Towards a national health insurance system in Yemen

Part 2: Options and recommendations

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Abbreviations

A.B.	Arab Bank
A.C.C.B.	Agriculture Co-op Credit Bank P
A.I.	Arab Insurance
AIDS	Acute Immune Deficiency Syndrome
AOK	General Local Health Insurance Fund
BCG	Bacille-Calmette-Guérin – Tuberculosis Immunisation
bn	billion
BUPA	British United Provident Association
BYR	Billion Yemeni Rial
C.B.	Central Bank
ca.	circa = approximately
CBHI	community based health insurance
CBHS	community based health services
CHIC	Centre for Health Insurance Competence
CIA	Central Intelligence Agency of the United States
CSO	Civil society organization
DG	Director General
DHS	district health system
DPT3	Diphtheria-Pertussis-Typhus Trivalent Vaccination
e.g.	for example
EBP	Essential basic package
EC	European Community
EIU	The Economists Intelligence Unit
EMRO	Eastern Mediterranean Regional Office of WHO
EPI	Expanded Program on Immunization
EU	European Union
f	female
GDP	Gross Domestic Product

Abbreviations

GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
GPC	General People's Congress
GTZ	German Agency for Technical Cooperation, German Development Corporation
H.O.C.	Hunt Oil Company
H.S.G.	Hayel Saeed Group
HE	His Excellency
HI	health insurance
HIA	Health Insurance Authority
i.e.	that is
ibid.	At the same place in the same source
ID	Identification card
IDI	International Danish Insurance
ILO	International labour office
IMF	International Monetary Fund
InfoSure	Health Insurance Evaluation Methodology and Information System of GTZ
LIFDC	low-income and food deficit country
m	male
M.I.	Mareb Insurance
MCH	Mother and child health
MDG	Millennium Development Goals
MENA	Mediterranean and North Africa Region
mio	million
MIS	Medical Insurance Specialists
MoCS&I	Ministry of Civil Services and Insurances
MoE	Ministry of Education
MoF	Ministry of Finance
MoH	abbreviation of MoPH&P
MoPH&P	Ministry of Public Health and Population
MoPIC	Ministry of Planning and International Cooperation
mR	million Rial
N.B.Y.	National Bank of Yemen
na	not available
NGO	Non-governmental organization
NHIS	National Health Insurance System
NHS	National Health System or Service
ny	No year mentioned in documents and publications
OECD	Organization of Economic Cooperation
P.B.M.A.	Public Board for Meteorology & Aviation
P.C.T.	Public Corporation for Telecommunication
P.E.C.	Public Electricity Corporation
PAPFAM	Pan Arab Project for Family Health
PDRY	People’s Democratic Republic of Yemen
PHC	primary health care
PRSP	Poverty Reduction Strategy Paper
Q	quarter of a year
Re	Re-insurance
RoY	Republic of Yemen
SBS	Seguro Básico de Salud – Health insurance in Bolivia
Sec. Pol.	Security Police
SHI	Social Health Insurance
SimIns	Health Insurance Simulation Model of WHO and GTZ
SNN	social safety net
STD	Sexually transmitted diseases
SUMI	Seguro Unitario Materno Infantil – Unitarian Mother-Child Insurance (Bolivia)

Abbreviations

T.I.I.B.	Tadhamon International Islamic Bank
T.Y.	TeleYemen
TSI	Targeta Sanitaria Individual – Individual health card
UK	United Kingdom, Great Britain
UNDP	United Nations Development Program
UNICEF	United Nations Infant, Children and Education Fund (normally called United Nations Children's Fund)
US$	Dollar of the United States of America
USAID	United States (of America) Agency for International Development
VIP	very important person
W.B.	Watania Bank
W.I.	Watania Insurance
WB	World Bank
WHO	World Health Organization
Y.I.B.	Yemeni Islamic Bank
Y.I.I.	Yemen Islamic Insurance
Y.R.I.C.	Yemen Re-Insurance Company
YAR	Yemen Arab Republic
Yem.	Yemenia Airlines
YemDAP	Yemen Drug Action Programme
YR	Yemeni Rial
YSP	Yemen Socialist Party

Preamble

Based on a Decree of the Cabinet of the Republic of Yemen the Ministry of Public Health & Population (MoPH&P) contracted in June 2005 Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH for conducting a study on situation assessment and proposals for a national health insurance system. GTZ formed a consortium together with World Health Organization and International Labour Office. Together with the Republic of Yemen the World Bank and the World Health Organization co-financed the study. We would like to acknowledge the good partnership of all parties involved.

The consultancy contract requested the consortium to present

I	by two months of commencement of the consultancy:	1.	A report summarizing the main findings of the situation assessment (summary of relevant documents, review of national insurance schemes, analysis of the health financing opinion schemes as well as outcome of the visits and interviews of relevant stakeholders).
II	before the end of the consultancy:	1.	Findings of the study which include a report on proposals for health financing alternatives.
		2.	A proposal framework for national health insurance which includes: - An implementation action plan - Macro-financial projections for the next 10 years - Material to be presented in the dissemination workshop(s).
III	at the end of the consultancy:	1.	A final report on the consultancy service (in English with Arabic translation)

The contract was signed on 17th June 2005. The consultancy started 17th July 2005. The interim report was given to MoPH&P in four hardcopies and one softcopy in English by 14th September 2005. The above mentioned "before-the-end-of-the-consultancy" report was handed over in English by 10th October 2005. After a few modifications this report was translated and handed over as final report four months after starting the study. The final report has the title "Towards a national health insurance system in Yemen" and consists of four volumes:

- Part 1: Background and assessments - translated into Arabic
- Part 2: Options and recommendations - translated into Arabic
- Part 3: Materials and documents
- CD with electronic files of parts 1, 2 and 3, PowerPoint presentations and various background documents.

We take the opportunity to thank our partners in Yemen, especially His Excellency Prof. Dr. Mohammed Yahya Al Noami in the name of all partners and stakeholders who shared with us their insights, knowledge and wisdom.

Sana'a,
17th November 2005

Detlef Schwefel
GTZ GmbH International Services

Towards a national health insurance system in Yemen

Executive summaries [1]

Part 1: Background and assessments [2]

Introduction: Health insurance tries to convert out-of-pocket spending in case of illness into regular small prepayments of many citizens. This allows to provide health care according to the need and not only according to the ability to pay, especially in case of catastrophic illnesses. Based on a Decree of the Cabinet of the Republic of Yemen, a team from German Development Cooperation (GTZ), World Health Organization (WHO) and International Labour Office (ILO) was contracted to conduct a study towards assessing the feasibility of a national health insurance system in Yemen. The methodology included documentation review, field visits, questionnaires, interviews with stakeholders, and workshops. This summary presents the essentials of the baseline assessment, sketches three alternative options and recommends a roadmap to drive towards a social and national health insurance system.

Background: Mass poverty, high population growth and insufficient public services in the context of an oil dependant economy characterises Yemen. Many avoidable diseases and deaths call for prevention and improved primary health care. Increasing numbers of chronic and modern diseases are treated in doubtful quality in public and private hospitals. Cost-sharing in public facilities, cost-recovery of drugs and cost exempted treatments in public facilities are not well organised and unfair. Out-of-pocket payments in times of illness are very high, and the better-off look for treatment abroad.

Social security: In case of shocks of life, people in Yemen are widely left alone. A social safety network is in place, but it is restricted to some population groups, and coverage is often limited. Pension insurance of the public and organised private sector provides social protection for about one million employees. Quite a number of public and private companies set up health benefit schemes providing reasonable health care at a cost of approximately 45,000 YR per year per employee and family. Law proposals have been presented to the cabinet to introduce social health insurance schemes for the public and private employment sectors. Opinion leaders support this drive and ask for immediate implementation, starting with the public sector. A national health insurance system would also have to involve the better-off self employed, and especially the 50% of the population living in poverty, underemployment and unemployment. Community health insurances might be helpful for the poor, if they are backed up by government paid public services targeted to the most vulnerable groups.

Part 2: Options and recommendations

Full speed towards national health insurance: Health insurance for the entire (public and private) formal sector would cover 1.5 million employees plus 200.000 pensioners. Including their families it would benefit nearly half of the Yemeni population. The expected yearly revenue from wage-related contributions would arise to about 58 billion Yemeni Rial. This money would be insufficient for buying a good health benefit scheme like the one provided by the Telecommunications Corporation, and health insurance would produce a high deficit. Cost containment could be done for instance by excluding treatment abroad, or by reducing the benefit package drastically. Such a “small for all” scenario would avoid deficits. Improving the efficiency of service delivery is an always needed element of cost-containment. Additional funding would have to be looked for, too, either through

[1] Annex 2 presents a political summary by members of Al-Shura Council, Parliament, Political Parties. Ministry of Health.
[2] The detailed report on background and assessments towards a national health insurance system in Yemen is published in a separate volume, i.e. part 1 of our study report.

increased public funds or via earmarked taxes (e.g. on cigarettes, qat, petrol, big equipment). Campaigning for welfare funds and endowments for paying the contributions for the poor (as well as for unemployed), is advisable and could reduce deficits. A "full speed" towards social health insurance would be an excellent opportunity for initiating the overdue radical or even revolutionary change of the health care system. An independent and trustful health insurance organisation would contract only the best providers and enforce quality health care. However, the many prerequisites for such an organisation are not to be achieved in a short time. A "full-speed" approach towards social health insurance is reasonable but not feasible.

Incremental approach towards national health insurance: An incremental approach would support a three-fold strategy. (1) Networking and strengthening of existing company health benefit schemes, mainly setting-up re-insurance, broadening risk-pools and building associations of company schemes, has the potential to improve their scope and quality. (2) The intentions of the military, police and security-police to engage in a joint venture towards health insurance for their about half a million employees should be supported, if their facilities will open their doors for handling catastrophic cases of the poor and if they would share their experiences with a national steering committee on social health insurance. (3) In the civil government administration it might be good to start with staged demonstration projects for the teachers employed by the Ministry of Education. All steps of an incremental approach will need professional back-up, guidance and international technical support. (4) Concurrently, government must achieve a full cost-effective coverage of health services for all poor.

A think tank for a national and social health insurance system: A Centre for Health Insurance Competence (CHIC) shall be built up to support a drive towards a good management culture and to foster the incremental introduction of a national health insurance system. Such a centre should discover, analyse and replicate best practices of solidarity and company based health benefit schemes. It should help emerging community based health insurances. Permanent advocacy and lobbying towards a social and national health insurance system should be a preferential task for the CHIC. Last, not least, it has to invest heavily in capacity building and human resources development. Starting as a think tank for social health insurance, the Centre will be converted, step by step, into a national health insurance authority geared towards transparency, credibility, accountability, and based on a passionate professionalism. International technical support is needed to build up such a Centre for Health Insurance Competence. Committed local funding, nevertheless, should demonstrate first and firmly the political willingness to engage in a social and national health insurance system in Yemen.

Immediate steps: Immediately, the Prime Minister should nominate an advisory council or steering committee for social and national health insurance composed mainly of experienced and committed representatives of

- ministries, especially those responsible for finances, health, social affairs, civil services, endowment, and those that might adopt health insurance soon, e.g. defence, interior, education,
- solidarity schemes, health insurance projects, employers' and employees' associations or unions, civil society organisations, universities, women organisations and other outstanding experts, partners and stakeholders, including Al-Shura Council, parliament and parties.

WHO promised to give technical support to a secretariat for social health insurance to be put in place concurrently. Based thereon an independent and autonomous centre for health insurance competence should be build up with (a) a presidential or cabinet decree for instituting it, (b) a yearly budget of 400 million YR given by the Republic of Yemen, and (c) with additional international support, e.g. from World Bank funds. This Centre shall be converted step by step into a national health insurance authority that replicates the good experiences of the Social Development Fund and adapts them to an independent, credible, accountable and transparent public non-profit institution for social health insurance. This authority will guide the incremental approach towards social and national health insurance in Yemen.

Outlook: In Yemen, it must not take decades until a social and national health insurance system is in place. People deserve a health system that gives them high quality and cost-effective health care in case of need, independent from their ability to pay.

Towards a national health insurance system in Yemen

Part 2: Options and recommendations

1. Background and assessments

1.1 Introduction

More than half of the Yemenite population do not have access to health care. This is partly due to the lack of reachable provider facilities, mainly in rural areas where more than two out of three citizens are excluded from health care. The other relevant factor is the inability of the poor population share to pay for health care. Health insurance coverage is practically inexistent, and pre-payment schemes are very scarce and hardly affordable. People have to cover most expenditure from their pockets, so that many people are unable to pay for needed and adequate medical care in the time of need.

Some political initiatives have been raised in the past in order to overcome this situation by implementing social protection in health. Especially health insurance has the potential to lower the access barriers to health care, to prevent impoverishment caused by illness, and to overcome the exclusion of so many citizens from health. Collective funds are best for fair health financing, because individuals or groups can dedicate an affordable amount of money to acquire the right to receive financial support whenever the insured health risk occurs. Health insurance makes payment for health independent from the utilisation of clinics, hospitals or pharmacies, because people pay before falling ill and not only when we are sick, as most people have to do now with a very high share of out-of-pocket payment. And it pools different risks, since everybody pays and not only the sick or vulnerable. Cases of serious and costly illness that do not happen very often can be paid by a health insurance fund. We talk about national health insurance, when almost all citizens are obliged to join health insurance, especially the wealthy and the healthy, and when all citizens can enjoy the benefits of health insurance. We talk about a national health insurance system, when different health financing forms are combined to provide health care in case of need and not just according to the ability to pay.

1.2 Terms of reference

Based on a Decree of the Cabinet of the Republic of Yemen the German Development Cooperation (GTZ) was contracted to undertake a study on situation assessment and proposals for national health and insurance system. The terms of reference are:

1. Collect, summarize, and synthesize all relevant documents and data bases prepared for Yemen and provide an overview for a comparative analysis of the situation in Yemen with selected countries in the region and the World.
2. Identify important existing solidarity schemes in Yemen and analyze their structure, impact, and performance.
3. Review existing health insurance schemes in Yemen, including public sector programmes, private health insurance, community-based health insurance and company-based health insurance schemes.
4. Conduct and analyze a health financing opinion survey of politicians, Islamic leaders, citizens, development partners, local governments, ministerial officials, insurance companies, public and private health care providers, NGOs, workers' syndicates and the medical association.
5. Visit and interview the ministries and other central institutions, public and private health care providers, district local councils and health offices on governorate and district levels.
6. Compare the present situation in Yemen with experiences in similar countries in the region and worldwide in order to determine which preconditions are required to start a National Health Insurance System.

7. Analyze and discuss in a workshop(s) all findings and suggested alternative health care financing options with major stakeholders and draw conclusions against background of the realities in Yemen.
8. Develop at least 3 alternative health financing proposals which assure the equity of health care provision. Each proposal should cover issues related to revenue collection, provider payment, choice and unit of enrolment, benefit package, pooling arrangements, contribution schedule & method and purchasing.
9. Propose an implementation plan with stages of regional, social and organisational expansion according to priorities, management capabilities, quality of existing health services, and preparedness of population groups
10. Prepare the National Health Insurance financing framework for each proposal as well as preliminary macro-financial projections for the first 10 years.
11. Identify areas of demand for future technical assistance for the establishment of a National Health Insurance system in Yemen.

1.3 Methodology

The German study team was working in close cooperation with partners from the Ministry of Public Health and Population. Yemeni professionals participated in all stages of data collection and analysis as "twins" of all international experts in the spirit of mutual learning and capacity building. The team was complemented by specialist consultants from World Health Organization and from the International Labour Office. A comprehensive literature discovery and review was undertaken, and essential documents were translated into English. Interviews were conducted with more than 230 partners from national and local governments, parliament, Shura Council (second chamber), employers, unions, health insurance schemes, pension funds, civil society organisations, and donor agencies. More than 20 groups of opinion leaders shared their views on social health insurance with a multiple choice questionnaire. More than 30 public companies responded to a questionnaire on costs and benefits of their health schemes for employees and their families. Another survey shed light on afternoon jobs of civil servants and their willingness to join health insurance. Field visits in four governorates added to the knowledge gained. In a series of workshops interim findings were discussed, and a consensus of the study team and their Yemeni partners was build up for presenting assessments and options in a larger workshop on 11.-12.09.2005 with more than 80 participants. On 3rd October 2005 options and recommendations were discussed with members from Parliament, Al-Shura Council, political parties and the Ministry of Health. A presentation to the Cabinet is scheduled.

1.4 Background

Most of the 20 million Yemeni live in mass poverty and lack government services. The population growth exceeds economic development. Oil reserves will dwindle in a foreseeable future. A sustainable development policy has to be designed and started yet. Human capital formation should be one of the major concerns, with health and education as drivers of economic and social development. Health is a macroeconomic investment. Human resource development has to be complemented by a diversified production strategy and a reversal of the increasing environmental degradation.

Most diseases and deaths in Yemen are avoidable at low cost. Prevention and promotion of adequate health seeking behaviours of families, however, are not priority in decisions on resource allocation for health care. In the strongly medicalised Yemeni society, primary care has a low status although it is highly cost-effective for avoidable diseases as well as for the increasing chronic and "modern" diseases. More than half of the population has no access at all to health care. Especially women are excluded and marginalized. This situation is aggravated by a very uneven distribution of public health facilities and by a significant underfunding of the running costs of public health facilities. Hospitals in the public sector are generally under-utilised and of doubtful quality. The private sector is not properly regulated and its quality is uncertain. There is a very high demand for treatment abroad in the case of severe diseases.

About 29% of total health expenditure in Yemen – from private pockets and public funds – is used for treatment abroad. Approximately every two out of three Rials spent for health care are paid by families and households as out-of-pocket payment in case of illness. Extremely high health care costs hit only very few people, diseases are unpredictable, and prices in the individual case widely unknown. As social protection in health is lacking, these conditions make quite a number of families impoverish by expensive treatments, catastrophic diseases and death of family members. Even for normal diseases they have to spend a lot of money. In spite of relevant presidential decrees and existing exemption rules for the poor, public health care is by no means given for free. Cost-sharing of patients finances 45% of the costs in the largest government hospital, Al Thawra. On top of this, most providers get informal payments. 84% of opinion leaders say, cost-sharing is not well organised; and 91% affirm that cost-sharing leads to postponement of treatments. Exemptions for the poor are only given to a very small extend. This is due to the underfunding of public facilities and the low moral of staff that did not increase by topping up their salaries from the cost-sharing income. In the afternoons, the same staff earns in the grey market or shadow economy of health care. An excellent programme for cost-recovery of drugs by means of a drug fund for essential drugs fell into the trap of mismanagement and corruption. The very good government cost exemption scheme for chronic and catastrophic diseases was not enforced properly. The result is a high private spending at the time of use

- high spending for avoidable diseases
- high spending for catastrophic cases
- high spending for treatment abroad
- high spending for drugs
- high spending for informal, under-the-table payments.

Health insurance intends to regulate and reduce out-of-pocket payment, and to shift the unpredictable high burden for a few persons into regular prepayment of all, so that health care can be given according to need, and not according to affordability, only.

1.5 Social security and protection

A social safety net for Yemeni is a priority of the poverty reduction strategy of the government. A remarkable social fund for development was built up to mitigate the effects of economic adjustment programs. It could address some issues like “providing access to basic services in education, health, water and microfinance, as well as creating job opportunities and building the capacity of local partners”. Nevertheless, most families are left alone in case of structural or random shocks like flooding, fire, robbery, crop failure, inflation, currency adjustments, price increases, unemployment, accidents, famines, disabilities, long-term care needs i.e. all the “small” catastrophes that can destroy the existence of individuals, families and even extended families. Public risk management is not in place, neither. The only element of social protection addressed by the government is an insurance scheme for death, disability and pensions. It covers the military, police and government administration sectors quite well, but coverage of the private formal employment sector is very low. However, the implementation of pension insurance for about one million employees was an important achievement.

1.6 Existing health insurance schemes

Yemen has a rich history of solidarity and local self-help initiatives. Most of them are small-scale and of limited coverage. Undoubtedly, this is a treasury of good ideas and best practices. They have to be further discovered, assessed, disseminated and replicated, wherever possible. This is a strong mandate for follow-up activities towards a national health insurance system in Yemen. Examples are teachers’ and hospital staff solidarity schemes reaching beyond health and health care.

Community based health insurance schemes are discussed and recommended internationally. They are mostly voluntary schemes linked to public or private health care facilities. Two of such endeavours are promoted in Yemen, in Taiz and Hadramaut governorates. Both are not yet ready to be implemented fully, and some doubts prevail regarding their replicability in other areas.

Company based health benefit schemes in the public and private sector do show very diverse and interesting features regarding benefit packages, membership, provider contracting and payment, as

well as risk-management and co-financing. Financial transparency and administration seem to be weak, and there is ample room for improving and strengthening such schemes, that on average cost about 45,000 YR (equals currently 234US$) per employee (and family) per year. A national health insurance system might and should benefit from the various experiences and from the knowledge available on how to manage such funds. More in depth studies have to be realised on these and similar schemes.

1.7 Expectations regarding health insurance

National and social health insurance is being discussed in Yemen since unification in 1990. Health insurance related salary deductions were already introduced shortly thereafter but not followed by the provision of health insurance benefits. Since 1995 the Ministry of Defence proposes a health insurance scheme for the armed forces, and a similar move is now existing to cover police and security police, altogether close to half a million employees. For the civil public and the formal private employment sector a law proposal of the MoPH&P was given several times to the cabinet, which decided in 2004 to contract a study for assessing proposals and alternatives.

The international community expects a sustainable and really social health insurance for all citizens, especially benefiting the poor, the vulnerable and women that are systematically excluded from access to fair and reliable provision of needed public services. Empowerment of the poor and of women, especially, has to be strengthened in this context. In view of preventing corruption, the building of an independent, transparent, credible and accountable health insurance authority would be the most important prerequisite for a health insurance that might assure accessible and high quality provision of health care for those in need.

Most of the interview partners of the study team did not appear that enthusiastic with regard to health insurance. Most pointed at the difficulties in setting up a trustful fund after repeated bad experiences with funds in the health and other sectors. Many interviewees mentioned other priorities related to the basic needs that are still not satisfied for the majority of the population. A questionnaire given to opinion leaders in Yemen brought a slightly more positive picture. They are quite uniform in rejecting the current practices of cost-sharing for health in public facilities, and nearly all of them advocate a social health insurance system covering the whole family. Health insurance should be mandatory, organisation would be best at the national level, and management should rely on an autonomous health insurance organisation. 77% of the opinion leaders would like health insurance to start immediately or within two years.

1.8 Experiences in other countries

In neighbouring low-income countries, unacceptable high levels of out-of-pocket spending and shrinking government spending for health are as common as in Yemen. In Djibouti civil servants are covered and military and police have health benefit schemes. In Sudan, social health insurance covers 22% including civil servants, students, veterans and families of martyrs. In Pakistan there is no formal health insurance scheme. In the middle-income-countries of the region health care is financed through a mix of tax-based, social health insurance and self-paying schemes. In Morocco the social health insurance coverage reaches 17%, in Lebanon and in Egypt about half of the population, and in Jordan recent reforms have expanded coverage by social health insurance to 60%.

Experiences from other continents can be helpful for Yemen, too. South-east Asian experiences pinpoint to the need of special programs and government subsidies for contributions of the poor. Latin-American experiences indicate that targeted benefit packages are feasible even in precarious economic conditions and that it is essential to make sure that contributions for health insurance are channelled really to health benefits. Africa can give good examples of back-up strategies for emerging health insurance schemes in the form of centres of health insurance competence. Yemen does not stand alone attempting to introduce a national and social health insurance system. It can bank of the experiences of other countries, and should benefit from an appropriate networking with such experiences.

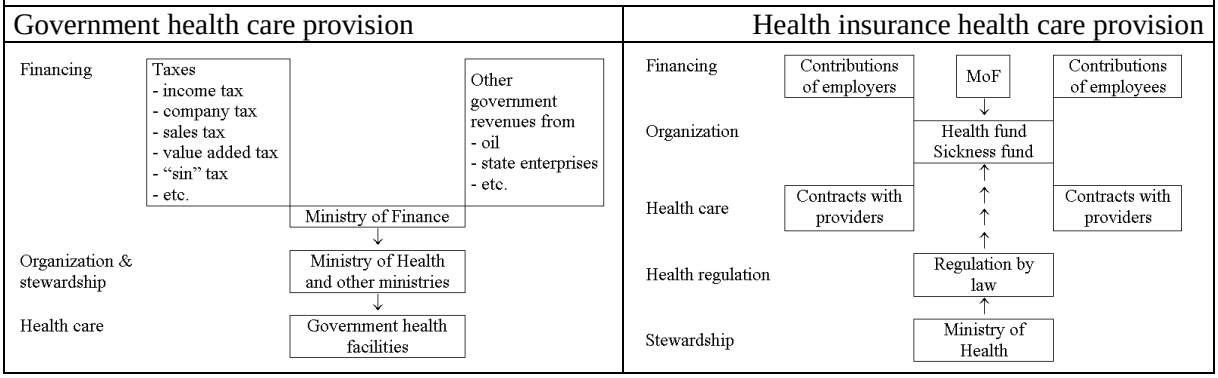
1.9 Preconditions for a national health insurance system in Yemen

Health insurance is not an easy concept, especially in the Moslem world. Awareness and understanding is not widespread. Motivation and mobilisation campaigns are needed to spread the basic ideas of a social health insurance and to stress linkage to the idea of solidarity shared by nearly all Arab people. Powerful decision-makers have to be convinced, too, and leadership is indispensable at various levels of policy decision-making. Social health insurance can survive only in close partnership and in a clear division of labour with the government, especially with the Ministry of Finance for funding and progressively taxing the healthy and the wealthy, and with the Ministry of Health for stewardship, prevention of avoidable diseases and promotion through health education for all. In Yemen it might be difficult to regain trust of the public sector and of opinion makers. Funds for health were mismanaged and abused by corruption. Health insurance deductions from salaries did not give any return in form of health benefits. For regaining lost trust, one unrenounceable prerequisite seems to be an outstanding independent management that is entirely bound to the principles of transparency, credibility, and accountability. A strictly professional approach is as needed as a staff that is knowledgeable in all the many specialised domains of health insurance and dedicated to the basic ethics of public service in the public interest.

2. Alternative health financing and health insurance proposals for Yemen

Health insurance differs significantly from government health care provision as it exists in Yemen. The following figure presents a simplified confrontation of both types of health care provision.

Figure 1 Basic differences between social health insurance and government health care provision



Between both types of health care provision there are fundamental conceptual and practical differences. In case of government health care provision organization, supervision, regulation and stewardship are tasks of the Ministry of Health. This generates typically an overlapping of diverse interests and decreases efficiency. In the case of a social health insurance, the Ministry of Health regulates, supervises and gives stewardship but is not a provider of health care; the most cost-effective providers are competing and the are contracted by the health insurance which is governed by employers and employees as payers, eventually joined by the government if subsidies are given. Check and balances are easier and better to be organized, if such a kind of clear-cut division of labour is done. There are many more reasons to opt for a social and national health insurance system.

2.1 A social and national health insurance system's vision for Yemen

2.1.1 What is a social or national health insurance system?

Health insurance has some specific characteristics that distinguish it from other types of insurance. Different from material losses due to accidents, fire or other damages, diseases and bad health affect essential elements of human beings. Health is generally considered a human right, a social good, and precondition for well-being, work and income, i.e. it is a production factor for social and economic development at the family level but also for macroeconomics. Indeed, while for car, fire or liability insurance plans risk-related contributions or coverage limits are generally accepted, the exclusion of certain diseases or the "punishment" of carriers of chronic diseases by higher contributions have low acceptance. This is why health insurance combines the typical elements of any insurance with some very specific features:

- Prepayment: Health insurance means to pay before falling ill and not only when we need medical care, as most people in Yemen have to do now through very high cost-sharing.
- Risk-pooling: Cases of serious illness are very costly, but they do not happen very often. If a health insurance fund manages to pool enough people of different health risks, it will be able to cover even very high costs for a few cases.
- Unpredictability: The occurrence of diseases is unpredictable in the individual case (but not for large numbers of populations).
- Lack of consumer sovereignty: patients generally do not have an idea of what kind of treatment will be needed for the various diseases. The prices of health care are not rationally negotiable for the individual patient.
- Indirect impacts and costs: postponing health care is risky and produces additional direct and indirect costs.
- Fairness: While people find it justified to make those who drive a very risky way or love to play with candles to pay more for a car or fire insurance plan, this is not the case for those who become ill. Illness is destiny. The prices of health care for catastrophic cases are unaffordable for most people.

One of the most fundamental problems asking for health insurance is that the financial burden of health care is extremely unequally distributed

- < 1 % of the population causes 25-30% of total health expenditure
- ~ 10 % of people with illnesses are responsible for 50 % of the expenses for health
- 50 % of the people consume only 1-3% of the overall health care costs.

In view of this situation impoverishment due to high health expenses is quite wide-spread. Worldwide, 178 million people are yearly exposed to catastrophic health costs, meaning that these health costs damage the household economy so that entire families are impoverished. This affects yearly more than 100 million people. In India, for example, a very large sample survey found out that 25% of families go bankrupt after hospitalisation of one family member. (Peters 2002) To cope with catastrophic health costs is one of the basic intentions of social health insurance.

Because of the many risks and uncertainties, even in free market economies, health insurances are a response of the society and of businessmen. Private insurances, nevertheless, will

(1) try to insure mainly the low risks and avoid members that cause high costs and once insured,

(2) patients might demand too much and physicians might overcharge the bill to health insurance.

The first problem is called adverse selection, the second one moral hazard. Both are powerful hints at the need, that – in the public interest – the government has to intervene and to give back-up, regulation and stewardship for health insurances. An unregulated private health insurance is against public interests. A social and national health insurance serves the public interest best, since it is mandatory for almost all and it serves according to the need and not according to the ability to pay.

The debate of broad social protection from the risks of bad health and illness refers to two basic concepts, national health insurance and social health insurance. We talk about national health insurance, when almost all citizens are obliged to join health insurance, especially the wealthy and the

healthy, and when all citizens can benefit from the insured services. This might be organised either by one single insurance institution, or by a combination of different health financing forms. The core task of a national system is to guarantee health care provision in case of need, and to make it independent from the ability to pay. If everybody in a country pays regularly a small amount of money for getting health care in case of need, funds will be available to give good health care to all citizens, including the poor and needy. We talk about a national health insurance system, when various endeavours of a fair financing for health and health care are brought into a network. This might be the case of Yemen, where there are a few interesting initiatives, that in the future might be coordinated: community health insurance schemes as planned as in Taiz, fair and regulated cost-sharing schemes for government health facilities, health insurance schemes for employees of private and public companies, revolving drug funds.

We talk about social health insurance, when – for example – the regular contributions of the members are according to salaries or income, if small and larger families pay the same contributions, and if the ill do not have to pay more than the healthy members. Social health insurance makes the protection of each single citizen from health risks a concern of the whole society. Society is much more than the ensemble of its members or a great organised market on population level, and the individual's true interests are best achieved in and through society. If implemented carefully and adapted to the specific conditions in Yemen, social health insurance can safeguard solidarity and universal coverage. Minister and members of Al-Shura Council, parliament and political parties underlined the solidarity culture by the following suggestion: A Fatwa for supporting health insurance for the poor and the needy should be advocated for, to be able to use in the future some Zakat and Endowment funds to support health and health care. A Fatwa in favour of health insurance was also given in Saudi Arabia.

2.1.2 Some essential questions

Developing a system for social health insurances at the national level is a long-lasting process that involves many different partners: Government, parliament, Shura council, various ministries, public and private companies, workers' unions, women's' organizations, charities, civil society organisations, health care providers and – last not least – the patients. The system shall be a social insurance that benefits the poor and the vulnerable most. It can benefit them in a sustainable way only, if the financing framework is sound. The study will deal specifically with this dialectics of solidarity and sustainability. Health insurance is meaningless if health services provided are not of good quality.

Health insurance is quite a complex system of interactions between various components of the entire health system and it is by no means just a financing issue. There are many questions for social health insurances to be addressed in the context of a sound health financing framework:

- Setting up the scheme: Should we start discovering solidarity and charity schemes and try to replicate them as far as possible? Should we try to extend private security or insurance schemes given by private or public companies for their employees? Should we learn from the contracts that some hospitals offer the private sector?
- Membership: Is membership mandatory or voluntary? Which part of the family will be insured together with the member of health insurance? How will members be identified when they request for services?
- Financing: What will be the main sources of finance? Will the government continue to give free or subsidised health care for the poor and needy? Should employers and employees or workers pay contributions for health insurance? Should the contributions for health insurance be linked with salaries or total income, and could it be controlled? Should everybody pay the same health insurance contribution or should the poor pay less, if they were not exempted? Should there be co-payments for the beneficiaries of a health insurance?
- Benefits: What benefit package can be paid according to the contributions of the members? Should we design an initial benefit package focussed upon maternal and infant health problems, or should it rather cover the most important chronic diseases? Alternatively one could start insuring catastrophic illnesses, very serious conditions and chronic conditions. Should the

transport to the hospital be included in health insurances? What about inclusion of the costs of sick-leave?

- Risk management: How do we assure that not only the sick and ill join health insurance? How do we assure that contributions income covers the costs of medical treatment?
- Providers: Which public or private physicians, hospitals and other health care providers will be contracted? Will only highly qualified physicians and hospitals get contracts from health insurance and how will quality services be controlled and assured? How will providers be paid?
- Administration and legal affairs: Will the Ministry of Health be the main responsible government agency? Can an independent and trustful Health Insurance Authority be build up? How can it be achieved that the health insurance organisation has a high transparency and accountability and is free of corruption?

Table 1 Core components of a health insurance scheme

المميزات الأساسية لخطط الضمان الصحي

Main Characteristics of Health Insurance Schemes

1	Setting up the scheme	وضع المخطط أو النظام	1
2	Membership	العضوية	2
3	Financing	التمويل	3
4	Benefits provided by the insurance scheme	الفوائد المرجوة من النظام التاميني	4
5	Risk management	ادارة المخاطر	5
6	Services	الخدمات	6
7	Legal issues, constitution	مسائل قانونية_الدستور	7
8	Administration	الادارة	8
9	Healthcare provision	شرط الرعاية الصحية	9
10	Provider payment	مساهمات المزود	10
11	Financial profile	الملف المالي	11
12	Statistical profile	الملف الاحصائي	12
13	Implications	تضمينات	13
14	Health authorities – role of the state	الجهات الصحية المسؤولة_دور الدولة	14
15	Plans for the coming years	الخطط للسنوات القادمة	15

Source: Hohmann 2001

Before entering in technical details, a basic question will have to be addressed: Is it too early to start with a national health insurance system in Yemen? And what is the best strategy for achieving social protection from avoidable diseases and suffering especially for the poor and vulnerable? How to build up and sustain the capacities for setting up and running a feasible and reasonable national health insurance system? What will be needed most? Several options and procedures are possible: A pluralistic system of improved and sustained smaller scale health benefit and health insurance schemes, a piloting of a health insurance for selected employees, special programmes for the self-employed and the informal sector and a programme that deals especially with the health needs of the poor and the most vulnerable sections of population.

During the last years, the international debate has begun to focus on health insurance in general and on social health insurance specifically in the context of poverty reduction. Well-performing social protection schemes can prevent people from and induce treatment for important illnesses. Health insurance has the potential to protect not only the poor, but a large population share from catastrophic payments and thus reduce poverty or avoid impoverishment. Due to a series of implications on the health care sector, health insurance can also prevent poor people from wasting money on ineffective or over-priced treatments, and enable people to participate in family planning programs.

Health insurance fulfils essential tasks with regard to the organisation of health care markets. Not only the risk pooling or risk sharing improves with the number of enrolees, but also the purchasing power increases and allows health insurance funds to negotiate special prices with providers, to define (and explain) cost-effective benefit packages, to monitor quality and appropriateness of care, to encourage quality assurance, to use appropriate payment mechanisms, to strengthen essential drugs policy, and to force quality up & prices down.

At the same time, active purchasing can improve access and quality of care and encourage efficiency of the health care system. With regard to the implementation of a national health insurance system in Yemen it has to be stressed that insurance schemes for the formally-employed population is generally inequitable because it tends to postpone the necessities to cover with health services the unemployed, the large informal sector, and the rural population. Private insurance is also systemically inequitable because it implies risk selection and cream skimming, and inequity is especially high as long as universal coverage is not achieved. Enforced compulsory (social) health insurance, however, has a series of socio-political advantages as compared to other social protection systems. In a country with the socio-economic pattern of Yemen, this will be impossible without subsidised contributions for the poor, eventually with affordable and correctly exempted co-payments. Nevertheless, the required administrative capacity and human resources and other essential prerequisites might oblige the country to opt for a second best approach.

