59	5.9	25	5.0	34	6.8
3	82	8.2	46	9.2	36	7.2
4	111	11.1	59	11.8	52	10.4
5	132	13.2	63	12.6	69	13.8
6	156	15.6	68	13.6	88	17.6
7	173	17.3	99	19.8	74	14.8
8	82	8.2	42	8.4	40	8.0
9	57	5.7	30	6.0	27	5.4
10	27	2.7	8	1.6	19	3.8
11	19	1.9	7	1.4	12	2.4
12	20	2.0	8	1.6	12	2.4
Total	1,000	100.0	500	100.0	500	100.0

**Number of children below 18**

The majority of parents had children below 18 years of age. Only 16.7 per cent had no child below 18, meaning that the children are more than 18.



**Table 7. Number of children below 18 years***Q7. How many of your children are below 18 years?*

Number of children	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
None	146	16.7	65	15.0	81	18.3
1	214	24.5	91	21.0	123	27.8
2	242	27.7	112	25.9	130	29.4
3	158	18.1	82	18.9	76	17.2
4	70	8.0	49	11.3	21	4.8
5 or more	45	5.1	34	7.9	11	2.5
Total	875	100.0	433	100.0	442	100.0

**Children under 18 years in School**

About 38 per cent of these households had one child below 18 years of age in school (Table 8). The proportion of the households decreased steadily as the number of children below 18 years in school increased. Altogether, 74.0 per cent of the households with children under 18 years in school had one to two children in school and 26.0 per cent had three and more children in school. In the Dangme West, 12.7 per cent of the respondents had 4 and more children below 18 years in school, more than their counterparts in the Kwahu South (4.7 per cent).

**Table 8. Children under 18 years in school***Q8. How many of your children under 18 go to school?*

Number of children	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1	257	37.9	112	34.1	145	41.7
2	245	36.1	115	35.3	130	37.1
3	117	17.3	59	17.9	58	16.5
4	43	6.3	27	8.2	16	4.5
5 or more	16	2.4	15	4.5	1	0.2
Total	678	100.0	328	100.0	350	100.0

**Reasons for children under 18 years not in school**

There was a high rate of non-response to this question. However, for those who did respond, the most common reason given was that the children were still too young (70.4 per cent). Another 16.5 per cent indicated difficulties with school fees, some said the children refused to go to school (Table 9).

In Kwahu South, some of the children were not in school because they had completed Junior Secondary School (9.0 per cent). The analogous proportion in Dangme West was only 1.8 per cent. Children who had refused to go school were more frequent in Dangme West indicated by 5.4 per cent of the respondents compared to 1.0 per cent who indicated this reason in Kwahu South.

**Table 9. Reasons for Children under 18 years not going to School***Q9. If some of the children under 18 don't go to school, why?*

Reason	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Still Young	188	70.4	119	71.3	69	69.0
Lack of Fees	44	16.5	29	17.4	15	15.0
Completed JSS	12	4.5	3	1.8	9	9.0
Refused to attend school	10	3.7	9	5.4	1	1.0
Employment	8	3.0	6	3.6	2	2.0
Other	5	1.9	1	0.6	4	4.0
Total	267	100.0	167	100.0	100	100.0

## Dependent children

About 23 per cent of the respondents had no dependent children. Some 37.0 per cent had 1 to 2 dependant children and about 40 per cent had 3 and more dependent children. In the districts the most notable difference was the proportion of respondents with 5 or more children: 16.2 per cent in Dangme West and 5.8 per cent in Kwahu South (Table 10). Comparisons with Table 7 suggest that at least some children under 18 are not dependent on their parents for their living.

**Table10. Dependants children of household***Q10. How many of your children depend on you for a living?*

Number of children	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
None	226	22.6	105	21.0	121	24.2
1	169	16.9	75	15.0	94	18.8
2	201	20.1	97	19.4	104	20.8
3	174	17.4	83	16.6	91	18.2
4	120	12.0	59	11.8	61	12.2
5 or more	110	11.0	81	16.2	29	5.8
Total	1,000	100.0	500	100.0	500	100.0

## Other dependants in household with financial responsibility

More than half of respondents (53.7 per cent) had no other dependants in their household. In the districts the proportion of the respondents with no other dependants was much higher in Dangme West (62.2 per cent) than in Kwahu South (45.2 per cent). Generally, households in Kwahu South had relatively more other dependants than their counterparts in the Dangme West (Table11).

**Table 11. Other dependants for whom householder has financial responsibility**

*Q11. How many other dependants (apart from your children) do you have for whom you are financially responsible?*

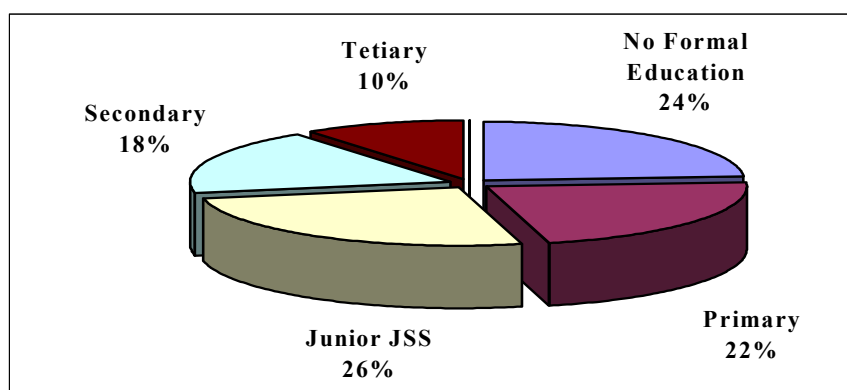
Other dependants	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
None	537	53.7	311	62.2	226	45.2
1	222	22.2	89	17.8	133	26.6
2	109	10.9	43	8.6	66	13.2
3	55	5.5	24	4.8	31	6.2
4	40	4.0	19	3.8	21	4.2
5 or more	37	3.7	14	2.8	23	4.6
Total	1,000	100.0	500	100.0	500	100.0

## Level of formal education

Nearly one-quarter of the respondents (24.4 per cent) had no formal education. Among those with formal education, 26 per cent had Junior Secondary school education followed by 22 per cent who had Primary school education (Figure 12). Those with relatively higher level of formal education formed 28 per cent of the respondents: 18.1 per cent Senior Secondary school and 9.9 per cent Tertiary education (Table 12).

In Dangme West district, 61.0 per cent of respondents had Primary and Junior Secondary school education, compared to 34.2 per cent of their counterparts in Kwahu South. In the higher levels of education (Senior Secondary and Tertiary), Kwahu South had a higher proportion (40.2 per cent) than their counterparts in Dangme West (15.8 per cent).

**Figure 12. Level of formal education**



**Table 12. Highest level of education***Q12. What was your highest Educational level?*

Level of education	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
None	244	24.4	116	23.2	128	25.6
Primary	216	21.6	164	32.8	52	10.4
Junior secondary	260	26.0	141	28.2	119	23.8
Senior secondary	181	18.1	57	11.4	124	24.8
Tertiary	99	9.9	22	4.4	77	15.4
Total	1,000	100.0	500	100.0	500	100.0

## 2. Employment and incomes

### Employment

This section looks at the employment status of the respondents, type and sector of employment including that of spouses and other household members, income from employment and other sources, and land assets.

The majority of the respondents (72.4 per cent) were self-employed. About 14 per cent were employees in regular jobs. Another 2.2 per cent were casually employed and 4.7 per cent had retired. Those who were unemployed formed 6.9 per cent.

In the districts, Dangme West had a much higher proportion of self-employed (83.4 per cent) than Kwahu South (61.4 per cent); consequently, in all the other types of employment the proportions were higher in the Kwahu South than in the Dangme West (Table 13).

**Table13. Distribution of respondents' status of employment**

*Q13. Are you employed in?*

Status of employment	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Employed in regular job	138	13.8	39	7.8	99	19.8
Self employed	724	72.4	417	83.4	307	61.4
Casual employed	22	2.2	5	1.0	17	3.4
Unemployed	69	6.9	18	3.6	51	10.2
Retired	47	4.7	21	4.2	26	5.2
Total	1,000	100.0	500	100.0	500	100.0

### Category of employment

The highest proportion of respondents (30.8 per cent) were traders, followed by 22.2 per cent who were farmers (Table 14). Third were professionals (10.6 per cent), followed by 10.0 per cent who were employed in civil and public services. Those in fishing formed 8.9 per cent and mainly came from the Dangme West district, reflecting its partially coastal location. Of those in the other categories of employment, 5.0 per cent were in construction.

In Dangme West district, the highest proportion of the respondents were in farming (26.5 per cent) followed by 24.7 per cent who were in trading. Those in fishing formed the third highest proportion (16.9 per cent). Those in the other employment category were relatively few.

The picture was quite different in Kwahu South where the highest proportion of the respondents (37.4 per cent) were in trading, followed by 17.5 per cent in farming, 15.6 per cent in civil/ Public service and 15.1 per cent in Professional jobs. Those in the other employment categories were relatively few.

**Table 14. Category of employment of respondent**

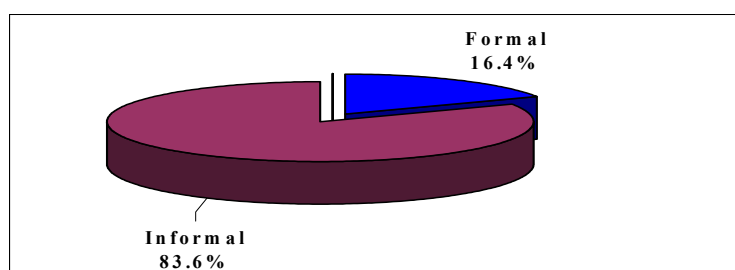
*Q14. If employed, specify which category*

Category of employment	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Civil / Public service	88	10.0	22	4.8	66	15.6
Construction	44	5.0	25	5.4	19	4.5
Manufacturing	13	1.5	8	1.7	5	1.2
Financial	9	1.0	0	0.0	9	2.1
Farming	196	22.2	122	26.5	74	17.5
Professional	94	10.6	30	6.5	64	15.1
Mining / Quarrying	3	0.3	2	0.4	1	0.2
Fishing	79	8.9	78	16.9	1	0.2
Livestock	17	1.9	4	0.9	13	3.1
Trading	272	30.8	114	24.7	158	37.4
Office / Administration	3	0.3	1	0.2	2	0.5
Other	66	7.5	55	11.9	11	2.6
Total	884	100.0	461	100.0	423	100.0

## Sector of employment

Most of the respondents said they are in the informal sector (83.6 per cent) (Figure 15). In the Dangme West district more of the respondents (91.6 per cent) were employed in the informal sector than their counterparts in the Kwahu South district (75.6 per cent). Consequently, while nearly a quarter of the respondents in the Kwahu South district were employed in the formal sector, only 8.4 per cent in the Dangme West district were employed in the formal sector (Table 15).

**Figure 15. Sector of employment**



**Table 15. Sector of employment**

*Q15. Does the respondent's employment category fall into formal or informal sector?*

Sector of Employment	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Formal	164	16.4	42	8.4	122	24.4
Informal	836	83.6	458	91.6	378	75.6
Total	1,000	100.0	500	100.0	500	100.0

## Employment status of spouse

The bulk of spouses (53.4 per cent) were self-employed and many were housewives (37.4 per cent) and considered themselves to be unemployed. Only 6.7 per cent were employed in a regular job.

In the Dangme West districts more of the spouses (60.4 per cent) were self-employed than in the Kwahu South district where 46.4 per cent were self-employed. In Kwahu South, those who were unemployed and also employed in regular jobs (42.0 per cent and 9.0 per cent), respectively, were substantially more than their counterparts in the Dangme West district (32.8 per cent and 4.4 per cent) respectively.

**Table16. Employment status of spouse**

*Q16. Is your spouse employed?*

Status of employment	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Employed in regular job	67	6.7	22	4.4	45	9.0
Self employed	534	53.4	302	60.4	232	46.4
Casual employed	8	0.8	2	0.4	6	1.2
Unemployed	374	37.4	164	32.8	210	42.0
Retired	17	1.7	10	2.0	7	1.4
Total	1,000	100.0	500	100.0	500	100.0

## Employment category of spouse

A considerable number of spouses (52.9 per cent) were also employed in trading, followed by 24.5 per cent who were in farming (Table 17). Those in professional occupations and civil / public services formed 7.8 per cent and 7.7 per cent, respectively. Those employed in other categories of occupation formed less than 3 per cent each.

In the two districts the majority of the spouses were in trading: 54.3 per cent in Dangme West and 51.0 per cent in Kwahu South. In both districts, again, the proportions of spouses engaged in farming were second highest: 28.7 per cent in Dangme West and 19.0 per cent in Kwahu South.

Relatively higher proportions of the spouses in Kwahu South were engaged in professional activities and in Civil / Public services (11.6 per cent and 10.9 per cent, respectively) than their counterparts in the Dangme West (4.6 per cent and 4.9 per cent respectively).

**Table 17. Employment category of spouse***Q17. If spouse is employed or self-employed, specify which category*

Category	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Civil / Public Service	47	7.7	16	4.9	31	10.9
Construction	14	2.2	7	2.1	7	2.4
Manufacturing	3	0.4	1	0.3	2	0.7
Financial	3	0.4	1	0.3	2	0.7
Farming	147	24.5	93	28.7	54	19.0
Professional	48	7.8	15	4.6	33	11.6
Mining / Quarrying	1	0.1	0	0.0	1	0.3
Fishing	15	2.4	13	3.9	2	0.7
Livestock	4	0.6	1	0.3	3	1.0
Trading	321	52.9	177	54.3	144	51.0
Office / Administration	4	0.6	1	0.3	3	1.0
Other	2	0.3	1	0.3	1	0.3
Total	609	100.0	326	100.0	283	100.0

**Sector of employment**

Like their counterparts, the majority of the spouses (87.9 per cent) were employed in the informal sector and only 12.1 per cent were employed in the formal sector (Table 18). In the districts, more of the spouses (94.2 per cent) were employed in the informal sector in the Dangme West district than in the Kwahu South district (80.6 per cent).

**Table 18. Sector of employment of spouse***Q18. Does the spouse's employment category fall into formal or informal sector?*

Sector	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Formal	74	12.1	19	5.8	55	19.4
Informal	535	87.9	307	94.2	228	80.6
Total	609	100.0	326	100.0	283	100.0

**Employment status of other household members**

Most of the other household members (71.2 per cent) were not employed (Table 19).



**Table 19. Employment status of other household members***Q19. Are any other members of the household in work?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	288	28.8	112	22.4	176	35.2
No	712	71.2	388	77.6	324	64.8
Total	1,000	100.0	500	100.0	500	100.0

**Category of employment of other household members**

Many of the other household members (24.2 per cent) who were employed were in trading, followed by farming (20.1 per cent) and professional occupations (17.8 per cent). Those who were employed in civil / public service, construction and fishing formed 9.4 per cent, 9.1 per cent and 8.4 per cent, respectively (Table 20).

In the districts, trading and farming also predominated. Fishing was more prevalent in Dangme West (21.4 per cent), while professional and civil / public service activity was greater in Kwahu South (25.7 per cent and 11.3 per cent respectively).

**Table 20. Category of employment of other household members***Q20. If anyone else is employed or self-employed, specify which category*

Category	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Civil/Public Service	28	9.4	8	7.1	20	11.3
Construction	27	9.1	8	7.1	19	10.7
Manufacturing	3	1.0	2	1.7	1	0.5
Financial	6	2.0	0	0.0	6	3.4
Farming	60	20.1	28	25.2	32	18.1
Professional	53	17.8	9	8.0	44	25.7
Mining/Quarrying	2	0.7	1	0.8	1	0.5
Fishing	25	8.4	24	21.4	1	0.5
Livestock	8	2.7	1	0.8	7	3.9
Trading	72	24.2	30	26.9	42	23.8
Office/Administration	2	0.7	0	0.0	2	1.1
Other	2	4.0	1	0.8	1	0.5
Total	288	100.0	112	100.0	176	100.0

**Sector of employment of other household members**

The other members of the households were also mainly employed in the informal sector (77.8 per cent) (Table 21).

In the districts, a much higher proportion of the other household members in the Dangme West (91.1 per cent) worked in the informal sector than their counterparts in the Kwahu South (69.4 per cent), a reflection, perhaps, of the higher proportion of people employed in the civil / public service and professionals.

**Table 21. Sector of employment of other household members***Q21. Does this employment category fall into formal or informal sector?*

Sector	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Formal	64	22.2	10	8.9	54	30.6
Informal	224	77.8	102	91.1	122	69.4
Total	288	100.0	112	100.0	176	100.0

**Duration of unemployment of respondents**

Those unemployed for over a year formed the highest proportion of the respondents (55.2 per cent), followed by those who have been unemployed for just one year (20.3 per cent). Those who were unemployed for six months or less formed 24.5 (Table 22). In the districts, long-term unemployment was more prevalent in Kwahu South.