2.1.3 Components of a national health insurance in Yemen

A national health insurance system should benefit directly and indirectly the whole population of Yemen, i.e.

- the formal sector employees of the government
- employees and workers in the formal private employment sectors
- the better-off self-employed
- the self-employed in very small businesses, in the informal sector and in close-to-subsistence agriculture and fisheries
- the unemployed
- the poor, disabled and marginal members of society.

The following table tries to quantify the numbers of households in these sectors and hints at optional health care financing schemes for these groups.

The opinion of the leaders
75 % of opinion leaders say: Health insurance should be organized at national level
Source: GTZ&EC survey 2005

The numbers of the different segments of population in the following table are roughly estimated. We distinguish four population groups: the formal public and private sector, the better-off self-employed, the poor self-employed and the unemployed and poor. For these groups we hint at four different health financing options. The options are compatible with developments and/or proposals in Yemen:

- the proposal of a health insurance law with payroll contributions which is paralleled by a project proposal of the military sector,
- the development of community based health insurance schemes in rural areas, as experimented with the support of a European Union programme in Taiz and of Oxfam in Hadramaut,
- and the public provision of tax- and cost-sharing-financed health services all over the country.
- A scheme for the better-off self-employed still has to be designed, tested and developed.

Coordinating and harmonizing health financing options for the entire population is the aim of a national health insurance system. The health insurance component of the health system is going to increase as much as possible and the component of the tax-based provision of public services is going

to shrink. The most important aspect is, that all population groups are to be covered by cost-effective health services and that the interactions between the various components of the health system are always kept in mind. This should avoid the splitting of the health care system into various separated and segmented subsystems. In many Latin American countries, for example, the health insurance sector is quite apart from the public health sector and this causes inequities and inefficiencies on a large scale.

Table 2 Components of a national health insurance system in Yemen

Health financing options by households' main employment sector	Workforce (rough estimates)	Health financing options: Payroll tax contribution insurance	Self-employed insurance	Community based health insurance schemes	Tax-based public services
Government	420.000	37.5 %			
Military	350.000				
Polices	150.000				
Public companies	70.000				
Mixed companies	10.000				
Formal private companies	500.000				
Better-off self-employed	500.000		12.5 %	↑↑↑↑↑↑↑↑	
Poor self-employed	1.000.000			10 % ↓↓↓↓↓↓↓↓ Expansion strategy	50 %
Unemployed and poor	1.000.000				
Households in Yemen	4.000.000	37.5 %	12.5 %	(~10 %)	50 %
Population in Yemen	22.000.000	37.5 %	12.5 %	(~10 %)	50 %

Sources: own estimates and calculations

A national health insurance could be called a social health insurance, if there are subsidies

- from the rich to the poor
- from the young to the old
- from small to larger families
- from workers to the unemployed
- from the healthy (low risks) to the sick and vulnerable (high risks)

in the name of a national drive towards solidarity encompassing all members of society, especially the poor and marginalized ones.

What is the best way to get such subsidies? Some argue that it is most important that government gets a regular and relatively high tax income with a high progressivity, i.e. that the better-off pay higher taxes than the poor. This can be done best with income taxes. It would allow to spend the tax money in the public interest and especially for those who need health care provision most. Others argue, that it is the best to have a mandatory health insurance system for as many members as possible. Percentage based pay-roll deductions from the salaries would foster solidarity, since those with a higher salary would pay a higher contribution to health insurance. Advocates of progressive taxes would answer that this refers only to the salaries, but not to the income and that a health insurance authority would have quite some difficulties in assessing the income of their members. Indeed, this is a very complicated task, especially for getting fair contributions from the self-employed. Increasingly, therefore, it is suggested that contributions for health insurance might be flat rates, i.e. the same premiums for all

members, and that the governmental tax system should guarantee the above mentioned subsidies for the disadvantaged members of society.

Theoretically these four options are

- progressive taxation of all members of society

and for members of a health insurance

- salary and wages related deductions from the salaries or pay-rolls or
- income based contributions raised by tax authorities and/or health insurances or
- flat rate deductions of the same levels for all members of the insurance.

Before designing a national health insurance system for Yemen, such options have to be discussed and compared. The easiest way in Yemen would be to deduct the contributions from the salaries of the employees and workers in the formal employment sector. Income related insurance contributions for families are better in sake of solidarity than salary based pay-roll deductions, even if these are much easier to be enforced and collected. Differentiated flat-rate contributions for informal sectors could alleviate the extra burden that is often placed on them, especially since they are taxed usually according to an estimated income (e.g. based on the size of the land they plough) and not according to the salaries and – being employers and employees at the same time – since they are asked to pay both contribution shares. These examples show that for a national health insurance system the various options have to be checked carefully and that they could be applied differently for different groups of the population and for different groups of the health insurance. It is important, to keep such options in mind, before designing a health insurance scheme. It is important, too, to always consider both main financing methods: taxes and contributions. The health insurance proposal in Yemen mentions only the mandatory salary deduction method.

The opinion of the leaders
54 % of opinion leaders say: Health insurance should be mandatory and obliged by law.
Source: GTZ&EC survey 2005

If compulsory or mandatory insurance already exists for some people, extending it incrementally to other regions and social groups will be a feasible way to achieve universal coverage if a number of conditions are met (Bärnighausen 2002, p. 1567). Extension and finally universality of social protection can be achieved by the regional,[3] the personal [4] and the work place principle.[5] The three different principles are not excluding each other; they are rather complementary and can evolve simultaneously, consecutively or alternately. However, the process of extension might bring along a series of problems that are to be taken in account in order to avoid high social costs and an unnecessarily strong resistance from some stake-holders. During the extension of the formal coverage and the implementation of alternative social security mechanisms, current members of social health insurance schemes are likely to pay part of the price of including the new groups in the form of higher insurance contributions. Thus, people and groups already covered by social protection mechanisms may be opposed to include additional beneficiaries into the insurance scheme. At the same time, inequity tends to increase because access to health care may decrease for the uninsured in the interim periods as resources are drained away from the uninsured to provide health care for the insured (Bärnighausen 2002, p. 1567, Normand 1994, p. 41).

Government support is needed for most social health insurance schemes in the world. This includes the re-insurance for acceptable deficits of the health insurance, subsidies for insurance contributions of the self-employed, the exemption of all poor from cost-sharing and cost-recovery schemes, the full

[3] An insurance scheme first established in selected regions of a country (usually the most industrialised ones) extends gradually to cover other geographic areas (usually less developed).

[4] Extension of coverage via the inclusion of uncovered persons either oriented at horizontal criteria such as occupation or vertical criteria such as income or the extension of coverage to family members.

[5] Extension according to the extension of (formal) employment, either along horizontal (e.g. economic sector) or vertical lines (e.g. size of company).

payment of all or most recurrent costs for health facilities in poor and remote areas or eventually the full payment of health insurance contributions for the poor to a health insurance authority. Furthermore, government has to support an improved effectiveness and efficiency of all public health services and programmes, especially by increasing drastically prevention and health promotion activities, and driving at an optimum-efficiency strategy in all private and public health care. Improved and enforced regulations and a strict quality control and supervision of public and private providers are essential elements of this strategy. As already mentioned, a progressive tax policy is a vital ingredient of a social strategy of the entire government with impacts and implications for the entire health sector and the entire system of health financing. An appropriate interaction between government and health insurance and between their specific forms of fund-raising is an essential component of a national health insurance system, consisting of

different population groups
different fund-raising options
different expansion strategies

which all have to be combined in a way that solidarity and fairness is best achieved for availing of the best possible health care for all in need.

In principle, a nationwide, universal health insurance scheme seems to be the best. It would encompass all population groups and it would find the best mix of health financing options that guarantees fairness of financing and high quality and cost-effective health care provision in case of need for every citizen.

Table 3 Basic advantages and disadvantages of a nationwide, universal health insurance scheme

Advantages	Disadvantages
• Nationwide pooling promises the biggest economies of scale and therefore best prices for services. • Universal schemes carry the ideas of equity in access to and financing of the services. • Potential of more equal health market growth • A mostly independent and powerful health insurance organisation has the chance to get the trust of the population (and providers) • No need for a complicate risk compensation scheme (cross-subsidise) to equalise the different risk and finance pools of various HI schemes. • More easy to be centrally controlled / steered by the government / parliament	Necessity of many prerequisites, like: • Strong political will and power Authority to enforce the rules nationwide • Socio-cultural anchoring of the solidarity principle • Highly qualified personnel in force to handle the scheme (health insurance authority) • Highly qualified personnel in the supervising institution to steer the scheme • Regularly reliable data and information about the services and the cash flow

Considering these main advantages and disadvantages the destination seems to be clear. In the long run - if a society wants to live the principles of solidarity - a nationwide and universal scheme has priority. The aim of a national vision for a social health insurance is,

- to convert the out-of-pocket payments at the time of use of health services (with dramatic implications for many citizens who can not afford it)
- into pre-payment schemes,
- where all citizen contribute (by taxes or contributions) to a fair health financing
- for high-quality and cost-effective health services that are given according to needs, and not according to affordability, mainly.

To realise such a vision step by step several alternative approaches will be discussed in the following.

2.2 Alternative A: Big push

A Deputy Minster of Civil Services and Insurances (MoCS&I) announced in a meeting with the study team that by the year 2006 the time of health insurance will begin for all employees of the public sectors. The public sectors under the guidance of the MoCS&I comprise about one million employees; they include government officials, the military, police and security police. By July 2006 health insurance contributions might be deducted from the salaries of the employees and workers and the government – as employer – will pay its share of the contributions. This would be easy, since a big salary increase would be given by this time to all public sector employees. By January 2007 a national health insurance authority should be existing and operating to provide the health insurance benefits to all members and beneficiaries. The authority would operate under the stewardship of MoCS&I.

The opinion of the leaders

77 % of opinion leaders say:
Health insurance should start immediately or within two years

Source: GTZ&EC survey 2005

2.2.1 Membership

This sharp and clear vision guides our first alternative. We will add to it the inclusion of the employees and workers of middle-sized and larger productive and service companies in the formal private sector. Additionally – and in accordance with the proposed health insurance law – we will consider the pensioners. The following table presents rough estimates on the households and household members involved in such a "big push" strategy towards national health insurance.

Table 4 The formal employment sectors

Employment sector	Households (rough estimates)	Population (1 : 7)
Government	420.000	2.940.000
Military	350.000	2.450.000
Polices	150.000	1.050.000
Public companies	70.000	490.000
Mixed companies	10.000	70.000
Formal private companies	500.000	3.500.000
Totals	1.500.000	10.500.000
Pensioners		
Pensioners (Pop. 1 : 2)	200.000	400.000
Total II	1.700.000	10.900.000

In accordance with the most recent statistical year-book of Yemen we assume a family size of 7 persons per member of each employee and worker and we assume for sake of simplicity that health insurance would cover the entire family. For the pensioners we calculate an average of two persons covered by the member.

The opinion of the leaders

35 % of opinion leaders say:
Pensioners are too poor to pay for health care

Source: GTZ&EC survey 2005

The opinion of the leaders
80 % of opinion leaders say: Health insurance should cover government employees first, including public and mixed companies
Source: GTZ&EC survey 2005

7.2.2 Contributions

According to the proposed health insurance law the contribution rates for the members of health insurance shall be

- 6% to be paid by the employer
- 5% to be paid by the employee

of the salaries including all allowances. In international comparison this seems to be a fair contribution, in comparison with Arab countries it is quite high. Allowances comprise for the time being about 51% of the basic salaries. (Tarmoom 2003) Based on quite diverging data and information from various sources we estimate the average salaries for the public and private sector and for the pensioners at roughly the figures given in the next table.

Table 5 Average monthly salaries

Employment sector	Salary per month
Average monthly salary in the public sector	25.000 YR
Average monthly salary in the private sector	30.000 YR
Average monthly pension	20.000 YR

Sources: various interviews with stakeholders

These figures incorporate already salary increases, as they were promised by government to their employees and workers in the middle of 2005. Based on these assumptions we can calculate the monthly deductions from salaries for employees and employers and the potential yearly revenue of a health insurance fund according to sources.

Table 6 Monthly pay-roll deductions and yearly revenue for health insurance according to the "big push" scenario

Sectors / Indicators	Public sector	Private sector	Pensioners	All
Number of employees and workers in millions	1	0.5	0.2	1.7
Number of beneficiaries in millions	7	3.5	0.5	11
Average wage, salary or pension per month in YR	25.000	30.000	20.000	
Employers contribution in %	6 %	6 %	6 %	
Employer's contribution per year per employee in YR	18.000	21.600	14.400	
Employees contribution in %	5 %	5 %	5 %	
Individual employees' contribution per year in YR	15.000	18.000	12.000	
All employers' contributions per year in billion YR	18	10.8	2.9	31.7
All employees' contributions per year in billion YR	15	9	2.4	26.4
All contributions per year (rounded) in billion YR	33	20	5	58
Government contributions (as employer) in billion YR	18	0	2	20

Table 6 Monthly pay-roll deductions and yearly revenue for health insurance according to the "big push" scenario

Companies' contributions (as employers) in billion YR	0	10.8	1	12
Employees' contributions in billion YR	15	9	2	26
All contributions per year (rounded) in billion YR	33	20	5	58

Source: Health insurance law proposal and own assumptions and calculations

2.2.3 Impact on national health accounts

About 58 billion Yemeni Rial (BYR) would be generated per year by pay-roll deductions in the public and private formal sectors. This would increase by 40 % the actual national health accounts, as shown in the following table. It would have a high impact on the pattern of national health accounts.

Table 7 Health spending by agents in Yemen before and with health insurance in the formal employment sectors

Agent \ Expenses	Before health insurance		With health insurance	
	BYR	%	BYR	%
Households	65	56.5	91	55.5
Ministries of Finance and Health	32	27.8	57	34.8
Public companies	5	4.4		
Private companies	3	2.6	15	9.1
Donors	10	8.7	1	0.6
Totals	115	100	164	100
Spending per head in YR	6091		8683	
Spending per head in US$	33		47	
Increase in %			43	

Sources: National health accounts 2003 updated (Driss 2005) and own assumptions and calculations

2.2.4 Revenue / expenditure comparisons

What can be bought with this money? In the following we will use two scenarios. The first one is based on a "good practice" in Yemen. The Public Telecommunication Corporation offers a benefit package, that is appreciated by its employees and workers. The workers union is proud to have achieved this package in long labour negotiations the fine-tuning. It includes

- lump sums for drug use
- free outpatient and inpatient care
- free treatment abroad

for the family, including wife and children. For members of the extended family, e.g. father and mother, cost-sharing and co-payments are applied. This benefit package costs 61.404 YR per employee per year. The next table specifies this and contrasts it with the revenues from pay-roll taxes of 6% for the employer and 5% of the employee.

Table 8 Telecommunication scenario for revenues and expenditure

Revenues	Health insurance contributions	57,8 BYR
	Yields of investment (10%)	5,8 BYR

Table 8 Telecommunication scenario for revenues and expenditure		
Expenditures	Telecommunication benefit package *	104,4 BYR
	Overhead (8%)	8,4 BYR
Deficit ** to be covered by taxes or other subsidies		49,2 BYR
* Assumption: Same benefit package as in Telecommunication Corporation with 350 Mio YR per year for 5.700 employees = 61.404 YR per employee ** Deficit is 43.6%		

This scenario shows that a considerable deficit would be generated. The same result is obtained, when we use a different way of estimating expenditures of health insurance. It is based on the assumption that about one health insurance employee is needed to serve 500 beneficiaries of the health insurance scheme. Such a rule is valid, for example, in German health insurances which have a significantly higher productivity level of human resources that the one observed in Yemen. Aiming at a conservative estimation, we do not take this point into account. For 11 million beneficiaries of the big push strategy 22.000 employees would be needed. If they would receive an average Yemeni salary, this would cost 6.6 billion Yemeni Rial per year. This is the anchor of the calculations in the following table. Percentage shares of expenditure for overhead, hospital care, drugs are based on international experiences. We include two special aspects, furthermore:

- Assuming that work injuries are covered by health insurance and not by a special insurance scheme apart from it, we include expenditure for accidents and in the worst case, expenditures for early retirement benefits
- Assuming that the employers will join the scheme only, if health insurance alleviates their burden for sick leave payments by paying salary-substitutions after and for certain periods of time, we include this expenditure item in the expenditure basket of health insurance
- Assuming that the building of a health insurance system in Yemen needs quite some skill development, training and massive education for the employees and the many partners and stakeholders involved, we add a considerable amount of expenditure for training.

Altogether, the expenditures would amount to about 110 BYR per year. Comparing expenditures and revenues, a deficit of about 46 BYR per year would arise, as can be deducted from the following table.

Table 9 Sickness fund scenario for revenues and expenditure				
Revenues		Expenditures		
Sources	BYR	Destinations	BYR	%
Public employers	18,0	Providers (inpatient & outpatient)	49,5	45
Public employees	15,0	Drugs and medical supplies	22,0	20
Private employers	10,8	Accidents, pensions, etc.	13,2	12
Private employees	9,0	Sick leaves	7,7	7
Pensioners	5,0	Management, staff, etc. (22.000)*	6,6	8
Yields of investment (10%)	5,8	Investments & operation costs	2,2	
Deficit ** (tax, subsidies)	46,4	Training, consulting, etc.	8,8	8
Total in billion YR	110	Total in billion YR	110	100
* Assumption: 1 health insurance employee with an average salary of 25.000 YR per month per 500 beneficiaries ** Deficit is 42.2 %				

Such calculations can be varied in many ways. This is exactly, what they are intended to stimulate: discussions of reducing or covering deficits and finding ways of a more rational allocation of scare resources. But a note of caution should be given. Health insurance contributions do not cover all health expenses in most countries. Very small benefit packages are not attractive. Company schemes are often company-subsidized. These are just three lines of reasoning for justifying an acceptable level of spending at the health insurances. Health insurances nearly always have to get a topping up by government. Based on international experiences we calculate with deficits at about 40%. On the other hand side we have to keep in mind, that health insurances for the formal sectors should not run into

deficits but produce returns so to be able to cross-subsidise services for groups in need. Therefore, cost-containment measures and the search for additional funding is always needed.

2.2.5 Deficit reduction strategies

Some deficit reduction or cost-containment strategies are mentioned in the following table. Financial implications are mentioned and comments made on the applicability of such a strategy in the context of Yemen.

Table 10 Deficit reduction strategies for health insurance in Yemen

Strategy	Some financial implications	Comments
Cost-sharing	> 40 % co-payment required	Contribution payers will not understand the advantage of health insurance, which tries to overcome out-of-pocket payments
Reduced benefit package	Excluding treatment abroad (44%)	Will reduce attraction for middle classes
	Covering only chronic and catastrophic conditions	Could cover the deficit
	Downsizing the benefit package to an acceptable minimum	Could cover the deficit
Higher contributions	1% contribution increase = 5BYR = 20% contribution rates	Too high, even in international terms
Member benefits only	Low risk members in small family will need 20BYR = big profit	Yemenis value family benefits very high; all opinion leaders support this option
Chronic & catastrophic care by government	Deficit can be covered	This is a very good current policy, which nevertheless is not followed as a rule; 63% of the opinion leaders share this view
Rational drug use/ essential drug list only	As drugs amount to 35 % of total expenditure, a palpable cost-containment is to be expected	The effect has to be calculated according to price levels; as drugs; resistance of pharmacists
Use of purchasing power of health insurance, i.e. bulk discount etc.	Little, middle-term effect	Might neutralise higher costs due to increasing demand
Lean management	Maximum 10% reduction	Should be done, anyway

An important point of cost containment is controlling and selecting respectively excluding providers. One central aim of every reform effort (everywhere in the world) should always be improving the efficiency of provision of services. There are a lot of experiences with that especially in higher developed countries. But inefficiency exists everywhere; in countries where resources are extremely limited, reducing inefficiency is even more important. However a health care system is organized, it is essential to have instruments to “police” doctors and other providers and to have instruments to „compete” e.g. with the pharmaceutical industry. There are a lot of possibilities to enhance efficiency systematically, but some things are global. A bigger pool of “demanders” (like big insurance organisations or like a state) promises better / lower prises for services.

Another thinkable “solution” to reduce an expectable deficit might be, to create a “favourable” risk pool. This means to pool the “wealthy and healthy” to get high total contributions on the one hand and low expenditures on benefits on the other. For those we need health services and the solidarity of the

community most - the “ill and poor” - that doubtless would be the worst case. It is obvious, that this can’t be a “solution” with a social spirit.

The opinion of the leaders
0 % of opinion leaders say: Only employees shall be covered by health insurance
Source: GTZ&EC survey 2005

Additional funding strategies should be employed on a parallel track. In the following table some possibilities are mentioned and commented on.

Table 11 Additional funding strategies for health insurance in Yemen

Strategy	Financial implications	Comments
MoF covers deficit without increasing allocations for health	Produces deficits for the tax based health services	Negative redistribution effects for the poor and needy
MoF covers deficit with appropriately increasing allocations for health	Doubling government expenditure for health	Highly desirable for health and education
Earmarked “sin” or other taxes (qat, cigarettes, big equipment, etc.)	Could cover deficits in “both” health systems (health insurance and government)	Stability of revenue and positive redistribution effects; Tax Authority is supporting this strategy
Voluntary and value driven zakat funds allocations	70-100 billion YR per year if people can trust that their donations are applied for valuable purposes Could cover “both” deficits	Lack of stability but high social value
Untapping of endowment and other charity funds	Could cover “both” deficits	Big potential; Ministry of Endowment and Guidance could be a good partner; highly recommendable to include them in policy making
Income rating	Still to be calculated	Double earnings fairly handled but difficult to implement
Disease-oriented support from international donors, mainly GFTAM	Could release the financial burden caused by malaria, tuberculosis and AIDS	Relevant during the initial phase, problem of sustainability
Higher employer contribution for low-income workers/employees	Could increase average contribution level	Political agreement needed, incentive to increase income level
Improved effectiveness of tax and custom system and dedicate additional funds to health insurance	Variable according to performance	Political uncertainty, commitment indispensable
Earmarked petrol tax defined as a percentage of national oil income	Additional resources available for health care	Reserves limit sustainability, political will is needed; more important source than taxes, currently

Every institution who gives money also wants to have control over spending it. To be able to control a scheme without a swollen supervising board and with complex lines of decision and numerous members, the aim should be to keep the financing sources clearly arranged.

2.2.6 Prerequisites

Prerequisites for a national and social health insurance system will be mentioned and discussed in the following according to the many "M" of management. Money is just one of such ingredients and was discussed before. It is by no means the most important prerequisite of a good and sustainable health insurance system, since with good motivation, mobilisation and manpower much more money can always be raised, if the product of health insurance is good and if politicians, patients and providers understand it. What most importantly is needed in the Yemen context is a mechanics of management that is trustful, credible, transparent. In view of the experiences with the drug fund, for example, trust in funds got lost. In all our discussions this issue was raised in the context of "graft and corruption" and an independent health insurance authority was asked for.

The opinion of the leaders

63 % of opinion leaders say:
An autonomous health insurance organization should be set up

Source: GTZ&EC survey 2005

As a fundamental prerequisite for a big-push strategy we recommend an independent high capacity management team with full transparency, credibility and accountability and modern corporate entity characteristics, possible contracted to an international company. Key features of a national health insurance fund are mentioned in the following table

Table 12 Key features of an independent and trustful national health insurance fund

Independence:
(a) separation from traditional government structure and main orientations for the Fund set by an independent Board of Directors,
(b) close association with NGOs, CSO, private sector, local government, patients' representatives, best practice experts and providers

Leadership:
(a) selection of a highly motivated, well-experienced and professionally highest qualified personality with proven leadership qualifications;
(b) board of directors not involved in day-to-day management decisions

Professionalism:
(a) rational recruitment and selection of personnel within an open and transparent process,
(b) all staff characterised by high experience and professional background,
(c) constant learning and training processes,
(d) constant revision of technical regulations and guidelines

Efficiency:
(a) strong and decisive management with political support from the highest levels,
(b) enthusiastic output-oriented staff recruited with strong professional and management experience
(c) use of objective indicators to monitor progress;
(d) constant learning from mistakes

Transparency in operating procedures:
(a) well publicised procedures and transparent decision making;
(b) transparency through proper two-way communication between beneficiaries and the health fund;
(c) flexibility i.e. willingness to learn from "mistakes"

Table 12 Key features of an independent and trustful national health insurance fund

Accountability:
(a) internal and external and on-the spot auditing,
(b) regular and on-the spot international auditing,
(c) strict and independent quality audit of providers,
(d) participation by international and civil society observers and advisers,
(e) enforcement of severe penalties in case of misuse and corruption

Capacity building of all partners involved and willingness to learn from international experiences:
(a) mainly in the beginning, foreign advisers and experts are important for technical, administrative and managerial support,
(b) continuous capacity building

Sources: One part of these recommendations was patterned after the experiences and recommendations of the social development fund, several other aspects were added by the team

For the institutional set-up of a national health insurance fund the following structure might be recommended.

Table 13 Recommended organisational structure for health insurance fund

Prime Minister – Chairman
Board of Directors
Managing Director
- Functional units:
  - internal auditing,
  - monitoring and evaluation including quality control of providers,
  - programming and planning,
  - finance and administration,
  - information and actuarial studies,
  - contracting and procurement, technical support
  - claims processing, provider payment policies
  - health economics and health financing policies
- Sectoral units
  - outpatient care,
  - inpatient care,
  - catastrophic care,
  - drugs,
  - other

Source: Modified structure of Social Fund for Development

It is doubtful, that such settings can be established very soon. If the big-push strategy were chosen, then it would be necessary to build up such structures with very strong support from abroad. In this case an internationally experienced high ranking management company would have to be hired to build it up and top run it for quite some time, until it can be handed over fully into Yemeni hands. This is needed, if credibility, transparency and accountability are the guiding principles to regain the lost but needed trust in any health insurance fund, i.e.

- trust by the public
- trust by the patients
- trust by the providers.

without which it would not worth and recommendable to build up a health insurance authority in Yemen. It would be best to start with a small health insurance secretariat, to expand it first into a centre for health insurance competence and step by step into a national health insurance authority. This takes time but pays off.

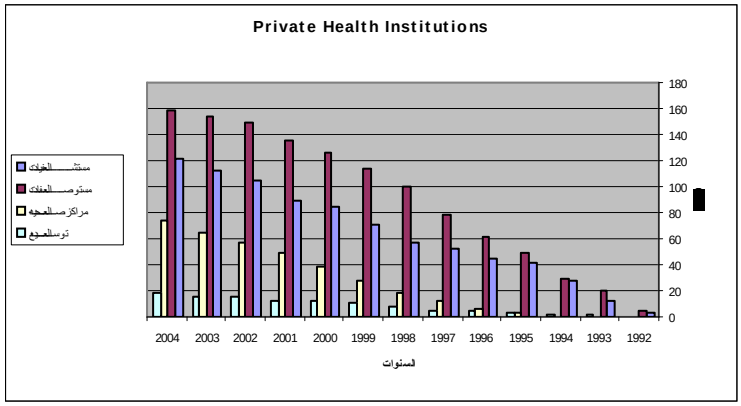
Some more prerequisites are needed for establishing a national health insurance fund to support the big-push scenario for health insurance in Yemen. Some are mentioned in the following table.

Table 14 Some more prerequisites for health insurances in Yemen

Management "M"	Explanation	Status
Mastermind	No leadership was discovered yet (talking, no walking, wherever)	Should be discovered
Manuals	Basic law, by-laws and constantly revised regulations and guidelines - enforcement of laws	Enforcement of laws is a serious problem
Multiplicity	Strong partner institutions not yet existing to represent the interests of providers, patients, etc.	Takes a long time
(Wo)Manpower	Economists, public health specialists, insurance economists, full-fledged health economists, bankers, social security specialists, persons with vocational training in social security, etc.	Not sufficiently available or not yet discovered
Material	Building, infrastructure, computer technology, ID card technology, etc	Not a problem
Motivation	Awareness of patients, quality drive of providers, public service orientation of managers	Not sufficiently given
Mobilisation	From within the HIA and with support of media Marketing of products and procedures	Has to be developed
Measurement	Regular actuarial, epidemiological and evaluation studies of outcomes and impacts	Basic data are missing, heavy investment needed
Monitoring	Internal audit, international audit, audit by media and civil society organizations, patients and providers	Acceptance of regular monitoring has to be strengthened

For health insurance a very important further prerequisite has to be taken into account: markets. A good supply of good providers in close reach to the patients is a must for a credible health insurance. Indeed, in the last years there was a steep increase of health providers in Yemen, as can be seen in the following figure.

Figure 2 Health provider development in Yemen



Source: Adel Al-Aamad

According to the provider market there are two challenges: We need *enough* providers to fulfil the criterion of reachable health services, but on the other side we need the *right* providers. We need providers which manage good quality services to *valuable prices*. Those private doctors, health centres or hospitals which (almost) exclusively medicate wealthy direct payers are not beneficial for the mass of the population.

There are several ways to avoid or minimise the lag of needed and available services. One is to use the market to optimise quality and prices of services. But that only works, if we have a fair market relation between supply and demand - and therefore we need a large group of people who potentially demand services. That will allow for concluding fair contracts between the pool and the providers. A single ill person is always a very weak "demander", an ill person is primarily just seeking help.

2.2.7 Advantages and disadvantages of the "big push" strategy

There are two big advantages and many disadvantages of the big-push strategy. It is by no means already decided that it might be too difficult to engage in such an option. But it would be a dangerous road, that at its end, nevertheless, could be very beneficial for Yemen.

Table 15 Advantages and disadvantages of a big-push strategy

Advantages	Disadvantages	Possibilities
Big clientele means good pooling and economies of scale A needed health system change is possible	Most prerequisites are not met Institution building takes time Political commitment is weak Low availability of needed data and information Socio-cultural constraints General mistrust regarding any government fund Few experiences available Not sufficient manpower available Low degree of fiscalisation General mistrust towards funds	Salary increases give a historical chance Internationally experienced and highly professional management group takes over and gets it started

2.2.8 Sub-scenarios of the big-push strategy

A national health insurance authority will enrol its contribution paying members. In case that the government pays the contribution rates for the poor and the unemployed and all who are not able to pay any or the full contribution (e.g. pensioners), the health insurance authority would get increasingly the responsibility to provide these members with the benefit packages stipulated by law or regulations. In the end, the health insurance authority would then take over to contract nearly all curative health care and the government facilities would then be just one provider competing with other providers. The Ministry of Health would then be able to concentrate on its role as regulator and as steward of the entire health system. The corresponding sub-scenarios might be called: coexistence and revolution.

Table 16 Two sub-scenarios for the big-push strategy

Coexistence	Revolution

Table 16 Two sub-scenarios for the big-push strategy

Coexistence		Revolution	
Division of labour between government health services provision and health insurance authority • Government cares for prevention, promotion, primary health care and eventually for chronic and catastrophic diseases and illnesses • Health insurance authority services its members and beneficiaries, only		Government pays contributions for the poor, unemployed & pensioners to health insurance authority. • HIA takes over all preventive and curative health care and contracts the best providers only and everywhere. • Government focuses on basic functions of regulation and stewardship and supervisory authority.	
Advantages	Disadvantages	Advantages	Disadvantages
Government controls directly important service sector Chance for both actors to learn from each other	Problematic institutional risk selection, e.g. regarding chronic and catastrophic cases Government is provider and supervisor at the same time	Creation of clear-cut responsibilities Prevention of institutional risk selection Chance for higher public acceptance of HIA Misuse control easier since all are insured	Difficult to realize Need of quite complex regulations to control and to pilot the system by incentives Fast implementation of a new and big p(l)ayer contains risks of corruption

A further sub-scenario for the big-push alternative would be to reduce the benefit package drastically to the average benefit package affordable by the national health accounts and to provide this benefit package gradually to all sectors of society, including the unemployed and poor, as well as to the better-off self-employed. Some more details of this scenario are given in chapter 4. We call this scenario the “small for all” scenario.

2.2.9 Cooperation requirements for the big-push strategy

The various partners involved in the big-push strategy have to play their respective roles shown in the following table.

Table 17 Cooperation issues regarding big-push strategy

All ministries and companies	Enrolled in setting up the scheme Responsible for inscription of employees Pay contributions as employers Responsible for transferring contributions
Ministry of Health	Conceptual and regulatory leadership Preparation of public providers for national health insurance Give priority to prevention/promotion; eventually to catastrophic diseases Withdraw step-wise from health care provision
Ministry of Finance	Give financial support to the health insurance authority from general and/or earmarked taxes Support sufficiently flanking activities to support prevention, promotion and extension of coverage of basic primary health care

Table 17 Cooperation issues regarding big-push strategy	
Ministry of Civil Service and Insurance	Give financial support to the health insurance authority from own budget allocations Enrol all public servants into the scheme and negotiate with MoF the best ways of introducing salary deductions without provoking riots

The assignment of some new roles of the different partners and stakeholders involved will have its impact on Ministry of Health and Ministry of Finance and might influence positively the strained relationship that both do have, for the time being.

Table 18 Implications for Ministry of Health and Ministry of Finance	
Ministry of Health	Less subsidies to be given to health care providers Ministry withdraws stepwise from health care provision Health workers can focus on prevention + promotion Ministry concentrates on regulation and stewardship
Ministry of Finance	MoF will know better what they pay for Health services will become more and more efficient Additional support for health services is needed (~200%)

2.2.10 Conclusion

The big-push strategy comes very close to the vision of encompassing all health care in Yemen and of addressing the needs of the entire population. Nevertheless, many constraints and unmet preconditions make the comprehensive approach extremely difficult to realise. However, with strong support by the President, with commitment of relevant decision-makers, and with the help of international partners the vision might even become reality. That would need a tremendous effort and a huge investment in financial and mainly human resources. Under certain circumstances, a “big-push” strategy towards a national health insurance system might appear reasonable, but hardly feasible; however it is by no means impossible.

The opinion of the leaders
80 % of opinion leaders say: Government employees should be covered first by health insurance including employees of public and mixed companies
Source: GTZ&EC survey 2005

A kind of big-push strategy was chosen by South Korea. Within 12 years a universal coverage was achieved. It was heavily backed up by demonstration projects and health systems research, as we will propose it through the institution of a Centre for Health Insurance Competence.

Table 19 The development of health insurance in South Korea	
1976	Health Insurance Law as social part of fourth 5-year plan Mandatory insurance in corporations > 500 employees Medical programme for the poor
1979	Extension to government employees and teachers Mandatory insurance in corporations > 300 employees

Table 19 The development of health insurance in South Korea	
1981	Mandatory insurance for industrial workers in firms > 100 employees Pilot program for self-employed in 3 rural areas
1982	Pilot program for self-employed in 1 urban and 2 rural areas
1983	Mandatory insurance for industrial workers in firms > 16 employees
1988	Mandatory insurance for industrial workers in firms > 5 employees Inclusion of all rural self-employed
1989	Inclusion of all urban self-employed
Source: Kwon 2002	

Government sectors and the large companies were integrated into a pluralistic national health insurance within three years.[6] The approach in South Korea assembles elements of the big-push strategy and the incremental strategy described below. An incremental step-by-step approach was chosen by most countries, especially in the neighbourhood of Yemen.

2.3 Alternative B: Step by step

An incremental strategy could start either from the demand of one or more stakeholders or from the opportunities for introducing health insurance together with a (self-)selected potential stakeholder. Military and police in Yemen are demanding for health insurance. The Armed Forces are a frontrunner since 1995, and the police is willing to join efforts with the Army and the security police. This would benefit a large segment of the public sector employees and their families, altogether close to 3 million inhabitants of Yemen. In the civilian sector of government, a perceived and clearly expressed need for health insurance still has to be discovered. Motivation and mobilisation campaigns could stimulate such a felt and perceived need. In view of this, we will discuss with the incremental scenario the potentialities of implanting health insurance into one of the larger public institutions, so to have a model for further demonstration, dissemination and replication. This includes building up and fostering a network and linkages amongst the various existing health benefit schemes in the public, private and potentially in both sectors. But before explaining implementation options and strategies, a look at the share of various institutional sectors within the government will give an idea of the expected risk pool sizes for different approaches.