**Table 22. Duration of unemployment of respondents***Q22. If unemployed for how long have you been out of work?*

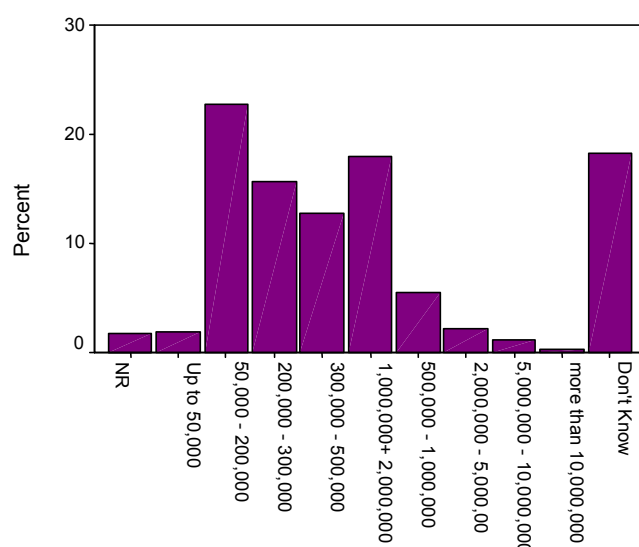
Duration	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
One month less	5	7.2	2	10.5	3	6.0
Two months	7	10.1	3	15.8	4	8.0
Six months	5	7.2	1	5.3	4	8.0
One year	14	20.3	5	26.3	9	18.0
More than one year	38	55.2	8	42.1	30	60.0
Total	69	100.0	19	100.0	50	100.0

**Gross incomes of household**

Just over a quarter of the households (28.4 per cent) had monthly gross incomes ranging from 50,000 to 200,000 cedis. Cumulatively, 50.3 per cent of the households had gross monthly incomes not exceeding 300,000 cedis. The households that had between 300,000 cedis and 1,000,000 cedis formed 38.4 per cent and 11.4 per cent had incomes exceeding 1,000,000 cedis (Figure 23).

These figures were broadly repeated in the districts, but generally the respondents in Kwahu South had higher gross monthly incomes, with a significant proportion (39.5 per cent) earning more than 500,000 cedis, compared to only 25.2 per cent in the same income bracket in Dangme West.

**Figure 23. Gross monthly income of respondents**



**Table 23. Gross monthly income of household**

*Q23. Please estimate your total gross monthly household income*

Income (Cedis)	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Up to 50,000	19	2.4	4	1.3	15	3.1
50,000 - 200,000	227	28.4	104	33.1	123	25.3
200,000 - 300,000	156	19.5	69	22.0	87	17.9
300,000 - 500,000	127	15.9	58	18.5	69	14.2
500,000 - 1,000,000	180	22.5	57	18.2	123	25.3
1,000,000 - 2,000,000	55	6.9	15	4.8	40	8.2
2,000,000 - 5,000,000	22	2.8	7	2.2	15	3.1
5,000,000 - 10,000,000	11	1.4	0	0.0	11	2.3
More than 10,000,000	3	0.4	0	0.0	3	0.6
Total	800	100.0	314	100.0	486	100.0

## Sources of income

Self-employment was the principal source for both main and secondary income (40.6 per cent per cent and 40.1 per cent, respectively), followed by farming (25.0 per cent and 30.0 per cent respectively (Table24). Remittances from abroad were also notable (5.3 per cent and 5.8 per cent respectively). Other informal income sources were significantly higher for both main and secondary (21.5 per cent and 17.9 per cent respectively) than formal sources (1.6 per cent and 1.0 per cent respectively).

In the Dangme West district the main income source was from self- employment (33.7 per cent) followed by (16.1 per cent) of the respondents who indicated farming as their main source of income. The most important secondary source of income was from self-employment indicated by 53.4 per cent of the respondents. This was followed by farming (20.1 per cent). Other informal sources of income were much more important for both the

main and secondary sources (36.4 per cent and 17.3 per cent) respectively than the other formal sources of income (2.9 per cent and 1.4 per cent respectively).

In Kwahu South, self-employment was also the most important source of income (47.7 per cent) followed by farming (30.1 per cent), whilst for the secondary source of income farming was more important than self-employment (36.1 per cent and 29.0 per cent).

**Table 24. Income sources of household**

*Q24. Please tell us whether your household has income from the following sources during the past twelve months. Please, also indicate the two main income sources.*

Source	Total				Dangme West				Kwahu South			
	Main		Secondary		Main		Secondary		Main		Secondary	
	F	%	F	%	F	%	F	%	F	%	F	%
State enterprises	0	0.0	13	2.1	0	0.0	3	1.1	0	0.0	10	3.0
Political party / trades union	8	1.0	7	1.1	2	0.5	3	1.1	6	1.5	4	1.2
Self employed	336	40.6	249	40.1	141	33.7	151	53.4	195	47.7	98	29.0
Farming	207	25.0	186	30.0	84	20.1	64	22.6	123	30.1	122	36.1
Pensions	41	5.0	13	2.1	19	4.5	6	2.1	22	5.4	7	2.1
Remittances from abroad	44	5.3	36	5.8	8	1.9	3	1.1	36	8.8	33	9.8
Other formal income	13	1.6	6	1.0	12	2.9	4	1.4	1	0.2	2	0.6
Other informal income	178	21.5	111	17.9	152	36.4	49	17.3	26	6.4	62	18.3

## Household ownership of Land Assets

The majority of the respondents (61.1 per cent) did not own land (Table 25). In Dangme West district, those who own land were much fewer (29.4 per cent) than their counterparts in the Kwahu South (48.4 per cent).

**Table 25. Household member ownership of land**

*Q25. Do you or anyone in the household own any land, including land on which your house is built?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	389	38.9	147	29.4	242	48.4
No	611	61.1	353	70.6	258	51.6
Total	1,000	100.0	500	100.0	500	100.0

### 3. Health

This section presents results related to health in health delivery facilities, period of admission to hospital and payment, etc.

#### Access to and Type of Health Delivery Facility

An overwhelming majority of the respondents (97.4 per cent) had access to a health delivery facility in their town / village of residence (Figure 26). This proportion was equally high in the two districts (Table 26).

Figure 26. Access to health delivery facility in town / village

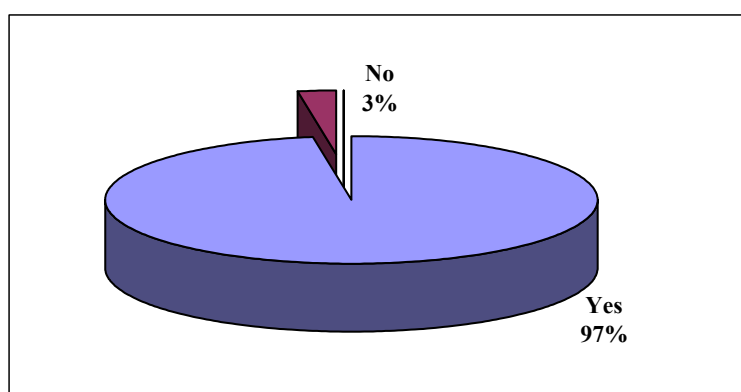


Table 26. Access to Health Facility in Town /Village

Q26. Do you have access to a health delivery facility in this town / village?

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	974	97.4	486	97.2	488	97.6
No	26	2.6	14	2.8	12	2.4
Total	1,000	100.0	500	100.0	500	100.0

#### Type of health facility

The majority of the respondents (88.6 per cent) had access to a chemist / pharmacy, followed by 57.2 per cent who had access to government clinic (Table 27). About 26.2 per cent had access to government hospital and 19.6 per cent had access to private clinics. Mission hospitals were also accessible to 18.3 per cent of the respondents. About 58 per cent had access to a herbalist.

In the districts Kwahu South had better access to Chemists / Pharmacies, Government hospitals, mission hospitals and herbalists than their counterparts in Dangme West. Dangme West had more access to private and Government clinics than their counterparts in Kwahu South.

**Table 27. Type of Health Delivery Facility available\****Q27. What types of facilities are available to you?*

Facility	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Private clinic	196	19.6	116	23.2	80	16.0
Chemist/Pharmacy	886	88.6	398	79.6	488	97.6
Government clinic	572	57.2	301	60.2	271	54.2
Government hospital	262	26.2	27	5.4	235	47.0
Mission hospital	183	18.3	66	13.2	117	23.4
Herbalist	581	58.1	101	20.2	480	96.0
Others	21	2.1	14	2.8	7	1.4

\* Multiple responses.

## Distance to health facility

The distance to the nearest health delivery facility was less than 1 km for about two-thirds of the respondents (Table 28). Cumulatively, a facility was within 3 km for 90.2 per cent of the respondents. For 7.1 per cent of the respondents, a health delivery facility was 4-5 km away and for the remaining 2.2 per cent a facility was 5 km and more away.

In the Dangme West district the distant to a health facility did not exceed 3 km for 97.4 per cent of the respondents, compared to 83.0 per cent in the Kwahu South district. Relatively speaking health facilities were at greater distances for more people in Kwahu South than in Dangme West.

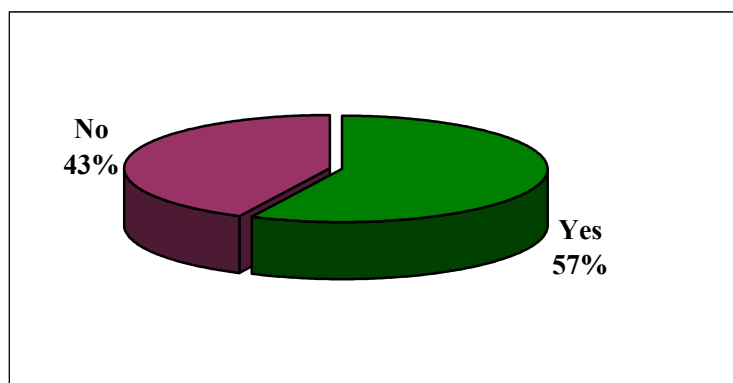
**Table 28. Distance to health facility***Q28. How far is the nearest health facility from your home?*

Distance	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Less than one Km	667	66.7	386	77.2	281	56.2
2 - 3 Km	235	23.5	101	20.2	134	26.8
4 – 5 Km	71	7.1	7	1.4	64	12.8
6 – 10 Km	18	1.8	4	0.8	14	2.8
Over 10 Km	4	0.4	1	0.2	3	0.6
Don't Know	5	0.5	1	0.2	4	0.4
Total	1,000	100.0	500	100.0	500	100.0

## Household indisposition and hospital admission

About 57.2 per cent of the households had some of their members falling ill in the past 12 months. The remaining 42.8 per cent had no illness occurring in the households (Figure 29). In the Dangme West, 65.0 per cent of the respondents have had some household members indisposed in the past 12 months compared to 49.4 per cent of their counterparts in the Kwahu South district.

**Figure 29. Household indisposition in the past 12 months**



**Table 29. Household indisposition in the past twelve months**

*Q29. During the past twelve months did you or any member of your family fall ill?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	572	57.2	325	65.0	247	49.4
No	428	42.8	175	35.0	253	50.6
Total	1,000	100.0	500	100.0	500	100.0

## Household members who fell ill

As might be expected, the household members most likely to fall ill were children (43.2 per cent) and father / mother (27.4 per cent, Table 30). In both districts the proportions of household members who fell ill were highest for children: 38.8 per cent in Dangme West and 49.0 per cent in Kwahu South. The proportion of respondents indicating fathers and mothers falling ill was much higher in Dangme West (32.0 per cent) than in Kwahu South (21.4 per cent).

**Table 30. Household members who fell ill**

Household member	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Father	71	12.4	44	13.5	27	10.9
Mother	86	15.0	60	18.5	26	10.5
Children	247	43.2	126	38.8	121	49.0
Self	118	20.6	68	20.9	50	20.2
Husband / Wife	37	6.5	23	7.1	14	5.7
Sisters	6	1.0	2	0.6	4	1.6
Other	7	1.2	2	0.6	5	2.0
Total	572	100.0	325	100.0	247	100.0

## Length of illness of household members

Many of the respondents (30.6 per cent) indicated that their household members were ill for up to 7 days and 23.1 per cent indicated that the illnesses lasted for less than 3 days. Cumulatively, 53.7 per cent of the household members were ill for up to 7 days, nearly 3 quarters of the respondents indicated that household members were ill for less than 2 weeks and the remaining one quarter were ill for more than 2 weeks (Table 30a).

In Dangme West, 40.6 per cent of the respondents indicated that their household members were ill for periods not exceeding 7 days, compared to 70.8 per cent in Kwahu South. The proportion of the respondents who indicated that their household members were ill for two weeks and more was substantially higher in Dangme West (32.9 per cent) than in Kwahu South (15.0 per cent).

**Table 30a. Length of illness of household members**

*Q30a. What was the length of illness?*

Period of illness	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Less than 3 days	132	23.1	41	12.6	91	36.8
Up to 7 days	175	30.6	91	28.0	84	34.0
More than 7 days	121	21.2	86	26.5	35	14.2
Two weeks and more	144	25.2	107	32.9	37	15.0
Total	572	100.0	325	100.0	247	100.0

## Type of medical facility used by household

Overall, the most commonly used medical facilities were government clinics (38.6 per cent) and government hospitals (22.4 per cent), followed by chemists / pharmacies (17.3 per cent, Table 30b).

There were, however, significant variations in the districts. In Dangme West, greatest use was made of the government clinic, whereas in Kwahu South utilization was fairly evenly spread between the government hospital and clinic, and chemists / pharmacies. This reflects to some extent the availability of facilities, notably access to a government hospital in Kwahu South (Table 27).

**Table 30b. Type of medical facility used by household**

*Q30b. What medical facility was used?*

Facility	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Government Clinic	221	38.6	168	51.7	53	21.5
Government Hospital	128	22.4	58	17.8	70	28.3
Chemist/Pharmacy	99	17.3	38	11.7	61	24.7
Mission Hospital	58	10.1	22	6.8	36	14.6
Private Clinic	50	8.7	28	8.6	22	8.9
Herbalist	16	2.8	11	3.4	5	2.0
Total	572	100.0	325	100.0	247	100.0



## Cost of treatment

The cost of treatment varied from nothing to over 500,000 cedis. Many of the households (23.6 per cent) said they paid between 15,000-30,000. Cumulatively, 37.1 per cent did not pay more than 30,000. For 51.4 per cent of the households, the cost of treatment did not exceed 50,000 cedis. For another 18.4 per cent the cost range was from 50,000 to 100,000 cedis and for 25.5 per cent of the households, the cost exceeded 100,000 cedis (Table 30c).

**Table 30c. Cost of treatment of illness of household member**

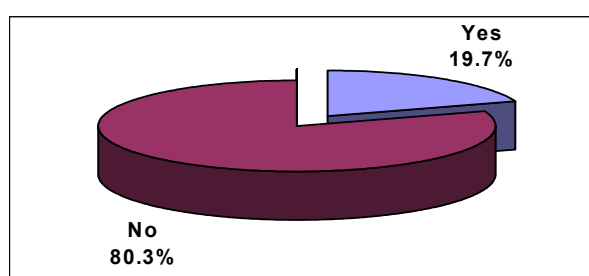
*Q30d.. What is the approximate cost of treatment?*

Cost (Cedis)	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Nothing	27	4.7	26	8.0	1	0.4
5,000 - 15,000	50	8.7	18	5.5	32	13.0
15,000 - 30,000	135	23.6	78	24.0	57	23.1
30,000 - 50,000	82	14.3	48	14.8	34	13.8
50,000 – 75,000	49	8.6	26	8.0	23	9.3
75,000 - 100,000	56	9.8	23	7.1	33	13.4
More than 100,000	61	10.7	29	8.9	32	13.0
More than 200,000	38	6.6	18	5.5	20	8.1
More than 500,000	47	8.2	33	10.2	14	5.7
Don't Know	27	4.7	26	8.0	1	0.4
Total	572	100.0	325	100.0	247	100.0

## Hospital admission and period

In the last two years, only 19.7 per cent of the respondents indicated that some of their household members were admitted at hospitals.

**Figure 31. Hospital admission of household members within the last 2 years**



**Table 31. Hospital admission**

*Q31. Have you been on hospital admission during the past two years?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	197	19.7	91	18.2	106	21.2
No	803	80.3	409	81.8	394	78.8
Total	1,000	100.0	500	100.0	500	100.0

## Duration of hospital admission

The period of admission of household members was 1 to 2 weeks for 44.2 per cent of the households, more than 2 weeks for 29.9 per cent of the households and less than a week for 25.9 per cent of the households (Table 32). There was no significant difference between the two districts.

**Table 32. Duration of hospital admission**

*Q32. If yes, for how long were you admitted?*

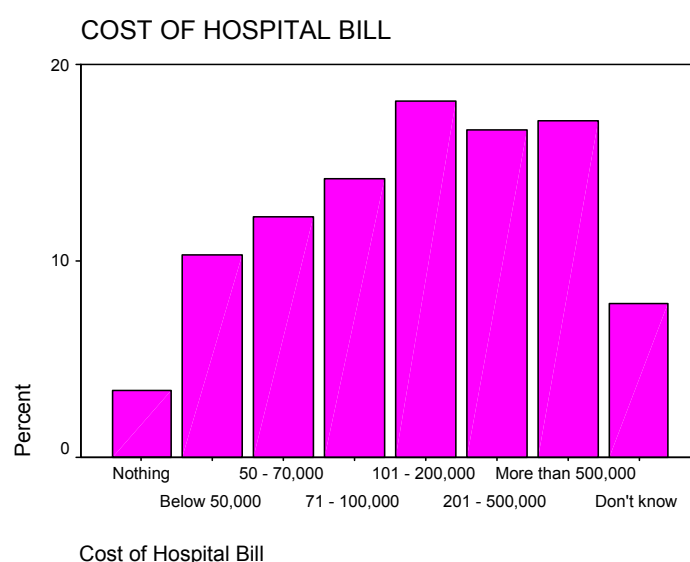
Duration	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Less than one week	51	25.9	22	24.1	29	27.3
Between 1 and 2 weeks	87	44.2	40	44.0	47	44.4
More than 2 weeks	59	29.9	29	31.9	30	28.3
Total	197	100.0	91	100.0	106	100.0

## Payment for hospital admission

The distribution of the cost of hospital admission is shown on Figure 33. About 42 per cent of the households paid less than 100,000 cedis, 36 per cent paid between 100,000 to 500,000 cedis and 17.8 per cent paid over 500,000 cedis.

In the districts, 39.6 per cent of respondents in Kwahu South and 44 per cent in Dangme West paid below 100,000 for hospital admissions. Those who paid between 100,00 and 500,000 cedis were more in Kwahu South (50 per cent) than in Dangme West (19.8 per cent). As a consequence, more people paid more than 500,000 cedis in Dangme West (26.4 per cent) than in Kwahu South (10.4 per cent, Table33).

**Figure 33. Cost of hospital bill**



**Table 33. Cost of hospital bill**

*Q33. How much, roughly, did you pay for your stay in hospital?*

Cost (Cedis)	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Nothing	7	3.5	6	7.2	1	0.9
Below 50,000	21	10.6	17	18.6	4	3.7
50,000 - 70,000	25	12.7	9	9.8	16	15.0
70,000 - 100,000	29	14.7	8	8.7	21	19.9
100,000 - 200,000	37	18.8	12	13.1	25	23.6
200,000 - 500,000	34	17.3	6	6.5	28	26.6
More than 500,000	35	17.8	24	26.3	11	10.3
Don't know	9	4.6	9	9.8	0	0.0
Total	197	100.0	91	100.0	106	100.0

## Perception of quality of treatment

The perception of the quality of treatment were satisfied to very satisfied for 84.3 per cent of the respondents and only 6.4 per cent were not satisfied (Table 34).

Slightly more respondents in Kwahu South (87.4 per cent) were satisfied to very satisfied on the perception of quality of treatment at medical facility than in Dangme West (81.2 per cent).

**Table 34. Perception of quality of treatment at medical facility**

*Q34. What is your perception on the quality of treatment at the medical facility used?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Not at all satisfied	36	3.6	30	6.0	6	1.2
Not satisfied	28	2.8	24	4.8	4	0.8
Neither/Nor	93	9.3	40	8.0	53	10.6
Satisfied	581	58.1	218	43.6	363	72.6
Very satisfied	262	26.2	188	37.6	74	14.8
Total	1,000	100.0	500	100.0	500	100.0

## Hospital admission by perception on quality of treatment at health facility

Results reflected a high proportion of satisfaction rate amongst respondents who had been on admission and those who had not on the perception of quality of treatment at health facility.

In the Dangme West district out of a total of 91 respondents who had been on admission during the past two years, a high score of 77.0 per cent were satisfied to very satisfied on quality of treatment at health facility. Out of a total of 400 respondents who responded in the negative a high proportion of 82.2 per cent were satisfied to very satisfied on quality of treatment at health facility.

Scores on satisfaction rate were even higher in the Kwahu–South district, out of 106 respondents who had been on admission (90.5 per cent) were satisfied to very satisfied on the quality of treatment as against 403 who had not been on admission in the last two years also following the same trend (89.9 per cent) were satisfied to very satisfied about the quality of treatment at the health facility.

#### Hospital Admission Q31 by Perception on Quality of Treatment at Medical Facility Q34

Response	Dangme West				Kwahu South			
	Yes		No		Yes		No	
	F	%	F	%	F	%	F	%
Not at all satisfied	9	9.9	21	5.1	4	3.8	2	0.5
Not satisfied	8	8.8	16	3.9	4	3.8	0	0.0
Neither/Nor	4	4.4	36	8.8	2	1.9	51	12.9
Satisfied	42	46.2	176	43.0	87	82.1	276	70.1
Very satisfied	28	30.8	160	39.1	9	8.5	65	16.5
Total	91	100.0	409	100.0	106	100.0	394	100.0

#### Reasons for dissatisfaction

Among the reasons for dissatisfaction were the poor quality and type of drugs given, attitude of nurses / doctors, hospital bill too much (Table 35).

**Table 35. Reasons for not being satisfied by district cross tabulation**

*Q35. Why do you say you are not satisfied with the quality of treatment at medical facility used?*

Response	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
Nurses do not handle Patients with care	10	15.6	8	14.8	2	20.0
Only Paracetamol and Cloroquine dispensed	14	21.9	12	22.2	2	20.0
Quality of Drugs not adequate	10	15.6	8	14.8	2	20.0
Hospital bills too much	9	14.1	7	13.0	2	20.0
Medical facility not accessible	5	7.8	5	9.3	0	0.0
Drugs prescribed do not match with sickness	9	14.1	7	13.0	2	20.0
Patients not attended to properly	5	7.8	5	9.3	0	0.0
Doctors not competent	2	3.1	2	3.7	0	0.0
Total	64	100.0	54	100.0	10	100.0

## 4. Knowledge of MHOs, membership and payment of premium

### Knowledge of MHO

Many of the respondents (75.9 per cent) had knowledge of MHOs. About 78.4 per cent and 73.4 per cent were aware of MHO's in Kwahu South and Dangme West respectively.

**Table 36. Knowledge of MHO**

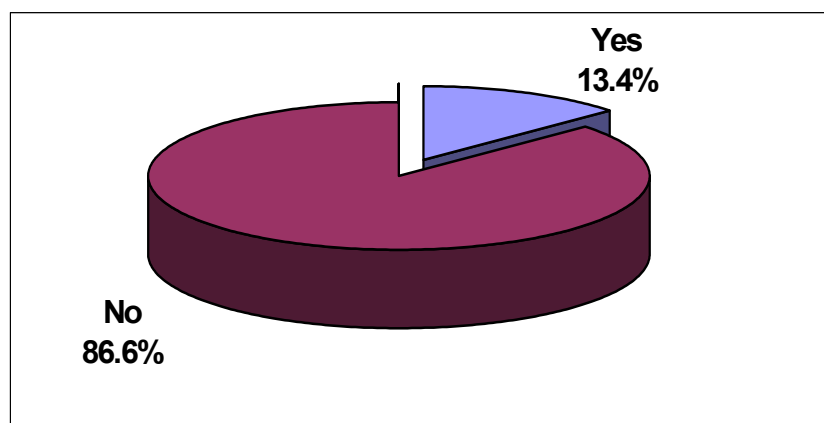
*Q36. Do you know of any Mutual Health Organization in this community?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	759	75.9	367	73.4	392	78.4
No	241	24.1	133	26.6	108	21.6
Total	1,000	100.0	500	100.0	500	100.0

### Membership of MHO

Of 1,000 respondents interviewed, only 134 were members of an MHO. Some 15 per cent of the respondents were members of MHO in Kwahu South and they were about 11.4 in the Dangme West.

**Figure 37 Membership of MHO**



**Table 37. Membership of MHO**

*Q37. Do you belong to the Mutual Health Organization (MHO)?*

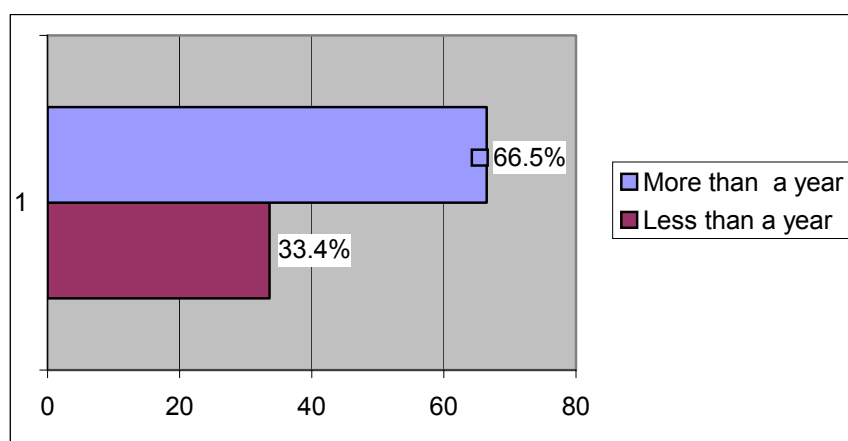
Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	134	13.4	57	11.4	77	15.4
No	866	86.6	443	88.6	423	84.6
Total	1,000	100.0	500	100.0	500	100.0

## Duration of membership

Two thirds of this 134 persons said their membership had been for more than a year and on third claimed it was less than a year.

In Kwahu South and Dangme West (40.2 per cent and 24.5 per cent) respectively said less than a year whilst respondents who said more than a year were 75.4 per cent in Dangme West compared to 59.8 per cent in Kwahu South (Figure 38).

**Figure 38. Duration of membership**



**Table 38. Duration of Membership of MHO**

*Q38. If yes, for how long have you been a member?*

Duration	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Less than a year	45	33.6	14	24.6	31	40.3
More than a year	89	66.4	43	75.4	46	59.7
Total	134	100.0	57	100.0	77	100.0

## Family membership of MHO

About two thirds of the households have the entire family as members of MHO and about one third did not register all family members (Table 39).

More of the respondents in Dangme West (84.2 per cent) ascertained that their family members have joined MHO than in Kwahu South (53.2 per cent).

**Table 39. Family membership of MHO**

*Q39. Do all members of your family belong to the MHO?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	89	66.4	48	84.2	41	53.2
No	45	33.6	9	15.8	36	46.8
Total	134	100.0	57	100.0	77	100.0

## Reasons for family not joining MHO

The reasons for not joining with family included premium being expensive (44.4 per cent), some said family members were staying elsewhere (20 per cent), some claimed they could not register during the registration exercise (Table 40).

**Table 40. Reasons for other Family Membership not joining of MHO**

*Q40. If not all members belong to the MHO, why have others not joined?*

Reasons	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
Premium too high	20	44.4	4	44.4	16	44.4
Some children do not live with me	9	20.0	0	0.0	9	25.0
We could not register during the registration	3	6.7	0	0.0	3	8.3
Due to poor quality of service	3	6.7	0	0.0	3	8.3
Only those fall sick frequently registered	3	6.7	2	22.2	1	2.8
My sister's children are staying temporarily	1	2.2	1	11.1	0	0.0
Lack of interest	1	2.2	1	11.1	0	0.0
Others	5	11.1	1	11.1	4	11.1
Total	45	100.0	9	100.0	36	100.0

## Amount of premium paid

About 41 per cent said they paid a premium not exceeding 20,000 cedis, 43 per cent a premium of 20,000 to 30,000 cedis, and 16 per cent a premium of 30,000 cedis and more.

In the districts, the majority of respondents in Dangme West (86.0 per cent) paid premiums not exceeding 20,000 as against 7.8 per cent in Kwahu South. For those who paid premiums between 20,000-30,000 it was the reverse, they were 67.5 per cent in Kwahu South and 10.5 per cent only in Dangme West. Those who paid premiums of 30,000 and more were 24.7 per cent in Kwahu South and 15.7 per cent in Dangme West (Table 41).

**Table 41. Amount of premium paid**

*Q41. How much do you normally pay for your membership of the MHO (the premium)? (Obtain approximate amount if exact is not available)*

Cost (Cedis)	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
0 - 10,000	4	3.0	3	5.3	1	1.3
10,000 - 20,000	51	38.1	46	80.7	5	6.5
20,000 - 30,000	58	43.3	6	10.5	52	67.5
30,000 - 60,000	12	9.0	0	0.0	12	15.6
+ 60,000	9	6.7	2	3.5	7	9.1
Total	134	100.0	57	100.0	77	100.0

\*\*\* Some of the respondents who paid 30,000 cedis and more claimed the said amount includes payment for some family members.

## Frequency of payment of premium

The majority of the MHO members (74.6 per cent) paid the premium yearly and 23.9 per cent paid monthly. Only 0.7 per cent paid weekly (Table 42).

In the districts more respondents in Dangme West (93.0 per cent) affirmed they paid premiums yearly as against 61.2 per cent in Kwahu South, whereas more in Kwahu South (36.4 per cent) paid premiums monthly than in Dangme West (7.0 per cent). A small 1.3 per cent in Kwahu South, reported paying premiums weekly.

**Table 42. Frequency of payment of premium**

*Q42. How often do you pay this amount?*

Frequency of payment	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Weekly	1	0.7	0	0.0	1	1.3
Monthly	32	23.9	4	7.0	28	36.4
Yearly	100	74.6	53	93.0	47	61.0
Others	1	0.7	0	0.0	1	1.3
Total	134	100.0	57	100.0	77	100.0

## Percentage of premium paid to monthly income

The annual premium paid for membership of MHO as a proportion of monthly income was calculated by the interviewer and should therefore be taken with caution. For 85.8 per cent of the respondents, the premium formed not more than 10 per cent of their monthly incomes and for 9.7 per cent of the respondents, the premium was between 10 and 20 per cent of their monthly income. The premium exceeded 20 per cent of monthly incomes for 4.5 per cent of the respondents (Table 43).

In Dangme West, 91.2 per cent paid premiums under 10 per cent whilst the corresponding figure in Kwahu South was 81.8 per cent.

**Table 43. Percentage of premium paid to monthly income\***

*Q43. What is this as a percentage of monthly income (interviewer to calculate)?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1-3 %	61	45.5	28	49.1	33	42.8
3-6 %	32	23.9	19	33.3	13	16.9
6- 10 %	22	16.4	5	8.8	17	22.1
10 – 13 %	3	2.2	1	1.8	2	2.6
13 – 16 %	6	4.5	0	0.0	6	7.8
16 – 20 %	4	3.0	2	3.5	2	2.6
20 – 40 %	6	4.5	2	3.5	4	5.2
Total	134	100.0	57	100.0	77	100.0

\*Premiums as a percentage of monthly salary.



## Impressions of premium paid

The majority of the respondents (64.9 per cent) felt that the premium was manageable; 22.4 per cent felt that it was too much and 9.7 per cent said it was too little (Table 44).

In Dangme West (68.4 per cent) and Kwahu–South (62.3 per cent), a majority of respondents felt it was manageable, whilst 28.6 per cent in Kwahu South and 14.0 per cent and Dangme West felt that premiums were too high. About 16 per cent in Dangme West and 5.2 per cent in Kwahu South were of the view that premiums were too little.

**Table 44. Impressions of premium paid**

*Q44. Do you think this is*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Too much	30	22.4	8	14.0	22	28.6
About right	87	64.9	39	68.4	48	62.3
Too little	13	9.7	9	15.8	4	5.2
Don't know	4	3.0	1	1.8	3	3.9
Total	134	100.0	57	100.0	77	100.0

## Source of premium money

About 83 per cent of the members of the MHO who thought the premium was too much pay the premium from their own resources and 17 per cent indicated the money came from relatives (Table 45).

**Table 45. Sources of premium money**

*Q45. If too much, how did you raise money to pay?*

Source	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Self	25	83.3	6	75.0	19	86.4
Relatives	5	16.7	2	25.0	3	13.6
Total	30	100.0	8	100.0	22	100.0

## Comparison of amount spent on health since joining MHO with other commitments

The amount of premium spent on health was perceived as manageable (about right) by 50.7 per cent of the respondents, whereas 38.1 per cent felt it was high and 9.0 per cent felt it was low (Table 46).