2.3.1 The share of various public institutions of the government

The following table gives the latest available data on employment in the public sector, which is estimated at close to one million employees.

Table 20 Formal sector employment in Yemen	
Government employees (latest available data)	Number
Ministry of Defence	350.000
Ministry of Education	240.000
Ministry of Interior (+ Sec. Pol.)	150.000
Public and mixed companies	74.108
Ministry of Health	43.000
Scientific Institutes	37.797

[6] For more details see chapter 20 of part 3 of our study report.

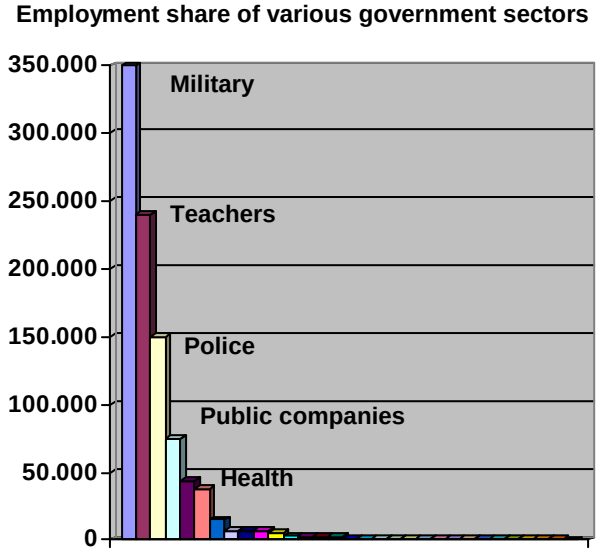
Table 20 Formal sector employment in Yemen

Government employees (latest available data)	Number
Ministry of Public Works	14.765
Ministry of Agriculture	7.145
Universities	6.493
Ministry of Local Administration	6.287
Ministry of Civil Services	4.631
Ministry of Finance	2.988
Ministry of Trade	2.366
Ministry of Justice	1.870
Ministry of Culture	1.818
Ministry of Social Affairs	1.238
Ministry of Foreign Affairs	1.095
Ministry of Media	938
Ministry of Transportation	917
Ministry of Fisheries	772
Ministry of Youth and Sports	669
Ministry of Endowment	665
Ministry of Planning	634
Ministry of Industries	562
Educational Centres	341
Ministry of Vocational Training	324
Ministry of Legal Affairs	217
Ministry of Oil and Minerals	210
Ministry of Emigrants	153
Ministry of Telecommunication	138
Ministry of Electricity and Water	98
Other government administrations	34.540
Total	986.779

Sources:
Data on Government Administration 1998 given by Public Pension Authority. Data on education, health, military, police and security police by interview partners 2005. Data on public companies: Statistical Yearbook 2004

A graphical presentation highlights much better the relationships in terms of numbers of employees. This is an important criterion as a big number means better pooling for health insurances and favourable options for economies of scale.

Figure 3 Employment share of various government sectors



Military, teachers and policemen are special candidates for implementing health insurance. There is a felt need on the side of the Army and the police. This expectation could not yet be detected in the Ministry of Education, although the vice-minister of education clearly calls for health insurance. At the Ministry of Health a rapid opinion survey among administrative and professional personnel revealed, that 95 % of them would join a health insurance, if available. However, a clear-cut initiative for taking the lead towards health insurance has not been visible so far within the Ministry of Health; the close relationship to the world of health care providers brings advantages, but also major disadvantages when it comes to define essential tasks like provider selection and payment.

The opinion of the leaders

54 % of opinion leaders say:
health insurance should be mandatory

Source: GTZ&EC survey 2005

2.3.2 Advantages and disadvantages of starting with health insurance in selected public institutions

The following table summarises various advantages and disadvantages of the various incremental strategy options for health insurance starting with or focussing on the above mentioned sectors.

Table 21 Advantages and disadvantages of a health insurance set-up for various public sectors

Choices	Advantages	Disadvantages
Military	Large number Documented willingness Hierarchical, top-down structure Hospitals and health centres all over Yemen Mandatory enrolment Payroll deduction easy to introduce Implicit re-insurance through the Ministry	No provider/purchaser split No value added for the soldiers Separated management unit Different contribution rates may hamper integration in a national system Further privileges for a privileged group Barrier to extend beyond uniformed forces
Police and security police	Large number Documented willingness Hierarchical, top-down structure Willingness to join military HI Mandatory enrolment and payroll deduction easy to perform Implicit re-insurance by the Ministry	No provider/purchaser split No value added for the policemen Provision in Sana'a and Aden Separated management units Further privileges for a privileged group Barrier to extend beyond uniformed forces
Public and mixed companies	Various experiences in place Companies cooperation Reduction of companies' costs Good organisational level Necessary data available	Abolition of existing schemes possible Probable reduction of coverage and scope of benefit packages Workers' insatisfaction, possibly riots Political resistance
Ministry of Education	Large number Nationwide presence Good communicators Several experiences with employee-driven solidarity schemes (i.e. in Aden and Sana'a) High commitment	Only 18 % in bigger cities Only 30 % close to cities No willingness documented Solidarity funds not supported No qualified staff for HI management No employees' representatives Decentralised structure
Ministry of Health	95 % are interested Good understanding of HI High commitment as "model" scheme Nationwide distribution Close relationship to provider sector*	Only 18 % in bigger cities Only 30 % close to cities Decentralised structure No solidarity funds started Staff qualification for HI management needed No employees' representatives *But: Vested interests of providers

2.3.2.1 The public security sector

The public security sector, consisting of military, police and security police has demonstrated since long its willingness to engage in health insurance. This interest and commitment should be honoured. The health insurance law proposal for the armed forces should be approved, as soon as possible and a joint venture started with police and security police. This would benefit half a million employees and altogether 3 million people in Yemen. Experiences of implementing this law, of contracting public or private providers outside the catchment areas of own health facilities and other relevant experiences should be shared with all other stakeholders interested in health insurance. Such a start with health insurance should be very transparent. This would be a first conditioning of an approval. A second conditioning refers to the public responsibility of the military and the police. They ought to open their

medical doors wide for all emergencies of the poor and of women and they should treat them without cost-sharing. It would be good if at least a quarter of the medical capacities of the facilities of the military and the police would be reserved for such a public service.

There are several reasons to start a national health insurance system (together) with the armed forces. First of all there is a documented interest in form of a law proposal[7] from side of the military leadership and the Ministry of Defence to add to the existing health care provision a health insurance fund. Also the 'how' is already designed in the draft of a law of medical insurance for the armed forces. This draft – which was continuously developed since 1995 - regulates all basic items of a health insurance: legal design of the fund including supervising body, membership, beneficiaries, benefits, contributions and other financial resources. Proposals for the essential characteristics of the scheme are:

- Mandatory membership of all personnel of the armed forces;
- Voluntary membership for the pensioners of the armed forces (and for others);
- Beneficiaries are family members of the subscribers (very broadly providing: father, mother, wives, single, widow and divorced daughters, suns under 18 and some sore);
- Contributions from 3% of the soldier's basic salary and 5% for officers and 6% of the salary paid by the Ministry of Defence as contribution to the health insurance;
- Main benefits are inpatient and outpatient treatment (plus treatment abroad with the approval of a medical committee), laboratory and x-ray examinations, surgical operations, childbirth, pregnancy and child care.

The military itself calculates with an average of five paid-up beneficiaries per soldier. That means in case of 350,000 subscribers plus 1,750,000 family members co-insured, altogether there would be covered more than 10% of the inhabitants of Yemen. There are some characteristics of the militariy that are very helpful when trying to introduce a health insurance pretty fast. Caused by the very hierarchical, top-down structure of the military it should be relatively easy to implement the decision. Secondly it is important, that the armed forces already offer universal services to their personnel, they already manage health care. The armed forces provide e.g. 12 larger hospitals, 4 regional hospitals and 122 health units around the country. That signifies that there is the possibility to start the scheme so like in a virtual kind. Saying this is meant that this scheme could be enrolled without the sudden need of thousands of contracts with providers. At a later stage also private and / or public hospitals and / or other providers could and should by contracted. The health insurance scheme for the armed forces could be rolled out relatively fast. Feasible might be, to start in the bigger cities and enrol the scheme from there into the regions. The Local Authority Law would not be a hindrance, since the Ministry of Defence is not bound to it.

It seems to be a good idea, to merge the proposed health insurance of the armed forces with that of the polices. Advantages are: likewise top-down structure, both are managed on a central level (what is important for getting contributions directly from the Ministry of Finance), both have shown their willingness to implement a health insurance. The circumstance that the police only possesses two hospitals would be acceptable in the scenario of a unified scheme, because in that case the policemen could also use the hospitals, health centres and providers of the military and they together should / could contract further providers. Some bigger challenges result from the fact that at the moment the suggestions about essential questions of the scheme characteristics are different or unknown. It is not clear and documented if the police would adopt the plans of the military regarding benefits (e.g. out of country treatment also for relatives), beneficiaries (broader definition of co-insured family members) and contribution rates (at the armed forces 3% and 5%). It is recommended that the three parties involved start a dialogue very soon. A merging of the three public security brances would altogether benefit 3 million inhabitants of Yemen.

[7] See the English translation of the law proposal for the armed forces in part 3 of our study report.

2.3.2.2 The public education sector

Asked about the willingness of the ministry of education to be a frontrunner for health insurance, the vice-minister immediately started to discuss implementation details, i.e. that a consensus of MoE, MoF, MoCS&I, MoPH&P should be found first on scope and purpose of introducing health insurance, and on the salary implications; a frontrunner for health insurance would have to decrease the salaries by collecting the contribution shares of the employees and to increase the salaries in the government budget due to the shares of the employers. Especially the first would be difficult to realise, since the employees would expect a proportional salary increase of 5% so not to be hit by health insurance, especially in view of the very low salaries in the government sector. If this would be granted, each further sector of public employees would expect the same.

If this problem could be solved another difficulty would emerge, since many teachers are working outside the cities, where a choice of health providers of good quality is difficult. Therefore the scheme should be tested first in Sana'a and eventually Aden. A second step would go into the capital cities of Governorates, and a third one would select some of the Governorates for pilot-testing the scheme. All this implies that it might be a long way towards health insurances in the educational sector. However, teachers are important multipliers and thus might become relevant stakeholders for a national health insurance system. To start with this professional group will favour the dissemination of the idea of social protection and help to inform the society in Yemen about the concept of insurance.

Difficulties with collecting the contributions have to be solved preventively. If it would not be possible to collect the contributions at the source, i.e. by a transfer from the Ministry of Finance to the health insurance authority (of the teachers), a complicate, slow and low transparent cash flow would be the consequence. According to the Local Authority Law it would obviously not be allowed to collect the contributions directly at the Ministry of Finance. Therefore it is strongly recommended to permit such a procedure through a Cabinet decree, after discussions and negotiations with the Ministry of Local Administration.

An additional argument for starting health insurance with the Ministry of Education derives from the fact that the education personnel in Yemen and elsewhere can look back on a series of experiences with employee-driven, self-governed health benefit schemes. For instance, the Education Fund Co-operation organised recently in the Education Office in Sana'a (see chapter 17 in part 3 of our study report) is a good example for this kind of teacher-driven schemes. The Fund started as a bottom-up initiative of the educational staff with voluntary affiliation, but contributions are deducted directly from payrolls. Due to former experiences in other Governorates, the members of the Educational Fund are very reluctant towards closer co-operation with the ministry. They fear to lose control of the use of the funds that are very likely to disappear in unknown channels as far as the Ministry of Education and lastly the Ministry of Finance take over financial control. Thus, implementing health insurance in the educational sector should be a transparent and participatory process where employees play an important role and are listened carefully. Good management, extensive participation of employees, and reliability of benefits and services will be crucial conditions for assuring performance, acceptance by teachers and sustainability of a health insurance scheme implemented in the educational sector.

2.3.3 Top-down incremental strategy

Who starts with health insurance? The above mentioned preconditions are valid for answering this question, too. Furthermore it needs the gradual development of willingness and of accepting advise and control and to learn from mistakes. A strong guidance would have to be given by an institution knowledgeable in the field of health insurance. We propose a Centre for Health Insurance Competence, as outlined below. However, a top-down driven incremental start of health insurance in the larger public employment sectors is always a difficult endeavour, and the risks have to be outweighed with regard to the expected benefits.

- Since the introduction of health insurance in the Ministry of Education would be a top-down approach of implanting a new idea into an existing institution, a well designed motivation and mobilisation campaign would be needed. Such a campaign is fruitless, if there is no good product to sell. Good quality of health care can be provided just in the bigger cities, for the time being. Given the prevailing structure of health care and the prevailing speed of health reform, a fast improvement can not be expected. This is especially the case, if it is just one frontrunner for health insurance implementation in the public sector.

- In the military and police sector the situation seems to be different in view of the availability of own hospitals and health centres that might be improved by the influx of salary contributions. Nevertheless, there is no competition of providers towards quality improvement and it might well be that the additional funds will just be used for additional investments, that do not have a direct impact on improving the benefit packages for the soldiers and policemen, which are quite good already without health insurance.

- A top-down approach for implementing health insurance in public companies, for instance by introducing mandatory affiliation to a national health insurance scheme is very likely to raise opposition or even active resistance. Most public sector companies offer quite comprehensive health benefit packages for their staff; thus, many employees are already receiving medical benefits without paying any contributions. Workers and their unions will certainly demand a visible improvement of coverage what is difficult to achieve in most cases, and they will not accept higher than minimal contribution rates.[8] However, the interest in health insurance will probably be split. Those employees who are entitled to a small benefit package will be more open towards a comprehensive health insurance scheme. In particular, the Government would benefit from health insurance, since a relevant part of the operational costs would be financed by the employees' contributions. The additional revenue gives the public sector companies the opportunity to compensate the workforce – at least partly – for higher expenditures for health care and to convert health insurance into a shared win-win situation for employers and employees. However, from an equity point of view it is recommendable to dedicate the public company surplus to be expected from health insurance for subsidising health care for the poor and for vulnerable groups. A national, and even more a social health insurance system is meant to cover the largest possible population share and to enhance equal access to affordable medical services. The margin of operation depends on the reachable degree of social cohesion and will be object of political negotiations and even struggles.

- The private company sector is expected to be even more reluctant to accept health insurance if it is implemented from above with an obligatory character. In general, entrepreneurs use to disapprove any interventions from the public or State. Many private companies have reasonable health benefit schemes in place, mostly financed exclusively by the employer without contributions from the employees.[9] Although the scope of private benefit packages is less comprehensive than in public companies, it will be difficult to achieve equal or even better coverage than currently given.

- However, mandatory health insurance will be attractive for employers for the same reasons mentioned with regard to the public company sector. This will be even more relevant if the legal work insurance is included in the benefit package of the national health insurance system, as foreseen in the law proposal presented to the cabinet. Currently, the situation seems to be very unclear, and mainly private companies use to link health with work insurance and to mix health related benefits to legal obligations with regard to occupational health, and even with life insurance. For most private employers, a clear-cut definition of costs and benefits according to a

[8] Representatives of workers and employees declare unanimously that contributions should not be higher than 2 % of the salary.

[9] Different from most company schemes, the largest Yemeni enterprise group, Hayel Saeed in Taiz, provides health care for contributions shared among employer and employee, but in this consortium the employer pays also the major part of health care funding.

national health insurance system is very likely to reduce health related expenditure that amounts currently to an average of 42,000 YR per employee per year (see chapter 4.3 in part 1 of our study report).

Facing the various predictable problems and constraints, involvement of the public and private companies in a national health insurance system is a major challenge and needs a careful and intelligent preparation in order to prevent avoidable resistance. As observed in many occasions and mentioned above, solidarity is given at a small-scale setting. Thus, the inclusion of the public and private sector should start from the existing schemes on company level. One recommendable and viable step at the very early stage seems to be informal networking aiming at the implementation of a re-insurance scheme amongst companies. Enlargement of the risk pools will lower the individual company risk of very high expenditures and allow for expanding the benefit packages.

Networking and re-insurance will certainly start best amongst public (and potentially mixed) companies on the one hand and private enterprises on the other hand. Organisational, administrative and conceptual reasons are different in both sectors, and the entrepreneurial logic behind makes also a difference, although both are not incompatible at all. In addition, private sector workers refuse to pay wage-related contributions to the same health insurance fund as public sector employees because they use to get higher salaries and do not see why they should pay more for getting the same benefit package. Thus, in the beginning an independent organisation of a public and private sector health insurance fund might be unavoidable for achieving a high degree of acceptance and approval.

Public and private sector health benefit schemes, as well as all other formal or informal health financing schemes in place, are very likely to benefit from a Centre for Health Insurance Competence (CHIC) to be set up in Yemen. The various insurance and benefit schemes can find qualified advice and suitable answers to their specific questions and tasks. In spite of the differences mentioned above, on the end the set of problems and tasks is relatively simple to oversee, and the CHIC is an excellent platform for exchanging experiences and share solutions that are deeply rooted in the Yemeni context and reality. In the long term, increasing co-operation and the implementation of re-insurance might induce further collaboration and potentially the implementation of one or very few health insurance associations or federations on the national level.

The opinion of the leaders
91 % of opinion leaders say: There is a real need for health insurance
Source: GTZ&EC survey 2005

2.3.4 Bottom-up incremental strategy

Preferable would be a bottom-up development of health insurances with roots in Yemen and with a considerable size or demonstration power. Outside the public companies and some private companies, there is no scheme that was discovered until now. In some other countries, health insurances started small:

- in many countries the teachers played a decisive role
- taxi drivers were among the driving forces for health insurance in South Korea
- 70.000 self-help funds were dealing with health benefits, in Germany, long time ago

Self-help organisations of social groups exist in Yemen, too. We suggest intensifying discovery strategies to find health related solidarity schemes, community health insurances and private and public health benefit schemes. Such schemes would have to be supported, networked and empowered. They need a space to develop, to expand, to be replicated, to grow. They need love, not laws. We should not regulate them but learn from them and with them.

Table 22 Advantages and disadvantages of small scale schemes	
Advantages	Less political constraints Setting-up easier Better feasibility Less bureaucracy Reduced number of providers needed
Disadvantages	Small risk pool Low economy of scale Less representative Expansion more difficult Higher administration costs Barrier to extend to other groups

Small funds need support and re-insurance in cash and kind from the government. Re-insurance in kind means that government facilities have to back-up small scale insurances with a free or highly subsidised provision of good health care in case of need. Furthermore, support and guidance shall be given for free, upon request.

One of the most relevant strengths of country-borne mutual aid and self-help schemes is the high degree of appropriateness for local conditions. Thus, it seems helpful to detect as many of these organisations as possible and to analyse their patterns of performance. The assessment of the schemes intended to diagnose the most relevant characteristics such as the degree of risk sharing; the type of ownership; membership and coverage; financing; administration and fund management; provider payment mechanisms; health care provision; and the links between the scheme and other community development activities. The lessons learned may give useful information about people's priorities and expectation that might flow in the design of a NHIS in Yemen. Awareness of stakeholders and decision-makers about alternative social protection schemes should be awaked and raised in order to enrich the debate and put additional ideas into the political proposals.

2.3.5 Regional incremental strategy

Another option would be to start with all public sectors in selected areas or regions. Sana'a and Aden would be the best candidates for such a strategy. In this case all government employees in these two cities would be given a special allowance to compensate for a salary decrease due to pay-roll deductions of the contribution rates. To compensate for negative redistribution effects for all other public employees and citizens, at least the same amount of compensation should be channelled to improve the extension of coverage of primary health care in far-flung areas and for the benefit of the poor, especially addressing prevention and promotion. This strategy would be good to pilot-test health insurance in an area where there already exists a competition between providers and where some of the provides might be willing to improve their quality and adopt sustainable quality assurance programmes. Accreditation schemes could be tested, as well as various payment mechanisms. A precondition is a trustful independent health insurance authority as described in chapter 2.2.6. Leaders of this movement would be probably the public security sector and the educational sector, as mentioned in the foregoing chapter. Nevertheless, many preconditions are not fulfilled yet. This strategy, too, needs a strong support from national and international expertise and it needs a full blown political willingness signalled by the most important political leaders of this country. This could be shown by allocating a good budget for a supportive infrastructure in form of a Centre for Health Insurance Competence that might be converted, step by step, into a National Health Insurance Authority patterned after the "best practice" demonstrated by the Social Development Fund.

2.3.6 Special preconditions for incremental health insurance introduction

In case of a gradual health insurance support or implantation in Yemen, a national health insurance authority would not exist. The existing or emerging schemes would have their own management units and they would cater to relatively small clienteles. Both have high risks. To address these risks government has to set up at least two mechanisms:

- A national re-insurance guarantee which supports such schemes in case of need, but only in case of good management, for rare cases of health conditions (e.g. haemophiliacs) and for any justifiable other shocks
- A national health insurance supervision authority, that controls the independent company management units, tries to harmonize them, to guarantee the trustfulness of the funds, to network the various schemes and to give them guidance and support

Concurrently, government must achieve a full cost-effective coverage of health services for all poor. It would not be a social and national health insurance system, if all efforts would concentrate just on the above mentioned sectors of society, which are relatively privileged. More than 50% of the population lives in poverty and more than 50% of the population do have difficulties in accessing health care services. Additionally, prevention and promotion should be fostered, to reduce the number of avoidable deaths and diseases. This would benefit any health insurance system, too.

2.4 Work and network strategy

A majority of experts and of interviewees of the opinion survey express the desire to have health insurance in Yemen as soon as possible. However, there are also many people who anticipate a series of major problems if the implementation of a national health insurance system starts in the current situation. According to the study findings and the analysis of the given conditions in Yemen, the options to create a nationwide, well performing health insurance system seem indeed doubtful. Such an ambitious and complex social policy goal has to be well prepared in order to reduce the risk of failure and generalised disappointment. Further conceptual preparation, planning and decision-making seems to be unavoidable before starting the implementation process. It has to be clear that health insurance needs a multi-sector and interdisciplinary approach that goes far beyond drawing and passing a law. This is especially true in a socio-cultural surrounding where legal dispositions are commonly not met or not effectively applied in many situations. Undoubtedly, health insurance needs an adequate legal framework, but financial, administrative, managerial and other tasks as well as concrete experiences in place seem to be even more crucial for implementation and performance.

The opinion of the leaders
87 % of opinion leaders declare they would join health insurance
Source: GTZ&EC survey 2005

2.4.1. Why not to rush with health insurance

The following paragraphs resume the most relevant reasons and justifications for postponing the start of the implementation of health insurance until some unrenounceable preconditions are met.

- One of the major reasons to put in question the viability of a short term approach derives from the general mistrust with regard to public or publicly run funds in Yemen. Due to a series of bad experiences, the cabinet declined to accept new funds what represents a weighty obstacle for implementing national health insurance. The pension fund is seen by some as inefficient and corruptive, and people perceive that they do not receive an equivalent for the contributions they have been paying during lifetime, especially in case of disability. Many employees and workers have had a long personal experience with salary deductions without having ever received any

benefits. The Social Welfare Fund has avoided to increase benefits according to inflation and cost development, and the beneficiaries are often the better-off instead of the really needy. In a series of interviews it became also quite clear that the major interest of various stakeholders in health insurance is to raise additional resources for specific purposes rather than to guarantee equal access to health care for all in case of need. Taking in account that misuse and corruption are a permanent threat in Yemen, implementing a new public insurance fund bears a series of risks and demands for very careful preparation and introduction. A more detailed analysis of well performing funds, mainly the Social Development and the Public Works Fund, is needed in order to be able to design a reasonable framework for a national health insurance fund.

- For achieving such an ambitious goal as the creation of a nationwide health insurance system in the context of the Yemenite society a strong political support and even enthusiasm is needed. In this very moment, no outstanding leadership for health insurance seems to be available for pushing the implementation of a national health insurance system in Yemen. At the same time, the political willingness of government decision makers appears to be too weak to expect major support for national health insurance. It is interesting to point out that 27% of the experts interviewed in our opinion survey stated that the justification for discussing health insurance in Yemen is to follow a fashion in international debate. Most political party programmes do not give priority to health insurance, although all political leaders declare to be in favour and to support a parliamentarian initiative in this direction. The willingness of employers and employees to implement a national health insurance system is also unclear although they declare to be in favour of social protection against health risks. However, benefit expectations are high compared to the relatively low contributions they are willing to pay, and neither employers nor employees seem to be ready to think about a national system and the inclusion of the very poor.

- What is relevant for implementing a national health insurance system is the relative size of the formal and informal sectors. The larger the informal sector, the greater the administrative difficulties in assessing incomes, setting the health insurance contributions of informal sector workers, and collecting contributions (Carrin 2002, p. 7). Yemen has a very high percentage of informal sector workers, thus population coverage of public and social services is weak. As in many other countries, the major challenge is how to further include the rural and informal sector population in a national and even universal coverage plan. Enrolment of the population in the agricultural and informal sectors is likely to be even more difficult. Income for this population fluctuates and spontaneous willingness to declare true income and pay regular contributions is low (Carrin 2002, p. 6). The barriers for implementing a national health insurance scheme are high, and the necessary steps ought to be analysed and studied accordingly.

- Additional problems will arise from the given socio-political and socio-cultural setting in the country. A major part of the population lives outside urbanised areas, and 80% of the rural population live in scattered settlements. The State and public institutions are of recent development and not present in all parts of the country. Social protection relied traditionally on family, tribal and religious structures, and the understanding of principles and mechanisms of health insurance is practically inexistent. Thus, it will take quite a long time to get people adequately informed about what health insurance stands for and what it is meant for. And, as long as other necessities are perceived priorities, the people will not be convinced or even enthusiastic with regard to health insurance. “Food insurance” might be more necessary than improving social protection against health risks as long as malnutrition remains a major problem for the poor majority in Yemen.

- On the other hand, prevention, promotion and accessible public health services are also perceived as more important than health insurance that is often felt to be more for the better-off than for the really needy. In the same way, some people think that the health of the poor has to be a priority concern of social and health policy. According to their prevailing experiences, a relevant group of Yemeni citizens see health insurance as a typical middle class topic. And in fact, many interviewees who used to belong to the better-off were mainly concerned about their own economic situation and vested interests. Indeed, as for the mentioned reasons coverage of

the formal sector and the middle class is easier to achieve than for informal workers and citizens in rural areas, this prejudice might be enforced during the implementation of a national health insurance system and enhance resistance from the excluded. In addition, positive experiences of health insurance are still lacking in Yemen. Until now, none of the many solidarity schemes has been able to convert into a health insurance in the true sense of the word. And community based schemes are not yet in place or have been too small and not sustainable.

- One major limiting factor for implementing not only a nationwide health insurance system, but also for starting an incremental approach towards the latter is the reduced scope and quality of health care offered in the country. On the one hand, in many rural and especially in remote areas health care facilities are still scarce or even lacking. However, about 70 % of the population lives outside the cities. One essential condition for health insurance is physical access to available health care. For the majority of Yemenite people this demand is priority and has to be tackled before starting with health insurance.

- In addition, even where health care is provided, quality is doubtful and varies from one facility to the other. This refers to the quality of medical procedures, and nursery care; and it also true for the human treatment and equipment. In spite of some very few initiatives, quality management and control in health care is still lacking, and supervision of public as well as private providers remains insufficient. The variable and sometimes lousy quality of health providers make 47 % of the interviewed opinion leaders propose to start health insurance with a selection of the best providers available. Therefore it will be necessary to define some clear-cut criteria and introduce effective systems to measure quality because a relevant part of currently available information relies on personal perception and experience.

- Two facts prove clearly the bad quality or, at least, the bad reputation of health care in Yemen: The first is the extremely high share of out-of-country treatment that is responsible for about 44 % of the overall national health expenditure. And, many people tend to define quality of care as treatment abroad. This is valid both for the assessment of health care as such and for the valuation of health benefit schemes and health insurance. When people refer to “better“ or even “very good” schemes, it turned out that they used to refer to the accessibility of medical treatment abroad. However, sending a relevant share of enrolees for health care outside the country will threat the financial viability and sustainability of any health insurance scheme and system in Yemen. Recently, a few new and modern hospitals haven opened or are being built, but further performance and mainly good practices are needed for changing the reputation and demand-side expectation of Yemenite citizens.

2.4.2 Work, not hesitate: Steps to undertake immediately

It has to be clearly said, however, that the most important aspect of the “work and network” scenario is the second part: to work. Waiting refers only to the question when to start best the creation of a national health insurance system. It is rather meant as a recommendation to think over the given conditions and how to start a serious attempt to implement health insurance in Yemen. But “to wait” does not mean to postpone any further action and to do nothing. On the contrary, work should start immediately, and there is a lot of work to do for implementing health insurance in the near future.

For instance, if this study concludes that no outstanding leadership for health insurance has been detected, that does not mean, that Yemen lacks the right and suitable personnel. The matter of fact is that leaders who can push strongly and constantly forward have not been found so far. Thus, the search has to continue, and the idea has to be spread in order to find also all other personnel that will be required for implementing health insurance in Yemen. A realistic time frame for implementing a national health insurance system in Yemen seems to be a 5 – 9 years period.

On the institutional level, a “change agent” for setting up health insurance is needed. That might be one or several ministries; or public, private or mixed companies that have had promising experience

with protection schemes for employees can take a leading role. As stated before, a vast majority of interviewees would prefer to start health insurance with governmental employees, and a minor share still recommends to begin with the employees of public and mixed companies. A basic decision is needed on the cabinet level, and hopefully strongly supported by the President, about which ministry or which ministries should play the leading role during the implementation process. According to the findings of the study team, no clear definition of tasks and responsibilities has been made on the government level how to tackle with the various and very complex demands and necessities for creating health insurance. So far, the idea of creating a national system appears to be restricted to a small department of the Ministry of Health (MoPH&P) and some representatives of other ministries. And the MoPH&P seems to be relatively isolated amongst the government. However, the Ministry of Finance (MoF) seems to play a leading role in the cabinet so that the inclusion of the MoF is of utmost importance for any serious attempt to implement social protection in health. On the inter-ministerial level there is still a lot of work to do in order to create the conditions for the ambitious project to turn into the way towards health insurance in Yemen.

If the Government decides to start setting up a national health care system with one or several ministries, or with any other public or state-run institution, it should initiate the necessary steps as soon as possible. In this case, the governmental organisations will be responsible for the inscription of all employees, for paying the contributions corresponding to employers, and for transferring the up-coming contributions. Therefore, a series of reliable data of the target group are needed:

- Realistic registration of all employees in the country
- Strict revision of employee and salaries lists
- Possibly counting of all dependents
- Registration of employees' salaries
- Cross-check of personnel data with tax authority
- Cross-check of data with pension funds
- Valuation of extra income (afternoon activities)
- Assessment of age structure of public employees
- Estimation of epidemiologic situation
- Detailed assessment of existing health benefit packages of the target group(s)
- Costing of current health benefit expenditure of ministries/public companies
- Studies about willingness to pay of public employers
- Studies about ability and willingness to pay of public employees

Additionally, the leading ministry(ies) and/or public company/ies should start as soon as possible to decide about the type, scope and quality of the health care provision they want to get for their employees. Enrolees will have high expectations to include specialised out-of-country treatment in the benefit package. However, that will put under pressure the financial viability so that it is recommendable to investigate the current potential to cover at least most of the health services delivered abroad in Yemen. This includes not only a severe revision of the current providers and the specialised services offered, but might include also the planning of targeted investments in specialised hospitals and the search for additional funding trough international donors. In a situation where investments in the constructions of health care facilities do not always satisfy the expectation of international co-operation agencies, connecting scaling-up with sustainable concepts of health care financing might even improve the readiness of multi- or bilateral donors to invest in the health care system.

In spite of a certain reluctance of public and state-run institutions to co-operate with the private sector and the far going ignorance of its performance, the opinion survey gives a clear mandate towards the inclusion of both public and private providers into the future health insurance system in Yemen. A majority favours the co-operation with a mix of providers, and still 47% demand expressively for a selection of the best health care facilities, while only 6% and 8 % want to restrict health insurance to public or private providers, respectively. In order to assure adequate health care provision, the following steps towards backing-up a future national health insurance system might and should be started immediately:

- Assessment of available health care facilities in the area of expected demand
- Improvement of heath care infrastructure in under-provided regions
- Assessment and consolidation of the expected needs
- Targeted investments in health care provision
- Enforcement of a strict control of public providers on the various levels
- Implementation of a country-wide information system
- Improvement of scope and outcome of statistical operations and data collection in the country
- Creation of the legal framework for more effective supervision of private health care
- Design of an accreditation system for health care providers
- Creation and enforcement of quality control in public *and* private health care facilities
- Assessment and pre-selection of provider who offer good and excellent quality
- Implementation of effective managerial and costing systems on provider level

All tasks mentioned above, and certainly some others, will be necessary to assure adequate health care provision and to create the preconditions that the health care system has to fulfil for implementing a national health insurance system. Evidence shows clearly that many of these prerequisites for health insurance and especially for a national health insurance system are still underdeveloped or missing. It is obvious that the responsibility to adapt health care provision to the needs of a health insurance system relies mainly on the MoPH&P. The sector ministry has a numerous staff at its disposal that seems to be best prepared and should be available for these and other tasks. Therefore training of human resources and capacity building is needed and should become a policy priority. Currently, the MoPH&P staff shows a clear majority of health workers, mostly medical doctors with a clinical training background only. However, the management of a health system and especially of a health insurance system requires quite a set of additional qualifications. An interdisciplinary and multi-professional approach is imperative and has to replace the traditional orientation of the MoPH&P towards the public sector only. A multi-sector setting opens the way towards innovative approaches merging relevant knowledge from different traditional subjects (Laaser 2002, pp. 3, 14).

If the MoPH&P will be assigned as the agent responsible for managing the scheme, a training and capacity building offensive is urgently needed. For giving the necessary professional support and backing for the preparation and creation process as well as for the further realisation and guidance of any health insurance system in Yemen, the most qualified personnel has to be selected and trained intensively. Capacity building has to comprise a broad set of measures like the following:

- Postgraduate qualification programs for key personnel abroad
- Participation of selected personnel on international conferences
- Training courses for MoPH&P staff inside Yemen
- Technical and financial support for studies performed by national and international experts
- Training courses in health financing, health economics, and other related issues
- Enhancement of academic interchange on an international level
- Fostering the implementation of a faculty of public health in Yemenite universities
- Linking policy-making to academic research
- Implementation of country-specific evidence-based policies
- Repeated short term consultancies of international experts
- Joint donor efforts for unifying efforts and bundling support

It becomes evident that the wait-and-work approach has a series of implications and will require heavy public sector investments. Although the MoPH&P might be the leading agent in the preparation and implementation process, the other public entities – ministries and/or companies – who will participate in the future health insurance system have to give substantial support for providing additional funds during the implementation period and probably in a longer term. Taking the role of employers who benefit from social protection of their staff they should be involved not only in the issues they have to face directly, but also in the overall costs for setting-up the scheme(s). Investigations, studies and registration processes should be linked and shared between different ministries and/or companies, as it should be investments in capacity building and training. Each participating ministry and company will need its own prepared staff that is qualified to deal with health insurance for the employees.

Investments in research and specialised training institutes will benefit the whole country so that it seems unfair to burden only one ministry with all costs. For instance, the MoF should have great interest in getting well-prepared national personnel who have had the opportunity to study accounting, book-keeping and even health economics with a specific country-view that is not achievable through qualification outside Yemen.

Last not least, all public and potentially all private entities involved in health insurance ought to share responsibility for the national system to be built up. Re-insurance is a crucial point for assuring performance and guaranteeing sustainability of any insurance scheme. Especially during the initial period when only a few institutions are involved in the system and the risk pool is still relatively small, extremely high expenditure for health care has the potential to threat the whole system. In order to avoid this risk and to guarantee sustainability of the health insurance fund, the ministries and/or companies who participate in the scheme should share the financial risk and organise an effective re-insurance.

2.5 From alternatives to scenarios

The three alternatives mentioned contain many sub-alternatives. The "big-push" alternative, for example, would financially not be feasible if no cost-containment policies would be adopted, as outlined above. Modifications of

- coverage of health insurance, e.g. formal sector plus self-employed
- gradual implementation, e.g. staged inclusion of the unemployed and poor
- contribution rates, e.g. varying between 2% and 7% for workers
- benefit packages, e.g. including treatment abroad or just offering an average benefit package
- co-payments or cost-sharing, e.g. for reducing over-use (moral hazard)
- inclusion of a smaller or extended family as beneficiaries

are some policy options for converting general alternatives into clear-cut scenarios. Hundreds of such scenarios are possible and a political and technical debate is necessary to identify some best fitting scenarios from the different points of view.

We chose the following scenarios for being able to present and discuss some implications of the alternatives.

Table 23 Scenarios towards a national health insurance system in Yemen

Scenario	**1a**	**1b**	**2a**	**2b**	**3**
Description	*Current spending levels / current utilisation rates*	*Current spending levels / rising utilisation rates*	*Enterprise based benefit package / current utilisation rates*	*Enterprise based benefit package / rising utilisation rates*	*Enterprise based benefit package / rising utilisation rate / public finance constraint*
Average health care cost (YR)					
Outpatient	1,319	1,319	3,152	3,152	3,152
Inpatient	45,278	45,278	45,278	45,278	45,278
Average utilisation rate (per insured)					
Outpatient	stable at 1.598	starting at 1.598; rising to 3 in two years	stable at 1.598	starting at 1.598; rising to 3 in two years	starting at 1.598; rising to 3 in two years
Inpatient	stable at 0.015	starting at 0.015; rising to 0.033 in two	stable at 0.015	starting at 0.015; rising to 0.033 in two	starting at 0.015; rising to 0.033 in two

Table 23 Scenarios towards a national health insurance system in Yemen

		years		years	years
Contribution					
Formal sector (% of wages)	starting at 8%; rising to 10% in seven years	stable at 11%	stable at 11%	stable at 11%	stable at 11%
Self-employed (flat rate in YR)	1,000 YR inflation adjusted	1,000 YR inflation adjusted	1,000 YR inflation adjusted	1,000 YR inflation adjusted	6,500 YR inflation adjusted
Co-payment rate					
% of cost	10%	10%	10%	10%	20%

Details will be given in chapter 4, below.

2.6 Creation of the Centre of Health Insurance Competence

Our study on has achieved to detect and describe some relevant aspects and preconditions in the country. After concluding the investigations in the field, however, it has to be pointed out that a series of tasks is still remaining that seem to be relevant for the preparation and implementation of health insurance in Yemen, i.e.:

- Discovery and further analysis of solidarity schemes
- Awarding of best solidarity schemes
- Replication of best solidarity schemes
- Consultation for solidarity schemes
- Observation and analysis of company health insurances
- Consultation for company health insurances
- Networking of company schemes into a federation of company schemes
- Implementation of re-insurance of company schemes on a voluntary basis
- Follow-up and guidance of community based schemes
- Implementation of re-insurance for community-based schemes

With regard to accountability, administration and management capacities and other crucial insurance functions, the general situation in Yemen is comparable to many small-scale and micro-insurance schemes. As health insurance tradition and understanding are recent and scarce in the country, experience and expertise with regard to health insurance is widely lacking. This is mainly attributable to

- insufficient qualified personnel and organisation
- incomplete data sets that do not allow for evidence-based decisions
- a paternalistic and welfare-driven behaviour of stake-holders
- lacking options to survey the performance of insurance tasks

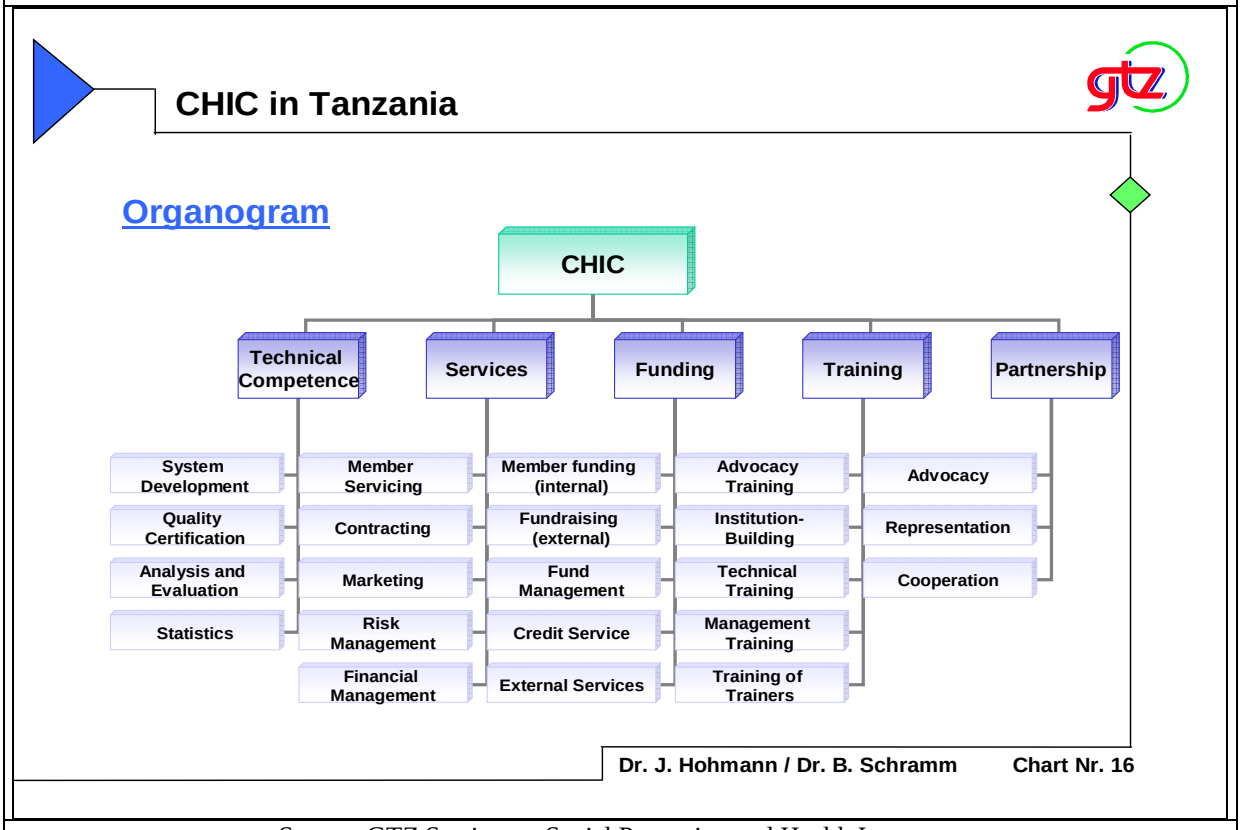
Thus, one of the major conclusions of this study is the need to implement a Centre of Health Insurance Competence (CHIC) prior to or in addition to any of the policy options mentioned before. Such a centre should be created within the given national context and in a way that allows the participation of all relevant stakeholders. A CHIC can help to provide organisational and managerial competencies essential for setting up, implementing and monitoring a health insurance scheme (e.g. outsourced services), and it can foster the exchange of ideas and concepts with governmental organisations, health care providers, civil society, and others. A CHIC is to be perceived as a part of a network of health

insurance organisations and can provide consistent and long term support to its associated members. For instance, different schemes can organise centres of competence, source out specific services using the know-how without having to pay for it on their own (see Huber 2003, p. 64ff), share services and providers or offer portability of entitlements even with organisations outside the co-operative sector. It can support the development of standardised products or procedures suitable for local adoption, and advice stakeholders for negotiations with insurance companies for good group insurance terms.

In the specific case of Yemen, a CHIC should be especially organised in a way that it can provide advocacy towards a social and national health insurance system. The most relevant tasks for consultancy and capacity building are the following:

- Basic teaching of potential health insurance staff inside Yemen: IT, English, health-related issues
- International training of potential leaders in health insurance: health financing, health policy, health insurance, etc.
- Additional and specific training activities in co-operation with academic institutions
- Further assessment and potential harmonisation of health insurance schemes
- Proposal writing for national and international programmes
- Repeated workshops with international specialised staff and consultants in Yemen
- Promotion of participation of “masterminds” in international seminaries and conferences
- Regular participation of various stakeholders in international health insurance meetings
- Promotion of expert exchange amongst other developing countries, e.g. Kenya

Figure 4 Organogram of a Centre for Health Insurance Competence in Tanzania



Source: GTZ Section on Social Protection and Health Insurance

On the technical and support level, a CHIC is predestined to cover a series of additional functions, i.e.

- Technical Support through consultancy, analysis and evaluation
- Introduce an effective and reliable statistical system and contracting techniques
- Financial Support (Accounting, Funding, Claim Management, Reinsurance)

- Institutional Collaboration (Regulation, Advocacy, Representation, Cooperation)
- Promotion of core skills (Political Advocacy, Management or Technical Training, Personal Skills Development)

The implementation of a national Centre of Health Insurance Competence could be supported by international agencies and mainly by the consortium on social protection in health built by GTZ, WHO and ILO in order to co-ordinate efforts and to join forces. For setting up a CHIC, a legal framework is needed that allows such a competence centre to open activities in the national market and to act as a franchising company. Technical support for creation and setting up a CHIC will initially require expertise and equipment, but on the long run external consultancy is supposed to be withdrawn according to the growing capacity and autonomy of Yemenite stake-holders. If sustainability of the CHIC is guaranteed, the centre will be able to give long-term support for any emerging and performing health insurance scheme. This might be a crucial contribution to implement a national health insurance system in Yemen.

The CHIC could also take over the role of a think tank on the national level. Performance and scope of a competence centre are potentially unlimited, and further tasks might develop according to the implementation strategies and success. However, the study authors would like to stress the fact that a Centre for Health Insurance Competence will be a very important prerequisite for all health insurance options considered and presented in this paper. The priority activities will certainly have to be adapted to the ever chosen country strategy for implementing a national health insurance system. While the "Big push" and the incremental options will require both training and technical support, the "work and network" strategy will focus more on capacity building. If the Yemen Government decides to make a brave step towards a national system that offers universal coverage from a very early stage, CHIC will be needed for preparing and advising the technical staff of the one national insurance fund and for supporting the existing company as well as the emerging community based schemes. In the incremental strategy, a major task for the HIC will be the assessment and harmonisation of existing and/or emerging insurance schemes. And in the most cautious option, the CHIC will have to focus firstly on capacity building and assessment.

For the implementation of a Yemenite CHIC, several options are possible. However, if the MoPH&P will be the leading agent for setting up a national health insurance system, it should also be a major partner of the competence centre. As a viable strategy appears the creation of the CHIC as a joint venture of the MoPH&P and other concerned stakeholders, i.e. the MoF, Ministry of Civil Services and Insurance, Ministry of Labour and Social Services, other Ministries, the health insurance fund or funds, representatives of company and community-based schemes, health care providers, academic staff and consultants. The CHIC could develop or be converted into a kind of think tank of an emerging Health Insurance Authority (for further proposals please see Chapter 5).

2.7 Design and comparison of alternatives

In the following table the main questions of the InfoSure methodology, developed by GTZ, will be answered for four different alternatives of a health insurance system in Yemen, i.e.

- Big push, i.e. covering all formal sector employees and pensioners
- Small for all, i.e. covering all citizens with a small benefit package
- Step by step, i.e. introducing health insurance by sectors or regions
- Work and network, i.e. creating the preconditions for a national health insurance.

All relevant aspects of health insurances will be taken into account, as they were discovered and detected and experienced in the many countries, where GTZ undertook consultancies on health systems and health insurances, including community based and micro-insurances. The following table tries to give a comprehensive overview on the essential issues of health insurance, which – with no doubt – could be even more detailed.

Table 24 Comparative characteristics of alternatives

No.	Aspects	Big push	Small for all	Step by step	Work & network
1	**Setting up the scheme**				
1.1	Set-up period	Immediately; respectively relatively fast, depends on the benefits catalogue; problem: very low developed regions (providers & their payment)		According to demand and opportunity	After some preconditions are met
1.2	What kind of need/ problem is the driving force?	Health care delivery and health financing in Yemen need a revolution, very soon.	You need a strong political and / or social will to integrate all people in one scheme	Military and police are eager to start, because they need funds to expand their hospitals	Trust in government funds got lost. It will take time to recover it.
1.3	Role of external stakeholders	The president and the people have to back up this strategy	Those who already get "better benefits" will not be interested at all to be integrated in a "small package insurance"; e.g. the armed forces and public companies	Ministry of Finance has to get a well detailed project plan Ministry of Local Administration to be involved	International community should support a CHIC
1.4	What kind of support should be given?	Evaluation, selection and design of the mostly desired (and valuable) benefits; extensive technical support how to get and spend the contributions; implementing and improving of efficient provider payment-systems	Evaluation of the desired benefits; technical support how to get and spend the contributions (payment)		
1.5	Who participates in the decision-making process?	The president at the top and at least the most powerful political decision-makers	Political decision-makers, Al Shura Council, members of the parliament Various ministries concerned, especially MoF, MoPH&P, MoCSI, MoSAL, MoEG Top-Management of the funds / schemes that will be integrated Civil society representatives		The most committed and experienced members of the steering committee

Table 24 Comparative characteristics of alternatives

No.	Aspects	Big push	Small for all	Step by step	Work & network
2	**Membership**				
2.1	What are the target groups?	Starting from the public sector, then all employees, the pensioners, in the long run all inhabitants of Yemen are possible	All inhabitants of Yemen	According to the design of the steps: civil servants and / or military and / or police and / or educational staff	A policy paper will mention them and it will be lobbied, that the poor and vulnerable shall not be forgotten
2.2	Are there any groups that are unwanted?	As a matter of principle there are no unwanted groups; but important is, that all integrated people stay (and pay) continuously in the system – misuse control is essential			Study on best misuse controls
2.3	Is there a difference between the initial target group and the members who join in reality?	There should be no difference			Expansion strategies will be studied
2.4	Exclusivity of membership	In the first steps only working people (and their families) and pensioners are integrated	Yemen people who work abroad	see target groups	Will be studied
2.5	Economic activity of the target groups		People with all kinds of activities and all social and economic characteristics		Studies on self-employed will get certain priority
2.6	Social and economic characteristics of the target group				
2.7	How is membership constituted	Mandatory (or for some groups voluntary - but if so, beware of risk selection!)			Will be studied
2.8	How are members recruited?	In a mandatory scheme: by public and private employers; by local authorities, pension funds / authorities In a voluntary scheme: persuade the future members to subscribe e.g. in local HI-offices			Will be studied
2.9	Contract between member and insurance scheme	A reliable (possibly even “virtual”) contract between member and HI should be the foundation of the HI-system			Will be studied
2.10	Unit of subscription	Permanent workers and employees	E.g. for self-employed and others who are not reachable at the “source” (like e.g. workers) there should by local offices	According to future political decisions	Will be studied

Table 24 Comparative characteristics of alternatives

No.	Aspects	Big push	Small for all	Step by step	Work & network
2.11	Definition of family members	e.g. non working spouses and children up to 18 and / or as long as they study are paid-up co-insured			Will be studied
2.12	Status of family members	e.g. paid-up co-insured or very low contribution			Will be studied
2.13	Identification of members	Identified over the member (e.g. working husband)			Will be studied
2.14	Regional distribution of members	Synonymous to the distribution of the inhabitants and social demographic structure in Yemen			Will be studied
3	**Financing**				
		The main source of health insurance schemes are contributions. The total volume depends on the scheme. Contributor is as a basic principle the potential beneficiary of the scheme and the state in cases of contribution subsidies. Contributions result in a percentage of wages. They should be collected monthly at the source where possible (e.g. employer, MoF, etc.) to avoid losses. The contribution rates will in no scenario be increased over the proposed (social health insurance law) 6% (employer) / 5% (employee) share. The payment should be controlled by those who are responsible for the budget (e.g. HIA or MoF). There should be penalties for embezzlement of contributions (for the employer). Non-working spouse and children should be paid-up; Contributions for the poor, unemployed and pensioners (if all integrated) should be paid / subsidized by the government / pension fund.			
3.3	Co-payments	A system of legal given and administered co-payments is principally better than uncontrolled “under-the-table payments”. It is practical to pay co-payments directly to the provider and the insurer withdraws the sum from his account. None of the future schemes will be able to offer all services totally free. The worse the financial situation of the scheme is, the higher and more areas of co-payments will be necessary. E.g. planned in the social health insurance law there are co-payments of a third of the price of drugs (outside hospitals) and outpatient care, what seems to be too high. It should be aimed at a limitation of co-payments. Global limits related to the income (e.g. “co-payments have to be paid up to a maximum of XX% of the yearly income”) might theoretically be more fair than group-exemptions in advance (e.g. “pensioners, children, chronically ill don’t have to pay”) but means much more to administer.			
3.4	Subsidies, donations	It is possible to integrate subsidies and / or donations for financing in all HI schemes. Deficits of schemes account for subsidies and / or donations. The social health insurance law intends a cigarette tax (5 Rials on 20) to subsidies the scheme. According to international experiences the increase of tobacco prices is appropriate to raise the revenues and lower the health expenditures (caused by smoking) simultaneously. Government subsidies will be needed, e.g. for investments. Indirect government subsidies will result from a drive towards increased and strengthened support of prevention and promotion programmes and through intensified primary health care for early treatment and early detection. Fund-raising is a very important task to be performed.			

Table 24 Comparative characteristics of alternatives

No.	Aspects	Big push	Small for all	Step by step	Work & network
4	**Benefits provided by the insurance scheme**				
4.1	Benefit package	According to best examples of public companies, e.g. Telecommuni-cation Corporation	The idea of this strategy is to create a package that accords to the average benefits affordable by the national health accounts. Aim is, to keep it all together as cheap as today.	Will be defined during implementation and according to availability of resources and providers	Actuarial studies and international comparisons will be undertaken
		The existing and discussed schemes offer several benefit packages. Most necessary and most wanted seems to be • inpatient care and • drug dispensary. Beside that important benefits are: • Medical services provided by the general practitioner, • Specialist outpatient care, • Surgical operations, • Lab and diagnostic investigations • Benefits around maternity			
4.2	Relation of benefits provided by other schemes	There are relations to the pension schemes and to the work injuries insurance; contributions are principally connected to pensions (e.g. 6% / 5% like the SHI law suggested), injuries during work periods should (are planned to) be covered by the work accident insurance.			Comparative analysis of existing schemes
5	**Risk management**				
		Whoever is responsible for the budget / fund should be able to calculate his household and should be politically responsible for the result. For the calculation the management needs reliable real-time data and information.			
6	**Services**				
		An insurance scheme should offer their members information at least about services and benefits. For all insurance schemes it is also important to allow direct contacts to the insured. Therefore a decentralised presence is required.			
7	**Legal issues, constitution**				
7.1	Status of the insurance scheme	The strategy equivalent scheme is not existing yet		Armed forces and police are already covered (but directly by the state via taxes)	Existing schemes can develop
7.2	Legal form	Some drafts for health insurance laws in Yemen already exist. Especially one proposal for a Social Health Insurance Law and one about the Medical Insurance for the Armed Forces is well elaborated. They will need only minor modifications and should be considered as framework laws to start with and to get modified according to experiences and circumstances. A “rolling law revision” process should be accepted.			

Table 24 Comparative characteristics of alternatives

No.	Aspects	Big push	Small for all	Step by step	Work & network
8	**Administration**				
		All administrative affairs regarding to a health insurance are up to now not regulated. There are some experiences in Yemen with company benefit schemes and there is a draft concerning the Establishment of Health Insurance Authority. In addition e.g. the military has profound experience and knowledge how to administer health care services directly. An important point of administration is the registration of members and their employers. Within the public sector (including military and police) that should be no problem. How the healthcare provision, contracts with providers and especially the quality assurance will be in practice organized has still to be discussed, designed and determined. To administer a health care fund dependable, like compiling a reliable financial plan, elaborated statistics, controlling and accurate bookkeeping is imperative. Therefore well educated staff is a condition. Without the right human resources every try to administer a complex insurance scheme will fail.			
9	**Healthcare provision**				
9.1	General situation				
9.1.1	Availability of healthcare provision	There is a deep gap between the facilities of providers / hospitals in bigger Cities and those in rural areas.		The Military has own hospitals and health centres all over the country	Studies to be done
9.1.2	Regional distribution of providers				Studies to be done
9.2	Relationship with providers	The health care funds should contract with providers and they should have the right to select them. That signifies on the other hand, that the fund is responsible for the achievement and accessibility of services. If the fund has its own healthcare service – this is not to be recommended! – it should be treated like a contracted one. Reimbursement of (external) bills is definitely the most expensive way to buy services. The reason is, that a health care market is generally dominated by providers / suppliers and sick people are very weak "demanders" - primarily they just seek help.			
10	**Provider payment**				
		Several methods of provider payment can be found in Yemen. None of the strategies and their schemes behind are linked to a specific payment method.[10] Principally fee for service payment is expensive and bad to control. Outcome oriented payment systems or capitation fees / lump sums should be used wherever possible: they promise better quality and lower prices.			

[10] The following payment methods should be assessed (Carrin 2003):

1. Fee for service. This payment method is most similar to the cost-sharing and private claim procedures used today. This payment mechanism may lead to excess use, as single detail of diagnostics and treatment will be paid for and providers stand to gain from induced health care. Another disadvantage is that the administrative costs for checking the claims are high. From the point of view of the NSHIF, forecasting total health care expenditure is quite difficult.
2. Payment per case. The contract will provide for a flat or lump sum for each patient. This can be a payment per visit, per hospital admittance, per bed day, per diagnosis related group (DRG), etc. The administrative procedures are rather simple, but this method may not totally avoid excess use. Forecasting of health care expenditure remains difficult.
3. Budget. It can be assessed how much each health institution needs for the provision of the benefit package. Assuming a certain quantity of health care services for the coming year, a prospective budget can be calculated and offered to the health facility. This payment system is associated with easy administrative procedures, but may tend to under-provision. The NSHIF

Table 24 Comparative characteristics of alternatives

No.	Aspects	Big push	Small for all	Step by step	Work & network
11	**Financial profile**				
		The accruement of a larger deficit is foreseeable	Short-term this scheme will be (qua definition) financially neutral.	Deficits are expectable but the risk of getting the finances out of control seems not so big.	Studies to be done
12	**Statistical profile**				
		Data are still missing. It will be essential to have reliable and valid data and information		Seems to be the easiest strategy to calculate because of the probably best internal data (military, police, educational staff) and because of the incremental process.	The establishment of a health and management information system for Yemen will be advocated for. It is needed, too, for transparency and quality assurance.
		The available statistics for all (future) schemes are all improvable. The big challenge begins, when a health insurance scheme begins its work. Then it is essential to refine the statistics in progress as fast as possible. A good health and management information system is essential			
13	**Implications**				
		An established health insurance system holds the chances to: • improve the quality of care, • enhance the health care market equal over the country, • forward a fair service price level, • push intelligent payment systems and • boost efficiency and effectiveness.			
14	**Health authorities – role of the state**				

will have to monitor, if the necessary health care services are really provided. From the point of view of the NSHIF, forecasting of expenditure is easy.

4. Capitation. This payment method would require that all NSHIF-insured register at one particular health facility. A flat or weighted capitation rate is paid per registered insured member. Each facility will have the responsibility to delivery health care to the registered members when they seek care. From the viewpoint of administrative simplicity and planning, this payment method is among the simplest. It also transfers the responsibility for delivering efficient and effective health care to the provider. The registration at one health facility, certainly when a population is mobile, is a main obstacle, however. In addition, there is the risk that this payment method leads to under-provision.

5. Combination. A combination of the above mentioned methods can be considered, e.g. a flat or lump sum for basic health care at outpatient and inpatient level, but a fee-for- service for highly specialized health care services.

Table 24 Comparative characteristics of alternatives

No.	Aspects	Big push	Small for all	Step by step	Work & network
	Health authorities – role of the state	In practice various options of supervising the health care system can be found. But in every country the state / government is finally responsible for the health care of the population. For this reason, the state gives the legal framework of (public) health care, but also has to supervise the schemes in any way. Normally that is done by the ministry of health, but it should depend on the financial responsibility within the government and for the scheme. The government can supervise the insurance scheme by leading the steering authority directly (as proposed in the Decree on Establishment of Health Insurance Authority). Another way is to share the task, create an inter-level of supervising and assign controlling tasks to a board of selected stakeholders. In many countries e.g. a board of representatives of employers and employees and in some countries added by an governmental agent is set in. Principally those should be in a supervising board, who are finally responsible for the finances. Internationally good experiences were made, in particular referring to the acceptance of decisions of the board, when those groups are integrated who represent those who are paying the contributions. The suggested organizational structure of the authority picks up that idea.			

7.8 An assessment of the alternatives

Several preconditions were mentioned for starting or implementing the various alternatives and sub-alternatives. In the following table they are resumed and assessed.

Table 25 Assessment of alternatives

Preconditions		Big push	Small for all	Incre-mental	Wait work
Money	Sufficient financial resources?	-	+	~/+	+
Mastermind	Leadership and willingness?	-	~	~/+	+
	Clear concept and idea?	+	~	+	+
	Powerful leaders back-up?	~	~	+	~
Mechanics	Appropriate management?	-	~	~/+	~
	Government back-up?	-	~	~	~
	Donors back-up?	-	~	~	~
	Sufficient anti-corruption control?	-	-	-	~
Markets	Sufficient high quality providers?	-	~	~	~
Manuals	Enforcement of laws and regulations?	~	~	~	+
Manpower	Sufficient qualified cadre?	-	~	-	~
Motivation	Knowledge, awareness, excitement?	-	~	~	~
	Consensus of stakeholders?	-	-	~	~
	Solidarity support for the poor?	-	+	-	+
	Trust?	-	-	-	-
Measurement	Sufficient data and information?	-	-	-	~
Summary assessment		-	~	~/+	+

In terms of a feasible and reasonable choice it seems to be advisable to start working with the last mentioned alternative.

3. Implementation plan

3.1 Prerequisites

According to the experiences of countries with health financing systems based on social health insurance like for example Austria, Costa Rica, Germany, Japan or the Republic of Korea it is evident that Yemen needs a transition period to achieve universal coverage. The period between the first law related to health insurance and a final law approved to implement universal coverage was never less than 20 years. Yemen might learn from those experiences and the transition period would not be that long but it will take some time nonetheless. Government stewardship is an essential facilitating factor in this process. The very first stewardship function is to address the principal design features of the scheme. These are:

- Milestones for the systematic coverage of the population or specific groups
- Definition of the contributors and beneficiaries
- Financing sources for health insurance contributions
- Allocation and substantiation of revenues
- Definition of methods for paying providers
- Organizational and administrative framework.

Analysing the "Draft of a Social Insurance Law" that had been presented to the government in February 2004 and also regarding further the "Draft Law of Medical Insurance for the Armed Forces" on the one hand, and considering the general political goals and objectives of the Health Sector reform in Yemen – this is adequate and universal access to health care services and equity in both the delivery and financing of health care – on the other hand, it is necessary for the public stewardship to reassure and to adapt some of the features. This is very important for further implementation steps. Some of those questions that should be answered are:

- How to get all parts of the Yemenite population involved into the insurance system? What about health insurance for the big group of unemployed people in Yemen? Should other systems and laws like the Social Welfare Fund be expanded and cover them further on? What is an optional and realistic timeline to cover other groups of the population besides the public sector (including the ministries)?
- What is definitely to be covered by the benefit package? One of the central functions of health insurances in industrialised countries is to ensure a continued pay in the case of sick leave. In Yemen this is part of the employer's responsibility. To bring this into the benefit package could strengthen employers' engagement for the health insurance and make Yemen's economy more attractive for (international) private investment. Is there a political willing to add disability income insurance into the benefit package?
- The financing of the health insurance will work only on the basis of employers' and employees' contributions. A model calculation of the health insurance's monthly budget based on the stipulations of the Draft of the Social Insurance law demonstrated that probably about 60 % of the budget will have to be covered by public revenues (from oil income, taxes, donors etc.)[11]. Is there a political willingness and ability for refinancing such an amount? On the other hand: Are there optional alternatives of financing the system? What are other ways to increase the revenues (for example from the contribution side) on the one hand and to decrease costs on the expenses-side (providers, administration, staff) on the other hand?

Before the implementation of the Health Insurance these questions need to be answered, because they have got a direct impact on building up a project organization and for planning and realizing concrete milestones.

[11] See chapters 22.4 to 2.2.6

3.1.1 Financial resources

Financial resources of the health insurance depend basically on the definition of the contributors, beneficiaries and the benefit package. In so far it is necessary to answer those questions first. On the other hand the experiences of existing international health schemes and also the results of model calculations might be helpful for answering some open questions within the Yemenite process of decision-making.

The financial frame of the NHIS will be determined by revenues on the one hand and expenses on the other hand. [12] There are the following sources of revenues to be taken into account:

- Employers' contributions
- Employees' contributions
- Pensioners' contributions
- Government's contributions for pensioners
- Other revenues from taxes and donors
- Yield of investment.

On the other hand there are the following expenses to calculate:

- Expenses for providers and medical treatment (hospitals and physicians)
- Expenses for drugs
- Expenses for costs of accidents and rehabilitation
- Sick leave/disability income insurance
- Administration/management/staff of the NHIS
- Expenses for infrastructure
- Expenses for training and external consulting
- Other expenses (for example for interest and credit repayment)

Due to the fact that there is currently no sufficient health insurance infrastructure in Yemen available it will be necessary either to invest into the basic structure from the government's side (this is costs for basic investment in infrastructure like buildings, data-warehouses, insurance card etc.) or to refinance the investment on the private market. The latter will increase the expenditures for interest and repayment.

The biggest position on the expenses' side will be the position for providers, medical treatment and drugs. The average expenses for treatment in hospitals amounts in industrialized countries to already more than 30 % of the total expenditures. The budget for administrative overheads, staff and infrastructure will exceed about 8 % of the total expenditure of a NHIS. In our preliminary model calculation the monthly expenses of a NHIS covering in a first step 11,5 million Yemenite people were estimated to be round about 9 Billion Rials. Based on the contribution rates of the Draft of the Social Health Insurance Law there was evidence that other revenues (from taxis, donors etc.) have to cover about 4 Billion Rials a month. There are different ways to increase the revenues and to decrease the expenses.[13] One way to expand the revenues is to increase the contribution rates. Another one is to expand the referred income basis , for example by taking additional private income into account. An option to decrease the expenses is to reduce the size of the administrative body. Another is to force cost management activities on the providers' side. There are many of such ways and means. Nonetheless there is evidence that Yemen will need a significant increase of public funds and investments to build up such a system.

[12] See chapter 2.2.4
[13] See chapters 2.2.5 and 2.2.6

3.1.2. Human resources

The human resources that are needed to run a health insurance system in an efficient way include both: quantity and quality of staff. First of all it is necessary to have a look on the basic functions of the planned NHIS because they request special conditions and criterions for staff's quantity and quality. The responsible bodies of a NHIS will draw up a yearly plan of the administrative overheads, that means costs of staff both in a central headquarter with monitoring and pooling functions (that will be located in Sana'a) and the regional areas as governorates and districts. They will directly impact on the above-mentioned monthly and yearly budgets.

Yemen's National Health Insurance System will be based on a risk pooling of its members, in principle the majority or even further on all of the population. The system is based on pooling the contributions of its members and other stakeholders. Referring to a National Health Insurance Act contributors are the households, enterprises and the Yemenite government. The NHIS has to set the right financial incentives for providers, based on contracts, so to ensure that *all* beneficiaries have access to effective public and personal health services. The NHIS and eventually its regional and local schemes are acting as independent as possible but will follow national targets of Yemen's health policy as there are:

- To generate sufficient and sustainable resources for health
- To use these resources optimally
- To ensure that the defined beneficiaries have accessibility to health services on an acceptable standard and of a qualified level.

Referring to the fact of a necessary transition period the implementation would start with some crucial parts of the public and private sector. On the long run the NHIS seeks to enrol the whole population and is therefore from the very beginning to be run on a compulsory basis for the defined groups and sectors. The NHIS will be based on a professional management system. The functions of the schemes could be differed in primary external management processes that refer to clients and providers on the one hand and in supporting processes that focus on internal organization and administration on the other hand.

The five external processes are:

1. Benefit processes (include all questions of benefit packages and services)
2. Members'/Employees' processes (memberships, data-collection, campaigns for new memberships)
3. Contributions' processes (collecting and controlling contributions, reminding, summary proceedings)
4. Employers' processes (memberships, data-collection, employers' consulting)
5. Providers' processes (data-collection, contracts, negotiations, quality management, monitoring)

The four internal processes are:

1. Personal processes (human resources management, training, employment, dismissals, salaries)
2. Administrative processes (infrastructure, buildings, procurement, data-warehouses)
3. Financial processes (current accounts, budgeting, reinvestment, payments, transactions, pooling processes)
4. Management processes (setting goals, controlling, delegation).

The bodies of the NHIS will have an organization that covers the external and internal processes in different departments with qualified specialists. The necessary qualifications will include customer advisors, public health managers, insurance economists, administrators, physicians, pharmacists, health economists, contract specialists, lawyers, information and informatics specialists, health educators, marketing specialists, et cetera. Preparing the implementation of the NHIS in Yemen, it will be necessary to hire (international) specialists and to train Yemenite professionals in the above-mentioned fields. A very intensive training campaign is needed, inside and outside of Yemen. On the other side there seem to be a number of specialists available in Yemen who returned back to Yemen

after several years of specialization abroad. They have to be discovered and used as trainers and/or employees.

As to the quantity of the staff it is necessary to have more detailed information about the sectors in which the NHIS will start working. This is to have information about the need for customers' advising and the already both available and suitable Yemenite staff. A more detailed analysis of needs and requirements should be one task of the project organization and/or of the Centre of Health Insurance Competence that has to be installed preparing the implementation of the NHIS.

The human resource needs of a NHIS might be underlined using some references from health insurance schemes in industrialized countries though a comparison is always questionable on the background of some rather different demographic and social structures between Yemen and European countries. Anyway a short model calculation might demonstrate the questions that will have to be answered calculating the human resource need for a health insurance in Yemen. Some of the big European health insurances have a personal reference number of 2 full-time insurance's employees per 1.000 insured people. If the NHIS in Yemen started with 1,5 million insured members (public and private sector) with an estimated average family size of 7, plus 200.000 insured pensioners and their wives/partners there would be already a number of close to 11 million of Yemenite people insured. Calculated on the basis of the mentioned reference number the NHIS would have to employ about 22.000 people, even a reference number only based on members (1,5 million of insured employees and 0,2 million of insured pensioners) would still request a size of 3.400 NHIS-employees. This example underlines that the NHIS will be one of the biggest Yemenite employers in the future. In any case it is necessary to define special reference numbers that take the special need of the Yemenite system into account. This might also be a task of the project-management that has to be installed for implementing the NHIS.

3.1.3 Material resources

The question of needed material resources includes two aspects. The first is to make or to have a basic infrastructure available as there are suitable buildings, computer infrastructure, office furniture, transport fleet etc. There will be an investment in new infrastructure necessary. Yemen will have the chance to use modern equipments to build up an effective *and* efficient system based on valid data. A crucial instrument for this will be to start working with an insurance card for all beneficiaries that guarantees valid data-transfer, good quality of medical service and that prohibits misuse. This needs an investment in the hardware both on the side of the health insurance and the providers. An exact calculation of the costs for this investment requests valid data as to available infrastructure, number of beneficiaries, size of staff, needed specialists etc. To prepare this should be the task of a special project-organization, e.g. the nucleus of a health insurance authority.

The second aspect deals with the current expenses. The material expenses are – besides the staff costs – part of the administrative expenditures. In average the material costs can be calculated as a third of the expenses for staff costs, a reference number that might be used for further model calculations and different scenarios. This should also be the task of the special project-management.