There was a significant difference between the two districts. About 64 per cent in Kwahu South and 33 per cent in Dangme West said the premiums were manageable. In Dangme West, 61.4 per cent believed premiums were high, compared to 20.8 per cent of their counterparts in Kwahu South. Respondents who felt premiums were low were 13.0 per cent and 3.5 per cent in Kwahu South and Dangme West respectively.

**Table 46. Rating on amount spent on health since joining MHO**

*Q46. Considering your other items of expenditure, eg. Food, Clothing, School fees, etc., would you say that premiums were*

Rating	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
High	51	38.1	35	61.4	16	20.8
Low	12	9.0	2	3.5	10	13.0
About Right	68	50.7	19	33.3	49	63.6
Don' Know	3	2.2	1	1.8	2	2.6
Total	134	100.0	57	100.0	77	100.0

### Perception of premium in relation to other commitments

About 50.7 per cent of the respondents rated the amount of the premium in household expenditure as manageable (about right), 16.4 per cent indicated that it was high and 28.4 per cent said it was low (Table 47).

The majority of respondents in Kwahu South (64.9 per cent) perceived premiums to be about right, whilst only 31.6 per cent shared this view in Dangme West. About 20.8 per cent in Kwahu South and 10.5 per cent in Dangme West said that premiums were high. Nevertheless, 54.4 per cent in Dangme West acknowledged that premiums were low, with only 9.1 per cent in Kwahu South. This shows a notable difference between the perception of the premium as a proportion of income against the perception of value received.

**Table 47. Rating of premium in relation to other commitments**

*Q47. As a member of the scheme do you consider the amount you spend on the premium in relation to your other commitments as*

Rating	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
High	22	16.4	6	10.5	16	20.8
Low	38	28.4	31	54.4	7	9.1
About right	68	50.7	18	31.6	50	64.9
Don't know	6	4.5	2	3.5	4	5.2
Total	134	100.0	57	100.0	77	100.0

### Improved access to health care as member of MHO

Most members of the MHO (58.2 per cent) indicated that their access to health care has improved as a result of membership. Nevertheless, 23.1 per cent indicated no improvement.

Scores were higher in Dangme West (66.7 per cent) than in Kwahu South over respondents who admitted that MHO has improved their access to healthcare. For those who responded in the negative there was not much difference in Dangme West (24.6 per cent) and in Kwahu South (22.1 per cent).

**Table 48. MHO improving access to healthcare**

*Q48. Has your membership of the MHO improved your access to health care?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	78	58.2	38	66.7	40	51.9
No	31	23.1	14	24.6	17	22.1
Don't know	25	18.7	5	8.8	20	26.0
Total	134	100.0	57	100.0	77	100.0

### Reasons for non-improvement of access to healthcare by MHO

The reasons for non-improvement of access to health care since joining MHO included lack of opportunity to access care, as since joining the MHO they had not been to hospital (22.6 per cent). Another 35.5 per cent did not see any improvement in the quality of treatment while 19.4 per cent were unhappy that the scheme did not pay the full medical bill (Table 49).

This last figure was skewed as it is a concern only of members in Kwahu South. Some 35.3 per cent there expressed concern that the scheme does not pay for all medical bills, which reflects the fact that hospital bills of less than 200,000 cedis are not refunded.

**Table 49. Reasons for non-improvement of access to healthcare by MHO**

*Q49. If no, why?*

Reasons	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
Have not been to hospital since joining scheme	7	22.6	2	14.3	5	29.4
Scheme does not pay for full medical bill	6	19.4	0	0.0	6	35.3
Quality of treatment not improved	11	35.5	7	50.0	4	23.5
Lack of drugs at clinic	4	12.9	3	21.4	1	5.9
Prescribed drugs do not cure sickness	3	9.7	2	14.3	1	5.9
Total	31	100.0	14	100.0	17	100.0

### Expected additional benefits

Some 21 per cent of the MHO members would like the schemes to pay for all expenses of treatment, while 17.9 per cent wished for better treatment. About 13 per cent of members would like to be given more drugs. Another 14 per cent wished for a reduction in the premium. Others expected benefits included provision of qualified doctors (6.7 per cent), provision of dental and eye departments at the government hospitals and members should be treated anywhere (2.2 per cent each respectively (Table 50)).

In Kwahu South, about 25 per cent were of the view that the scheme should pay for all hospital bills as against only 15.8 per cent in Dangme West. In Kwahu South, 19.5 per cent indicated that premiums should be reduced as compared to 7 per cent in Dangme West. More respondents in Dangme West (26.3 per cent) than Kwahu South (11.7 per cent) had concerns that patients should be treated well.

**Table 50. Expected additional benefits***Q50. What additional benefits would you want the scheme to offer its members?*

Reasons	Total		Dangme West		Kwahu South	
	F	%	F	%	F	%
Nothing	18	13.4	8	14.0	10	13.0
Scheme should pay for all additional money	28	20.9	9	15.8	19	24.7
Premium should be reduced	19	14.2	4	7.0	15	19.5
Patients should be treated well	24	17.9	15	26.3	9	11.7
More drugs should be given to MHO card holders	17	12.7	11	19.3	6	7.8
Qualified Doctors should be provided	9	6.7	3	5.3	6	7.8
Lab facilities should be provided	3	2.2	1	1.8	2	2.6
Scheme should care for all types of diseases	3	2.2	1	1.8	2	2.6
MHO members should be treated anywhere	3	2.2	1	1.8	2	2.6
Dental & eye-check should be provided at Government's hospital	3	2.2	0	0.0	3	3.9
Others	7	5.2	4	7.0	3	3.9
Total	134	100.0	57	100.0	77	100.0

## Status of membership

Almost all of the respondents who joined the MHO are still members (93.3 per cent), with 98.7 per cent in Kwahu South and 86 per cent in Dangme West (Table 51).

**Table 51. Status of membership of MHO***Q51. Are you still a member?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	125	93.3	49	86.0	76	98.7
No	9	6.7	8	14.0	1	1.3
Total	134	100.0	57	100.0	77	100.0

## Reasons for withdrawal from MHO

The reasons for the withdrawal are presented in (Table 52). A third (3 members) felt that the members were not treated well as compared with those who pay cash. Another third were not satisfied with the quality of service and one member with the quality of drugs prescribed. Two members withdrew for lack of money.

Out of those who have withdrawn their membership from the MHO, 8 were from Dangme West and only one from Kwahu South. It should be noted that the numbers who have withdrawn from the MHOs are very small indeed.

**Table 52. Reasons for withdrawal from MHO***Q52. If not, give reasons*

Reasons	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
Card holders not treated like those who pay cash	3	33.3	2	25.0	1	100.0
Not satisfied with quality of service	3	33.3	3	37.5	0	0.0
Doctors prescribe only Paracetamol	1	11.1	1	12.5	0	0.0
No money so I stopped	2	22.3	2	25.0	0	0.0
Total	9	100.0	8	100.0	1	100.0

**Willingness to join or re-join MHO**

Many of the respondents were willing to join the MHO as shown by the large yes response (88.0 per cent, Table 53). Both districts demonstrated very high yes scores with 89.1 per cent in Dangme West and 86.8 per cent in Kwahu South. It is interesting to note that five out of the nine members who withdrew from the MHO said they are willing to rejoin.

**Table 53. Willingness to join or re-join MHO***Q53. If you answered NO to Question 37 or 52, would you be willing to join or re-join a Mutual Health Organization?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	770	88.0	402	89.1	368	86.8
No	105	12.0	49	10.9	56	13.2
Total	875	100.0	451	100.0	424	100.0

**Reasons for non-willingness to join or re-join**

A majority of those who were not willing to join the MHO indicated that they simply cannot afford the premium (45.7 per cent, Table 54). Moreover, those who said the premium was too much might be added to that group. Some want to have more education on the scheme (13.3 per cent). Others, again in Kwahu South, were not happy with the fact that bills are not refundable if below 200,000 cedis.

**Table 54. Reasons for non-willingness to join or re-join***Q54. If not give reasons*

Reasons	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
Cannot afford to pay premium	48	45.7	20	39.2	28	51.9
More education on MHO	14	13.3	3	5.9	11	20.4
Premium too much	5	4.8	4	7.8	1	1.9
Family do not get sick	5	4.8	4	7.8	1	1.9
Drugs do not meet expectation	7	6.7	6	11.8	1	1.9
Patients not treated well	3	2.9	3	5.9	0	0.0
Scheme not trustworthy	3	2.9	1	2.0	2	3.7
Job takes me out of Village	5	4.8	4	7.8	1	1.9
Bills not exceeding 200,000 not refundable	2	1.9	0	0.0	2	3.7
Do not provide quality service	5	4.8	4	7.8	1	1.9
Others	8	7.6	2	3.9	6	11.1
Total	105	100.0	51	100.0	54	100.0

**Factors considered for joining MHO or not**

The factor considered the most important priority in decision to join or not to join the scheme was the reduction in premium. The factor ranked second in importance is the quality of service and the factor ranked third was the benefits (Table 55a, 55b, and 55c).

*Q55. If you were considering joining or rejoining an MHO what priority would you give to the following...(Ranking)*

**Table Q55a. Reduction in premium**

	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Rank 1	430	55.8	182	45.3	248	67.4
Rank 2	184	23.9	101	25.1	83	22.6
Rank 3	156	20.3	119	29.6	37	10.1
Total	770	100.0	402	100.0	368	100.0

**Table Q55b. Improve quality of service**

	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Rank 1	249	32.3	145	36.1	104	28.3
Rank 2	413	53.6	189	47.0	224	60.9
Rank 3	108	14.0	68	16.9	40	10.9
Total	770	100.0	402	100.0	368	100.0

**Table Q55c. Wider Choice of benefit**

	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Rank 1	91	11.8	75	18.7	16	4.3
Rank 2	173	22.5	112	27.9	61	16.6
Rank 3	506	65.7	215	53.5	291	79.1
Total	770	100.0	402	100.0	368	100.0

### Desired cost of MOH in districts

About 37 per cent would join if the premium were 5,000 to 10,000 cedis. Almost 40 per cent of the respondents would be ready to pay between 10,000 and 20,000 cedis. The proportion that will join if the premium were above 20,000 drops sharply (Table 56).

It seems respondents in Dangme West are less ready to pay a relatively higher premium than their counterparts in Kwahu South.

**Table Q56. Desired cost of MHO in districts**

*Q56. What amount would you be ready to pay to join an MHO?*

Cost (Cedis)	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
5,000 - 10,000	327	37.4	217	48.1	110	25.9
10,000 - 20,000	345	39.4	175	38.8	170	40.1
20,000 - 30,000	174	19.9	45	10.0	129	30.4
30,000 - 40,000	17	1.9	5	1.1	12	2.8
40,000 - 50,000	9	0.8	7	1.6	2	0.5
50,000 - 100,000	3	0.2	2	0.4	1	0.2
Total	875	100.0	451	100.0	424	100.0

### Problems and challenges experienced by MHO members

Table 57 is a summary of problems and challenges experienced with the schemes. They included poor quality of treatment (13.4 per cent). Additional expenses incurred when making claims (6.7 per cent) and inadequate attention to scheme members (3.7 per cent). Nonetheless, 42.5 per cent of schemes members did not mention any problem.

In the districts respondents in Dangme West (22.8 per cent) and Kwahu South (6.5 per cent) emphasized that the MHO did not give quality treatment. In Kwahu south (14.3 per cent) reiterated the concern that bills below 200,000 are not paid. Difficulty in paying the premium was mentioned by 8.8 per cent and 3.9 per cent in Dangme West and Kwahu South respectively. Lack of drugs at health facility and drugs not curing sicknesses was stated by (7.0 per cent and 3.9 per cent) in Dangme West and Kwahu South respectively.

**Table Q57. Problems and challenges experienced with MHO***Q57. What problems and or challenges have you experienced since joining MHO?*

	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
None	57	42.5	24	42.1	33	42.9
Has raised my expenditure	4	3.0	0	0.0	4	5.2
Difficulty in paying premium	8	6.0	5	8.8	3	3.9
Additional expenses when making claims	9	6.7	2	3.5	7	9.1
Bills below 200,000 not paid	11	8.2	0	0.0	11	14.3
Do not give quality treatment	18	13.4	13	22.8	5	6.5
Health assistants complained of regular visits	3	2.2	2	3.5	1	1.3
Health assistants don't pay attention to members	5	3.7	3	5.3	2	2.6
Drugs given do not cure sickness	2	1.5	2	3.5	0	0.0
Scheme takes care of only one-third of bills	2	1.5	2	3.5	0	0.0
Lack of drugs at the hospital	7	5.2	4	7.0	3	3.9
Pay for only admission bills	1	0.7	0	0.0	1	1.3
Premium of ₵30,000 is too much	4	3.0	0	0.0	4	5.2
Never been to hospital since we join the scheme	2	1.5	0	0.0	2	2.6
Others	1	0.7	0	0.0	1	1.3
Total	134	100.0	57	100.0	77	100.0

**Expected quality of service**

Although many respondents did not say anything, several indicators were suggested to improve the quality of service. The most frequent answer was that more and better doctors and nurses are needed (22.7 per cent), followed by improved attention paid to patients (13.8 per cent), and that drugs should be available and affordable (10.2 per cent).



**Table 58. Expected quality of service***Q58. What kind and quality of services would you expect?*

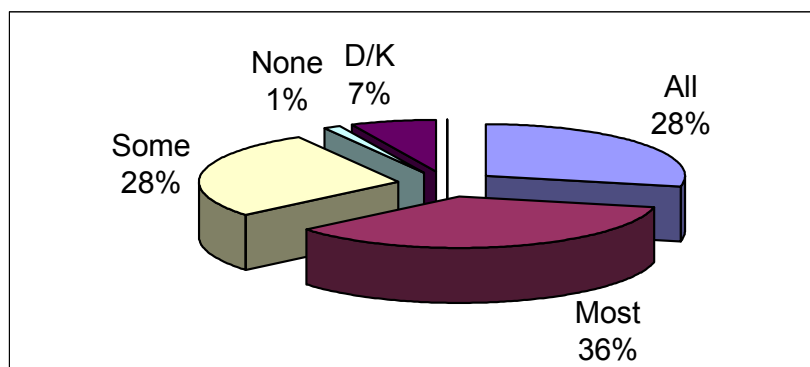
Reasons	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
Nothing	312	31.2	107	21.4	205	41.0
More and better doctors and nurses needed	227	22.7	175	35.0	52	10.4
More and better medical facilities should be supplied	55	5.5	44	8.8	11	2.2
Drugs should always be available and affordable	102	10.2	65	13.0	37	7.4
Personnel should give adequate attention to patients	138	13.8	54	10.8	84	16.8
Transport facilities should be provided for needy	5	0.5	4	0.8	1	0.2
Quality service with lesser cost	63	6.3	28	5.6	35	7.0
Equal opportunity to all patients	7	0.7	6	1.2	1	0.2
Education on healthy living practices	6	0.6	3	0.6	3	0.6
Premium should be reduced	9	0.9	3	0.6	6	1.2
Easy access to health care delivery	13	1.3	3	0.6	10	2.0
Health service should be effective and efficient	46	4.6	1	0.2	45	9.0
Others	17	1.7	7	1.4	10	2.0
Total	1,000	100.0	500	100.0	500	100.0

**MHO solving problems of cash and carry**

Only 1.4 per cent of the respondents indicated that the MHO does not solve any of the cash and carry problems. Some 35.5 per cent of the respondents indicated that the MHO solves *most* of the problems of the “cash and carry”, while 28.3 per cent said it solves *all* the problems and 27.8 per cent indicated that it solves *some* of the problems (Figure 59).

It is difficult to make a real comparison between the districts, as the difference between all, most and some is difficult to make. Results are presented in Table 59a.

**Figure 59. MHO solving problems of cash and carry**



**Table Q59a. MHO solves the problems of cash and carry by all respondents\***

*Q59. Do you think the MHO solves the problems of "Cash and Carry"?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
All	283	28.3	205	41.0	78	15.6
Most	355	35.5	82	16.4	273	54.6
Some	278	27.8	161	32.2	117	23.4
None	14	1.4	10	2.0	4	0.8
Don't know	70	7.0	42	8.4	28	5.6
Total	1,000	100.0	500	100.0	500	100.0

\* Responses of all respondents.

### **MHO Members' perceptions of whether MHO solves the problems of cash and carry\***

Half of MHO members who were interviewed indicated that the MHO solved most of the problems of cash and carry. About 20 per cent believed that it solved all the problems of cash and carry whilst a quarter said it solved some of the problems.