3.1.4 Legal preconditions

The above discussed and defined design features of the NHIS need to be addressed in a Social Health Insurance Law. Let us review the final draft of a Social Health Insurance law that was already presented to the government:

- It might be considered to begin the legal framework with some guiding principles, for example that NHIS shall contribute to the Vision of the Yemenite President to create an environment for the provision of sustainable quality health care that is acceptable, affordable and accessible to all Yemenites. The guidelines might also underline the basic principles of solidarity, community- and company-participation, independency and self-responsibility of the NHIS

- The group of beneficiaries might be enlarged regarding international and also Yemen's national health goals and in principle all Yemeni populations might be included with differentiated health financing schemes. This should be mentioned already in the law proposal.
- It is necessary to specify the benefit package at least in the sense of acceptable, medically indicated health care for all Yemenites or in the sense, that only cost-effective treatments will be financed based on internationally available evidences and meta-studies.
- The benefit package might or might not include besides an employment injuries insurance an insurance for continued pay of income in case of sick leave
- A harmonisation of laws related to health and insurance is necessary. This refers essentially to the Labour Law and to the Pension Law.
- The codification of a penalty-system should be considered and the chosen avoidance strategies related to graft, misuse and corruption. This law should be an example for a "good governance" law.
- Depending on the preferred option it is necessary to codify and specify the risk pooling in the case of a management via multiple funds. This might be included into modifications of the law after several years of an existence of one health insurance fund as the starter.
- To guarantee the independency of the NHIS it should be considered to separate the function of an external supervisory body (ministries in charge of the NHIS and responsible for inspection of the NHIS) from a more internal Board of directors that consists mainly of stakeholders from companies, trade unions and donors. Task of the latter would be to "hire and fire" the professional management of the scheme that should work on the basis of limited contracts (for example four years, with optional prolongations).[14]

3.1.5 Willingness and ability of stakeholders

In general terms, political willingness for health insurance remains unclear and appears to be rather weak at the level of decision-makers. All political parties the study group had the opportunity to contact during data collection expressed a certain interest and a potential support to a national health insurance system, but commitment seems to be limited and clear support for such a project a less important issue on the party agendas. The Parliament backs health insurance in Yemen, but refers to the Minister of Finance who has the power in the Cabinet and is hardly to be influenced by the majority in the Parliament. Thus, it remains to be seen if the Parliament will play a relevant role in promoting, asserting and getting through the political steps needed for the implementation of a health insurance system. Some members of the Al-Shura Council seem to be in favour of health insurance.

The commitment of the Government and ministries is also ambiguous and varies from one institution to another. As described especially in the presentation of the step-by-step approach (Alternative B, see 2.3), the Ministry of Defence and the Police have proven their interest and commitment, while in the Ministry of Education only single representatives seem to be ready to start health insurance. In other ministries the readiness is even more limited and no clear expectation regarding health insurance has been expressed so far. Neither the Prime Minister nor the President has made so far a clear declaration about the priority need and political importance of health insurance. However, some presidential decrees concerning cost-free treatment of chronic diseases and the priority attention of maternal and infant health call for improvement of social protection in health. Commitment and willingness of the Prime Minister and particularly of the President seem to be highly needed for the start of a national health insurance system.

Employers seem to be highly interested in creating a national and also a social health insurance system in Yemen. For employers health insurance has the potential to free them from a series of costs they have to cover on their own and without participation of employees. Currently employers use to be the only payers of health benefits granted by most companies. Thus, employers declare to be willing to pay even higher contribution rates for health insurance than workers and employees. If sick leave payment becomes a health and work insurance benefit, the readiness of entrepreneurs to contribute to

[14] Further aspects were mentioned in Table 12 and 13

health insurance will certainly increase. On the other side, employees are willing to pay at least relatively small contribution rates, what means around 2 or 3 % of their salaries. However, other social partners like women organisations stress the fact that other problems than health should be a priority concern, such as nutrition and access to education.

Community involvement and participation in implementing cost sharing was largely missing, except in very few donor-supported schemes, and only as long as the donors are present. Several studies have shown that although there is willingness to pay for services, there is a lack of trust in health providers and in traditional leadership. At hospital level there is minimal or no input by users to ensure that their priorities are taken into account. In addition, there is no evidence of any facility audits, and decisions about the use of revenue rely exclusively on the hospital director or his deputy. In Dhi-Sufal, decisions about the income use are met by the District Health Council including just one community representative. In Hodeidah, 13 committees representing the communities and the health facilities have been set up (Al-Serouri 2002, p. 15f). The findings of the study team in Shamayatayn (see chapter 4.2 in part 1 of our study report) showed also an obvious lack of transparency and community participation and, thus, confirmed former observations.

With regard to the ability of stakeholders to initiate, promote and participate actively in the implementation of a national health insurance system in Yemen, some constraints are to be admitted. General understanding of the concept of health insurance is weak not only in the in the population, but also at the level of stakeholders and decision-makers. Most interview partners the study-group has met during the three-months investigation were not used to distinguish clearly between health care financing and provision, and health insurance was often mixed-up with hospital care. In fact, most insurance schemes are directly linked to providers, with offices in hospitals, and relying on hospital personnel. However, the priority tasks of health insurance are health care financing, administration, management, controlling, and supervision, but not provision of medical care. A better understanding of what health insurance means and how it ought to be organised in order to fulfil the mentioned tasks will be needed for the upcoming political discussion and decision processes that are indispensable for giving the necessary support and backing of stakeholders to the ambitious project of a national health insurance system.

3.1.6 Willingness and ability to pay of recipients

Users' willingness to pay in developing countries is often underestimated because it is mixed up with the ability to pay that is often clearly restricted. Especially poor people have a clear feeling that they are continuously running the risk to lose a high amount of money for health care, mostly in expensive private facilities. Meanwhile, a series of studies in various developing and also in least developed countries have shown that even the poorest are willing and able to save and lay aside some money for health care expenditure (Agyemang-Gyau 1998, p 65, 76; Zeller/Sharma 1998, p 20; Arhin-Tenkorang 2001, p 37; Baraldes/Carreras 2003, p 17; Asgary et al. 2004).

In preparation for cost sharing, the MoPH&P conducted a survey to find out people's expenditure for health care, the services they pay for, and the willingness to afford higher expenses in the future. Most expenditure was destined to drugs and laboratory tests. Roughly half of the interviewed users (46 %) declared to be willing to pay up to five percent of their monthly income for health care, especially for drugs and laboratory tests where they were used to spent most of the money for (MoPH 1992). A more recent study realised in a rural area of the Sana'a Governorate, 77-100 % of respondents were willing to pay for curative services, 26-86 % per cent for immunisation, and 0-45 % for maternal and child health services (Dorman 1995). The fact that even public health services have never been free in many areas, with patients being required to pay formally or informally to obtain treatment, may explain the high willingness to pay.

These findings were confirmed in two studies. The study conducted in rural Sana'a cited above found that only 0-26 per cent received free care (Dorman 1995). A second study was conducted in Dhamar, and indicated that health care in public facilities was almost never free, mainly because drugs and

laboratory services were not available and had to be obtained from private pharmacies and laboratories (Qassim/Beatty 1995). People may be much more willing to pay small amounts for publicly provided services rather than for much higher-priced private services. Availability of services in nearby public facilities can also reduce the cost of transport associated with reaching private services, which are often concentrated in the cities. Nevertheless, it should be stressed that people are willing to pay for health care only if it is of good quality, or in areas where there has not been extensive provision of free services recently (Al-Serouri 2001, p. 14).

The apparently high willingness to pay is likely to reflect the fact that people in Yemen are highly used to pay for health care in all types of facilities, and that there is no alternative than to accept payment in public facilities (Al-Serouri 2001, p. 83). The fact that even public health services have never been free in many areas, with patients being required to pay formally or informally to obtain treatment, may explain the high willingness to pay (ibid. p. 14). In daily life, many people are obliged to look for coping strategies in order to get medical care in the moment of need. That might increase the willingness to pay for any kind of prepayment scheme even of those citizens who have only a very narrow understanding of health insurance.

Women seem to have a higher willingness to pay at least for good quality drugs (46 % of women, 29 % of men). Men tended to oppose payment for drugs more often than women due to fear of the misuse of revenue collected in the drug fund, while women stressed the irregular supply as a reason for reluctance (Al-Serouri 2001, p. 38). The same study revealed that poor people express in general a higher willingness to pay than the better-off (ibid. p. 39). One reason therefore might be that they have access to the public facilities only, and are thus more seriously affected by the funding shortages. However, poor respondents are much more as likely as to be unable to pay than the better-off because they simply cannot afford it. Unsurprisingly, unwillingness due to unaffordability hits mostly the poor, and it was mentioned slightly more often by women (ibid. p. 39).

As quality of care is essential for willingness to pay, any potential future scenario will require a clear-cut exemption system and strict supervision in order to create trust in the system, and thus improve willingness to pay. Incidences of arbitrariness and illegal charging by staff are likely to hamper not only the operation of cost sharing, but also the willingness to pay of health care users (ibid. p. 90). However, there is a direct interdependence between willingness to pay and quality of care. Thus, peoples' declared interest regarding contributions to a health insurance system reflects always their current experience as well as their expectations towards health care delivery. Thus, improved health care availability and quality, with an adequate supply of affordable drugs and services being the most important factors, is very likely to increase the willingness to pay and to attract also the better-offs whose contributions might cross-subsidise health care for the poor.

3.1.7 Mobilising all prerequisites

For starting the implementation of a national health insurance system a complex array of conditions and prerequisites have to be met. When the country initiates its long way towards a heath insurance system that has the potential to cover most and potentially all Yemeni, it faces a high risk to fail and to produce disappointment if things are not well planned and prepared. At first, the general understanding of what health insurance means and what health insurance can do has to be developed in Yemen. Only if politicians, decision-makers, stakeholders and citizens can be sure that they are talking about the same thing health insurance can emerge in a satisfactory way and help to solve the priority health needs of people in Yemen. Otherwise, the implementation process is running the risk to lead to a partial and scattered solution.

Other essential prerequisites that have to be met or at least faced in an early stage refer to the financial, material, human resources and legal conditions. Financing is not the only task of health insurance, but it is one of the most important that has to be assured for any kind of health insurance activity. Thus, the defining income resources and implementing reliable and transparent forms of payment are crucial points. That means that contributions from employers and employees, but also subsidisation from

general or earmarked taxes as well as from donations, zakat, endowment and other sources, have to be calculated on the basis of the expected expenditure for health care of the insured. The availability of resources has to be assured, and financial transfers and flows are not a minor task in a country where not everybody has a bank account and cheques use to be the most important form of financial transaction.

Regarding material requisites it has to be clear that the implementation of a national health insurance system is a huge challenge and a major task for a country that lacks any prior experience and can count neither on pre-existing infrastructure nor on necessary human resources. Independent from the implementation strategy applied the starting schemes will need offices, equipment, computers and specialised information technology that allows for performing at least the most basic tasks of health insurance. Step by step, the system will have to build up branches in all regions, governorates or even districts, and the need of infrastructure and technology will increase according to the expansion of the system and the inclusion of population groups.

Closely linked to the demand on physical space, workplace equipment and computer technology is the increasing need for qualified personnel that will arise because a relevant number of well trained staff for dealing with the various tasks of health insurance will be required. Currently, human resources seem to be a major challenge as even the private insurance sector claims for qualified staff covering a minimal market segment. A nationwide system will require thousands of people who have reasonable computer knowledge and can realise the various tasks like member affiliation, management, claim processing, accountability, controlling, fraud detection and many others in a confidential and reliable manner. At the same time, hundreds of health economists, insurance experts and other specialist will be needed for running a national system that achieves financial viability and sustainability. And, last not least, a number of highly qualified top managers will be necessary in order to run health insurance and to assure accountability as well as good performance.

On the political level, clear declaration of high-ranking representatives and further commitment concerning a national health insurance system in Yemen will be indispensable. The democratic parliamentarian system in Yemen is not accompanied by a deep-rooted culture of civil participation and responsibility. Obviously, most citizens are used to wait for signs and steps “from above” and hesitate to take initiative even when they are highly interested in some issues. On the other hand, people have also had the experience that bottom-up initiatives came to an abrupt end when the Government or public sector organisations were involved or even took over. Both factors make evident that pronounced and clear-cut political commitment at the top level will be an essential prerequisite for a national health insurance system in Yemen.

3.1.8 Project-organisation

We recommend to establish a professional project organisation – in the form of a Centre for Health Insurance Competence (see chapter 2.6) – in order to prepare the building up of the National Health Insurance. Basic success factors of such a procedure are:

- Clearness of project’s goals and a systematic approach
- Presidential or Cabinet decree for institution the Centre
- Sufficient financial budget from local funds, e.g. 200 million YR per year, to run it independently from international support
- Hiring a local professional with very intensive international experience in the field of health insurance and health financing and highly credible references or – for the beginning – an international project manager
- Adequate basic infrastructure (for training included)
- Building up a task force of professionals as an advisory board to this Centre (see chapter 5.6.1)

For a realistic perspective it is necessary to describe the different tasks of the project organization, to integrate the stakeholders into a professional project structure, to establish priorities and to define the concrete milestones and steps of realization. Examples for basic tasks are given in the following table.

Table 26 Project organization tasks

Management	**Implementation**	**Support**
Establish political support	Building up the administration	Marketing
Detailed planning	Selection and hiring of staff	Documentation
Controlling	Establishing financial and pooling system	Financing / budget
Evaluation	Defining pilot regions and implementing the system	Project assistance
Project organization	Building up a training system	Data analysis
Managing projects' staff	Training of managers	Controlling
	Project expansion	

For preparing and implementing the NHIS it is necessary to hire a task force of at least 25 experts, 15 Yemenite professionals and 10 international health insurance experts, some of them to be financed from international funds. It will need at least 12 months of preparation to have the administrative body of the Health Insurance on work. In any case it should be kept in mind that the Yemenite professionals working in the project organization should be part of the later management of the health insurance body. Hiring has to be done in view of the criteria mentioned in table 12.

Government's stewardship is a basic prerequisite and a crucial factor for the success of the process. The implementation plan should therefore include a professional structure to manage the further reform steps. Building up this structure it should already be considered to get those stakeholders involved that will be part of the later supervisory body of the NHIS. For the beginning we recommend an advisory board composed of the main health insurance experts of the country, various civil and non-governmental organizations, supported by the ministries involved in health insurance. (see chapter 5.6.1)

3.2 Regulation and quality enforcement

The enforcement of high quality medical services is and needs a continuous back up. The main challenge is to get transparency on the services provided. Without reasonable transparency it is nearly impossible to strengthen high quality in the provision of services. These are possible approaches:

- Enhancement of available data: Basic is to avail of reliable and valid data e.g. about diagnostics and treatments
- Introduction or / and improvement of documentation standards: Only documented services can be evaluated. Some experiences show, that already the introduction of simple documentation standards (e.g. in hospitals as an condition to get their bill paid) improves the quality of the treatments.
- Payment incentives: Outcome oriented payment systems are adapted to set the right incentives in direction of quality. Capitation fees or lump sums should be preferred to expensive fee-for-service-payments: they promise better quality (in the long run) and lower prices.
- Setting minimum standards: In many countries authorities define and dictate minimum standards for various treatments. Often they are developed by organisations of physicians. Sometimes they are defined by the government. In any case: to make them work, the acceptance of the standards is absolutely essential. Therefore it is compulsive to work them out together with representatives of those, who later have to fulfil the standards. These standards can - in a longer run - lead to guidelines.
- Guidelines: Especially high developed countries are actually trying to enforce the improvement of quality by setting guidelines. In some countries treatment guidelines are obligatory; in others guidelines have just an advisory character. Although the first experiences with implemented and elaborated guidelines in developed countries are promising, at the moment they do not seem to be the first choice in developing countries for quality enforcement. The same as with minimum

standards, guidelines need a high acceptance by doctors. It is unthinkable to create them without practising physicians.

In the staff of a centre for health insurance or a health insurance authority specialists in quality assurance are essential. They have to be experienced in the many endeavours that are undertaken in this domain worldwide. Quality assurance needs quite some investments in human capital and in networking between health insurance, health experts and providers. A link to Faculties of Medicine has to be established, as well.

3.3 Staging, planning and managing the implementation process

The most important elements of staging the implementation of health insurances

- for an eventual full speed implementation of health insurance or
- for selected public servants – e.g. military and teachers – or
- for pilot regions – e.g. Sana'a and Aden – or
- for the networking of existing health insurances and/or
- for the building up of project management and a centre for health insurance

were mentioned already in various chapters before. The forth-following chapter will add to it some more details with reference to various scenarios for optional health insurances. With regard to the implementation plan of various health insurance options we have to refer first, nevertheless, to a modification of the meaning of (implementation) planning during the last decades, characterized by a shift from health planning to health system management.

Health planning was a major concern of health services management in the last century. Originally it was masterminded by the Semashko model of planning health services in the Soviet Union, whereas Beveridge and Bismarck types of health services opted since long for managerial processes of problem solving. Nevertheless, health planning ideas found their way into Western health care systems, too. By and by and all over the world, it was superseded by a more flexible and pluralistic approach of coordinating health policies of various partners in the health sector, where each partner within his own area of responsibility had his own micro-planning and management procedures. After the fall of planned economies and the globalisation of market approaches, health planning started to change its basic character. Step by step, governments concentrated more and more on their basic functions of regulating and supervising the health sector composed of many different partners. In various Western countries the notion of a government as a provider of health services was outdated since long. Transition countries followed this trend gradually. At the turn of the millennium the international discussion started pinpointing at the value-driven stewardship role governments have to play in favour of the public interest.

This is why an implementation plan for health insurances in Yemen needs one essential component: continuous dialogues among the stakeholders (proponents, partners, providers, patients and any other group that might be affected or could give support and guidance), hopefully driven by the stewardship of a value driven Ministry of Health or by any other agent of the public interest. Implementation planning for health insurances, therefore, should be driven by the new meaning of health planning, which is briefly and analytically described in the following table and which best can be supported by creating a "planning group", or "advisory committee", or "steering committee", etc. We recommend a Centre for Health Insurance, supported by a strong, experienced and committed advisory committee.

Table 27 Core elements of a "new" health planning

Health planning proper	Needs assessment	Identifies health and health services needs, problems and opportunities and their social and economic context
	Consultation and participation	Consults with authorities, providers, and other actors in the health sector on their needs, problems and opportunities;
		Involves citizens in needs assessments and assesses preferences and demands of consumers
	Goals and strategies	Clarifies goals, objectives, targets and priorities of all partners involved and develops justifications for assigning priorities
		Describes and recommends opportunities for changes, services, projects, programmes and policies and recommends tactics
	Coordination, partnerships and negotiations	Coordinates and gives guidance for health planning activities of various partners of the health system
		Identifies potential collaboration of other partners and of funding sources
		Assists in negotiating joint or coordinated activities of all relevant partners involved
	Analyses and evaluations	Assesses advantages and disadvantages of various proposed options, e.g. in terms of costs and effectiveness
		Monitors and evaluates the implementation of plans, projects and programmes and their accomplishments, e.g. in meeting priorities of the Ministry of Health
	Decentralization	Supports regional and local health planning and delegates – if possible – planning processes to lower levels in the sense of participatory planning
	Tools and training	Updates regularly health planning tools and supportive resources, e.g. data, methods, and gives feedbacks on health planning tools
		Trains staff in health planning skills
	Information	Prepares evidence-based background documents for planning meetings and as background papers for policy making
Health policy support	Compilation	Compiles policy papers of partners of the health system and identifies needs for modifications of government policies
	Scenarios	Maps the direction for possible health policy changes
	Role setting	Assesses and/or defines the roles of various actor in the health system, e.g. the private and the public sector, for financing and provision (WHO 2000, p 121)
	Instruments	Identifies policy instruments and organizational arrangements required in both the public and private sectors to meet system objectives (WHO 2000, p 121)
	Capacitation	Sets the agenda for capacity building and organizational developments (WHO 2000, p 121)
	Guidance	Provides guidance for prioritizing expenditure, thus linking analysis of problems to decisions about resource allocation (WHO 2000, p 121)
	Alliances	Supports sector wide approaches for coordinating all relevant actors and initiates policy debates
	Consultations	Solicits expert opinions and consults with health services researchers and managers
	Risks	Assesses risks and potential direct and indirect implications of (potential) policies
	Analyses	Identifies major concerns of health policies, e.g. goodness, fairness, responsiveness, equity

Table 27 Core elements of a "new" health planning

Health stewardship support	Regulation	Supports setting the rules and ensuring compliance (WHO 2000, chapter 6)
	Knowledge	Supports exercising intelligence and sharing knowledge (WHO 2000, chapter 6)
	Strategies	Supports assessing and designing strategies, roles and resources (WHO 2000, chapter 6)
	Performance	Supports improving performance (WHO 2000, chapter 6)
	Excellence	Supports the discovery and promotion of best practices

We assume that a more detailed plan for the implementation of health insurance would not be needed for the time being, or even worse, would be misleading. Setting up health insurances is not an engineering task like the building of a road or an airplane. Setting up health insurances is a social process of interacting partners in their institutional contexts. Theoretically it seems to be important to define the rules of the "game" they are playing driven by their social and economic roles they are expected to perform. But even the setting of rules of a game might be overtaken by power-plays. All stakeholders involved will act according to their interests or how they might perceive them – right or wrong. It is like a soccer game without referee and arbitrator and even without a clearly defined field to play on. Managerial skills are needed much more than planning skills. We can not anticipate the future of social processes, but we can keep the processes going on and into the right direction. Therefore we suggest – in the public interest – to build up and support a new institution – a centre for health insurance – that participates actively and value-driven in a social process towards social health insurances to benefit all Yemeni citizens. This is the core element of the implementation plan.

In spite of all these caveats we submit to discussion the following implementation plan and timetable, which has to be reviewed repeatedly and adjusted to circumstances and opportunities. There is an old Latin proverb from Roman times: carpe diem, i.e. grab each opportunity. This should also be the motto of the health insurance evolution in Yemen.

Table 28 Milestones for health insurance evolution in Yemen

Year	Health insurance milestones	Institution building	Advise
2005	Review of study and planning Budgeting for CHIC	Secretariat	Steering committee
2006	Approval of military HI law Military pilot-testing in Sana'a Approval of civil HI law Project designs for teachers Dialogues between existing schemes Support by CHIC starts Support for micro-insurances MoPH&P increases pro-poor coverage International auditing and evaluation Increased international support	Centre for Health Insurance Competence (CHIC1)	Advisory board & Donors

Table 28 Milestones for health insurance evolution in Yemen

Year	Health insurance milestones	Institution building	Advise
2007 2008	Support by CHIC intensifies Approval of HIA law Expansion of military scheme Joint venture with polices designed Pilot-testing for teachers Support for micro-insurances Pilot-testing for self-employed MoPH&P increases prevention programmes MoF pays contributions for the poor International auditing and evaluation Increased international support	Centre for Health Insurance Competence (CHIC1)	Advisory board & Donors
2009 2010	All security schemes (SS) are unified SS tests contracting of external providers HIA supports security schemes Teachers HI in Sana'a and Aden Voluntary scheme for self-employed Harmonization plan for company schemes Support for micro-insurances MoF pays contributions for the poor MoPH&P increases prevention programmes International auditing and evaluation Increased international support	National Health Insurance Authority & CHIC1 splits into think tank of HIA and independent centre for HI training, research and consultancies	Supervisory board & Advisory board & Donors
2011 20012	Evaluation studies on experiences Full review of HIA Teachers in one entire Governorate SS at national level MoF pays contributions for the poor Micro-insurances strengthened Company schemes for all private sectors International support diminishes	National Health Insurance Authority & CHIC2	Supervisory board & Advisory board
2010 2014	Gradual expansion of all schemes MoF pays contributions for all poor MoPH&P increases prevention programmes Throughout audit and evaluation International support review	National Health Insurance Authority & CHIC2	Supervisory board & Advisory board
2015	Review and planning – participatory approach of all partners and clients		

4. Macro-financial projections of the proposed National Health Insurance[15]

4.1 Introduction

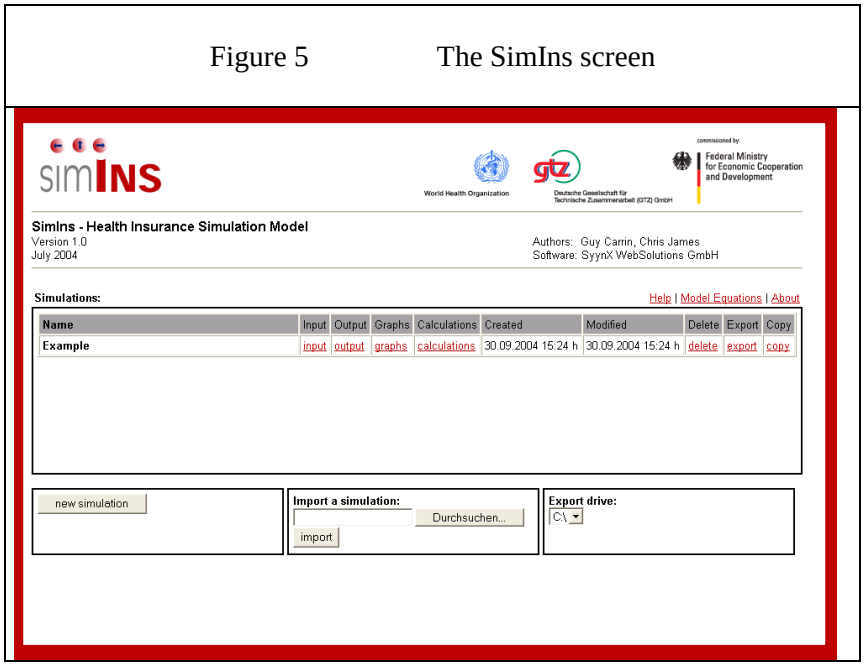
A number of financial projections were made using the WHO-GTZ health insurance simulation model SimIns-version 2[16]. SimIns is a health insurance simulation tool that analyses the basic mechanisms of health insurance. It projects the development of incomes and expenditures under certain assumptions over a 10 year period. Its principal use is in the financial forecasting of social health insurance (SHI) schemes, but it can also be used for community-based health insurance (CBHI). Key variables in health insurance - population coverage, incomes, health insurance contributions, co-payments, health

[15] Prepared by Guy Carrin, Ole Doetinchem and Belgacem Sabri, WHO

[16] See G.Carrin & C.James (2005). *SimIns health insurance simulation model (Eschborn: GTZ and Geneva: WHO), forthcoming.*.

care costs and utilisation rates - can be varied according to six population groups and up to fifteen health service categories.

Figure 5 The SimIns screen



SimIns has three principal uses:

1. To illustrate the implications of initial policies with respect to key health insurance variables, thus reflecting (as opposed to setting) different policy options.
2. To determine what sets of contributions and/or utilisation patterns and/or health care costs can ensure financial equilibrium in a dynamic, changing environment.
3. To illustrate the impact of health insurance on the overall structure of health financing.

The basic output includes estimates of health care expenditures for the non-insured and insured. These are based on cost estimates (for different health service categories) multiplied by associated utilisation rates (for different population groups, further separated into non-insured and insured). Financing of these health expenditures comes from the government health budget, user fees, health insurance contributions, co-payments and government subsidies to health insurance. Special attention is paid to the revenue-expenditure account of social health insurance, the surpluses or deficits, and ways to finance deficits especially by the government.

4.2 Purpose of the financial projections and broad alternatives

4.2.1 Introduction

The financial projections presented in this study are to be understood as very preliminary (as further fine-tuning of data to be inputted is required).[17] They give a first approximation of different scenarios among which policy-makers would have the select one that is most feasible from an economic, social and political point of view. Further in-depth costing studies and more refined actuarial studies need to be undertaken further, and their results used in more reliable scenario analysis.

[17] It will be a continuous task for the Centre for Health Insurance Competence or for the Planning Group of a National Health Insurance Authority to fine-tune data inputs and to use the results of such projections for dialogues with partners and policy makers. We consider simulation models as valuable inputs for discussion processes.

4.2.2 Basic characteristics of the alternative scenarios

The main characteristics in the projections undertaken are: the speed of implementation, the cost of the benefit package, the utilisation rates and the government subsidies into the health insurance scheme. Alternative combinations of these characteristics will lead to the building-up of the alternative scenarios.

The speed of implementation

An important characteristic in the scenario analysis is the speed of implementing health insurance coverage. An immediate implementation scenario could be calculated and analyzed. However, as outlined above (chapter 7.2), the implementation strategy of immediately covering the whole formal sector by 2007 (referred to as “big push”) encapsulates a number of problems. The most critical being a large health insurance deficit (when implementing an enterprise-based benefit package for all citizens) and no coverage of the self-employed and the poor at all, thus not providing any equity. Another major concern is that coverage of half the population within one year is most probably not technically feasible.

From an equity point of view, the self-employed which include a large fraction of the poor, would need to be considered right from the start of the implementation process. Still, government subsidies may be required to financially support health insurance coverage for the self-employed, especially the poor. The state of public finance may not allow policy-makers to adopt a fast implementation, however. Given those considerations, a gradual implementation of health insurance coverage is the most feasible, both for technical and economic reasons. In line with chapter 7.4.2., the financial projections therefore take into account a more realistic implementation time frame of at least 5 years for the so-called formal sector and more years for the self-employed.

The benefit package

Two types of benefit packages are considered. The first is based on the current level of health spending as presented in the National Health Accounts[18]. The cost of the benefit package offered is set equal to the average out-of-pocket spending per capita (after deducting 33 bn YR for treatment abroad and 10 bn YR from self-treatment).

It stands to reason that, assuming a status quo in utilisation rates, this package is financially feasible at the macroeconomic level. With such a package, however, one would not improve the overall quality of health services. In addition, the employees that currently benefit from a better enterprise-based package would of course loose health insurance benefits; however, the implicit assumption is that the difference between the enterprise-based package and the lower benefit package (based on the current level of health spending) would be covered by private health insurance arrangements at the individual or company level.

The value of the second benefit package, called enterprise-based benefit package, is based on the value of the benefit package offered by the Public Telecommunication Corporation minus 33 bn YR for treatment abroad. In the scenarios that use this package, all citizens that were not insured hitherto, especially the self-employed, would thus receive a better insurance coverage.

In SimIns, we enter the value of these alternative benefit packages via a maximum of 15 types of health services. However, due to insufficient data, we distinguish only outpatient and inpatient care in the current projections. It is important to stress here, however, that in future projections, this type of input needs to be improved. An in-depth study on the benefit package that National Health Insurance (NHI) could offer and on the costs of the health services within that package is required. In addition, the utilisation rates of the health services in such a package would need to be collected or estimated. The utilisation rates

[18] "Expenditure on Health" WHO template, WHO NHA Table- Yemen (nha@who.int)

With the gradual implementation of health insurance coverage for all, utilisation rates are not likely to stay the same. For those that are newly insured, the out-of-pocket payments would go down drastically. A 'price effect' is likely to be observed, with the insured demanding more health services than before. For a number of insured, especially the poor, the demand would even go up drastically: they would find themselves in a situation whereby health insurance gives them claims on health care services, as compared to the previous situation where their demand for health services was chiefly determined merely by their capacity to pay.

In view of the previous considerations, two alternatives are considered for the scenario analysis: 1. low utilisation rates which can be qualified as 'current'; 2. 'increasing' utilisation rates (3 outpatient visits per capita, and a 3% inpatient admission rate). The latter alternative is likely to be the more realistic of the two, after introduction of health insurance.

Government subsidies

Governments subsidizing social health insurance is fairly common in established SHI schemes, especially to cover the health care costs of the poor, the unemployed etc. who themselves cannot pay in regular contributions into such schemes. Of course, the amount of government subsidies depends on what government as a whole can afford and is willing to transfer to the SHI.

In the four of the five scenarios, we will present the level of government of subsidies (as a % of total government revenue) that would be needed to achieve a financial equilibrium in health insurance. Of course, one would still need to judge whether the 'needed' subsidies are financially feasible for the government. In the fifth scenario, we illustrate what might happen if there is an overall constraint on government subsidies, equivalent to 1% of total government revenue.

Overview of scenarios

Below we present the 5 scenarios analysed. They cover the period 2004-2014. They are differentiated here according to the level of benefit package, of the utilisation rates and of government subsidies. There are other differences in variables and parameters inputted; these will be available upon request.

Table 29 Main features of scenarios

SCENARIOS	**Benefit package**	**Utilisation rates**	**Government subsidies**
Scenario 1a	Based on current level of health spending	Current	Implied subsidies for financial equilibrium of SHI
Scenario 1b	Based on current level of health spending	Increasing	Idem
Scenario 2a	Enterprise-based package	Current	Idem
Scenario 2b	Enterprise-based package	Increasing	Idem
Scenario 3	Enterprise-based package	Increasing	1% of Total government revenue

4.3 Data used

4.3.1 Gradual implementation of insurance coverage

The projection scenarios share the same data reflecting the policy decision of gradual implementation. Coverage in four out of the presented five scenarios is expanded according to table 30 and figure 6 below.

Table 30 Coverage: time path of expansion, gradual implementation (millions)

At the end of the simulation period: coverage of the formal sector 100%; coverage of informal sector 85%

in millions	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Total insured population	2.294	9.431	12.908	15.461	18.15	20.545	22.613	24.784
Of which								
Dependants SE	0	2.584	3.723	4.925	6.194	7.533	8.944	10.43
Self-employed	0	0.606	0.873	1.155	1.453	1.767	2.098	2.447
Govt. employees	0.436	0.942	1.154	1.187	1.222	1.257	1.293	1.331
Employed	0	0.168	0.288	0.415	0.549	0.628	0.646	0.665
Pensioners	0	0.112	0.231	0.238	0.244	0.251	0.259	0.266
Other dependants	1.858	5.018	6.639	7.54	8.488	9.109	9.373	9.645
Population coverage (%)	10.36%	41.38%	55.04%	64.06%	73.09%	80.40%	86.00%	91.60%

This reflects coverage of the formal sector in stages according to institutional setup and a gradual inclusion of the self-employed sector.

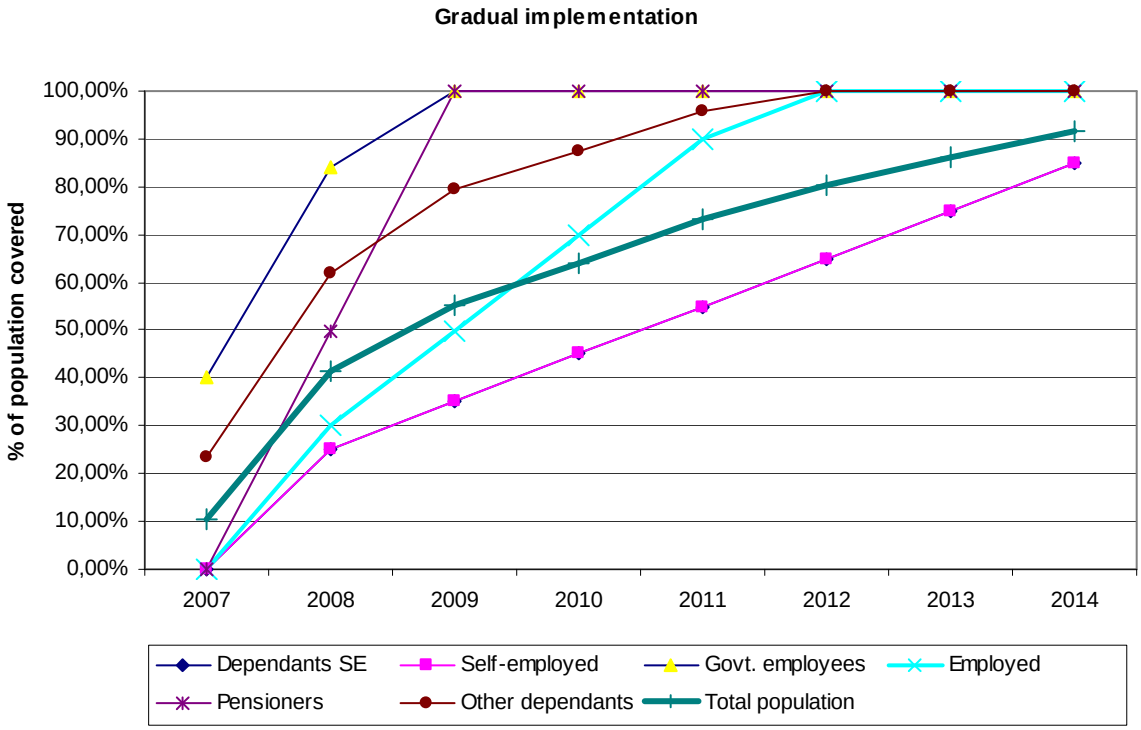
Government employees: We assume that in the initial year the health insurance covers the military only (ca. 400,000 staff plus dependants). The military is a highly organised body that is known to favour the introduction of health insurance and will therefore facilitate its introduction. This initial year can also be used to find and correct technical problems arising during implementation. The second year sees the inclusion of the police and other security personnel (ca. 200,000 staff) as well as the Ministry of Education (ca. 240,000 staff), dependants included each time. Finally, in the third year all government employees and their dependants would be covered.

Formal sector employees: Starting with the second year, the model assumes the gradual coverage of formal sector employees and their dependants, starting with 30% and reaching full coverage over a period of 5 years.

Pensioners: Coverage of pensioners, too, starts in the second year and includes all within 2 years.

Self-employed and the poor: The scenarios model the efforts to provide equity and include the self-employed and the poor population over time. In the second year, a quarter of the self-employed and poor are covered. This is then increased by 10% per year reaching 85% by the end of the given simulation period. Within this, half of all the self-employed are exempted from paying a contribution to account for poverty. The fifth scenario presented here differs in its coverage projection of the self-employed and poor; this is explained in that section.

Figure 6
Coverage: time path of expansion, gradual implementation (% of total population)



4.3.2 National Health Accounts, 2003-2004

The data and assumptions presented below in table 31and table 32 are used to construct the 'baseline' data.

Table 31 National Health Accounts data and assumptions

Variables	**Data and assumptions**
General Government expenditure on health (current prices)	46,745 mill R (2003) This figure is adjusted for inflation and the real GDP growth rate to obtain: 54,317.7 (2004)
Private expenditure on health (current prices)	85,993 mill R (2003) This figure is adjusted for inflation and the real GDP growth rate to obtain: 99,923.9 (2004)
General government expenditure	929,916 mill (2004)
GDP (current prices)	2,531,635 mill R (2004)
Exchange rate (R per US$)	184.78 (2004)
Total population (in thousands)	20,239

4.3.3 Other macroeconomic data used in the baseline year, 2004

Table 32 Macroeconomic scenario data

Variable	Value	Source
Population growth rate	2.9%	WB, Yemen Rep. at a glance
GDP real growth rate	3.7%	WB, Yemen Rep. at a glance
Total government revenue as a % of GDP	33.9%	WB, Yemen Rep. at a glance
Composition of total government revenue - taxes on income, profit and capital gains - indirect taxes - taxes on international trade - other fiscal revenues - non-fiscal revenue - grants	 15,257.6 mR 78,227.5 mR 87,341.4 mR 1,518.9 mR 511,390.3 mR 12,911.3 mR	- estimate of total government revenue in 2004, based on GDP of 2004 and the ratio of 33.9% (WB, Yemen Rep. at a glance) - distribution of total government revenue in its components, using the public finance structure of 1999 (see IMF Government Finance Statistics Yearbook, 2004: pp.487.
Inflation	12.5%	WB, Yemen Rep. at a glance
Utilisation of GDP (in %) - household consumption - government consumption - gross fixed capital formation - exports of goods and services - imports of goods and services	 63.6% 17.6% 21.0% 30.8% 39.9%	Based on WB, Yemen Rep. at a glance

4.4 Key Findings

4.4.1 Scenario 1a: Gradual implementation at current spending level and constant utilisation rate

In the initial projection scenario, we studied the overall impact of a gradual implementation strategy while providing benefits commensurate to current overall spending levels in the country. In this setup, the health insurance makes a profit such that this is the only scenario in which contributions from the formal sector are lowered from the initial assumption of 11%. The health insurance manages to keep financial equilibrium with formal sector contributions beginning at 8% of wages and rising to 10% by the end of the simulation period (see figure 7). Consequently, no government subsidies are required in this projection. For details of the financial results, refer to table 33.

Although eventually covering the whole population and requiring no subsidies, there are a number of caveats to this scenario: The benefit package that can be offered at a cost equivalent to current spending levels in the country as a whole means that benefits will be lower than and different to those that some employees in the formal sector are getting today. With the inclusion of the poorer and rural population, the benefits offered must take into account the overall health needs of the population, especially primary and preventive services as well as maternal and child health. Formal sector staff not wanting to forego some of the benefits they enjoy now (such as treatment abroad) would be able to buy supplementary private insurance. With contribution rates that undercut the amount that these employees are willing to pay and the inclusion of the self-employed and poor this may be attractive. Of course, a big caveat here is that the scenario uses low utilisation rates and may therefore not be realistic.

Figure 7

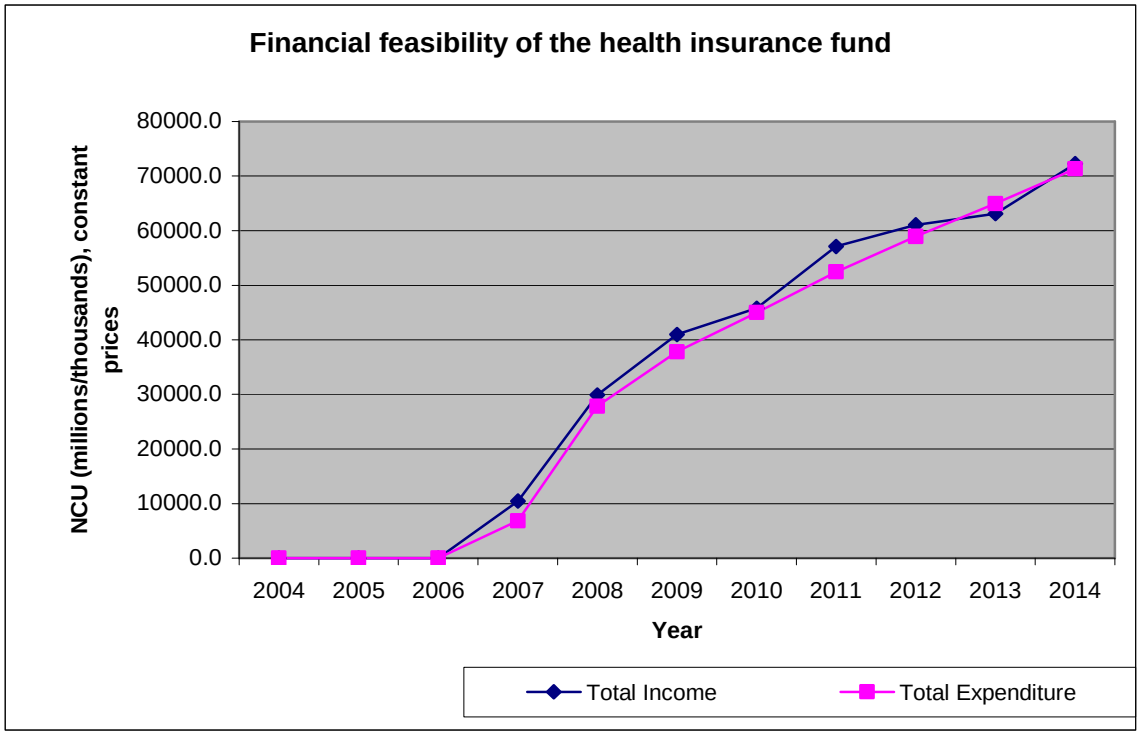


Table 33 SimIns Projection
Scenario 1: Gradual implementation (current spending level)
Scenario 1a: current utilisation levels
Scenario 1b: rising utilisation levels

Scenario 1a	Current spending levels / current utilisation rates		
millions YR (constant prices)	**2007**	**2009**	**2011**
Expenditure	6821.1	37818.8	52431.7
Revenue	10459.7	40965.1	57123.5
Balance	34.80%	7.70%	8.20%
Government subsidies[1]	0.0%	0.0%	0.0%

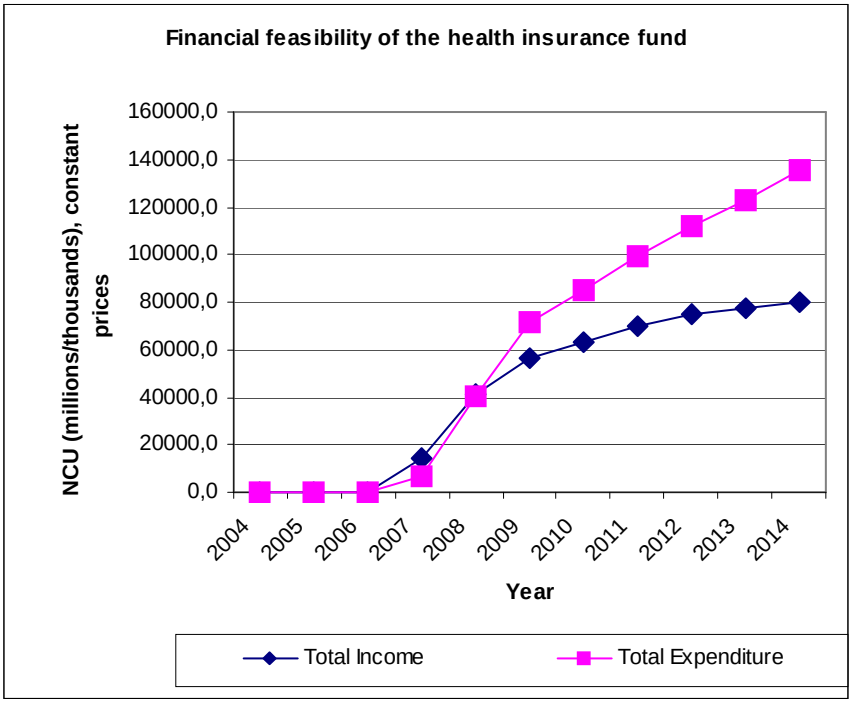
Scenario 1b	Current spending levels / rising utilisation rates		
millions YR (constant prices)	**2007**	**2009**	**2011**
Expenditure	6821.1	71769.6	99400.8
Revenue	14382.1	56162.8	69837.1
Balance	52.60%	-27.80%	-42.50%
Government subsidies[1]	0.0%	1.0%	2.5%

Note:
1 - Government subsidies required for financial equilibrium as percentage of total government revenues

4.4.2 Scenario 1b: Gradual implementation at current spending level and rising utilisation rate

Scenario 1b implements the expected increase in utilisation rates as access to health services increase with coverage. The resulting costs of health service provision pushes the insurance considerably into the red, the resulting deficit rising to over 40% of revenue by 2011 (see table 34 and figure 8). To correct this deficit, a government subsidy to the health insurance would be needed of 1% of general government revenue in the third year of operation rising to 4% in the 8th year. Note that unlike the previous scenario this already incorporates formal sector contributions of 11% of wages.

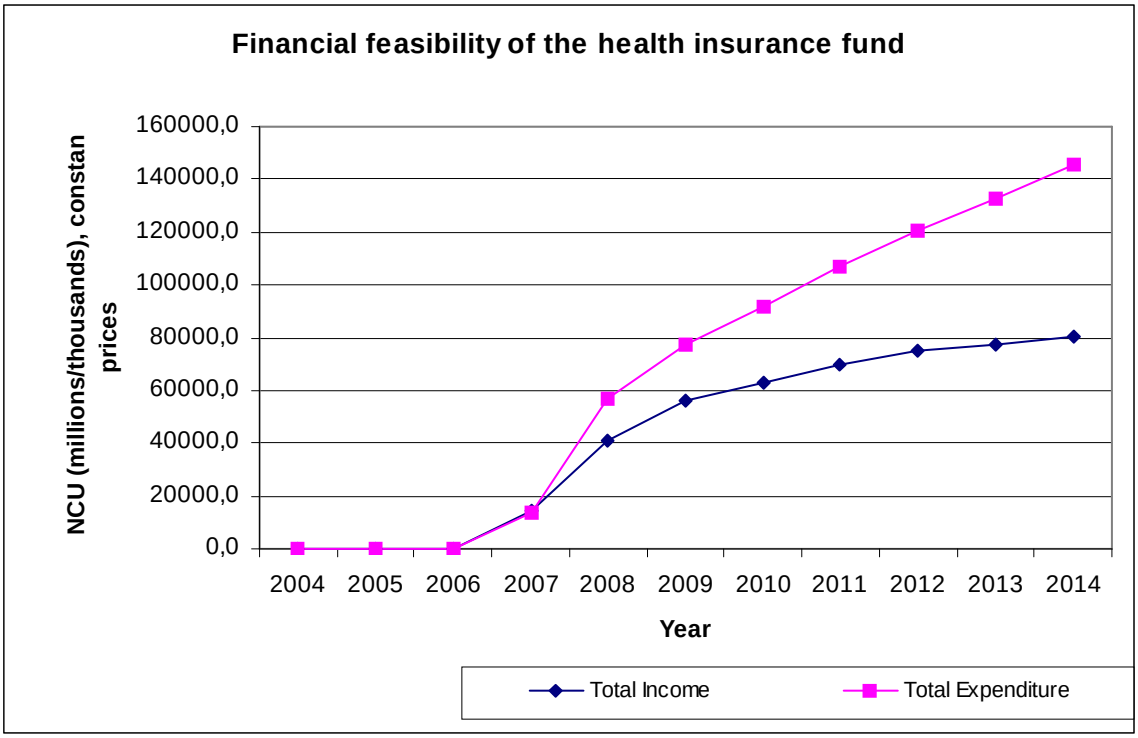
Figure 8



4.4.3 Scenario 2a: Gradual implementation with enterprise based benefit package and constant utilisation rate

For scenario 2a we based the calculations on higher health care costs, which is equivalent to the health insurance covering a benefit package based on current enterprise offerings (based on the Public Telecommunication Corporation health benefits). Under this regime, formal sector employees could be offered the same benefits as they are receiving now, although without treatment abroad. For the majority of the population the money should be spend on a package reflecting their health needs, as they are probably different from the average (male) employees'.

Figure 9



As can be seen in figure 9, with virtually the same earnings as in the previous scenario but significantly higher expenditures, the health insurance manages to break even in the first year only (during which only the military is covered). The financial results are presented in table 34. The deficit in percentage-terms is higher than even in scenario 1b, even though utilisation rates are kept constant at current levels. To balance the books, a subsidy would be necessary as soon as coverage is extended to the self-employed and the poor. The amount needed would be equivalent to 2% of government revenues in the third year of operation, rising to 3.5% in the fifth year.

Table 34
SimIns Projection: Scenario 2: Gradual implementation (enterprise based benefit package)
Scenario 2a: current utilisation levels
Scenario 2b: rising utilisation levels

Scenario 2a	Enterprise based benefit package / current utilisation rates		
millions YR (constant prices)	**2007**	**2009**	**2011**
Expenditure	13958.4	77388.3	107290.5
Revenue	14382.1	56234.2	69930.6
Balance	2.95%	-37.60%	-53.40%
Government subsidies[1]	0.0%	2.0%	3.5%

Scenario 2b	Enterprise based benefit package / rising utilisation rates		
millions YR (constant prices)	**2007**	**2009**	**2011**
Expenditure	13958.4	146041.3	202470.5
Revenue	14382.1	56313.3	70446
Balance	3.00%	-159.30%	-187.40%

Table 34
SimIns Projection: Scenario 2: Gradual implementation (enterprise based benefit package)
Scenario 2a: current utilisation levels
Scenario 2b: rising utilisation levels

Government subsidies[1]	0.0%	8.0%	11.0%

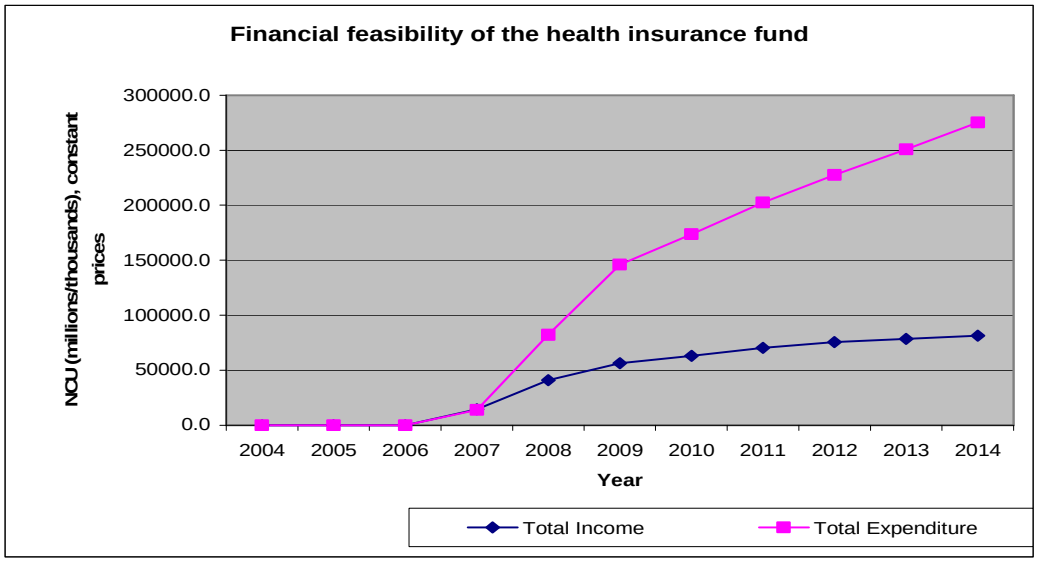
Note:
1 - Government subsidies required for financial equilibrium as percentage of total government revenues

4.4.4 Scenario 2b: Gradual implementation with enterprise based benefit package and rising utilisation rate

With the health insurance offering a higher benefit package than what the majority of the population is currently receiving, we are assuming that people will soon start to make more use of health services. Scenario 2b reflects this increasing utilisation rate, while the benefit package is, as in the previous scenario, financially equivalent to enterprise based health benefits.

A quick glance at figure 10 will make evident the financial unsustainability of such a scenario. The financial results are shown in table 35: the ensuing deficit would amount to more than 1½ of the insurance's revenue in its third year of operation already. Theoretically, this deficit could be eliminated by subsidising the health insurance with 8% of government revenue in 2009, which would rise to 11% in 2011.

Figure 10



4.4.5 Scenario 3: Gradual implementation with enterprise based benefit package and public finance constraint

For scenario 3 we approached the question of financial equilibrium from a different angle. Government subsidies are now fixed at 1% of government revenue, reflecting a possible public finance constraint. We then adjust other parameters to see how close we can get to a financially balanced but also equitable scenario of health insurance.

As many formal sector workers may resist paying into a health insurance that offers fewer benefits than what they are accustomed to, the expenditure is kept at enterprise level (equivalent to scenarios 2a

and 2b). Contributions of the formal sector are kept at the maximum of 11%. As such a setup would still result in a very large deficit, further measures are taken to decrease costs and to increase revenue.

- Co-payments are increased to 20%
- The contributions of the self-employed are split into two:
  - 1,000 YR for the average person in this category (2004 figures, inflation adjusted in the following years)
  - 500,000 rich self-employed pay a contribution equivalent to 4% of a salary that is twice that of the average government salary
- In the first year of operation, fewer people in the self-employed category are exempted from paying a contribution
- The extension of coverage of the self-employed and poor is slowed down considerably, so that by the end of the simulation period only half is covered (see table 36).

Table 35 Coverage of the self-employed and the poor in scenario 3: slower expansion (in %)

Year	2007	2008	2009	2010	2011	2012	2013	2014
SE coverage	0%	10%	20%	30%	35%	40%	45%	50%

The overall results are presented in figure 11 and in table 36. Although the scenario does manage to keep expenditures below and revenues above the levels of the previous scenario, a wide financial gap still appears as by the third year of operation. These figures already take into account the 1% government subsidy. Nevertheless, the health insurance deficit amounts to 63% of revenues in 2007 and 84% in 2011.

Figure 11

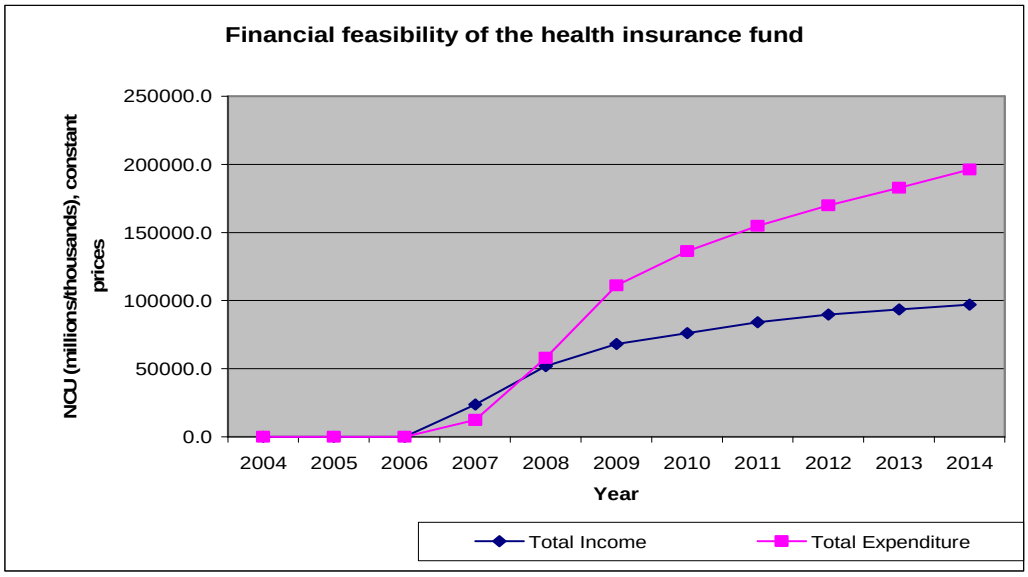


Table 36 SimIns Projection:
Scenario 3: Gradual implementation (enterprise based benefit package and public finance constraint and rising utilisation levels)

Scenario 3	Enterprise based benefit package /public finance constraint / rising utilisation rates		
millions YR (constant prices)	**2007**	**2009**	**2011**
Expenditure	12407.4	111108.9	154808.4
Revenue	23938.4	68127.1	84072.8
Balance[1]	48.20%	-63.10%	-84.10%
Government subsidies[2]	1.0%	1.0%	1.0%

Notes:
1 – Balance after government subsidy of 1% of total government revenues
2 - Government subsidies locked at 1% of total government revenues (public finance constraint)

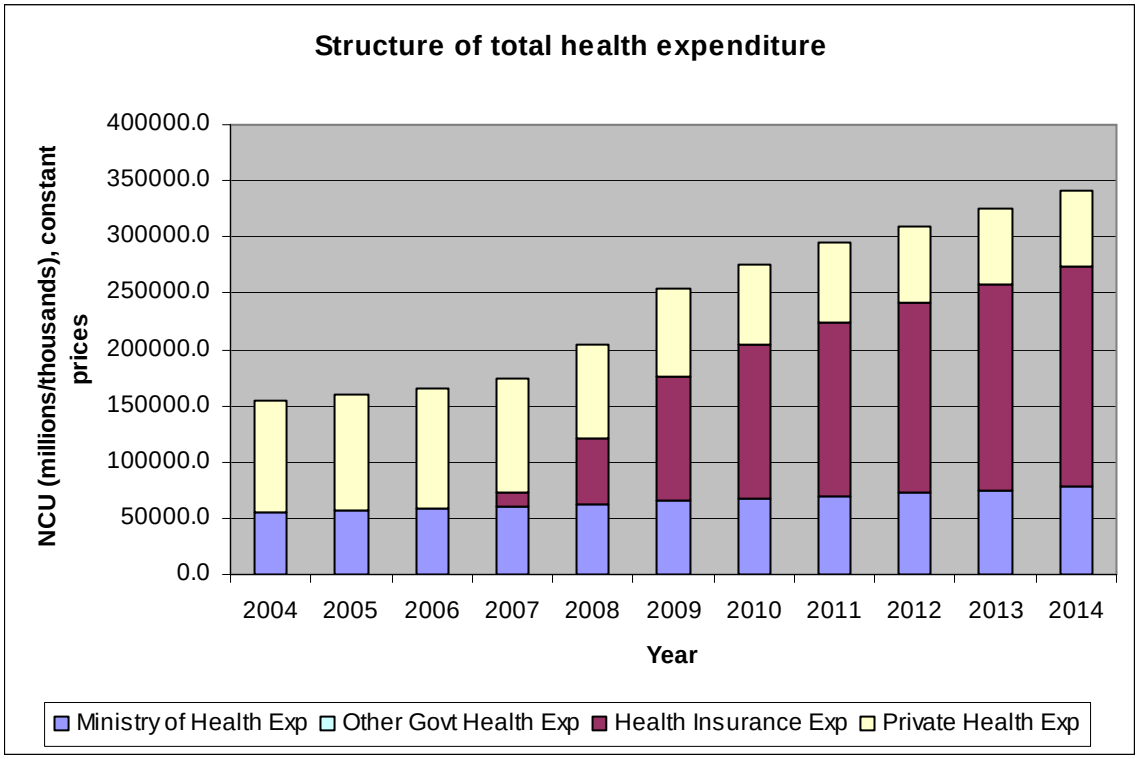
In this scenario we incorporated a ceiling to subsidies to the health insurance coming from outside it. This is probable, as there are many competing claims to whatever funds can be used for subsidies, be they from government or other sources. We adjusted the contribution levels to try and gain the maximum plausible revenue from within the health insurance system. We sacrificed equity and solidarity in several areas, namely higher co-payments, fewer exemptions, lower (or slower) coverage of the self-employed and the poor. Still, this did not result in a financial equilibrium for this health insurance projection.

To go on from here some important questions need to be asked: how much does Yemen orientate its health insurance policy along the normative goal of providing an equitable system and access to health care for all? Financial equilibrium is certainly easier to find, when coverage is limited to the formal sector. However, the health insurance system will ultimately be judged in terms of how much it has contributed to a healthier and better off society. For this equity is important. Solidarity between those that earn more and those who have less is important. Coverage and access to all at prices they can afford is important. As we have seen in these scenarios, achieving a sustainable and equitable health insurance system is difficult, not least from a financial perspective. The degree of solidarity, of cross-subsidisation, of inclusion of the self-employed, of exempting the poor from paying and of subsidising the system from government or other sources is for Yemeni society to discuss. The financial implications of these choices can then be modelled with further SimIns scenarios.

4.4.6 Structure of overall health expenditure

Figure 12 below is taken from scenario 3 and illustrates one of the fundamental characteristics common to all five projections: as health insurance is implemented and coverage is gradually extended across the population, the structure of health expenditure changes. Health expenditure shifts from private, out-of-pocket spending to prepayment into the health insurance and the share of health care expenditures transacted through the health insurance increases while private spending decreases. Furthermore, as an ever larger share of the population gains access to a more extensive package of health services through insurance, overall spending in the health sector increases.

Figure 12



4.5 Key challenges

Securing the necessary financial resources

Increasing the quality of health services (with its subsequent impact on costs of services), improving the utilisation of health care and extending overall access to health services to all of the population are important objectives in the context of Yemen. Social health insurance can be used as a major vehicle to work towards these objectives. However, financial resources would need to be identified. Even the introduction of the first (low) benefit package, while assuming a higher utilisation of health care, leads to important financial deficits. The government subsidies that would be needed, theoretically, represent major amounts; it follows that the opportunity costs of such subsidies are likely to be sizeable. The introduction of the better enterprise-based benefit package together with higher utilisation rates increases further the need for government subsidies, which now are projected to be even higher than the current Ministry of Health budget. Finally, once one introduces a constraint on government subsidies (see the fifth scenario), financial deficits rise further.

From our preliminary scenario analysis, we conclude therefore that financial feasibility of the assumed gradual implementation of social health insurance scheme is most problematic.

Possibly adapting the structure of social health insurance

From a financial point of view, it may be worth looking into the feasibility of a multi-fund structure for social health insurance. For instance, one could further develop the coverage of the formal sector population, letting them benefit from an existing enterprise-based benefit package. This could be done within a Employee and Civil Servants Sickness Fund. Then, there could be a Self-Employed Sickness Fund whereby the lower benefit package would be introduced. Special measures would have to be taken for the medium and high-income self-employed who are registered and for whom there are reasonable estimates of income (so that they can pay in contributions). A further fund could be composed of a federation of community-based health insurance schemes.

Benefit packages in the different funds could be different at the start, due to the different capacity to pay of the contributors. Yet, with economic growth and an improving income distribution, these packages could converge over a certain number of years to a common benefit package. Financially speaking at least, this would seem to be more doable.

The organisation of such a structure may cause further concern, however. In many countries with a multi-fund structure, funds operate under the umbrella of a National Health Insurance Board or Agency. The latter would need to exercise important stewardship for such a multi-fund structure to respond to common national objectives. In addition, it has to regulate any transfers between the different funds; for instance, a certain percentage of the revenues of the better-off funds (usually the Employee and Civil Servants Sickness Fund is one of them) could be siphoned off in favour of the less well-off funds. In addition, such an umbrella Agency would have to negotiate with Government about the Government subsidies that would financially support the various funds, especially the least well-off.

Working Group on the financing of social health insurance[19]

In this chapter, we presented a first set of preliminary projections for different scenarios. Further work needs to be done in order to define under which conditions social health insurance in Yemen could eventually be considered:

1. All data currently inputted in the SimIns simulation model need to be reviewed:
   (i) Categories of health services, together with their unit costs and utilisation rates (thereby making sure that utilisation rates of women and children are properly considered
   (iii) Updating of the macroeconomic accounts and public finance to the baseline year of the projections, namely 2004.
2. New scenarios to be explored:
   (i) the possibility of adjusting the tax structure together with a study of its n macroeconomic variables such as employment, investment and economic growth)
   (ii) the possibility of international grants to help sustain the financing of the social health insurance programme.

This work could be undertaken by a technical Working Group (that could be established by a National Steering Committee for social health insurance). Such a group would need to include national experts from ministries of health, finance and labour, and would also have to include a national legal expert. This group would in turn be supported by international technical assistance.

The interaction within this Working Group would significantly enhance the realism of further alternative scenarios. For example, it would be easier to study the financial implications of any changes in the currently proposed law. Or, constraints defined by the Ministry of Finance could be considered from the start.

5. Roadmap towards international co-operation for a health insurance system in Yemen

5.1 Demand for technical assistance

Keeping with former studies (i.e. Fattah 2003), this investigation has shown that a series of essential preconditions for implementing a national health insurance system are not met yet in Yemen. On the one hand side, this applies to the given situation in the health care system as well as to the persisting lack of a reliable information system. On the other hand side, most of the prerequisites for implementing and conducting a national health insurance system are not in place and have not yet been initiated although recommended clearly in former reviews and analysis.[20] Most of the

[19] Within the proposed Centre of Health Insurance Competence or a National Health Insurance Authority.

[20] For instance, point 5 of the review performed by an EMRO-expert three years ago states the following: An intensive training programme should be adopted from the start for all levels of health insurance staff particularly in management,

indispensable conditions for implementing a health insurance system in Yemen have been mentioned in the health financing proposals developed in this study, mainly in option 3 that invites to focus primarily on the remaining challenges and tasks.

In order to overcome the existing constraints and to prepare the implementation of a national health insurance system in Yemen within a reasonable time framework, the various tasks should be planned and started as soon as possible and in a well co-ordinated way. Parallel works can be done in the different areas of demand and on the multiple issues that have to be met prior to a successful implementation of a national or even a social health insurance system in Yemen.

During the whole implementation period, technical assistance and consultancy will be necessary according to the implementation process. Thus, planning and budget should be flexible enough to allow for additional inputs and investments on request whenever they are required.

5.1.1 Workshops, studies and technical expertise

Further meetings, workshops, conferences as well as a sustained policy dialogue forum with the participation of all stake-holders are needed in order to work on the national ownership of the study report and the recommendations included. Preparatory steps towards a national health insurance system include the search for broad understanding and consensus amongst all parties involved. The vivid discussion raised during the preliminary presentation of the study results and consequences needs a follow-up that allows for further participatory, democratic and consensus decision-making. Therefore, a series of meetings and workshops focussing on technical as well as political aspects, constraints and challenges of health insurance are absolutely needed. The institutionalisation of regular meetings with a well defined group of representatives of all relevant social groups might assure continuity and improve the outcome.

For the implementation of a national and potentially social health insurance system in Yemen, a series of still missing data and information has to be revealed in order to allow for evidence-based strategies. This refers not only to further health-related data and actuarial questions, but also to a clearer picture of the socio-economic and socio-cultural background and conditions in Yemen. The structure of political and economic power and accountability has to be addressed, and gender-issues are crucial for the implementation of a health insurance system that contributes to achieve the health goals, to improve population health, and to reduce poverty. The following studies should be initiated during the preparation phase and technical expertise will be needed therefore. National and internationals technical experts will be identified to help in refining the policy paper for SHI development, in managing the health policy forum, in refining the suggested scenarios and in managing the various working groups) and supporting or conducting the following studies:

- Actuarial study for a deeper understanding of the national health account data:
  - Financial resources, allocation and their flow in the field
  - Cost analysis, costing, allocation and channelling of funds nationally and in health facilities at various levels
  - Restructuring of resources allocation according to the requirements of poverty reduction, solidarity, and gender equality
  - Technical support to cost benefit package for social health insurance.
- Pilot studies about special gender issues like mobile clinics and domicile visits for maternal health
- Systematic detection and assessment of solidarity practices and existing solidarity schemes in Yemen
- Survey on expectations, demands and priorities of the various social groups (workers, employers, self-employed, women, farmers, etc.) and stake-holders.
- Studies about the acceptance and performance of community based health insurance schemes

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management information systems, health economics, actuarial sciences, financial and accounting systems, costs, contract management, managed care and case management (Fattah 2003, p. 2).

- Studies about the feasibility of free-card, cash transfer and other demand-driven subsidies in the social context of Yemen
- Studies about potential linkage of company health benefit schemes to a national health insurance system
- Studies about potential linkage of community-based health insurance schemes to a national health insurance system

5.1.2 Legal support and information systems

A series of laws and by-laws have to be developed or updated according to the agreed upon scenario to develop social health insurance. Data base for legislation could be developed and efforts should be focussed on making use of similar legal instruments applied in other countries inside and outside the region. Also there is a need to have a national health insurance data base on public and private providers, facilities and institutions providing health services, human resources, epidemiological and demographic profiles, and other information relevant for health care and health financing. In collaboration with WHO, ILO and other international donors, a national steering committee for social health insurance will identify necessary technical expertise to develop a nationwide health insurance systems.

Although adherence and acceptance of laws is generally low in Yemen, political projects use to start with the elaboration of and voting on a proposal of law. In fact, not only Government representatives, but also most stake-holders consider the passing of a new health insurance law as crucial starting point for implementing a national system. In the political situation when this study was demanded, the law proposal rejected in the Cabinet appears to be a major concern of all involved stake-holders.

One of the consequences of the various findings of this study is the fact that the proposed legal decree will need some further specification and adaptation to the design of a national health insurance system the Government and the society will opt for. The current version of the proposal seems to be insufficient to cover all aspects of such a complex issue of a health insurance lead by goals like poverty reduction, equity and universal coverage. Thus, in an early stage, technical support with regard to legal aspects and mainly to the law proposal will be felt as priority.

One of the issues to tackle with is the relationship between health insurance in the broader sense and insurance of work-related health problems like labour accidents or diseases. Another has to deal with the implications of the existing labour legislation on health insurance. Thus, at least four major focuses will need further investigation and proposals:

- Study of the overall legal framework for social protection in Yemen, focussing especially on those aspects that derive from the labour law
- Study of advantages and disadvantages of linking up general with work-related health insurance
- Development of a country-specific legal framework for implementing health insurance
- Elaboration of the legal design of a Health Insurance Authority

5.1.3 Capacity building

Yemen is currently facing a tremendous need of qualified personnel for implementing and running a national health insurance system. If social protection in health becomes a major goal of national policy, heavy investments are not only needed with regard to health care delivery and infrastructure, but even more in human resources and capacity building. Thus, the roadmap towards health insurance in Yemen has to include the following elements in order to create the indispensable prerequisites and to meet the needs for such an ambitious project.

1. Training of staff is needed in all areas related to the development of social health insurance program in Yemen. The areas to be covered are the following:
2. Management skills at various levels: strategic, operational, mid-level etc.

3. Health economics and health care financing (costing and cost analysis, financial management and planning, etc…)
4. Skills for managing health insurance authority
5. On top of the fellowships in these and other areas, national capabilities will also be strengthened through study tours for Yemeni professionals to be acquainted with similar schemes developed inside and outside the region.
6. In view of language problems, some training could be carried out in Yemen bringing experts from Arabic speaking countries. Training should also include language skills, mainly English, for professionals who will be dealing with social health insurance development.

In order to build up and to run a national health insurance system, a broad spectrum of general knowledge and specific skills will be needed. Currently, qualified (wo)manpower is not available in a sufficient number, and a series of indispensable qualifications have not yet been on the educational and academic agenda in Yemen. Thus, a major training program for health insurance staff should start as soon as possible for achieving the prerequisites of human resources for implementing a national system. The most important capacity building strategies should focus on political advocacy, management and technical training, and personal skills development.