Though a substantial number (63.6 per cent) of respondents Kwahu South indicated that an MHO solved most of the problems of cash and carry as against 33.3 per cent in Dangme West, 28.1 per cent in Dangme West said that MHO solves all the problems compared with only 14.3 per cent in Kwahu South. For those who were of the view that MHO solves some of the problems of cash and carry scores were higher in Dangme West (33.3 per cent) than in Kwahu South (18.2 per cent, Table 59b).

**Table 59b. MHO solves the problems of Cash and Carry by MHO Members\***

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
All	27	20.1	16	28.1	11	14.3
Most	68	50.7	19	33.3	49	63.6
Some	33	24.6	19	33.3	14	18.2
None	1	0.7	0	0.0	1	1.3
Don't know	5	3.7	3	5.3	2	2.6
Total	134	100.0	57	100.0	77	100.0

\* Responses of MHO members only.

### Preferred system of healthcare by all respondents

A large majority of the respondents (90.3 per cent) preferred the MHO to the cash and carry system. The proportion that preferred the cash and carry system was only 5.4 per cent. These figures were echoed among respondents in both districts: in Kwahu South, 92.6 per cent, and in Dangme West, 88.0 per cent preferred the MHO to the cash and carry system. Only 8.6 per cent and 2.2 per cent in Dangme West and Kwahu South respectively preferred the cash and carry system (Table 60a).

**Table 60a. Preferred system of healthcare by all respondents\***

*Q60. Which one do you prefer?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Cash and carry	54	5.4	43	8.6	11	2.2
MHO	903	90.3	440	88.0	463	92.6
Neither	43	4.3	17	3.4	26	5.2
Total	1,000	100.0	500	100.0	500	100.0

\* Responses of all respondents.

### Preferred system of healthcare by MHO Members

Although the bulk of MHO members (88.1 per cent) demonstrated their preference for the MHO with only (7.5 per cent) saying the cash and carry system, figures are slightly lower for MHO members than for all respondents (Table 60b).

**Table Q60b. Preferred system of healthcare by MHO Members \***

*Q60. Which one do you prefer?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Cash and carry	10	7.5	8	14.0	2	2.6
MHO	118	88.1	46	80.7	72	93.5
Neither	6	4.4	3	5.3	3	3.9
Total	134	100.0	57	100.0	77	100.0

\* Responses of MHO members only.



## 5. Exemptions

Some 84 per cent of the respondents indicated that some people should have free access to health facilities (91 per cent in Kwahu South and 77 per cent in Dangme West, Table 61).

**Table 61. Free access to health facility by all respondents**

*Q61. Do you think there are some people in this locality that should have free access to the health facilities without paying or by paying less?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	840	84.0	385	77.0	455	91.0
No	95	9.5	75	15.0	20	4.0
Don't know	65	6.5	40	8.0	25	5.0
Total	1,000.0	100.0	500	100.0	500	100.0

### Class of people for free access to health facilities

The most common suggestion for allowing free access to healthcare was the elderly (47.8 per cent), followed by the disabled (36.9 per cent). Other less frequent suggestions were students and school children (4.3 per cent), children under 5 years of age (2.1 per cent) and the poor (2.7 per cent). More respondents mentioned the elderly in Dangme West (59.3 per cent) than in Kwahu South (38.2 per cent) but more mentioned the disabled in Kwahu South (52.6 per cent) than in Dangme West (18.1 per cent, Table 62).

**Table 62. Class of people for free access to health facilities**

*Q62. If yes, who do you think should have this help?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
The disabled	310	36.9	71	18.1	239	52.6
Aged 70 years and above	231	27.5	124	32.5	107	23.5
Aged 60 years and above	99	11.8	80	20.8	19	4.2
Aged 80 years and above	71	8.5	23	6.0	48	10.5
Student and School Children	36	4.3	19	4.9	17	3.7
Children under 1 - 5 years	18	2.1	13	3.4	5	1.1
The poor	23	2.7	16	4.2	7	1.5
Orphans	12	1.4	9	2.3	3	0.7
Unemployed	19	2.3	9	2.3	10	2.2
Pensioners	5	0.6	5	1.3	0	0.0
The blind	1	0.1	1	.3	0	0.0
Pregnant women	5	0.6	5	1.3	0	0.0
Children between 1 - 3 years	3	0.4	3	0.8	0	0.0
Infants	2	0.2	2	0.5	0	0.0
The aged without careers	5	0.6	5	1.3	0	0.0
Total	840	100.0	385	100.0	455	100.0

## Deciding who should have access to free medical services

The majority of respondents (79.2 per cent) thought that the decision to allow free access to health facilities should be made by the Government. Only 9.9 per cent thought that MHO administrators should make that decision and 6.7 per cent said community leaders.

The trend was not very different in the districts: 87.7 per cent in Kwahu South and 69.4 per cent in Dangme West mentioned the government. MHO administrators were preferred by 10.9 per cent and 9.0 per cent in Dangme West and Kwahu South respectively. More respondents in Dangme West (14.3 per cent) believed their community leaders should decide on who should have free medical care while only 0.2 per cent mentioned it in Kwahu South (Table 63). This may be a reflection of current practice in Dangme West where there is greater involvement of community leaders.

**Table 63. Deciding who should have access to free medical services**

*Q63. Who do you think should decide if those people should have free access?*

Response	Total		Dangme West		Kwahu South	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Government	666	79.2	267	69.4	399	87.7
MHO administrators	83	9.9	42	10.9	41	9.0
Community leaders	56	6.7	55	14.3	1	0.2
Others	4	0.5	4	1.0	0	0.0
Don't know	31	3.7	17	4.4	14	3.1
Total	840	100.0	385	100.0	455	100.0

## Reasons for no free medical service

The reasons of the respondents who felt that free access to health facilities should not be given to any members or groups in society are presented in Table 65. The majority (69.5 per cent) wants everybody to pay in order to improve the medical services or build up the MHO (8.4 per cent). Trends did not differ in the districts; 70.0 per cent and 69.4 per cent in Kwahu South and Dangme West respectively were of the view that all must pay for improved services. About 9 per cent in Dangme West indicated that all must contribute to build MHO as against 5.0 per cent in Kwahu South (Table 64).

**Table 64. Reasons for no free medical service**

*Q64. If no, why?*

Response	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
Every one must pay for roved services	66	69.5	52	69.4	14	70.0
All should pay for drugs bought	8	8.4	8	10.7	0	0.0
All must contribute to build MHO	8	8.4	7	9.3	1	5.0
All must have quality care	2	2.1	1	1.3	1	5.0
All should pay the least cost	2	2.1	2	2.6	0	0.0
No	9	9.5	5	6.7	4	20.0
Total	95	100.0	75	100.0	20	100.0

## Suggestions and comments

A summary of final suggestions and comments made by the respondents are presented in Table 65. Some 15 per cent of respondents suggested improvement in the implementation of the schemes and another 15 per cent suggested that there should be more education on the schemes. Many other comments and suggestions were made by smaller numbers of respondents. For example reducing the amount of premium was suggested by 2.5 per cent of the respondents. It was also suggested that the HIPC funds should be used for the MHO. Patterns of response did not change much in the two districts.

**Table 65. Suggestions and comments**

*Q65. Do you have any comments or suggestions on this survey?*

Response	Total		Dangme West		Kwahu South	
	Frequency	%	Frequency	%	Frequency	%
Nothing	522	53.2	277	56.0	245	49.6
More Education about MHO	146	14.8	65	13.0	81	16.3
Scheme should be well implemented	152	15.4	64	12.9	88	17.7
Scheme should solve problems of cash and carry	19	1.9	4	0.8	15	3.0
MHO officials should be effective	16	1.6	8	1.6	8	1.6
Members should be treated at any hospital	7	0.7	4	0.8	3	0.6
Premium should be reduced	25	2.5	13	2.6	12	2.4
Sick should be given quality treatment	16	1.6	13	2.6	3	1.4
Enough Drugs should be available	11	1.1	8	1.6	3	0.6
People should be encouraged to join scheme	15	1.5	5	1.0	10	2.0
MHO registration be extended	5	0.5	2	0.4	3	0.6
Equal treatment for rich and poor	18	1.8	11	2.2	7	1.4
Qualified doctors should be sent to main Health facilities	6	0.6	5	0.1	1	0.2
Use HIPC funds for MHO	4	0.4	1	0.2	3	0.6
MHO should have Laboratories	4	0.4	3	3	1	0.2
Others	15	1.5	6	1.2	9	1.8





## 6. Further comparisons

### Place of residence by location (Urban/Rural)

The majority of the respondents (58.8 per cent) resided in rural areas and the remaining (41.2 per cent) were in urban areas (Table 67).

**Table 67. Place of residence**

Response	Frequency	Percentage
Rural	588	58.8
Urban	412	41.2
Total	1,000	100.0

### Access to health facility by location

Access to health facilities in the urban and rural areas in the two districts produced surprising results (Table 68). Only a slightly higher proportion of the respondents in the rural areas (98.0 per cent) indicated access to health facility than those in the urban areas (96.6 per cent).

**Table 68. Access to health facility by location**

Response	Rural		Urban	
	Frequency	Percentage	Frequency	Percentage
Yes	576	98.0	398	96.6
No	12	20	14	3.4
Total	588	100.0	412	100

### Awareness of MHO by location

The proportions of the respondents who are aware of the MHO were also not very different when rural and urban locations are compared (Table 69). The proportion of awareness of respondents in the rural areas (76.7 per cent) was even slightly higher than those in the urban areas (74.8 per cent). This may indicate more effective information dissemination on the MHO in the rural areas, or simply greater efforts to disseminate information there.

**Table 69. Awareness of MHO by location**

Response	Rural		Urban	
	Frequency	Percentage	Frequency	Percentage
Yes	451	76.7	308	74.8
No	137	23.3	104	25.2
Total	588	412	412	100.0

---

## Free access to health facility by location

The response on the free access to health care by location of respondents is shown in Table 70. A slightly higher proportion of the respondents in the rural areas (86.1 per cent) suggested free access compared to 81.1 per cent of the respondents in the urban areas.

**Table 70. Free access to health facility by location**

Response	Rural		Urban	
	Frequency	Percentage	Frequency	Percentage
Yes	506	86.1	334	81.1
No	44	7.5	51	12.4
Don't know	38	6.5	27	6.6
Total	588	100.0	412	100.0

## Cross tabulation of employment by age

The cross tabulation of age by employment is shown in Table 1a.

## Cross tabulation of hospital admission by age

Table 1b shows the result of the cross tabulation of age by Hospital admission.

## Cross tabulation of awareness of MHO by age

Table 1c shows the results of the cross tabulation of the awareness of MHO by age group.

**Table 1a. Cross tabulation of employment by age**

Response	15-20		21-30		31-40		41-50		51-60		61-70		70+	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Employed in a regular job	4	2.9	30	21.7	47	34.1	31	22.5	18	13.0	5	3.6	3	2.2
Self-employed	12	1.7	194	26.8	189	26.1	136	18.8	97	13.4	76	10.5	20	2.8
Casually employed	1	4.5	4	18.2	8	36.4	6	27.3	3	13.6	-	-	-	-
Unemployed	3	4.3	19	27.5	9	13.0	4	5.8	7	10.1	13	18.8	14	20.3
Retired	-	-	-	-	1	2.1	2	4.3	9	19.1	20	42.6	15	31.9

**Table 1b. Cross tabulation of hospital admission by age**

Response	15-20		21-30		31-40		41-50		51-60		61-70		70+	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Yes	-	-	46	23.4	32	16.2	36	18.3	31	15.7	37	18.8	15	7.6
No	20	2.5	201	25.0	222	27.6	143	17.8	103	12.8	77	9.6	37	4.6

**Table 1c. Cross tabulation of awareness of MHO by age**

Response	15-20		21-30		31-40		41-50		51-60		61-70		70+	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Yes	13	1.7	185	24.4	207	27.3	139	18.3	107	14.1	83	10.9	25	3.3
No	7	2.9	62	25.7	47	19.5	40	16.6	27	11.2	31	12.9	27	11.2

## Cross tabulation of employment by level of education

The results of the cross tabulation of employment by level of education is shown in Table 1d. For those employed in regular jobs the majority of the respondents had Tertiary or Secondary education. This trend is reversed for those who were self employed. For those who were casually employed, the majority was in Junior SS and senior secondary group. The proportion of unemployed was high among those with no formal education; however some of the unemployed have secondary education or Junior SS.

**Table 1d. Cross tabulation of employment by level of education**

Response	No formal		Primary		Junior SS		Secondary		Tertiary	
	F	%	F	%	F	%	F	%	F	%
Employed in a regular job	12	8.7	4	2.9	19	13.8	33	23.9	70	50.7
Self-employed	185	25.6	198	27.3	205	28.3	114	15.7	22	3.0
Casually employed	4	18.2	2	9.1	8	36.4	8	36.4	-	-
Unemployed	32	46.4	4	5.8	12	17.4	19	27.5	2	2.9
Retired	11	23.4	8	17.0	16	34.0	7	14.9	5	10.6

## Knowledge of MHO in community by household size

Table 2a shows that there is no significant correlation between the size of the household and the knowledge of MHO.

**Table 2a. Household size by knowledge of MHO in community**

Number in household	Total		Yes		No	
	F	%	F	%	F	%
1-3	223	22.3	162	21.3	61	25.3
4-6	399	39.9	319	42.0	80	33.2
7-9	312	31.2	236	31.1	76	31.5
10+	66	6.6	42	5.5	24	10.0
Total	1,000	100.0	759	100.0	241	100.0

## Membership of MHO by household size

Table 2b presents the members of MHO by household size. It is interesting to note those larger households seem to have a higher membership.

**Table 2b. Household size by membership of MHO**

Number in Household	Total		Yes		No	
	F	%	F	%	F	%
1-3	223	22.3	18	13.4	205	23.7
4-6	399	39.9	58	43.3	341	39.4
7-9	312	31.2	49	36.6	263	30.4
10+	66	6.6	9	6.7	57	6.6
Total	1,000	100.0	134	100.0	866	100.0

## Access to health facility by household size

Table 2c presents access to health facilities by household size. It is interesting to note that amongst the household that does not have access to health facilities, smaller size (1-3) and higher size (10+) seem to be over represented.

**Table 2c. Access to health facility by household size**

Number in household	Total		Yes		No	
	F	%	F	%	F	%
1-3	223	22.3	213	21.9	10	38.5
4-6	399	39.9	392	40.2	7	26.9
7-9	312	31.2	307	31.5	5	19.2
10+	66	6.6	62	6.4	4	15.4
Total	1,000	100.0	974	100.0	26	100.0

## Recent medical history by household size

Table 2d presents the hospital admission by household size. If the remark made for table 2c above is still valid for smaller size households, it is not anymore valid for larger households who have been on hospital admission slightly more. This might simply be explained by the fact that the larger the household the more probable one of the household members is admitted to the hospital.

**Table 2d. Recent medical history by household size**

Number in Household	Total		Yes		No	
	F	%	F	%	F	%
1-3	223	22.3	38	19.3	185	23.0
4-6	399	39.9	73	37.1	326	40.6
7-9	312	31.2	65	33.0	247	30.8
10+	66	6.6	21	10.7	45	5.6
Total	1,000	100.0	197	100.0	803	100.0

## Knowledge of MHO by social class

Some 86 per cent of respondents in the AB class had knowledge of an MHO, compared to 74 per cent of respondents in the C2D class and 77 per cent in the DE class (Table 3a).

**Table 3a. Knowledge of MHO by social class**

Knowledge of MHO	Total		AB (HIGH)		C2d (MEDIUM)		DE (LOW)	
	F	%	F	%	F	%	F	%
Yes	759	75.9	31	86.1	267	73.8	461	76.6
No	241	24.1	5	13.9	95	26.2	141	23.4
Total	1,000	100.0	36	100.0	362	100.0	602	100.0

## Membership of MHO by social class

In the AB class, 19.4 per cent were members, falling to 19.1 per cent in the C2D class and 9.6 per cent in the DE class.

**Table 3 b. Membership of MHO by social class**

Membership of MHO	Total		AB (HIGH)		C2d (MEDIUM)		DE (LOW)	
	F	%	F	%	F	%	F	%
Yes	134	13.4	7	19.4	69	19.1	58	9.6
No	866	86.6	29	80.6	293	80.9	544	90.4
Total	1,000	100.0	36	100.0	362	100.0	602	100.0

## Free access to health facility by social class

Some 32 respondents who were in the high class (89 per cent) were of the view that some people should have free access to Health Facility. About 87 per cent of respondents in the medium class C2D and 82 per cent in the lower class also were in that view (Table 3c).