First of all, capacity building in health economics and financing will be required for an extended core group of health insurance experts. This includes costing, cost analysis, financial management, and others. Training courses will also have to provide organisational and managerial competencies that are essential for setting up, implementing and monitoring a health insurance scheme. Therefore, management training at various levels will be of utmost importance, as it is the development of political advocacy, social marketing, and communication. The implementation of concomitant scientific research should accomplish the setting-up of a national health insurance system from the beginning; therefore a nucleus of researchers and academics from all over the country should be involved in the implementation process.

However, capacity building should not focus on specific insurance-related skills only. For running and performing a nationwide health insurance system, hundreds and even thousands of qualified personnel will be needed for different tasks and areas of work. Mainly the upcoming accounting and controlling procedures will require a considerable number of people who will not need very specific skills. However, informatics, information technology and also a reasonable domination of the English language will be indispensable for essential processes like data processing and documentation.

In order to satisfy the rapidly increasing demand of qualified personnel after starting health insurance in Yemen, training should be offered inside Yemen as well as on an international level. A sufficient number of institutions for all basic skills – language, IT, accounting, personal and financial management, controlling, contracting, etc. should be available in the country. For more specific qualifications, mainly the high ranking personnel should have the opportunity to participate in international trainings, seminaries and post-graduate studies, and to attend specific training courses like those offered by WHO, ILO and others.

5.1.5 Design of a social health insurance institution

Technical support in developing the administrative set up of the social health insurance authority including management information system, billing system, control, etc. is needed. WHO could coordinate international support in this area.

Institutional strengthening is also of utmost importance in the preparatory phase of implementing social health insurance, once the health insurance authority is established and after the start of the social health insurance program. The establishment of the technical secretariat of the national steering committee is an important milestone in this respect. It shall allow for a smooth preparation of social health insurance in Yemen. Such work will go in parallel with and is closely linked to capacity building to develop necessary national expertise. Efforts should also be made to upgrade the public

facilities which will be involved in service delivery (up scaling of facilities at various levels including bio-medical equipment, training, etc.). The design and implementation of the health insurance authority should include micro-insurance, decentralisation, claim processing, control and inspection, and all other tasks relevant for health insurance.

The adequate design of the insurance institution is a crucial factor for performance, viability and sustainability of national health insurance. In a social context where misuse and mistrust prevail, transparency, accountability and good reputation are of utmost importance for any fund to succeed. The general framework conditions described briefly in this study have to be studied in order be able to develop a legal, organisational and managerial framework for implementing a health insurance authority. This authority might be institute step-by-step: first and immediately as a technical secretariat of an advisory council for social health insurance which can be converted as a second step into a Centre for Health Insurance Competence which in turn – after the many preconditions are met – could be integrated (partly) into a National Health Insurance Authority.

The design of the institutional framework and institutions should be made in a way that guarantees for the inclusion of all social groups, especially the poor and women. All planning and conceptual work with regard to health insurance in Yemen rely mainly, if not exclusively, on male members of society, while the participation of women is weak and normally restricted to some very few selected areas like maternal health. Poor people use to face the biggest health risks, but their voice is nearly ever heard when it comes to implement social protection and to improve population health. Thus, the adequate participation of the most vulnerable groups has to be assured in the health insurance institution, whether it is one authority or a decentralised organisation.

Another essential condition for a successful health insurance institution that seems to be crucial in the Yemeni socio-cultural environment is prevention of any type of misuse, self-enrichment and corruption. Therefore, the national health insurance authority has to be an independently managed, not government-run institution with a strong and effective auditing and supervisory board. Face to the widespread mistrust to public institutions and all types of publicly run funds, a strict control of resources, clear rules for financial flows, and restrictive controls have to be in place. Guidelines and principles have to be developed that assure a high degree of transparency and accountability, restrict misuse, and implement adequate sanctions. That will require above-average salaries as well as effective controlling and supervision. However, in order to achieve both high accountability and reputation, an active international participation in the directory and auditing board of the health insurance institution(s) is highly recommendable, at least during the setting-up and implementation of the national health insurance system.

Social marketing and public relations are also important elements that might have impact on the implementation of health insurance. Social participation requires public awareness, and information through media plays an important role in social policy. Good press enforces transparency and helps to detect and reduce misuse and corruption. Thus, professionals of the health insurance should be aware of the public opinion and prepared for the challenges of good public relations for promoting health insurance.

Parallel activities seem to be indispensable for a successful implementation of a national health insurance system. The national Government should focus on the following tasks:

- Scaling up health care facilities
- Improve health care provision
- Implement strict supervision of health care delivery
- Implement quality control and assurance

5.2 A roadmap towards a social health insurance for Yemen

If the National Government, the Shura Council and the Parliament agree to implement health insurance in Yemen and select the most convincing out of the various options, additional support from

the international community will be very recommendable and is also expected by practically all stakeholders. In this case, joint efforts of all donors towards a national health insurance system will become an important part of the reform agenda. This refers to financial as well as to technical support from multi- and bilateral organisations. One task will be to channel a part of the various funds and resources destined to health sector improvement and reform towards health insurance. In the short term, the best way to develop and implement a forum of health insurance amongst donors has to be defined and agreed upon.

A realistic evaluation of the current situation makes a time span between three to four years reasonable for developing social health insurance, including legislation and information support, institutional adaptation, technical assistance and capacity building.

5.2.1 National advisory or steering council

One essential element that will be necessary for paving the way towards a nationwide health insurance system in Yemen is a national steering committee for social health insurance. For several reasons it seems to be best to locate this committee close to the Ministry of Public Health and Population, as far as it is expresses a clear willingness and commitment regarding a national health insurance system. Although the MoPH&P has accumulated a series of experiences with regard to health insurance and commissioned this study, several statements from in- and outside the ministry there is some reason to doubt the degree of conviction needed. However, the option to organise the steering committee closely linked to WHO is an important argument for to give the MoPH&P a leading role.

Once the national steering committee for social health insurance development is established, efforts should be made to get the political commitment at the highest level to implement social health insurance. The steering committee and its executive arm will develop the necessary policy and commission technical papers considered as necessary. It has also to organise a consensus-making process and achieve a widely backed decision about the option to apply for implementing a national health insurance system.

Upon a request by the Minister of Public Health and Population, possibly also by other cabinet members, the Prime Minister shall appoint the members of the steering committee. Such committee should include the most committed and knowledgeable representatives of the following:

- Main stakeholders
    - Solidarity schemes
    - Social health insurance schemes (e.g. of companies)
    - Community based insurance schemes
    - Workers' union or representatives of employees
    - Employer's syndicates or associations
    - Women's unions and federations
    - Civil Society Organisations
    - Non-governmental Organisations
    - Universities and academics
    - Pension funds
- Government agencies
    - Presidential office
    - Prime Minister
    - Ministry of Finance
    - Ministry of Public Health and Population
    - Ministry of Civil Services and Insurance
    - Ministry of Social Affairs and Labour
    - Ministry of Planning and International Cooperation
    - Ministry of Endowment and Guidance
    - Ministry of Education (if they will engage in social health insurance)
    - Ministry of Defence (if they will engage in social health insurance)
    - Ministry of Interior (if they will engage in social health insurance)

The core group should support a steering group or advisory forum or steering committee in Yemen to be nominated by the Prime Minister. It shall be an inter-ministerial, inter-agency and public-civil-partnership group or council with high level representatives of all relevant sectors, supported by the government, mainly the Ministry of Finance, the Ministry of Civil Service and Insurances, Ministry of Labour and Social Affairs, Ministry of Planning and International Cooperation, Ministry of Defence, Ministry of Interior, and the Ministry of Endowment and Guidance. This steering group has to include immediately the most relevant stakeholders and the civil society, e.g. existing health insurances, pension funds, professional associations, unions, women representatives, civil society organizations, universities and all other stakeholders. The implementation of a national health insurance system has to become not only an inter-ministerial, but especially a socially shared project that links it up with the civil society as well as with international and national co-operation.

After the review of the suggested scenarios to develop social health insurance for Yemen by GTZ with technical support from WHO and ILO, the follow up should be entrusted to the already mentioned national advisory group or steering committee. Such a group should achieve a high visibility and should be chaired by the Prime Minister. The following objectives should be pursued:

- to develop, based on the GTZ-WHO-ILO study, a policy paper on social health insurance highlighting the justifications of such policy option and its potential impact
- to provide a policy forum aimed at refining the agreed upon options for implementing social health insurance
- to mobilize necessary human and financial resources for implementing social health insurance
- to oversee the implementation of social health insurance
- to carry out a social marketing of the social health insurance program

A technical expertise may be needed to help in developing a plan of action for the secretariat and its the national advisory or steering committee in order to achieve best its objectives

Starting the first quarter of 2006, and after securing necessary budget (MoPH&P and donors) to be able to recruit national and international staff and to manage the work throughout the year, the steering committee resumes its functions. A secretariat for technical support will be hosted best in the MoPH&P (3-4 additional offices are needed in this respect). Necessary arrangements should be made to secure logistical support. The executive arm of the steering committee will develop with the help of technical experts a program of work for the year 2006 and beyond. All reports of the steering committee will be filed and follow up of the planned activities will be secured.

The advisory council or steering committee meets four times a year to *finalise* policy papers and to agree on strategic directions for social health insurance development. Working groups are initiated by the advisory council or steering committee to develop necessary technical papers on specific issues related to the development of social health insurance. An executive committee, composed of the technical secretariat and key representatives of ministries and stake holders is entrusted to carry out the necessary preparations for social health insurance development including:

- identification of technical expertise needed
- mobilization of financial resources
- recruitment of technical experts
- data collection and analysis and establishment of a data base for SHI development
- commissioning of research papers
- running of technical seminars and workshops
- social marketing of SHI program

The steering or advisory group should give support to the responsible governmental decision makers preparing the creation of an independent and autonomous Health Insurance Authority in Yemen, and to define the necessary terms of reference for the next steps on the way towards a national health insurance system in Yemen. It has to work on the ownership of this study and adapt it to the political and social demand and expectation in the country. The group has to push forward the process of consensus finding with regard to the best option to chose for implementing health insurance.

5.2.2 Core group or secretariat

On the national level, immediately, a strong core group could be created eventually in the MoPH&P with support from WHO and others. This includes on the one hand extending the number of persons currently involved in health reform and health insurance issues by additional full-time staff of about 2 professionals, a 3 person support staff as secretariat. Two international experts financed by donors should back up the local staff, give technical support, and guarantee linkage to the international community. The core group as well as the corresponding secretariat could be placed eventually in the MoPH&P in order to have continuous technical support and back-up from WHO. It shall include the following personnel :

- 3 experienced and committed government officials (delegated on part time basis)
- 2 professional Yemeni staff on full time basis (1 economist, 1 lawyer/manager)
- 2 professional international staff on full time basis (1 senior policy adviser, 1 health economist)
- 3 support staff on full time basis

At the beginning the running costs of the secretariat should be covered by a reassignment of government and project personnel and funds; available international technical and financial support should be realigned, too. This would prevent, that the group would be able to start only after eventually long negotiations which would dampen the whole process towards a national health insurance system in Yemen. GTZ, WHO and ILO should help in developing the terms of reference for the technical staff to be recruited nationally and internationally. This core group could be integrated later on into a Centre for Health Insurance Competence, as soon as this would be instituted, budgeted and could start to work as a nucleus of a future National Health Insurance Authority.

5.2.3 Interaction and networking

The technical secretariat will provide necessary support in terms of convening the various meetings and seminars, developing and finalizing policy and technical papers to develop social health insurance and preparing for the implementation of the agreed upon scenario. The technical secretariat is also entrusted to coordinate the donor's input in support of social health insurance development as being the main agenda of the health sector reform program. Efforts should be made to generate necessary financial support from all donors operating in the countries and involved in assisting the health sector program including bilateral donors, the World Bank and other UN and non UN agencies and institutions. Strong coordination should be developed between the technical secretariat and WHO and ILO and other partners involved in social health insurance development. Through its direct relationship with WHO country office in Sana'a, the technical secretariat will liaise with both WHO and ILO in order to generate necessary technical support to the social health insurance program.

The GTZ-WHO-ILO-Consortium could bring in shared values, indispensable political and ethical aspects of good governance and stewardship, as well as international experience in the field of social health insurance. It could support the advisory committee in follow-up and donor-coordination. The consortium members can cover more general as well as very specific areas of demand and according to the consortiums own profile of know-how and availability of experts. With regard to other specific tasks the Consortium could look for and co-ordinate support from other donors, i.e. GTZ might promote donor coordination in OECD-DAC and in other international bodies.

5.2.4 Time frame

The following table suggests a time table for implementing the proposed roadmap towards a national health insurance system in Yemen.

Table 37 Suggested time frame

	2006	2007	2008	2009
Advisory or steering committee with secretariat	Q1			
Development of SHI forum, workshops, etc.	Q2			
Legal and information support	Q2--------Q2			
Technical assistance for various studies	Q2----------Q1			
Creation of Centre for HI Competence	Q3			
Planning for a National HI Authority	Q3-------Q3			
Creation of HI Authority	Q1			
Capacity building	Q1----------Q4			
Q = quarter				

5.3 Demand for financial assistance

The minimal yearly financial requirements in US dollars for the operations of the national steering committee and its secretariat for the implementation of a national health insurance system in Yemen should include the following items.

Table 38 Costs of an advisory council with secretariat

Budget items	Amount (US-$)
National professional staff	60,000
National support staff	20,000
International staff	200,000
Logistical support	40,000
Meeting, travel, etc	80,000
Other expenses	100,000
Total	500,000

This budget should be available as soon as possible, best by early 2006, already. If it were not available in cash, then it should be available in kind by reassignments of personnel, material and other items. At least 50% of these costs should be shared by the Government of Yemen. For budget negotiations for the year 2007 the Government of Yemen should ask for a 200 million YR budget allocation by the Ministry of Finance to build up the Centre for Health Insurance Competence, recommended by the study team. This would be a good signal of national commitment. It would be appreciated by the donor community, for sure.

The 200 million YR budget for a Centre for Health Insurance Competence (CHIC) has the potential to contribute to a large variety of issues that have to be tackled in Yemen if the country decides to start an initiative to implement health insurance. The most relevant upcoming tasks seem to be the following:

- Advocacy actions towards a social and national health insurance system in partnership with all interested and committed stake-holders and the national advisory council for social health insurance (for further details, see chapter 2.6)
- Discovery and further analysis of solidarity schemes
- Observation and analysis of company health insurances
- Follow-up and guidance of community based schemes
- Coordination and supervision of research and the building up of a knowledge data bank and a health and management information system
- Training and human resource development

This Centre would enlarge the above mentioned secretariat and would be the nucleus for a future National Health Insurance Authority.

Each of the above mentioned epidemiological, actuarial and other studies considered indispensable for the implementation of a national health insurance system in Yemen will have a cost of approximately 200,000 - 500,000 €, according to the scope and coverage of the investigations.

Table 39 Cost of studies towards a social health insurance system

Study	**Estimated cost (€)**
Actuarial study for a deeper understanding of the national health account data	500,000
Survey on expectations, demands and priorities of the various social groups (workers, employers, self-employed, women, farmers, etc.) and stake-holders	500,000
Systematic detection and assessment of solidarity practices and existing solidarity schemes in Yemen	250,000
Studies about the acceptance and performance of community based health insurance schemes	250,000
Studies about the feasibility of free-card, cash transfer and other demand-driven subsidies in the social context of Yemen	300,000
Studies about potential linkage of company health benefit and community-based health insurance schemes to a national health insurance system	300,000
Pilot studies about special gender issues like mobile clinics and domicile visits for maternal health	300,000
Total	**2,400,000**

The Government of Yemen should budget as soon as possible a feasible but significant part of such costs from own government funds to give a sign of political willingness and commitment towards a social and national health insurance system.

5.4 Conditions for further international back-up and support

Undoubtedly, the international community should support the preparation, setting-up and implementation process. Relevant external financing that goes far beyond the given economic possibilities in the country will be unavoidable for any serious attempt to create a well performing system that assures fair financing and adequate access to health care. However, international support has to be backed up by a very clear and firm commitment of the Yemeni side, including the take-over of a significant part of necessary investments and running costs of the implementation process. Further negotiations will be necessary in order to define the priority fields and percentage of national co-financing.

And it has to be clearly said that international support will be restricted to investments during the implementation period, and eventually to continuous expenditures for infrastructure, maintenance, capacity building, and others. However, international financing should and will not be available for performance and running costs of health insurance, especially for covering the health care expenditures of enrolees. A national health insurance system in Yemen can build upon generous international help when it comes to set up and to implement health insurance, but the system has to be developed in a way that makes it financially viable and autonomous without support from outside the country.

International commitment is somehow conditioned by meeting certain expectations towards stewardship and good governance. This best can be shown if all or some of the following areas are tackled

- Focussing poverty and poverty alleviation
- Enforcement of equity and solidarity

- Transparency and accountability
- High participation-rate of women
- Involvement of women's organisations
- Involvement of worker unions, NGO's and the civil society

One additional option to improve the performance and viability of an emerging health insurance system derives from using opportunities to reduce the financial burden, especially during implementation and extension. Persisting communicable diseases represent still an important challenge for the Yemeni health system and, thus, will require considerable resources from a national health insurance fund. Although the spectrum of infectious diseases is broader, malaria, tuberculosis and also HIV/AIDS have a high impact on epidemiologic demands and health spending. The international community is making available relevant resources for preventing and treating mainly these three diseases. However, in many developing countries, administration and utilisation of donor funds is insufficient and prevents the poor countries from receiving all the money allocated. This is especially true for the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) that is often lacking well-prepared and reliable counterparts in order to apply the funds with transparency, accountability and efficiency. Against this background, a national health insurance system might become the steering organisation for to administer and allocate earmarked funds from the GFATM. The latter will be happy to have a national counterpart who is able to channel resources dedicated to fight AIDS, malaria and tuberculosis. And the national health insurance authority could receive resources needed to cover these diseases and include the treatment in the benefit package.

5.5 Other cooperation issues

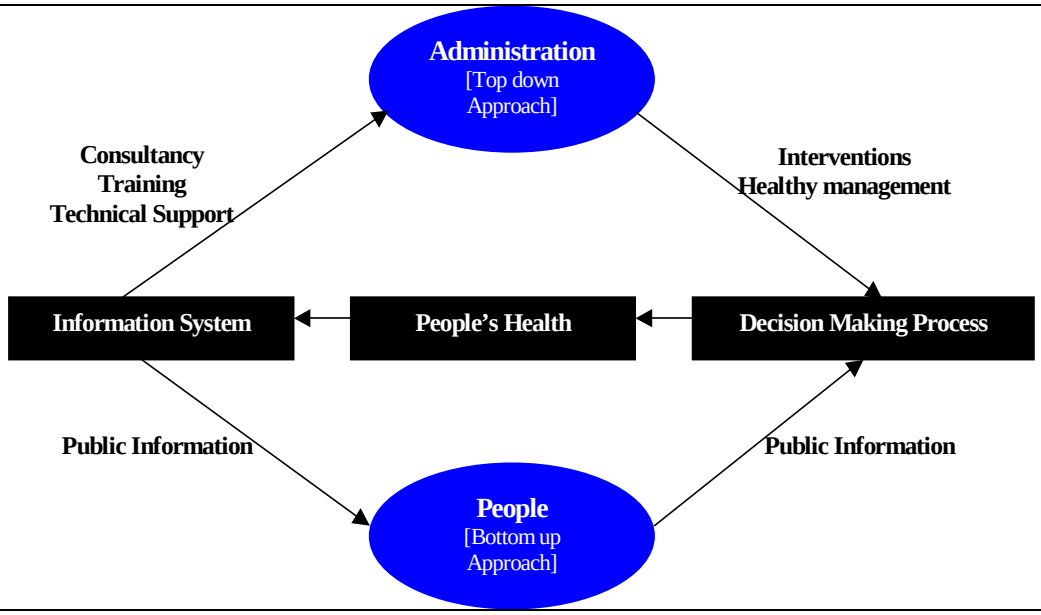
Beyond the health system, a series of additional tasks is likely to back-up the implementation of a national health insurance system and to promote scientific support.

Although the medical faculty of Sana'a University has the official title of "Medicine and Health Sciences", the teaching program offered is relatively far away from fulfilling the criteria of what is internationally discussed as "new public health" concept. The curriculum at Sana'a University does include epidemiology[21] and community health including biostatistics, general and specific epidemiology, demography, primary health care, health administration, and research methodology, the approach is heavily focussing the physicians' point of view and addressing traditional medical demands (University of Sana'a 2000, p. 48ff). However, the structural problems and socio-political demands discussed above are only to be managed by means of a strictly interdisciplinary approach and the co-operation of various professions. This also applies to infra-structural and organisational problems faced by health services at all levels, mainly by primary care units and centres (Laaser 2002, p. 77).

In the academic environment, public health has become kind of prototype of an interdisciplinary, multi-professional discipline, combining biomedical and the social sciences (Hurrelmann 1995, 1996) in so far as they comprise at least the four core disciplines of applied epidemiology, health management, health promotion, and environmental health. If on the other hand one of the central paradigms of Public Health is hold valid, namely that the state of health is also determined by a number of ecological determinants other than medical care, e.g. the socio-cultural and socio-economic conditions of living macro- and micro-economics, socio-cultural issues and the given conditions within a society, it becomes obvious that the improvement of population's health is not achievable following exclusively a medical paradigm. However, in most places all over the world training programs for public health professionals are hosted within medical faculties (Tulchinsky 2000). Under this narrow perspective it is difficult to develop "Health Sciences" as an autonomous academic field. Thus, the creation of independent institutes or academies of public health/health sciences might be needed in Yemen in order to fulfil the upcoming array of tasks resumed in the following graphic:

[21] Only one hour weekly during the second year (University of Sana'a 2000, p. 9).

Figure 13: An operational approach to improve people's health



Source: Laaser 2002, p.81

The lack of interdisciplinary "modern" public health institutes and health science academies in Yemen is to be considered a constraint for implementing health insurance on a large scale. Higher education regarding the understanding of population health and all health insurance relevant skills is needed. Thus, international donors should support the Ministry of Education and other stakeholders to set up health sciences, health economics, management, and other related academies in the country and to support specialised out-of-country training of teaching and research personnel. At the same, international lecturers and consultants should complement the national academic staff and participate in regular teaching activities. WHO and other donors should make available additional input for existing programs like the hospital management course at the University of Aden, and initiate or promote the implementation of further academic programs.

The Centre of Health Insurance Competence is recommended to search intensive contact and co-operation with institutes and universities in and outside the country. It might initiate and support a Centre for Health Strategy Studies (like the one implemented in Damascus), including a school of management and institutes for public-health, population, and health economics. Additional donor funding is likely to be available for enhancing academic strength and scientific back-up of a health insurance system. The support given by the European Committee to build up a structure and network of health science institutes within the scope of the Stability Pact in South East Europe might be an example of how to support public health schools and establish scientific collaboration in the region.

6. Summary

6.1 Introduction

More than half of the Yemenite population do not have access to health care. This is partly due to the lack of reachable provider facilities, mainly in rural areas where more than two out of three citizens are excluded from health care. The other relevant factor inability of the poor population share to pay for health care. Health insurance coverage is practically inexistent, and pre-payment schemes are very scarce and hardly affordable. People have to cover most expenditure from their pockets, so that many people are unable to pay for needed and adequate medical care in the time of need.

Some political initiatives have been raised in the past in order to overcome this situation by implementing social protection in health. Especially health insurance has the potential to lower the access barriers to health care, to prevent impoverishment caused by illness, and to overcome the exclusion of so many citizens from health. Collective funds are best for fair health financing, because individuals or groups can dedicate an affordable amount of money to acquire the right to receive financial support whenever the insured health risk occurs. Health insurance makes payment for health independent from the utilisation of clinics, hospitals or pharmacies, because people pay before falling ill and not only when we are sick, as most people have to do now with a very high share of out-of-pocket payment. And it pools different risks, since everybody pays and not only the sick or vulnerable. Cases of serious and costly illness that do not happen very often can be paid by a health insurance fund. We talk about national health insurance, when almost all citizens are obliged to join health insurance, especially the wealthy and the healthy, and when all citizens can enjoy the benefits of health insurance. We talk about a national health insurance system, when different health financing forms are combined to provide health care in case of need and not just according to the ability to pay.

6.2 Terms of reference

Based on a Decree of the Cabinet of the Republic of Yemen the German Development Cooperation (GTZ) was contracted to undertake a study on situation assessment and proposals for national health and insurance system. The terms of reference are:

1. Collect, summarize, and synthesize all relevant documents and data bases prepared for Yemen and provide an overview for a comparative analysis of the situation in Yemen with selected countries in the region and the World.
2. Identify important existing solidarity schemes in Yemen and analyze their structure, impact, and performance.
3. Review existing health insurance schemes in Yemen, including public sector programmes, private health insurance, community-based health insurance and company-based health insurance schemes.
4. Conduct and analyze a health financing opinion survey of politicians, Islamic leaders, citizens, development partners, local governments, ministerial officials, insurance companies, public and private health care providers, NGOs, workers' syndicates and the medical association.
5. Visit and interview the ministries and other central institutions, public and private health care providers, district local councils and health offices on governorate and district levels.
6. Compare the present situation in Yemen with experiences in similar countries in the region and worldwide in order to determine which preconditions are required to start a National Health Insurance System.
7. Analyze and discuss in a workshop(s) all findings and suggested alternative health care financing options with major stakeholders and draw conclusions against background of the realities in Yemen.
8. Develop at least 3 alternative health financing proposals which assure the equity of health care provision. Each proposal should cover issues related to revenue collection, provider payment, choice and unit of enrolment, benefit package, pooling arrangements, contribution schedule & method and purchasing.
9. Propose an implementation plan with stages of regional, social and organisational expansion according to priorities, management capabilities, quality of existing health services, and preparedness of population groups
10. Prepare the National Health Insurance financing framework for each proposal as well as preliminary macro-financial projections for the first 10 years.
11. Identify areas of demand for future technical assistance for the establishment of a National Health Insurance system in Yemen.

6.3 Methodology

The German study team was working in close cooperation with partners from the Ministry of Public Health and Population. Yemeni professionals participated in all stages of data collection and analysis as "twins" of all international experts in the spirit of mutual learning and capacity building. The team was complemented by specialist consultants from World Health Organization and from the International Labour Office. A comprehensive literature discovery and review was undertaken, and essential documents were translated into English. Interviews were conducted with more than 230 partners from national and local governments, parliament, Shura Council (second chamber), employers, unions, health insurance schemes, pension funds, civil society organisations, and donor agencies. More than 20 groups of opinion leaders shared their views on social health insurance with a multiple choice questionnaire. More than 30 public companies responded to a questionnaire on costs and benefits of their health schemes for employees and their families. Another survey shed light on afternoon jobs of civil servants and their willingness to join health insurance. Field visits in four governorates added to the knowledge gained. In a series of workshops interim findings were discussed, and a consensus of the study team and their Yemeni partners was build up for presenting assessments and options in a larger workshop on 11.-12.09.2005 with more than 80 participants. On 3rd October 2005 options and recommendations were discussed with members from Parliament, Al-Shura Council, political parties and the Ministry of Health. A presentation to the Cabinet is scheduled.

6.4 Background

Most of the 20 million Yemeni live in mass poverty and lack government services. The population growth exceeds economic development. Oil reserves will dwindle in a foreseeable future. A sustainable development policy has to be designed and started yet. Human capital formation should be one of the major concerns, with health and education as drivers of economic and social development. Health is a macroeconomic investment. Human resource development has to be complemented by a diversified production strategy and a reversal of the increasing environmental degradation.

Most diseases and deaths in Yemen are avoidable at low cost. Prevention and promotion of adequate health seeking behaviours of families, however, are not priority in decisions on resource allocation for health care. In the strongly medicalised Yemeni society, primary care has a low status although it is highly cost-effective for avoidable diseases as well as for the increasing chronic and "modern" diseases. More than half of the population has no access at all to health care. Especially women are excluded and marginalized. This situation is aggravated by a very uneven distribution of public health facilities and by a significant underfunding of the running costs of public health facilities. Hospitals in the public sector are generally under-utilised and of doubtful quality. The private sector is not properly regulated and its quality is uncertain. There is a very high demand for treatment abroad in the case of severe diseases.

About 29% of total health expenditure in Yemen – from private pockets and public funds – is used for treatment abroad. Approximately every two out of three Rials spent for health care are paid by families and households as out-of-pocket payment in case of illness. Extremely high health care costs hit only very few people, diseases are unpredictable, and prices in the individual case widely unknown. As social protection in health is lacking, these conditions make quite a number of families impoverish by expensive treatments, catastrophic diseases and death of family members. Even for normal diseases they have to spend a lot of money. In spite of relevant presidential decrees and existing exemption rules for the poor, public health care is by no means given for free. Cost-sharing of patients finances 45% of the costs in the largest government hospital, Al Thawra. On top of this, most providers get informal payments. 84% of opinion leaders say, cost-sharing is not well organised; and 91% affirm that cost-sharing leads to postponement of treatments. Exemptions for the poor are only given to a very small extend. This is due to the underfunding of public facilities and the low moral of staff that did not increase by topping up their salaries from the cost-sharing income. In the afternoons, the same staff earns in the grey market or shadow economy of health care. An excellent programme for cost-recovery of drugs by means of a drug fund for essential drugs fell into the trap of mismanagement and

corruption. The very good government cost exemption scheme for chronic and catastrophic diseases was not enforced properly. The result is a high private spending at the time of use

- high spending for avoidable diseases
- high spending for catastrophic cases
- high spending for treatment abroad
- high spending for drugs
- high spending for informal, under-the-table payments.

Health insurance intends to regulate and reduce out-of-pocket payment, and to shift the unpredictable high burden for a few persons into regular prepayment of all, so that health care can be given according to need, and not according to affordability, only.

6.5 Social security and protection

A social safety net for Yemeni is a priority of the poverty reduction strategy of the government. A remarkable social fund for development was built up to mitigate the effects of economic adjustment programs. It could address some issues like "providing access to basic services in education, health, water and microfinance, as well as creating job opportunities and building the capacity of local partners". Nevertheless, most families are left alone in case of structural or random shocks like flooding, fire, robbery, crop failure, inflation, currency adjustments, price increases, unemployment, accidents, famines, disabilities, long-term care needs i.e. all the "small" catastrophes that can destroy the existence of individuals, families and even extended families. Public risk management is not in place, neither. The only element of social protection addressed by the government is an insurance scheme for death, disability and pensions. It covers the military, police and government administration sectors quite well, but coverage of the private formal employment sector is very low. However, the implementation of pension insurance for about one million employees was an important achievement.

6.6 Existing health insurance schemes

Yemen has a rich history of solidarity and local self-help initiatives. Most of them are small-scale and of limited coverage. Undoubtedly, this is a treasury of good ideas and best practices. They have to be further discovered, assessed, disseminated and replicated, wherever possible. This is a strong mandate for follow-up activities towards a national health insurance system in Yemen. Examples are teachers' and hospital staff solidarity schemes reaching beyond health and health care.

Community based health insurance schemes are discussed and recommended internationally. They are mostly voluntary schemes linked to public or private health care facilities. Two of such endeavours are promoted in Yemen, in Taiz and Hadramaut governorates. Both are not yet ready to be implemented fully, and some doubts prevail regarding their replicability in other areas.

Company based health benefit schemes in the public and private sector do show very diverse and interesting features regarding benefit packages, membership, provider contracting and payment, as well as risk-management and co-financing. Financial transparency and administration seem to be weak, and there is ample room for improving and strengthening such schemes, that on average cost about 45,000 YR (equals currently 234US$) per employee (and family) per year. A national health insurance system might and should benefit from the various experiences and from the knowledge available on how to manage such funds. More in depth studies have to be realised on these and similar schemes.

6.7 Expectations regarding health insurance

National and social health insurance is being discussed in Yemen since unification in 1990. Health insurance related salary deductions were already introduced shortly thereafter but not followed by the provision of health insurance benefits. Since 1995 the Ministry of Defence proposes a health insurance

scheme for the armed forces, and a similar move is now existing to cover police and security police, altogether close to half a million employees. For the civil public and the formal private employment sector a law proposal of the MoPH&P was given several times to the cabinet, which decided in 2004 to contract a study for assessing proposals and alternatives.

The international community expects a sustainable and really social health insurance for all citizens, especially benefiting the poor, the vulnerable and women that are systematically excluded from access to fair and reliable provision of needed public services. Empowerment of the poor and of women, especially, has to be strengthened in this context. In view of preventing corruption, the building of an independent, transparent, credible and accountable health insurance authority would be the most important prerequisite for a health insurance that might assure accessible and high quality provision of health care for those in need.

Most of the interview partners of the study team did not appear that enthusiastic with regard to health insurance. Most pointed at the difficulties in setting up a trustful fund after repeated bad experiences with funds in the health and other sectors. Many interviewees mentioned other priorities related to the basic needs that are still not satisfied for the majority of the population. A questionnaire given to opinion leaders in Yemen brought a slightly more positive picture. They are quite uniform in rejecting the current practices of cost-sharing for health in public facilities, and nearly all of them advocate a social health insurance system covering the whole family. Health insurance should be mandatory, organisation would be best at the national level, and management should rely on an autonomous health insurance organisation. 77% of the opinion leaders would like health insurance to start immediately or within the next two years.

6.8 Experiences in other countries

In neighbouring low-income countries, unacceptable high levels of out-of-pocket spending and shrinking government spending for health are as common as in Yemen. In Djibouti civil servants are covered and military and police have health benefit schemes. In Sudan, social health insurance covers 22% including civil servants, students, veterans and families of martyrs. In Pakistan there is no formal health insurance scheme. In the middle-income-countries of the region health care is financed through a mix of tax-based, social health insurance and self-paying schemes. In Morocco the social health insurance coverage reaches 17%, in Lebanon and in Egypt about half of the population, and in Jordan recent reforms have expanded coverage by social health insurance to 60%.

Experiences from other continents can be helpful for Yemen, too. South-east Asian experiences pinpoint to the need of special programs and government subsidies for contributions of the poor. Latin-American experiences indicate that targeted benefit packages are feasible even in precarious economic conditions and that it is essential to make sure that contributions for health insurance are channelled really to health benefits. Africa can give good examples of back-up strategies for emerging health insurance schemes in the form of centres of health insurance competence. Yemen does not stand alone attempting to introduce a national and social health insurance system. It can bank of the experiences of other countries, and should benefit from an appropriate networking with such experiences.

6.9 Preconditions for a national health insurance system in Yemen

Health insurance is not an easy concept, especially in the Moslem world. Awareness and understanding is not widespread. Motivation and mobilisation campaigns are needed to spread the basic ideas of a social health insurance and to stress linkage to the idea of solidarity shared by nearly all Arab people. Powerful decision-makers have to be convinced, too, and leadership is indispensable at various levels of policy decision-making. Social health insurance can survive only in close partnership and in a clear division of labour with the government, especially with the Ministry of Finance for funding and progressively taxing the healthy and the wealthy, and with the Ministry of

Health for stewardship, prevention of avoidable diseases and promotion through health education for all. In Yemen it might be difficult to regain trust of the public sector and of opinion makers. Funds for health were mismanaged and abused by corruption. Health insurance deductions from salaries did not give any return in form of health benefits. For regaining lost trust, one unrenounceable prerequisite seems to be an outstanding independent management that is entirely bound to the principles of transparency, credibility, and accountability. A strictly professional approach is as needed as a staff that is knowledgeable in all the many specialised domains of health insurance and dedicated to the basic ethics of public service in the public interest.

6.10 Towards a national health insurance system in Yemen

The following table confronts the main sectors of Yemeni workforce with health financing options.