**Table 3c. Free access to health facility by social class**

Free access to health facility	Total		AB (HIGH)		C2d (MEDIUM)		DE (LOW)	
	F	%	F	%	F	%	F	%
Yes	840	84.0	32	88.9	314	86.7	494	82.1
No	95	9.5	4	11.1	28	7.7	63	10.5
Don't know	65	6.5	0	0.0	20	5.5	45	7.5
Total	1,000	100.0	36	100.0	362	100.0	602	100.0

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## 7. Conclusions and recommendations

The study paints a general picture of comparatively large households living on low incomes, with the majority of those in employment working in the informal sector. Ill health is not uncommon, but membership of health insurance schemes is low. Access to health facilities is limited, with a chemist or pharmacist being the most accessible form.

This is not unexpected. Whilst many respondents would like to join an MHO there are barriers in place: lack of knowledge and cost being the two principal ones. There were also complaints that registration of members for MHO is at a time when people were at work; it was suggested that in future, registration of new members should be done on holidays, or at the time when most people would be available.

Members of MHOs acknowledged that their access to health care has improved as a result, but there remained concerns over lack of access, poor quality treatment and schemes not covering all the hospital bills. Many members also feel that they are discriminated against, with better service given to those who pay cash for treatment. Quite simply, many MHO members feel they aren't getting value for money.

Findings revealed that 84 per cent of respondents would expect some people in the society to have free access to health facilities or be exempted from payment of premiums. They felt this should generally apply to the "aged without carers", the disabled, students / school children and children under 5 years of age. The problems facing Ghana as it implements its new National Health Insurance Scheme cannot therefore be underestimated.





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## **Annex 1. Details of sampling and data collection sample size / distribution**

Obviously there was the need to have a large sample size that would produce ample scope for detailed sub- cell analysis. As recommended by the client a sample size of 1,000 was targeted in the two districts.

<b>Region</b>	<b>Sample allocation</b>
Dangme West District	500
Kwahu District	500
Total	1,000

### **Sample selection**

The step-by-step systematic selection procedures are as follows:

#### **Stage I. Selection of survey locations**

The urban, peri-urban and rural areas had equal and calculable chances (1/n) of being included in, as well as being excluded from the sample.

#### **Stage II. Selection of sampling sectors**

The second stage involved the division of the towns into high (H) and low (L) density sectors, within each of the two categories, they were further subdivided into several sampling grids / units of fairly equal landmass. Thus the sample allocation to each group of sectors that is high / low density sector was proportionate to the number of sectors in each group. The selection of sectors to be sampled was through a random process prior to the start of the project in any particular district.

#### **Stage III. Selection of Dwelling structures**

The third stage was the selection of dwelling structures. For the purpose of this study, a dwelling structure was defined as a floor of a distinct residential building within a sector of a town. However, where a multi-storey building was occupied by only one household, the entire building (and not the floors) constituted a dwelling structure. Counting of floors was carried out consistently from the upper floor down to the ground floor in an unbroken chain from building to building.

The random route walk method with a fixed sampling interval was used at this stage. The sampling interval was fixed, based on the size of the sample (hence number of interviews to be conducted within each sector) and type of sector involved that is, whether it is a high or low-density sector.

#### **Stage IV. Selection of households**

A household was defined as all individuals living under the same roof and having a common feeding arrangement. A "Household selection Grid" was used to select the household in which interviews would be conducted. In a single household residential apartment building, the household would be automatically selected.

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## **Stage V. Selection of respondents**

The selection of respondents was made randomly amongst the Male / Female Head of Household. Respondents were screened to identify heads of household who were residents in the community and had not been interviewed before on a similar study. Visiting relations who have stayed for less than six months were not regarded as household members.

### **Call back / substitution criteria**

- If the selected adult Head of the Household was not available at the time of call, the Interviewer was to make up to three re-calls on different day / times including evenings when the selected respondent was likely to be at home. If these visits were still unsuccessful, such a case was regarded as non-response situation or an ineffective call.
- If the selected respondent was at home, but refuses to cooperate, or has traveled and would not be available within the next 48 hours, no substitution or call back was made, and such a call was regarded as an ineffective call.
- In situations of non-response, ineffective call or refusal, the interviewer would simply proceed to the next household selected in the random process.

### **Summary of selection procedure**

The selection procedure can be summarized as follows:

- Each selected town was broken down into sampling grids within the low and high density segments:
  - a) using the Group Interviewing Technique, a team consisting of five interviewers and one team leader assembled at a central point where each interviewer was be given a defined area in a particular sector from the central point, to make a fixed number of calls;
  - b) subsequently the interviewer went to a starting point, which was already defined by the team leader .The interviewer will skip in sequence, a number of dwelling structures equal to the sampling interval / gap;
  - c) if selected respondent was not available in the household at the time of call, three calls altogether was be made before such a call was regarded as ineffective. If however, the selected respondent was not available during the period of the study, fresh selection was made;
  - d) the household counting sequence was clockwise starting from the top floor down to the ground floor from building to building;
  - e) when the calls for a particular sector is complete, the whole group i.e. the team moved to another sector,
  - f) selection of all sampling sectors/ units for each town of study and the various starting points and daily schedule of calls were planned and concluded prior to the commencement of fieldwork.

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## Data collection / interviewing method

The *Group Interviewing Technique (GIT)* was adopted. With the G.I.T. a team consisted five interviewers and one team leader assembled at a central point, to make a fixed given number of calls.

All the team members completed a cluster or an area, before moving to another starting point as a group. The greatest advantage of this approach was the relative increase in the precision and reliability of results gained as virtually all interviewers jobs were spot-checked by the team leaders.

Highly skilled and experienced multilingual research assistants were used for data collection.



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## Annex 2

### Questionnaire



### ILO-GST HEALTH INSURANCE SURVEY QUESTIONNAIRE

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**Pre-interview information. This part should be filled out before the interview**

QUESTIONNAIRE No. ....DATE DD/MM/YY .....

COMMUNITY .....DISTRICT.....

RURAL [1]/URBAN [2].....

NAME OF INTERVIEWER .....

SUPERVISOR .....EDITOR.....

RESPONSE: .....(Full [1], Partial [2], Non Response [3])

**Read the following to the respondent**

Good Morning/afternoon/evening,

I am \_\_\_\_\_, an interviewer from ..... We are conducting a survey of local health situation on behalf of the International Labour Organisation.

May I please speak to the head of the Household?

If he/she is home.....REQUEST TO CONDUCT INTERVIEW AND GO TO PURPOSE SECTION

If he/she's not home.....MAKE AN APPOINTMENT

When may I find him /her? When is the best time to call? When is the best time to reach him/her?

### PURPOSE

This study is being conducted by the International Labour Organization as part of its activities to improve access to and quality of health services. We would like to identify local health needs and the impact of the provision of health services by local Mutual Health Organizations on health.

The results of the survey will help the ILO to find out the best way to assist the Mutual Health Organizations, so that they can offer better access to health for more people in their communities.

### CONFIDENTIALITY

All the answers and personal information you give will be treated in the strictest confidence, and will be used for statistical reporting purposes ONLY. You will not be identified in the report, and we will not pass on your details to anyone else.

### Instructions to interviewers

For all coded answers, indicate the Response Number (code) in the space provided at the end of the question.

Treat numeric responses (e.g. Number of children) as coded and indicate as appropriate.

Example: If the Answer to Question 3 is Divorced, Write 3 at the end of the question.

Otherwise, record the response in the space provided as clearly as possible.

## Part 1. Household profile

### 1) Sex of main interviewee

1. [Male]                      2. [Female]

### 2) Age of main interviewee (Estimate if respondent is not sure or unwilling to disclose)

1. [15-20]                      2. [21-30]                      3. [31-40]                      4. [41-50]  
5. [51-60]                      6. [61-70]                      7. [70+]

### 3) What is your marital status?

1. [Married]                      2. [Single]                      3. [Divorced]  
4. [Separated]                      5. [Widowed]

### 4) If married, do you have more than one wife or is your husband married to more than one wife?

1. [Yes]                      2. [No]

### 5) Who is the head of this household?

1. [Father]                      2. [Mother]                      3. [Other]

If other specify.....

---

5b) Social Class of respondent

1. [High]                      2. [Medium]                      3. [Low]

6) How many children do you have?

[0]                      [1]                      [2]                      [3]                      [4]                      [5 or more]

6a) What is the size of your household. How many people live with you and eat from the same pot?

Write number

7) How many of your children are below 18 years?

[0]                      [1]                      [2]                      [3]                      [4]                      [5 or more]

8) How many of your children under 18 go to school?

[0]                      [1]                      [2]                      [3]                      [4]                      [5 or more]

9) If some of the under 18 children don't go to school, Why?

1. [Still Young]                      2. [Lack of fees]                      3. [Completed SSS]  
4. [Refused to attend school]                      5. [Employment]                      6. [Other]

10) How many of your children depend on you for a living?

[0]                      [1]                      [2]                      [3]                      [4]                      [5 or more]

11) How many other dependants (apart from your children) do you have for whom you are financially responsible?

[0]                      [1]                      [2]                      [3]                      [4]                      [5 or More]

12) What was your highest Education level?

1. [None]                      2. [Primary]                      3. [Junior SS]                      4. [Secondary]  
5. [Tertiary]                      6. [Others] Specify

---

## Part 2. Employment and income

13) Are you employed in?

- |                                |                    |              |
|--------------------------------|--------------------|--------------|
| 1. [employed in a regular job] | 2. [self employed] |              |
| 3. [Casually employed]         | 4. [Unemployed]    | 5. [Retired] |

14) If employed or self employed, specify which category

- |                           |                             |                       |
|---------------------------|-----------------------------|-----------------------|
| 1. [Civil/Public Service] | 2. [Construction]           | 3. [Manufacturing]    |
| 4. [Financial]            | 5. [Farming]                | 6. [Professional]     |
| 7. [Mining/Quarrying]     | 8. [Fishing]                | 9. [Livestock]        |
| 10. [Trading ]            | 11. [Office/administration] | 12. [Other (Specify)] |

15) Does the respondent's employment category fall into formal or informal sector?

- |             |               |
|-------------|---------------|
| 1. [Formal] | 2. [Informal] |
|-------------|---------------|

16) Is your spouse employed?

- |                                |                    |              |
|--------------------------------|--------------------|--------------|
| 1. [employed in a regular job] | 2. [self employed] |              |
| 3. [Casually employed]         | 4. [Unemployed]    | 5. [Retired] |

17) If spouse is employed or self employed, specify which category

- |                            |                             |                       |
|----------------------------|-----------------------------|-----------------------|
| 1. [Civil/ Public Service] | 2. [Construction]           | 3. [Manufacturing]    |
| 4. [Financial]             | 5. [Farming]                | 6. [Professional]     |
| 7. [Mining/Quarrying]      | 8. [Fishing]                | 9. [Livestock]        |
| 10. [Trading]              | 11. [Office/administration] | 12. [Other (specify)] |

18) Does the respondent's spouse employment category fall in to formal or informal sector?

- |             |               |
|-------------|---------------|
| 1. [Formal] | 2. [Informal] |
|-------------|---------------|

19) Are any other members of the household in work?

- |          |         |
|----------|---------|
| 1. [Yes] | 2. [No] |
|----------|---------|



- 20) If anyone else is employed or self-employed, specify which category
- |                            |                             |                       |
|----------------------------|-----------------------------|-----------------------|
| 1. [Civil/ Public Service] | 2. [Construction]           | 3. [Manufacturing]    |
| 4. [Financial]             | 5. [Farming]                | 6. [Professional]     |
| 7. [Mining/Quarrying]      | 8. [Fishing]                | 9. [Livestock]        |
| 10. [Trading]              | 11. [Office/administration] | 12. [Other (specify)] |
- 21) Does this employment category fall into formal or informal sector?
- |             |               |
|-------------|---------------|
| 1. [Formal] | 2. [Informal] |
|-------------|---------------|
- 22) If unemployed for how long have you been out of work?
- |                      |                       |              |
|----------------------|-----------------------|--------------|
| 1. [1 month or less] | 2. [2 months]         | 3. [6 month] |
| 4. [1year]           | 5. [More than a year] |              |
- 23) Please estimate your total gross monthly household income
- |                             |                              |
|-----------------------------|------------------------------|
| 1. [Up to 50,000]           | 2. [50,000 to 200,000]       |
| 3. [200,000 to 300,000]     | 4. [300,000 to 500,000]      |
| 5. [500,000 to 1,000,000]   | 6. [1,000,000 to 2,000,000]  |
| 7. [2,000,000 to 5,000,000] | 8. [5,000,000 to 10,000,000] |
| 9. [more than 10,000,000]   | 10. [Don't know]             |
- 24) Please tell us whether your household has income from the following sources during the past twelve months. Please also indicate the two main income sources.
- |   | The main source of income. Put an "X" | The second main source of income. Put an "X" |
|---|---------------------------------------|--|
| 1. Formal employment for a private company                | ( )                                   | ( )  |
| 2. Formal employment for the state and state enterprises  | ( )                                   | ( )  |
| 3. Formal employment for a political party or trade union | ( )                                   | ( )  |
| 4. Self employment including small-scale trading          | ( )                                   | ( )  |
| 5. Farming  | ( )                                   | ( )  |
| 6. Pensions   | ( )                                   | ( )  |
| 7. Remittances from abroad                                | ( )                                   | ( )  |
| 8. Other formal income                                    | ( )                                   | ( )  |
| 9. Other informal income                                  | ( )                                   | ( )  |
- 25) Do you or anyone in the household own any land, including land on which your house is built?
- |          |         |
|----------|---------|
| 1. [Yes] | 2. [No] |
|----------|---------|

---

### Part 3. Health

26) Do you have access to a health delivery facility in this town / village?

1. [Yes]                      2. [No]

27) What types of facilities are available to you? (tick all boxes that apply, multiple response)

- 
1. Private clinic  
2. Chemist/Pharmacy  
3. Government clinic  
4. Government Hospital  
5. Mission Hospital  
6. Herbalist  
7. Others (give details)
- 

28) How far is the nearest health facility from your home?

1. [Less than 1km]      2. [2-3km]      3. [4-5km]      4. [6-10km]      5. [Over 10km]

29) During the past twelve months did you or any member of your family fall ill?

1. [Yes]                      2. [No]

30) If yes, can you give details of the illness(es)?

Family member who was ill	Length of illness (A)	Type of medical facility used (B)	Approximate cost of treatment (C)

A: 1. [Less than 3 days]                      2. [Up to 7 days]                      3. [More than 7 days]

4. [Two weeks and more]

B: 1. [Private Clinic]                      2. [Chemist/Pharmacy]                      3. [Government Clinic]

4. [Government Hospital]      5. [Mission Hospital]                      6. [Herbalist]

7. [Others]

C: 1. [Nothing]                      2. [5,000 - 15,000]                      3. [15,000 - 30,000]

4. [30,000 - 50,000]                      5. [50,000 - 75,000]                      6. [75,000 - 100,000]

7. [More than 100,000]                      8. [More than 200,000]                      9. [More than 500,000]

10. [Don't know]

31) Have you been on hospital admission during the past two years?

1. [Yes]                      2. [No]

32) If yes, for how long were you admitted?

1. [Less than 1 week]      2. [Between 1 & 2 weeks]      3. [More than 2 weeks]

33) How much, roughly, did you pay for your stay in hospital?

1. [Nothing]
2. [Below 50,000]
3. [50,000 - 70,000]
4. [70,000 - 100,000]
5. [100,000 - 200,000]
6. [200,000 - 500,000]
7. [More than 500,000]
8. [Don't know]

34) What is your perception on the quality of treatment at the medical facility used? Would you say you were satisfied or not?

**Show card and read out**

Not at all satisfied	..... 1 –	Ask Q35
Not satisfied	..... 2 –	Ask Q35
Neither/Nor	..... 3 –	Do not read out
Satisfied	..... 4 –	Go to Q36
Very satisfied	..... 5 –	Go to Q36

**If not satisfied – ask**

35) Why do you say you are not satisfied with the quality of treatment at medical facility used?

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#### Part 4. Mutual health organizations

- 36) A Mutual Health Organization (MHO), is one for which you pay a monthly amount (a premium) of about [**DQ – how much?**] to be a member – for a larger amount [**DQ = how much?**] all of your family can be members. Then, if you are ill or injured you can receive medical care (medicines, treatment for injury, hospital care for serious illness or injury). Because you pay a monthly amount, you do not have to pay for treatment when you need it. Do you know of any Mutual Health Organization in this community?
1. [Yes]                      2. [No]                      3. [Don't know]
- 37) Do you belong to the Mutual Health Organization (MHO)?
1. [Yes] (complete 38-52)                      2. [No] (proceed to 53)
- 38) If yes, how long have you been a member?
1. [Less than a year]                      2. [More than a year]
- 39) Do all members of your family belong to the MHO?
1. [Yes]                      2. [No]
- 40) If not all members belong to the MHO, why have others not joined?
- 41) How much do you normally pay for your membership of the MHO (the premium)? (Obtain approximate amount if exact not available)
- 42) How often do you pay this amount?
1. [Weekly]                      2. [Monthly]                      3. [Yearly]                      4. [Other (specify)]
- 43) What is this as a percentage of monthly income (interviewer to calculate)?
- 44) Do you think this is
1. [Too much]                      2. [About right]                      3. [Too little]                      4. [Don't know]
- 45) If too much, how did you raise money to pay?
1. [Self]                      2. [Relatives]                      3. [Friends]  
4. [NGO]                      5. [Church]                      6. [Other specify]
- 46) Considering your other items of expenditure, e.g. Food, Clothing, School fees, etc would you say that premiums were
1. [High]                      2. [Low]                      3. [About right]                      4. [Don't Know]

---

47) As a member of the scheme do you consider the amount you spend on the premium in relation to your other commitments as  
1. [High] 2. [Low] 3. [About right] 4. [Don't Know]

48) Has your membership of the MHO improved your access to health care?  
1. [Yes ] 2. [No ] 3. [Don't know]

49) If no, why?

50) What additional benefits would you want the scheme to offer its members?

51) Are you still a member?  
1. [Yes] (Go to Q58) 2. [No] (Ask Q52)

52) If not, give reasons

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53) If you answered NO to Question 37 or 52, would you be willing to join or re-join a Mutual Health Organization?  
1. [Yes] (Go to Q56) 2. [No] (Ask Q54 and don't ask Q55)

54) If not give reasons

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55) If you were considering joining or rejoining an MHO what priority would you give to the following:

	Rank 1 (Tick preferred choice)	Rank 2 (Tick preferred choice)	Rank 3 (Tick preferred choice)
Reduction in premium			
Improve quality of service			
Wider choice of benefits			

56) What amount would you be ready to pay to join an MHO?

Cost per month	Yes (tick)	No (tick)
50,000 - 100,000		
40,000 - 50,000		
30,000 - 40,000		
20,000 - 30,000		
10,000 - 20,000		
5,000 - 10,000		

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57) What problems and or challenges have you experienced since your joining MHO? (Question only for MHO members)

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58) What kind and quality of services would you expect?

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59) Do you think the MHO solves the problems of “Cash and Carry”?

1. [All] 2. [Most] 3. [Some] 4. [None] 5. [Don't know]

60) Which one do you prefer?

1. [Cash & Carry] 2. [MHO] 3. [None]

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## Part 5. Exemptions

61) Do you think there are some people in this locality that should have free access to the health facilities without paying or by paying less?

1. [Yes] (Go to 62)      2. [No] (Go to 64)      3. [Don't know]

62) If yes, who do you think should have this help? (List some characteristics)

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63) Who do you think should decide if those people should have free access?

1. [Government]      2. [MHO administrators]      3. [Community leaders]  
4. [Other]      5. [Don't know]

64) If no, why?

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65) Do you have any comments or suggestions on this survey?

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**Annex 4. Dangme West Health Insurance Scheme (DWHIS) /  
International Labour Organization (ILO):  
Premium Subsidization Project**

*Report for the Period 1st May 2003 to 30th April 2004*



**May 2004**



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## Acknowledgements

The following have contributed in diverse ways to this work over the period under review. They are listed in alphabetical order under their primary organization /affiliation.

### *Community*

Area council chairpersons of the DHK (Health Insurance Association)  
Other elected representatives of the DHK (Health Insurance Association)  
Chiefs and People of Dangme West District

### *Dangme West District Assembly*

Mr. Francis Abofra – District Planning Officer  
Mr. K.T.K. Agban – District Chief Executive  
Mrs. Rose Assan-Member – Head Department of Community Development  
Mr. Peter Tweneboa-Kodua – Head Department of Social Welfare

### *Dangme West Health Insurance Scheme Administration*

Miss Edna Abbey – Public Relations Officer  
Mr. Francis Fiifi Arkorful – Scheme Manager  
Ms. Patience Kpeglo – Data Entry clerk

### *Ghana Health Service*

Dr. Sam Adjei  
Dr. Irene Agyepong  
Dr. Evelyn Ansah  
Mr. Joseph Arthur  
Mr. D. A. Ashon  
Mr. Ebenezer Asiamah  
Mr. Edward Bruce  
Dr. Margaret Gyapong  
Mr. Richard Nagai  
Mr. Solomon Narh-Bana  
Mrs. Christiana Narh-Dometey  
Mr. Issaka Nashiru  
Mr. Kingsley Quarcoo

### *International Labor Organization*

Dr. Micheal Cichon  
Ms. Fiona Kilpatrick  
Mr. Florian Leger  
Mr. David Tumwesige

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## *Social Security and National Insurance Trust*

Mr. Tetteh Carboo

Mr. Ben Nyankah

This report was put together by Francis Fifi Akorful<sup>64</sup>, Edward S. Bruce, Richard A. Nagai, Solomon A. Narh-Bana<sup>65</sup>, and Irene A. Agyepong<sup>66</sup>.

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<sup>65</sup> Dangme West District Health Administration and Research Center, P.O. Box 1, Dodowa.

<sup>66</sup> Regional Health Administration, P.O. Box 184, Adabraka, Accra (Previously District Health Administration and Research Center, P.O. Box 1, Dodowa).

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# 1. Introduction

## 1.1. *The Dangme West Health Insurance Scheme*

The Dangme West Health Insurance scheme is a district wide not for profit community scheme or Mutual Health Organization targeted at people in the non formal sector with irregular cash incomes; as well as people in more formal employment with more regular cash incomes. It is currently in its fourth year of operation. The district health administration is currently in the process of building capacity in selected full time staff of the insurance administration so that the insurance administration can be separated from the district health administration. It is hoped that the end of 2004 will complete the process. It has always been the vision that eventually the scheme should be completely controlled by the community working with the district assembly rather than by the District Health Administration.

The scheme provides cover for primary out patients care at 10 participating primary care clinics in the district. In addition it provides cover for referral care in hospital up to a maximum ceiling per referral episode of C 400,000 (US\$ 44.44)<sup>67</sup>. There are no hospitals in the Dangme West district and the scheme has contracts with five hospitals surrounding the district to provide referral care in hospital to clients of the scheme. There is a gatekeeper system such that referral care is paid for only if the client first passes through a primary care clinic and is referred.

Registration for the first year of operation of the scheme started in October 2000. However this was preceded by a long planning and preparatory phase that lasted almost four years. For the first two years of operation, each insurance year run from 1st October of a given year to 30th September of the following year. This period was chosen to tie the insurance year to the period of money collection. The period of money collection begins in August since this is the period of harvest for the farmers and bumper fish catches for the fisher folk. By insurance year is meant the period for which premiums paid are valid. To ensure that clients get the full benefit of the insurance year, the activities needed to be completed before the start of the insurance year such as mobilization and awareness raising, collection of premiums and validation of cards for the new insurance year are started in July /August.

For the third year of operation (2002/2003), based on review and evaluation with the community representatives of the registered members the insurance year will run from January to December making it 15 months. This was to enable a switch to an insurance year that starts in January. Subsequent years will be 12 months. However registration will continue to start in August each year as before. The rationale for starting registration in August is to collect money from people at the time of harvest. The year has however been made January to December, because repeated feedback indicates that most people in the district who are Christians think of their year in terms of one Christmas to the next. They find it difficult to understand the concept of an October to September insurance year, even though they understand the principle of starting money collection in August.

Registration almost doubled between the first insurance year and the second insurance year from 3,081 individuals registered in 2000/2001 (approximately 3 per cent of the total district population) to 7,473 individuals registered in 2001/2002 (a little over 7 per cent of the district population). Registration for the 3<sup>rd</sup> insurance year did not increase much above the second year levels. Registration for the 4<sup>th</sup> insurance year just closed and the numbers are still being added up.

<sup>67</sup> US\$ 1 = C 9,000 as at the time of writing of this report.

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*In 2001, Internally Generated Funds (IGF) from insurance clients paid to primary care facilities was a total of C 14,479,469 making 5 per cent of all IGF in the district. The rest was made of direct out of pocket payments. In 2002 it rose to C 48,104,176 making 15 per cent of all IGF. In 2003, the insurance administration moved from paying fee for service to primary care providers to paying a flat rate of C 7,000 per case seen. This rate was arrived at based on an analysis of the detailed fee for service data that had been collected over the previous two years of the scheme's operation from payments made by insured as well as non insured clients. This data showed that in 2001, the average cost per insured client seen was C 5,353 and in 2002 C 5,917. The average for non-insured clients was similar with an average of C 6,144 in 2001 and C 5,778 in 2002. Therefore even allowing for inflation and the provider bonus of C 500 per client seen, C 7,000 appeared to be a reasonable flat rate to pay providers per case seen. The data was discussed with providers and the decision to pay the flat rate was taken with their agreement.*

*A rate for 2004 is yet to be worked out.*

## **1.2. The DWHIS/ILO Premium Subsidization project**

The Dangme West Health Insurance Scheme was selected by the ILO for a pilot project that aims at identifying and providing a premium subsidy to enable the registration of the most vulnerable households in the district. The aim of the project is to provide experience and objective information about this as a viable approach to ensure financial access to needed personal health services for the poorest and most vulnerable households. Under the original agreement, the ILO is to pay 75 per cent of the insurance premiums for a maximum identified number of 2000 poor families over a 3 year period. The ILO to pay the premium subsidies has provided a total amount of US\$ 50,000. It has in addition provided an amount of US\$ 10,200 to support the administrative costs of handling the project. It is uncertain if the funding calculated and made available for this when the project was first discussed in 2003 will still be adequate given the trend of government policy towards a premium of C 72,000 per adult per year and free care for children under 18. The current premium of the scheme that was used for the calculations is C 25,000 (US\$ 2.78) per person per year, with children under 5 and the elderly (over 70) paying C 15,000 (US\$ 1.67). The balance of C 10,000 for the subsidized group is taken from the exemptions fund.

## **1.3. Approach to project implementation**

A core committee was set up to plan for, coordinate and ensure successful implementation of the project. It was set up with representation from the district assembly, the district health management team (DHMT) and the research center, the health insurance administration and the seven area council chairpersons representing the Dangme West Health Insurance association (DHK). The ILO was represented by their local representatives David Tuwesige, Ben Nyanka and Tetteh Carboo. The representatives of the district assembly were the head of the department of social welfare, the head of the department of community development, and the planning officer of the district assembly.

## 2. The dialogue stage



The dialogue process begun at a meeting of health insurance association (Dangme Hewaminami Kpee [DHK]) elected representatives, assembly members, traditional leaders and opinion leaders called by the health insurance administration, the district assembly and the district health management team on July 2, 2003 at the Greater Accra Regional House of Chiefs (GARHC). The invited personalities included chiefs (traditional leaders) from the four traditional councils, opinion leaders, the district social services and community development officers, the district planning officer and all the community registration officers of the DHK. There were representatives from the health insurance administration, the district health management team as well as the research center.

The meeting started with a briefing by Dr. Irene Agyepong on the purpose of the meeting. She said that the participants have been invited to help deliberate on the factors or the indicators that would be used in the identification of the most needy households in the district in order for the ILO to subsidize their premiums for membership in the DHK<sup>68</sup>.

Messrs. David Tumwesige, Tetteh Carboo and Miss Fiona Kilpatrick, as representatives of the ILO in Ghana and in Geneva respectively, threw more light on the project and how it is anticipated to help the poor in the society should it be given the needed support and cooperation from all stakeholders. They stressed that; the aim of the project is to support the government in developing models for a rapid extension of health insurance coverage especially to the poor.

<sup>68</sup> Dangme Hewaminami Kpee (Dangme Good Health Association), the adopted name for the Dangme West Health Insurance Scheme.

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Numerous concerns were raised by the various participants about the need to ensure that our cultural and moral values are adhered to in implementing the project in order not to stigmatize the very poor in society. There were suggestions on how the whole issue should be approached especially on finding a suitable name for the poor. For most people, it is not acceptable to directly call them poor since it may imply that they are lazy or shiftless. They are going through hardship.

Subsequently, the participants broke up into their respective area councils to form seven groups. The groups brainstormed and came out with key indicators of poverty in the communities within their area council for further discussion and to pave the way for best approach to the task of listing the poor in the communities for subsidies. The details of the suggestions that came up in the groups are summarized in see appendix I.

At the close of the meeting the following key decisions were agreed upon as to the steps to take and the timelines for selecting poor families within their communities for subsidies.

1. Consultation with stakeholders (District Assembly, District Health Team, Welfare and Community Development, Community Representatives etc).
2. Identification of eligible Beneficiaries (by the community)-(July-August 2003).
3. Assessment of beneficiaries by Social Welfare, Community Development or other relevant authority (August- September 2003)
4. Estimate level of subsidy (August 2003).
5. Contractual Agreements with the scheme to provide a good quality of service (August 2003).
6. Payment of premiums for the poor families to the scheme (September 2003).
7. Evaluation of the project's impact (continuously).

### **3. Area Council Durbars and process of listing poor families**

On July 8, 2003 members of the planning and coordinating committee met informally at Marina Hotel, Dodowa to deliberate on the outcome of the meeting of the previous week and plan a strategy on how the project could be communicated throughout the district at the area council level and listings of the poor from the communities within the district obtained.

It was decided that separate meetings were to be held in each of the seven area councils with participation from assemblymen, traditional leaders, opinion leaders, headteachers, church leaders, Moslem groups, health workers as well as all heads of various recognized groups from the communities.

From 16- 27<sup>th</sup> July 2003, meetings were held in each of the seven area councils in the district to explain the project and obtain support and participation at the community level in the process of identifying and subsidizing the poorest within the district. Participants were given forms to go into their communities and list the most vulnerable households in most need of help. They were to submit their forms to a focal person selected by the area council who would then present the forms at the health insurance office. Transport expenses to bring the information to the district office. Refreshments were provided for all participants at the meetings. Lunch allowance was also provided for the facilitators and reimbursement provided for the cost of fuel in traveling to the durbars. An omission that was only realized when it was too late was the failure to arrange for reimbursement of the



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travel expenses community members incurred in traveling all the way from their communities to the durbars. It created a lot of confusion and discomfort to the organizers since it was clear people had been inconvenienced. In some areas it appears it also created some apathy in actively looking for and listing the poor. There is a limit to how much volunteerism should be reasonably expected from people living at subsistence level for whom every penny makes a difference in the vital necessities of day to day living. The ILO through their chief technical adviser in Ghana financed the meetings. The district health administration provided material and human resources to facilitate the meetings.

All those tasked to do this enlistment were given two weeks from the date of meeting to submit their forms through their focal person. Once the forms got to the district office, the data was entered in an excel spreadsheet. A sample of the form for listing the poor is attached as appendix 2.

The response from the area councils was very good and the insurance administration and district health administration /research center staff assisting with the project had to work extra hours to enter the submitted forms for work to begun on the verification process.

#### **4. The verification process**

The initial idea was to keep the verification process as simple as possible. If the project was to be replicable administrative needed to be kept simple, minimal and inexpensive. However it was also felt that it was necessary at this project stage to collect a little more information to make it clearer and easier to demonstrate whether this was a viable project or not.

After a series of meetings held between the chief technical adviser of the ILO and the DDHS as well as the health insurance manager and the PRO of the DHK, it was suggested that an independent verification of the poverty status of the listed households should be done using a simple survey. Officers from the district health administration and research center assisted in this process. The interviewers were independent young people in the district who were not the community members who submitted the lists or elected representatives of the scheme. They were all however people who lived in the district and were familiar with the social and cultural setting and the nature of poverty within the district.

A standard questionnaire was designed by a combined team of research and technical officers led by Dr. Irene Agyepong with contributions from David Tuwesige and Ms Fiona Kilpatrick of the ILO. A copy is attached as appendix 3.

The questionnaire was pre -tested twice by the Research officers in Nanoman and Mensah-Bar: all communities located outside the district. The training for the field workers followed immediately after the pre-testing.

The field workers also pre-tested the questionnaire at Oyibi; another community outside the district before work actually begun in the district. The survey lasted about two weeks. All the enlisted names received from the field were independently verified for decision to be taken on their poverty status <sup>69</sup>. The survey was pre-financed by the District Health Administration on the understanding that once the ILO money was transferred it would be paid back from part of the US\$ 10,000 for supporting administration of the project.

<sup>69</sup> Full report on the verification work is also included in this report.

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## 5. Results of the survey

The lists submitted had a total of 2590 households and in a few cases individuals. However, during the survey the number dropped to 1618 households for several reasons. Some households were doubled listed by different community members listing the poor. In some cases members of the household e.g. a student were listed separately from the household they belonged to. A few of the households listed could not be traced and after several efforts they had to be abandoned. In a few instances, the listed household had migrated out between the time of listing and the time of verification and had to be abandoned.

Fifty two per cent of the identified households were female headed and 48 per cent male. 44 per cent of the heads of household were married with the spouse permanently resident in the community.

The occupation of the head of the majority of selected households 45 per cent was farming. This is perhaps not surprising. The Ghana Core Welfare Indicator Questionnaire Survey (CWIQ) found that poverty was deepest among farmers in the coastal and northern savanna. Dangme West lies in the coastal savanna and many households are subsistence farmers. The next largest group was those who stated that they had no particular employment. Traders were the third biggest group. Others included in the group were fishermen, artisans, students, handicapped and retired people. Also included were a few civil servants. This sounds surprising given that civil servants are in formal employment. However it is interesting that in the preliminary discussion as to who the poor in the community were, one of the chiefs mentioned some civil servants. Civil servants are a very diverse group and there are some who are employed in a temporary rather than a permanent status for unskilled jobs such as laborers, night watchmen etc

The interviewers independent assessment of the status of the household was used as a screen and compared against the indicators. 11 out of the selected households for subsidy were classified by the independent verifiers as “rich” and were dropped. A comparison of households assets ownership, structure of dwelling, type of fuel used for cooking etc verified that the interviewers were reasonably accurate in their classification. It is of interest to note that of the 11 households who were dropped because they were “rich” for the district and did not qualify, the head of household in about half (5/11) was a farmer. In only 2 of the households was the head a civil servant wrongly classified as poor.

The household size ranged from 1 to 32 members with a mean of 6 (SD 3) and a median of 5. 95 per cent of households had 11 or less members.

A more detailed analysis of the survey data is being prepared as a separate report.

## 6. The registration of selected households

On February 3, 2004 all the stakeholders involved from the very first meeting that marked the beginning of this work were invited to the Greater Accra Regional House of Chiefs Hall to brief them on progress so far, confirm that money was going to be made available from the ILO to pay the subsidies as promised and finally plan for work to begin on the registration of the finally selected households. The District Chief Executive chaired the meeting.

All the DHK registration officers in each of the seven area councils were presented with a list of the beneficiaries, which they shared among themselves such that each registrar had a given number of households to register.

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Each of the 48 registration officers involved in the registration exercise were later given informed consent forms for the head of household (copy is attached as appendix 4) and registration forms as well an inkpad and eligible ink to take the thumbprint of those who cannot sign the consent forms.

Registration started in earnest within a week of this meeting.

## **7. Current status of the project**

The registration process has not been smooth as anticipated. Though most of the selected households showed keen interest in taking up the offer, many are having difficulty in paying the 25 per cent of their total household premium small as it seems. The added expense of providing two passport size pictures for each of their household members for the registration card and their insurance records in the district office is also proving difficult for many of them. This and many others were the sampled views from most of the registrars when we went to the field with Ms Fiona Kilpatrick who came to Ghana on 24th and 25th February 2004 to assess the verification process.

The health Insurance Administration have had discussions with the District Chief executive as well the DDHS and her colleagues on how best we can come to the aid of these most vulnerable households whose fate are uncertain though the ILO project proves very beneficial to meet their health needs.

The delay in the payment of the 25 per cent household premiums have compelled the insurance office to extend the deadline for these selected households till an appropriate solution is found to avert a situation where the very poor would be denied access to regular health care in the society. The plan now is to contract out the photographs to local photographers so that deep discounts are obtained for the bulk order. Secondly since the families are coming on about a quarter way into the registration year, once the photographs are available so a card can be prepared, they will be given their cards with or without the 25 per cent down payment. They will then be encouraged to continue paying in installments against the second year's registration. Without the photograph, the card cannot be prepared and that is now the most pressing problem – to get all the non-submitted photographs as rapidly as possible.

As at the time of writing this report 123 families with 482 individuals have provided all the photographs and paid the 25 per cent and received their cards. Efforts are going on to facilitate the receipt of pictures from the remaining families within the next four weeks so that there will be no families left unregistered. Once photographs are available, cards will be prepared with or without the payment of the 25 per cent.



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## **Appendix 1. Identifying and targeting the poor (group work) from meeting of July 2nd 2003**

### ***DODOWA/AYIKUMA GROUP***

1. *How to identify the poor?*
  - Prepare a checklist by D.H.K registrars.
  - Knowing the persons background.
  - Occupation.
  - Profession.
2. *Community involvement and consultation*
  - The chiefs and elders, teachers, health workers, DHK registrars, church leaders, head of households, pensioners and social club leaders.
3. *Indicators of poverty*
  - Bed-ridden
  - A neglected single-parent, under employed, unemployed with many children
  - The aged who can no longer work.
  - Neglected widows
  - Poor farmers (small scale) with large family.
4. *Who will do the work?*
  - The registrars of DHK within the community
  - Community health workers
5. *How long will it take?*
  - Three weeks from now
6. *How much is the subsidy?*
  - From 0 (zero)-90 per cent
  - Unemployed and neglected- 75 per cent
  - Underemployed and over stretched- 50 per cent
7. *How long will the subsidy last?*
  - Three years period
8. *Any others*
  - A year review of the scheme to ascertain the level of the beneficiaries in term of the subsidy percentage.

### ***NINGO GROUP***

1. *How to identify the poor*
  - Meeting with clan and family heads.
  - Registrars own investigation
  - Consultation with primary health care centers
  - Consultation with the council of churches.

- 
2. *Community involvement and consultation*
    - Sensitization of the community, community durbar and meeting.
  3. *Indicators of poverty*
    - Disabled, aged, invalids, orphans, pensioners, widows, subsistence farmers, low income group, people with chronic disease, conditions and unemployed.
  4. *Who will do the work?*
    - The current health Insurance registrars, community Development workers, Health workers.
  5. *How long will it take?*
    - Two months- July/ August
  6. *How much subsidy*
    - 75- 80 per cent
  7. *How long will the subsidy last?*
    - Three years or more
  8. *Any others*
    - Those to be covered should be classified as the “needy”.

## **PRAMPAM GROUP**

1. *How to identify the poor:*

They can be identified through the ff

  - Source of Income
  - Number of Dependants
  - The way of living
  - Sort of employment
  - Physical appearance
2. *Community involvement and consultation:*
  - Organize a durbar to sensitize the people
  - House to house education
3. *Indicators of poverty:*
  - Unemployment
  - Poor health condition
  - Living standard
  - Physical appearance
4. *Who will do the work?*
  - The area representatives
  - Assemblymen
  - Opinion leaders and the health management team
5. *How long will it take?*
  - Two months- July/ August
6. *How much subsidy?*
  - 80 per cent

- 
7. *How long should the subsidy last:*
    - Five (5) years
  8. *Any others:*
    - The poor person should be referred to as the “needy”. The area councils be rather identified as the area health workers.

## **ASUTSUARE/OSUWEM GROUP**

1. *The criteria we used to identify the people are:*
  - Orphans who are not adopted
  - Widows who have nothing to inherit
  - The aged who cannot cater for themselves.
  - Single parents who cannot afford basic needs.
  - Those with chronic diseases and cannot work to earn a living
  - The disabled
2. *Community involvement and consultation:*
  - Assembly members
  - Area council or unit committees
  - Chiefs and elders
  - Opinion leaders
  - Local council of churches
  - Religious bodies
3. *Indicators of poverty:*
  - Above
4. *Those who will do the work?*
  - Health Insurance Registration officers/Health workers.
  - Community Development Officers.
5. *How long will it take?*
  - It will take one month.
6. *The subsidy should be:*
  - 80 per cent
7. *The period should be:*
  - 10 years
8. *Any others:*
  - Those with large families premium should be subsidised by 50 per cent. Eg 6 members and above.
  - Needy person in the society.





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## Appendix 2. Form for listing the poor

Please identify below families/Individuals in your community that you sincerely think. Need Assistance to meet their health needs.

Head of Household/ Individual	House No.	No. of members	Physical Address (Include Landmark)	Why do you think this Family/Household/Individual needs help? Explain in detail please.
1				
2				
3				



### Appendix 3. ILO-DWHIS living standards profile questionnaire

Date: -----

Time Interview Started: -----

#### Introduction

*We are staff of the Dangme West Health Research Centre. We are collecting information on household living standard. The information will be used to make decision about how to make Health Insurance affordable to people in this district. We would be grateful if could give us a few minutes of your time to answer few questions about your household. Your participation is voluntary.*

*We are about 2500 households in the district in this exercise and your household has been selected. We will come back to you with a feedback when we have completed the exercise. If you have any question, please contact the District Director of Health Services. Tel. 076 8111.*

#### Section A. Household Composition and Background

Interviewer's name									
HH ID (If ever registered)									
House Number									
Area Council:									
Community:									
		Household Socio-Economic Profile							
		Adults						In School 0 = No 1 = Yes	If in school Who is paying school fees
		Sex	Age	Marital Status	Occupation / Economic activity	Education al Level	Yrs completed schooling		
Name of Head:									
Dependants Names:	Relation to Head of HH								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									

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## Section B. Dwelling-Related Indicators

(Information should be collected about the dwelling in which the family currently resides.)

**B1. What is the ownership status of dwelling?**

- (1) Built on squatter land
- (2) Given by relative or other to use
- (3) Provided by government
- (4) Rented.
- (5) Owned.

**B2. How many rooms does the dwelling have? (Include detached rooms in same compound if same household.)**

**B3. What type of roofing material is used in main house?**

- (1) Grass,
- (2) Tarpaulin, plastic sheets
- (3) Zinc, Asbestos/Aluminium sheets
- (4) Brick tiles
- (5) Mixture (Describe) \_\_\_\_\_

**B4. What type of exterior walls does the dwelling have?**

- (1) Timber/Wood
- (2) Iron sheets
- (3) Tarpaulin, plastic sheets
- (4) Mud walls
- (5) Mud house but with cement plastering
- (6) Brick or cement blocks.
- (7) Mixture (Describe) \_\_\_\_\_

**B5. What type of flooring does the dwelling have?**

- (1) Mud
- (2) Wood
- (3) Cement
- (4) Terrazzo /Tiles.

**B6. What is the observed structural condition of main dwelling?**

- (1) Seriously dilapidated
- (2) Need for major repairs
- (3) Need for minor repairs
- (4) Sound structure.

**B7. What is the electricity supply?**

- (1) No connection
- (2) Shared connection
- (3) Own connection.

**B8. What type of cooking fuel source primarily is used?**

- (1) Wood
- (2) Charcoal
- (3) Gas /Electricity.

**B9. What is the source of toilet?**

- (1) Bush, field, i.e. no facility
- (2) Shared pit toilet/latrine
- (3) Own pit toilet/latrine
- (4) Shared, ventilated, improved pit latrine
- (5) Own improved latrine
- (6) Flush toilet, own or shared
- (7) Pan or Bucket.

**B10. Major Source of water**

- (1) Pipe born into the house
- (2) Public stand pipe
- (3) River, pond, lake
- (4) Well/Borehole
- (5) Combination (specify)

**C. Asset-Based Indicators**

C1. Does Household own land? 1. Yes\_\_\_\_\_ 0. No\_\_\_\_\_

If C1 is 'No' then C2 and C3 = NA (Not Applicable)

C2. Is land: 1. Agricultural\_\_\_\_\_ 2. Commercial\_\_\_\_\_

C3. Approximate size of Land.....

C4. Type and Number of assets owned by household

Code	Asset Type	Owned by household? 0 = No 1 = Yes	Number Owned
	<i>Livestock</i>		
1	Cattle		
2	Sheep, Goats		
3	Pigs		
4	Birds (poultry)		
5	Rabbits/Grass Cutters		
	<i>Transport (In working condition)</i>		
6	Tractor		
7	Car		
8	Motorcycle		
9	Bicycle		
10	Boat		
	<i>Appliances and Electronics (In working condition)</i>		
11	Sewing Machine		
12	Television		
13	Video Deck		
14	Refrigerator		
15	Radio		
16	Stereo System (Cassette player)		
17	Electric or Gas Cooker		
18	Fan (Electric)		
19	Others (specify)		

- 
- C5. If you are offered a health insurance subsidy such that you pay  $\frac{1}{4}$  of the premium (~ ¢25,000 - ¢50,000) depending on your family size and government pays the rest of the premium to take up a health insurance policy for your household, would you be interested?

0 = No 1 = Yes

(For interviewer/field worker)

- C6. What is your overall assessment of the general wealth levels of household?

- (1) Very poor/Destitute
- (2) Poor
- (3) Average
- (4) Rich
- (5) Very Rich

Time Interview Ended:-----

**Codes**

**Sex**

- 0 – Male
- 1 – Female.

**Marital status**

- 1 – Single
- 2 – Married, with the spouse permanently present in the household;
- 3 – Married with the spouse migrant;
- 4 – Widow or widower;
- 5 – Divorced or separated;
- 6 – Minor/Child (under age 12).

**Occupation/economic activity**

- 1 – Unemployed
- 2 – Farmer
- 3 – Fisherman
- 4 – Artisan
- 5 – Trader (includes fishmongers)
- 6 – Civil Servant
- 7 – Student
- 8 – Others (Specify)
- 9 – Handicapped
- 10 – Retired
- 0 – NA (Not Applicable)

**Educational level**

- 0 – No formal education
- 1 – Less than primary 6;
- 2 – Completed primary 6 only;
- 3 – MSLC / JSS Uncompleted;
- 4 – MSLC / JSS Completed
- 5 – Attended technical or vocational School uncompleted

- 
- 6 – Attended technical or vocational school and completed;
  - 7 – Attended secondary but not completed;
  - 8 – Completed secondary
  - 9 – Attended Polytechnic (HND) or university.
  - 10 – Pre-School/Nursery/Baby

Relationship to head	Who pays fees
	0 – Head of household
1 – Spouse;	1 – Spouse;
2 – Son or daughter (child);	2 – Son or daughter (child);
3 – Father or mother (parent)	3 – Father or mother (parent)
4 – Grandchild;	4 – Grandchild;
5 – Grandparents	5 – Grandparents
6 – Other relative (specify);	6 – Other relative (specify);
7 – Other non-relative (specify)	7 – Other non-relative (specify)





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## Appendix 4. Informed consent form

*Informed Consent Form for Heads of Households Selected as Beneficiaries of the ILO /DWHIS(DHK) health insurance premium subsidy for households undergoing temporary extreme economic hardship.*

Dear Head of Household,

Last year the Dangme West Health Insurance scheme in collaboration with the ILO started a process of identifying families in the district who need help to be able to join the health insurance scheme because of temporary extreme economic hardship. The households were initially selected through durbars with elected community insurance representatives, traditional leaders etc at the area council level. We then carried out a rapid assessment survey in November /December 2003 to verify the selection. We are pleased to inform you that your household has been selected as one of the eligible households.

Under this offer, the ILO will pay 75 per cent (3/4) of the premium of eligible households each year for the next three years starting from the 2004 insurance year. However to benefit from this offer, each year the eligible households need to pay up the remaining 25 per cent (3/4) of the premium before their insurance status will be renewed.

If you accept this offer, we ask you to register all your household members as on the list you gave us when we visited you in November /December last year. We will then calculate the total premium for your household. We will present the bill for 25 per cent (1/4) of this amount to you to pay and present the bill for the remaining 75 per cent (3/4) to ILO to pay. For this first year of the program i.e. 2004 insurance year, as soon as you have finished paying your quarter premium and provided us with photographs of your family members, their cards will be issued and you can all start benefiting from this program. You have until the end of March to respond to this offer by paying your portion of the premium.

You are at complete liberty to accept or refuse this offer. However since we need to move forward with processing of forms and planning for the year ahead, we need to know your acceptance or refusal now. If you accept this offer, we would like you to signify your acceptance by signing and or thumb-printing this informed consent form for us. Similarly, if you refuse we would like you to signify your refusal by signing the form for us to say that you refuse this offer. Even after you have signed this form, you are liberty at any time you so choose to withdraw from this program if you so wish.

For further information please contact “The Scheme Administrator, Dangme West Health Insurance Scheme.”

Thank you.

I do / do not accept this offer.

Name of head of household: \_\_\_\_\_

House Address: \_\_\_\_\_

Community: \_\_\_\_\_

Signature /Thumb Print: \_\_\_\_\_

Verified by (Name): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_