<table>
<tr><td colspan="6">Optional components of a national health insurance system in Yemen</td></tr>
<tr><td rowspan="2">Health financing options
by
households' main employment sector</td><td rowspan="2">Workforce
(rough and rounded estimates)</td><td colspan="4">Health financing options</td></tr>
<tr><td>Payroll tax contribution insurance</td><td>Self-employed insurance</td><td>Community participation schemes</td><td>Tax-based public services</td></tr>
<tr><td>Government</td><td>420.000</td><td rowspan="6">37.5 %</td><td rowspan="6"></td><td rowspan="6"></td><td rowspan="6"></td></tr>
<tr><td>Military</td><td>350.000</td></tr>
<tr><td>Polices</td><td>150.000</td></tr>
<tr><td>Public companies</td><td>70.000</td></tr>
<tr><td>Mixed companies</td><td>10.000</td></tr>
<tr><td>Formal private companies</td><td>500.000</td></tr>
<tr><td>Better-off self-employed</td><td>500.000</td><td rowspan="3"></td><td>12.5 %</td><td>↑↑↑↑↑↑↑↑</td><td></td></tr>
<tr><td rowspan="2">Poor self-employed</td><td rowspan="2">1.000.000</td><td rowspan="2"></td><td>10 %
↓↓↓↓↓↓↓↓</td><td rowspan="2">50 %</td></tr>
<tr><td>Expansion strategy</td></tr>
<tr><td>Unemployed and poor</td><td>1.000.000</td><td></td><td></td><td></td></tr>
<tr><td>Households in Yemen</td><td>4.000.000</td><td>37.5 %</td><td>12.5 %</td><td>(~10 %)</td><td>50 %</td></tr>
<tr><td>Population in Yemen</td><td>22.000.000</td><td>37.5 %</td><td>12.5 %</td><td>(~10 %)</td><td>50 %</td></tr>
<tr><td colspan="6">Sources: own estimates and calculations</td></tr>
</table>

The tabled social health insurance law proposal could cover 1.5 million employees with pay-roll deducted contributions shared by employers and employees. For the better-off self-employed businessmen an appropriate scheme has to be developed, yet. For the at least 50% of the population that is poor, unemployed and underemployed, taxes and other government revenues have to be used. Community based health insurances will need re-insurance by the government, to cover more and more the poorer families, especially in rural areas. In view of this comprehensive vision three alternative options towards a national health insurance system in Yemen were designed, discussed and analysed: (a) a full speed and big-push option for the formal employment sectors, (b) incremental alternatives and (c) the building up of an essential institutional prerequisite for a rational and social national health insurance system.

6.11 Health insurance option A: Big push

The Deputy Minster of Civil Services and Insurances (MoCS&I) announced in a meeting with the study team that by July 2006 the time of health insurance will begin for all employees of the public sector. Planned salary increases for the civil sector offer a unique opportunity to start very soon with deducting health insurance contributions from the salaries. This reflects the idea of about three quarter of interviewed opinion leaders: health insurance should start very soon, and it should start in the public sector. If those private companies, which are legally obliged to contribute to pension schemes, would also be included, a total number of 1.5 million employees could be covered together with their families of approximately 7 members. This approach could benefit half of the population of Yemen.

Wage-related contributions of 6% (employers) and 5% (employees), as proposed in the social health insurance law, would generate 58 billion Yemeni Rial per year, if about 200,000 pensioners were also included. That would increase the current health spending in Yemen by 40%.

What can be bought by this money in the hands of a health insurance authority? A well appreciated health benefit package is provided by the Telecommunication Corporation to its employees and their families. If this benefit package would be provided for all 1.5 million enrolees, their families, and the pensioners, a deficit close to 50 billion YR per year would emerge. What can be done to reduce this deficit?

- Cost-sharing of patients would be difficult to maintain since health insurance wants to shift out-of-pocket spending into prepayment
- Reduced benefit packages are feasible and pay off, if treatment abroad would be excluded, especially. A “small for all” health insurance option would offer a considerably smaller benefit package that comes close to the current expenditure pattern in Yemen. This might be feasible in financial terms.
- Contribution rates can not be increased, since a 6%/5% share is already very high in the Arab context, and the salaries of workers and employees are really meagre.
- Employees without their families could benefit first, but this might be debatable according to Yemeni values.
- Chronic and catastrophic care could be provided by the government and not by health insurance, which would reduce drastically the deficit.
- Rational drug use has to be introduced anyway, i.e. a revolving and trustful drug fund has to be reinvented.
- Provider prices could be negotiated by the power of the economies of scale involved.
- Careful provider selection and control should accomplish the cost-containment strategy.

Furthermore, additional funds for health and health care have to be discovered and mobilised, for example

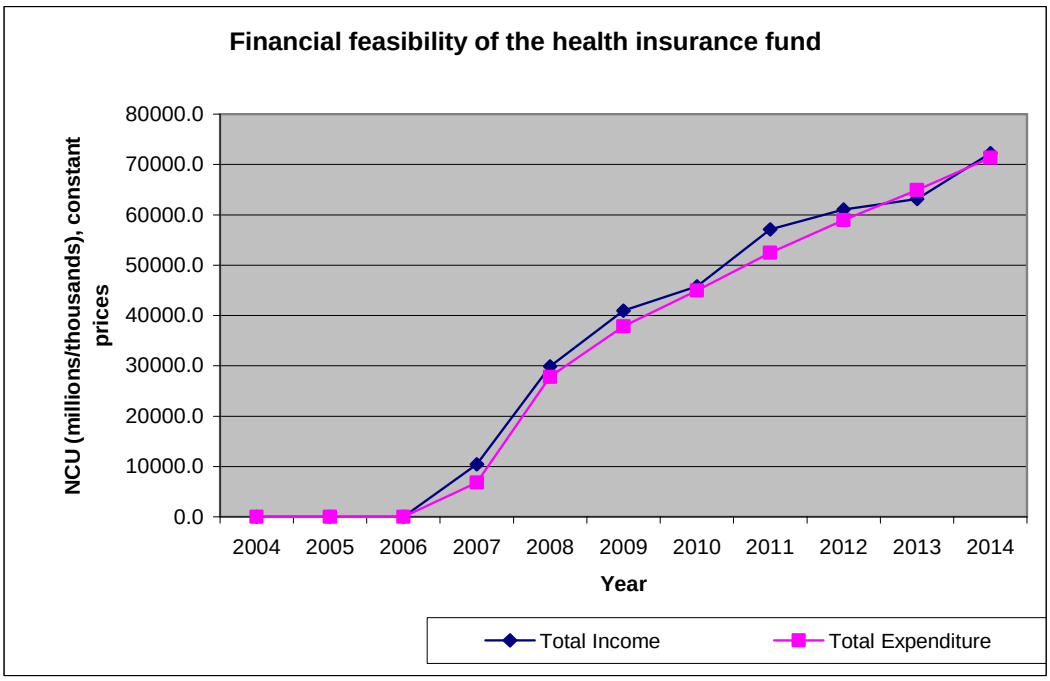
- Additional government funds for health provided to assure at least the coverage of the running costs of public facilities – a doubling of funds would be better and fair
- Earmarked “sin”-taxes and other taxes, e.g. on cigarettes, qat, big equipment, petrol
- Zakat funds and endowments for the benefit of the health of the poor and the vulnerable, to pay for health insurance contributions of those who are to be exempted from contributions
- Appropriate enforcement of existing tax laws and strengthening of progressive taxation.

In case of a clearly committed political willingness, the money-constraint of the big-push option for health insurance might be overcome. However, one of the essential prerequisites is even more difficult to implement: an autonomous and trustful health insurance authority. One option is to follow the pattern of the Social Development Fund or the Public Works Fund. In addition, the lack of sufficiently trained and experienced professionals is also a major constraint for implementing health insurance in a short term, and immediate capacity building and human resources development should accomplished by importing temporarily foreign experts. Some other obstacles remain: high quality providers to be contracted by health insurance are not available in many parts of the country, data and information on

patterns of risks and demands are not available, either. Currently, most of the essential prerequisites for health insurance are not met.

Nevertheless, the big-push strategy would be an excellent opportunity for the urgently needed radical improvement or even revolutionary change of the health system. If government or charitable funds would pay contributions for the poor and if a rational and national and not-corruptible health insurance authority would take the lead, then just the best providers could be contracted for cost-effective care for anybody in need. This could lead to a more efficient and effective health care delivery that is urgently deserved by Yemeni population. However, a "big-push" strategy towards a national health insurance system is reasonable but hardly feasible under the given conditions.

One of the sub-scenarios of the big-push strategy is mentioned explicitly because this is the only scenario that would not lead to financial deficits in the long run, as shown in the figure to follow.



Although eventually covering the whole population and requiring no subsidies, there are a number of caveats to this scenario: The benefit package that can be offered at a cost equivalent to current spending levels in the country as a whole means that benefits will be lower than and different to those that some employees in the formal sector are getting today. With the inclusion of the poorer and rural population, the benefits offered must take into account the overall health needs of the population, especially primary and preventive services as well as maternal and child health. Formal sector staff not wanting to forego some of the benefits they enjoy now (such as treatment abroad) would be able to buy supplementary private insurance. With contribution rates that undercut the amount that these employees are willing to pay and the inclusion of the self-employed and poor this may be attractive. Of course, a big caveat here is that the scenario uses low utilisation rates and may therefore not be realistic.

6.12 Health insurance option B: Incremental evolution

An incremental introduction or strengthening of health insurance can be done

- bottom-up by improving, harmonising and networking existing health benefit schemes, as they exist in public and private companies or as they are initiated by international donors in the form of community based health insurance schemes and/or

- top-down by supporting those public sub-sectors that are willing and ready to embark in social health insurance, as for example the military and the educational sector.

Concurrently, government must achieve a full cost-effective coverage of health services for all poor.

Military, police and security police with about half a million employees are ready and willing to have a health insurance scheme, since years. It is a good number for starting a reasonable pooling, needed for social health insurance, if – as declared – police and security police would have a joint venture with the army. Political willingness and a management structure supportive for a health insurance fund are given. All three sub-sectors have experiences with pension insurance funds. Based on their political power, all would avail of sufficient back-up funds and re-insurance by government. As a limiting factor appears the fact that engagement in health insurance is essentially oriented to finance expansions of the military and police hospitals, e.g. for getting an oncology department and for improving cardiology and other specialties not sufficiently available. Soldiers and policemen would not get any additional benefit since they receive – in principle – free health care for themselves and their families in the health facilities of their employers. Furthermore, they are exempted generally form cost-sharing and cost-recovery in public health facilities. Additional government subsidies for introducing health insurance for these groups would give further privileges for a privileged group. However, if military and police hospitals would fulfil the presidential order to waive cost-sharing for pregnant women and chronic ill people, and to exempt the poor from cost-sharing, that would provide many good reasons to get military health insurance started soon. Then, relevant experiences will derive from the military scheme that might enrich the discussion about a national health insurance system. The President himself could and should guarantee that this public sector would be increasingly beneficial for more and more poor people in need.

In the case of the Ministry of Education representing close to a quarter million teachers, the options are not as clear as with the public security sectors. However, backed by the stewardship of the President and the Prime Minister, the educational staff could be a good starter for social health insurance. Leadership and commitment exist at the high political level within the ministry. Undoubtedly, the scattered working places of the teachers, mainly outside the larger cities and even outside smaller towns, reduce the options to contract and control quality health care providers, for the time being. The implementation strategy must be gradual therefore: first in Sana'a, then in selected bigger cities, then in selected governorates. It would be difficult but with a good political and financial back-up it could be a good investment. A 'small-scale' national health insurance authority would have to support this social experiment. International donors are welcomed to join and to help during a decade. A centre for health insurance competence is needed for back-up and guidance. A health insurance supervisory agency and a re-insurance guarantee of the government are two essential prerequisites.

Networking, strengthening and expanding existing health benefit schemes of public and private companies is a third element of the incremental expansion strategy towards a national health insurance system. Many experiences are available, many more can be discovered and shall be analysed. There is such a rich potential available in Yemen, that it is astonishing, that it was not yet utilised before. Workers unions and employers associations are committed stakeholders. It has to be guaranteed, nevertheless, that they would not be deprived of their privileges by a national health insurance scheme. As stated above, it would produce deficits, to replicate their schemes at the national level. This is not the case with eventually emerging community based health insurances that deserve the full support of public services and public funds. International professionals and funds should be attracted to foster such schemes, including any kind of micro-insurances.

6.13 Alternative C: Work and network

There is a host of adverse circumstances against a national health insurance system in Yemen:

- A wide-spread mistrust with regard to public or publicly run funds
- No visible and strong political support and leadership in government and political parties
- Nearly insurmountable difficulties in covering the rural population in need

- The huge sector of poor, un(der)employed and self-employed at the margin of survival
- The fact that health insurance is rather a middle class topic
- The reduced scope and quality of health care offered in the country
- The absence of any quality management and control in the various sectors of health care
- The generalised commercialisation of public, private and informal health care
- The fleeing of Yemeni health care by seeking treatment abroad
- The priority needs of the health system for prevention, promotion and primary health care

It is not easy to overcome these deficiencies, bottlenecks and obstacles. It needs awareness campaigns, motivation and mobilisation measures, training, education and many promotional activities to justify a priority given for health insurance and to assure that a "new" social health insurance can be trusted in. This has to be based on facts and figures and on the selling of a good product that can be demonstrated as good or best practice. It requires reliable data and information on epidemiology, demand and supply of public, private and informal health care. It requires an effective and efficient supervision of health care in all Yemen and systems for appropriate licensing, accreditation and re-accreditation as well as penalty systems and its enforcement. It requires improvement of managerial qualifications and a performance oriented systems of incentives and disincentives. A training and capacity building offensive is urgently needed. All the many prerequisites of good management need strengthening – not just for introducing health insurance but in view of good governance in sustainable and credible institutions: money, mastermind, mechanics, motivation, mobilisation, manpower, measurement, monitoring and the many more "Ms" of good management. Health insurance would be only one of the beneficiaries of such a drive towards a modernised management, towards a good management culture.

6.14 An assessment of alternative options

Several preconditions are needed for starting or implementing the various alternatives and sub-alternatives. In the following table they are resumed and briefly assessed.

Assessment of alternatives					
Preconditions		Big push	Small for all	Incre-mental	Wait work
Money	Sufficient financial resources?	-	+	~/+	+
Mastermind	Leadership and willingness?	-	~	~/+	+
	Clear concept and idea?	+	~	+	+
	Powerful leaders back-up?	~	~	~/+	~
Mechanics	Appropriate management?	-	~		~
	Government back-up?	-	~	~	~
	Donors back-up?	-	~	~	~
	Sufficient anti-corruption control?	-	-	-	~
Markets	Sufficient high quality providers?	-	~	-	~
Manuals	Enforcement of laws and regulations?	~	~	~	+
Manpower	Sufficient qualified cadre?	-	~	-	~
Motivation	Knowledge, awareness, excitement?	-	~	~	~
	Consensus of stakeholders?	-	-	~	~
	Solidarity support for the poor?	-	+	-	+
	Trust?	-	-	-	-
Measurement	Sufficient data and information?	-	-	-	~
Summary assessment		-	~	~/+	+

It is advisable to start with the last mentioned alternative, especially with a Centre for Health Insurance Competence and to engage step by step in supporting incremental endeavours towards a national and social health insurance system in Yemen.

6.15 A think tank for social health insurance

A Centre for Health Insurance Competence (CHIC) will be helpful to support the creation of an improved management culture and the incremental health insurance implementation. Such a centre would have a series of tasks

- Discovery and further analysis of solidarity schemes, including the awarding of the best solidarity schemes, the replication of best practices and the consultation for existing and intended solidarity schemes in the context of a massive awareness campaign, that such schemes are needed for strengthening the social capital of Yemen that is so much needed for social and economic development
- Observation and analysis of company health insurances in the public and in the private sectors, including consultations and technical advice for such health insurances and a networking of such schemes into an association or federation of company schemes. The voluntary implementation of a re-insurance of company schemes could become an additional important task for enlarging the risk pool, reduce the individual company risk, and allow for stepwise extended benefit packages.
- Follow-up and guidance and consultancy of community based schemes, and implementation of re-insurance for community-based schemes. In this regard lobbying and awareness generation has to be done to improve the feasibility of community based schemes, especially those with indigenous roots in Yemen and "made in Yemen".
- Permanent advocacy and lobbying towards a national social health insurance system by proposal writings, research, communication and policy designs and a push for harmonisation of health insurance schemes and their integration into one national system, that safeguards a pluralistic multi-tier approach.
- Training in many forms: training of potential health insurance staff inside Yemen: information technology, English, health and health insurance related issues; training of potential leading health insurance staff outside Yemen: health financing, health policy, health insurance, etc.; repeated workshops with international specialised staff and consultants in Yemen; promotion of participation of "masterminds" in international seminaries and conferences; partnership with the Centre of Strategic Health Studies in Damascus and similar institutions elsewhere; et cetera.

GTZ has initiated and is supporting Centres for Health Insurance Competence in various countries. A networking and mutual learning of such centres would be very fruitful.

Committed local funding should demonstrate first and firmly the political willingness to engage in a social and national health insurance system in Yemen. Furthermore, the implementation of a national Centre of Health Insurance Competence could be supported by international agencies and mainly by the consortium on social protection in health built by GTZ, WHO and ILO in order to co-ordinate efforts and to join forces. For setting up a CHIC, a legal framework is needed that allows such a competence centre to open activities in the national market and to act as a franchising company. Technical support for creation and setting up a CHIC will initially require international expertise and equipment, but on the long run external consultancy is supposed to be withdrawn according to the growing capacity and autonomy of Yemenite stake-holders. If sustainability of the CHIC is guaranteed, the centre will be able to give long-term support for any emerging and performing health insurance scheme. This might be a crucial contribution to implement a national health insurance system in Yemen. Step by step, CHIC could be converted into a National Health Insurance Authority.

The CHIC could also take over the role of a think tank on the national level. Performance and scope of a competence centre are potentially unlimited, and further tasks might develop according to the implementation strategies and success. However, the study authors would like to stress the fact that a Centre for Health Insurance Competence will be a very important prerequisite for all health insurance options considered in our study. The priority activities will certainly have to be adapted to the ever chosen country strategy for implementing a national health insurance system. While the "Big push" and the incremental options will require both training and technical support, the "wait and work" strategy will focus more on capacity building. If the Yemen Government decides to make a brave step towards a national system that offers universal coverage from a very early stage, CHIC will be needed

for preparing and advising the technical staff of the one national insurance fund and for supporting the existing company as well as the emerging community based schemes. In the incremental strategy, a major task for the HIC will be the assessment and harmonisation of existing and/or emerging insurance schemes. And in the most cautious option, the CHIC will have to focus firstly on capacity building and assessment.

For the implementation of a Yemenite CHIC, several options are possible. However, if the MoPH&P will be the leading agent for setting up a national health insurance system, it should also be a major partner of the competence centre. As a viable strategy appears the creation of the CHIC as a joint venture of the MoPH&P and other concerned stakeholders, i.e. the Ministry of Finance, Ministry of Civil Services and Insurance, other Ministries, the health insurance fund or funds, representatives of company and community-based schemes, health care providers, academic staff, civil society organisations and specialised consultants. The CHIC could develop or be converted into a kind of think tank of an emerging Health Insurance Authority.

6.16 International support

International technical and financial support is needed and welcome in Yemen. Workshops, studies and consultancies, legal support, capacity building, designs of various options for social and national health insurance, national and international networking – all this deserves international cooperation. It is recommended that an advisory council or steering committee should be appointed *immediately* by the Prime Minister composed mainly of

- ministries, especially those responsible for finances, health, social affairs, civil services, endowment, and those that might adopt health insurance soon, e.g. defence, interior, education,
- solidarity schemes, health insurance projects, employers' and employees' associations or unions, civil society organisations, universities, women organisations and other outstanding experts, partners and stakeholders, including Al-Shura Council, parliament and parties.

This Council has the following objectives:

- to develop, based on the GTZ-WHO-ILO study, a policy paper on social health insurance
- to provide a policy forum on all related aspects, including on the redrafting of law proposals
- to mobilize necessary human and financial resources for implementing social health insurance
- to advise the preparation and implementation of social health insurances
- to carry out a social marketing of the social health insurance program.

This council will be converted later on into a permanent advisory board of the national health insurance authority.

A technical secretariat of the steering committee shall be put in place *immediately* by reassigning local and international professionals and it will be technically supported by WHO and GTZ offices in Yemen. As soon as possible, an independent and autonomous centre for health insurance competence should be build up with (a) a presidential or cabinet decree for instituting it, (b) a yearly budget of 400 million YR given by the Republic of Yemen, and (c) with additional international support, e.g. from World Bank funds. This Centre shall be converted step by step into a national health insurance authority that replicates the good experiences of the Social Development Fund and adapts them to an independent, credible, accountable and transparent public non-profit institution for social health insurance. This authority will guide the incremental approaches towards social and national health insurance in Yemen.

6.17 Outlook

In some countries it took a long time to cover all population with a mandatory social health insurance. Some developing countries – even poor ones – did it relatively fast. Yemen will not need decades to accommodate fairness of health financing with good health care for all. If there is a clearly increasing political willingness and commitment for a social and national health insurance system in Yemen and

if international technical support could be mobilised, then Yemen could offer all its citizens in a foreseeable future good health care in case of need and not only according to their ability to pay. This is, what social health insurance intends to achieve.

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Annex 1 Comments on the social health insurance law proposal

Republic of Yemen **Social Health Insurance law (Final draft)**	**Comments** [23] **Social Health Insurance law (Final draft)**
Article (1) This Law is nominated (Social Health Insurance Law)	**Additional article:** In the spirit of national solidarity and for the mutual benefit of all citizens the main aim of this law to reduce the high burden of out-of-pocket spending in case of diseases, especially for the poor and the vulnerable parts of population. Social health insurance intends to contribute to a sustainable financing of a high quality of health care for all and everybody. Each member of our Yemeni society shall get good health care according to need and not according to capacity to pay. Pre-payments for health care will substitute cost-sharing in case of illness.
Article (2) Definitions **Republic:** Republic of Yemen **Ministry:** Ministry of public Health and population **Minister:** Minister of public Health and population **Law:** Law of social Health Insurance **Board:** Board of Health Insurance Organization **Organization:** Health Insurance Organization **Chief of the Board**: . The Minister of public Health and Population, the chief of the board of Health Insurance Organization **Employer:** Administrative system of the government and units of both public and mixed sectors also any person or representative recruit a worker or more for a wage. **Insured:** Employee or worker or beneficiary benefiting from Health Insurance system paying the contributions stipulated in the social Health Insurance **Employee:** The person recruited in a job to do any intellectual, professional or technical or other works, the job which is approved in the balance of the government , public sector or mixed sector. **Labour:** Any person male or female working at a self-employer under his supervision and administration for a wage. **Pensioner:** Retired person having a pension according to social security laws and pension laws. **Contributions:** Premiums of both employer and employees stipulated in the articles of this law. Whole wage**:** The wage of the insured considered as the basis upon which the percentage of subscriptions are calculated. All incentives and benefits are taken in consideration. **Employment injury:** Injury with one of the occupational diseases listed in the table of the occupational diseases annexed to the executive bylaw of this law, all injuries	**OK**

[23] The modification of the law and its fine-tuning according to the recommendations of the study on a national health insurance system still needs quite some consultations with the advisory board that was recommended. All stakeholders shall be included as well as representatives of the civil society.

Republic of Yemen **Social Health Insurance law (Final draft)**	**Comments** [23] **Social Health Insurance law (Final draft)**
happening during work and due to it including related road injuries also injuries resulting from stress and exhaustion according to conditions and rules issued from the Minister of public Health and population. **Injured insured:** The insured covered by employment injury insurance and suffered from the injury. **Re-Suffering:** The injured insured complaining from the same employment injury after returning back to work approved by the medical authority based on medical data. **Sick person:** Who injured by a sickness or an injury which is not employment injury.	
Article (3) A system of social Health Insurance is instituted, it includes: (A) Sickness Insurance (B) Employment Injuries Insurance The system according to the stipulations of this law is compulsory.	**Replacement**: A system of social health insurance is instituted. It will cover sickness insurance first and might expand later on into work injuries insurance, according to decision of the cabinet. It will design, develop, test, recognize, support and step-by-step harmonize all health insurance endeavours of public and private agencies and companies, of communities, for the self-employed, the unemployed and for those who can not afford paying insurance contributions by themselves. For the employees of the formal public and private employment sectors membership will be compulsory. For other sectors of society it will be decided by board decision, if membership is compulsory or voluntary.
Article (4) The stipulations of this law covers 1- Workers covered by the law No. (19) for the year 1991 concerning civil services. 2- Workers covered by the labour law No. *(5)* for the year *1995* and it's amendments. Keeping the stipulations of the international agreements, approved by the republic active, foreigners covered by labour law, to be covered by this law, they must have a contract not less than one year and the same situation is adopted by their countries 3- Any other sectors, the Council of Ministers approve their coverage by this law who are not covered by the stipulations of the two laws mentioned in items (1) and (2) of this article. 4- Pensioners who retired according to civil law. *5*- The rest of republic citizens who approves the council of ministers to be covered by this law.	**To be added:** Family members of the insured will receive the same benefits stipulated by the law. Family members include wife/husband/partner and children below legal age. For fathers, mothers and other family members living in the household of the insured special arrangements will be developed.
Article (5) The stipulations of this law covers who are mentioned in article (4), gradually, sectorially or geographically.	**OK**
Article (6) Exemption from the stipulations of article (4) of this law, employment injuries insurance covers workers who are less than 18 years of age.	**OK**
Article (7) The provided services of health insurance to insured includes the services of prevention, treatment and rehabilitation with their different levels and the medical investigations needed for them as	**To be added**: A comprehensive and cost-effective benefit package shall be given. Details of the benefit package will be developed and tested based on actuarial

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what specified in the executive bylaw of this law.	studies, the availability of providers, as well as on negotiations for public subsidies to be given in cash or kind by the government or public health facilities. Prevention and basic primary health care for all citizens will be the continued responsibility of the Ministry of Public Health and Population until a Health Insurance Authority can take over all health care. It will be decided later, if sick-leave-payment and related benefits shall be included and when this will start.
Book Two Sickness Insurance **Section one** **Financing and scope of implementation**	
Article (8) Sickness Insurance is financed from these resources	
First**:** Monthly contributions which include (A) Contribution of the employer constituting 6% of insured wages covered by stipulations of this law according to iterns (l),(2) of article(4)of this law (B) Contribution of the government constituting 6% of the pension for the pensioners retired according to item (4) of article (4) of this law. (C) Contribution of the insured constituted of: (1) *5%* of the wages for those covered according to the items (1) , (2) of the article (4) of this law (2) *5%* of the pension for those retired according to item (4) of the article (4) of this law.	**To be added**: (D) Basis, size and periodicity of contributions of other population groups to be included in social health insurance will be determined in the process of developing and testing appropriate health insurance schemes for them
Second**:** Co-payments of the insured (1) Co-payment of the insured by third of the price of drugs outside hospitals except for chronic diseases which decided by a decree from the Minister of Public Health and population. (2) Co-payment of the insured from the cost of service outside the hospital by a percent not exceeding the third of the price of the service approved by the organization or third of it's cost, which is possible and the Minister of Health and populations issues a decree deciding the value of this, co-payment and it's conditions according to a proposal from chairman of the organization.	**Replacement**: Co-payments will be charged only to avoid moral hazard. Its amounts will be decided during the implementation process. For one serious illness episode co-payment should not exceed one monthly per capita income of the insured
Third**:** Other revenues: Revenue of a cigarette tax equals to *(5* Rials) on each 20 cigarettes, local or foreign, soled in the local market. This tax is collected through a decree from the Minister of finance after coordination with the Minister of public Health and population.	**To be added**: Further revenues from taxes on qat and other consumer goods or commodities will be negotiated. Raising additional funds for paying the contributions of the poor and vulnerable from Zakat and Endowment funds will be strongly advocated and partners linked to these sectors will be

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	invited to participate in the spirit of solidarity for all.
Fourth**:** The yield of investment of the above mentioned resources	**To be added**: The principle of collective equivalence should prevail. At least 90% of the regular revenues should be spend for health benefits of the insured.
Article (9) The Council of Ministers, by a proposal from the Minister of Public Health and population, may extend the coverage according to article (4) by adding new sectors and deciding the value of contributions and co-payments and the sponsors by not more than double of values decided in this law.	**To be deleted**: 11 last words of article
Article (10) The stipulations of this book cover the insured gradually according to article (4) of this law by a decree from the Minister of public Health and population after presenting to the Council of Ministers	**To be added after MoPH&P**: or other stakeholders
Article (11) The Minister of Public Health and population may issue a decree to implement the stipulations of this insurance on wife of the died pensioner (the widow) after presenting to the council of Ministers and coordination with the Minister of Insurance. This decree states the conditions and situations of benefiting by this insurance and the percentage of contribution	**To be added after MoPH&P**: or other stakeholders
Article (12) Health Insurance organization is responsible for providing health insurance services stipulated in this law, through the providers it decides, inside or outside it's facilities and according to the levels of medical care and the rules issued by a decree from the Minister of Public Health and Population.	**To be modified**: The Health Insurance organization is responsible for contracting the best cost-effective and high-quality health services available in public, private or mixed sectors of providers. Quality assurance and cost-containment programmes will be a prerequisite for contracting health services.
Article (13) The coverage by this insurance is stopped through these situations (1) working period of the insured by an employer not covered by this insurance. (2) periods outside the country for any reason. (3) period of special leaves, educational leaves, scientific missions, which are used by the insured outside the country. (4) conditions of pension stopping for the widow.	**To be added**: (5) Coverage can be prolonged by voluntary contributions to be calculated.
Section Two Services of Health Insurance provided to Insured	
Article (14) Services of health Insurance provided to insured means the preventive, treatment , rehabilitation and medical investigation services as specified in the executive bylaw of the law and specially the following services: (1) Medical services provided by the general practitioner. (2) Medical services at the level of the specialist	**To be deleted**: Already contained in article (7)

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including dental specialist. (3) Treatment and inpatient care of hospital , chronic disease institution or specialized centre. (4) Surgical operations and other kinds of treatment as needed. *(5)* x-ray and lab investigations and the other medical investigations or alike (6) Diagnostic and treatment investigations and alike. (7) Drug dispensary needed in all cases mentioned above. (8) Care *for* the insured female during pregnancy and delivery (9) Provision of the rehabilitation services , appliances and prosthesis according to the conditions and situations decided by a decree from the Minister of public Health and population.	
Article (15) Health Insurance organization takes the responsibility of treating the insured and caring for them medically in the providing facilities which specified for them by the organization and it is not accepted to provide that treatment or medical care in clinics or chronic disease institutions or hospitals or specialized centers except under special agreements activated for that purpose, specifying the minimum standard for the levels of medical care and it's price and it is not accepted for the standard of the medical services , in this case , to be less than the minimum standard issued in the decree of the Minister of public Health and population.	**To be deleted**: Already contained in article (12)
Book Three **Employment Injuries Insurance** **Financing, Health Insurance services provided and executive stipulations**	
Article (16) Employment Injuries Insurance is financed by (1) Monthly contributions for which the employer is held responsible according to a percent of 2% of the wages of insured referred to them by article (4) of this law. (2) Yield of investment of contributions referred to. Employers are exempted from contributions of insured referred to them in article (6) of this law if they are ruled out of wages.	**To be postponed**
Article (17) It is meant by the health insurance services provided to who are covered by employment injuries insurance, all what is mentioned in article (14) of this law and it's executive bylaw.	**To be postponed**
Article (18) Employer is held responsible , in case of employment injury, to transport the insured to	**To be postponed**

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treatment facilities specified by the health insurance organization and a decree from the Minister of public Health and population is issued in cooperation with the Minister of Insurance deciding the executive stipulations of employment injuries insurance concerning procedures of treatment , medical care and cases of re-suffering or complications resulting from the employment injury and settlement the cases of permanent disability.	
Article (19) It is considered as an employment injury each case of re-suffering *from* the same previous employment injury or a complication resulting from it.	**To be postponed**
Article (20) It is decided by a decree from the Minister of public Health and population in cooperation with the Minister of Insurance , the procedures should be taken by the insured in case of requesting to re-evaluate the decision of treatment provider by ending the treatment and returning back to work or by denying the affection with an occupational disease or unsettlement of a disability or it's estimated percent.	**To be postponed**
Article (21) The conditions and situations of considering the injury resulting from stress or exhaustion from work an employment injury are issued by a decree from the Minister of public Health and population in cooperation with the Minister of Insurance	**To be postponed**
Book Four **Institution of a fund for sickness Insurance and Employment Injuries Insurance. It's Financing, Administration, Duties and Responsibilities**	
Article (22) A fund is instituted for financing services of health insurance and all it's affairs and specially fulfilling these requirements (1) Considering the principal standards of total quality in doing contracts with providers, achieving the economic performance in provision of service and supervising it's accomplishment. (2) Putting the financial basics for fund expenditure. (3)Financial control and complete follow up for all items of service provision.	**Title to be modified**: "and employment injuries insurance" to be deleted **Replacement of all articles**: An independent health insurance authority will be designed and instituted later. Preparation for this will be done by a Centre for Health Insurance Competence and its multi-sectoral advisory council to be build up by a Cabinet decree. The design should follow the example of the

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Article (23) The fund is administered by a general organization called Health Insurance Organization , has it's own entity and it's chief of board is the Minister of public Health and population assisting him a chairman and a vice —chairman, it has it's own balance which is a part of the general balance of the state. The members of the board, it's duties and responsibilities are decided by a presidential decree by the presentation of the Minister of public Health and population.	Social Development Fund. It has to be an autonomous institute with highest credibility, transparency and accountability under the rule of a performance oriented incentive and penalty system. It shall be the best example of good governance and stewardship in the Republic of Yemen. International advise, cooperation and auditing is welcome.
Article (24) The Health Insurance Organization is responsible for the treatment of the injured or the sick insured and carrying medically for them till cured or settled by a disability. The organization have the right to observe the injured or sick insured in any site to be under treatment. It is meant by treatment and medical care what is stipulated in the article (14) of this law.	
Article (25) The fund's money are composed of: (1) Revenues stipulated in this law (2) Subsidies , donations and grants which the board of the fund decides to accept. (3) Yield of investment the fund's money. (4) Other revenues resulting from fund activities.	
Article (26) By a decree from the Council of Ministers, by a presentation from the Minister of Public Health and Population, the value of contributions and co-payments can be changed according to the result of investigating the financial situation of the fund every five years.	
Article (27) In case of the presence of surplus in fund's money ,this surplus is kept in a special account and it's expenditure is only by approval of the board for these objectives specially 1- Upgrading the level of health insurance services provided to the insured. 2- Expansion of coverage in the health insurance system stipulated upon in this law 3- Financing building and investment programs, training and research programs and different systems related to organization activities	
Book Five **General stipulations**	
Article (28) The services of health insurance to injured or sick insured are provided inside the country till to be cured or a disability is settled. The organization and it's branches in governorates has the right to observe the injured or sick insured in any place to be treated . The level of health insurance services shall not be lower than the minimum level mentioned in the Minister of Public Health and Population issue . The	**To be modified**: The word "minimum" shall be replaced by "cost-effective"

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injured or sick insured can ask for medical care in a higher level than the insurance level decided and paying the extra cost out of his pocket.	
Article (29) The provider is held responsible to inform both the insured and the employer at the end of treatment of the insured injured and the period of sick leave documented by the forms approved from the board by an issue according to the conditions and situations decided by that issue . The period of sick leave is compulsory to the employer.	**OK**
Article (30) The employer is held responsible to do a pre-employment medical examination for candidates supposed to be employed, this examination is done by the organization or it's branches in governorates according to the conditions situations and stipulations of medical fitness issued by a decree from the Minister of Public Health and Population in cooperation with the Minister of Insurance. The cost of this examination is paid according to it's actual cost by the price list of the organization.	**To be postponed**
Article (31) The employer is held responsible to do a periodic medical examination for the employees who are exposed to occupational hazards and may be injured by any of the occupational diseases listed upon in table (1) of the occupational diseases, stipulated in the executive bylaw of this law. This examination is done by the organization or it's branches in governorates according to it's actual cost by the price list of the organization The Minister of public Health and population issues a decree of the conditions and situations of performing these examinations. The employer is held responsible to offer all the documents, information and facilities needed to perform these examinations in it's timing. The organization in doing this examination is held responsible to inform all concerned authorities with discovered occupational diseases among workers and the resulted deaths	**To be postponed**
Article (32) Disabled cases are documented by a certificate from the organization, it's items are decided by a decree from the Minister of public Health and population in coordination with the Minister of Insurance. The medical committees specified by the organization issue the reports verifying residual disability occurring to insured in cases of employment injury and sickness, it's date and percentage. The medical committees are held responsible in cases of employment injury and sickness, to inform social insurance authority and the insured with the residual disability and it's percent . The insured may ask for re-evaluation of the medical decision according to article (20) of this law.	**OK**

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Article (33) In case of estimating the degree of residual disability from employment injury , the rules and regulations mentioned in table (2) concerning estimation the degrees of residual disability of employment injury shall be adopted as mentioned in details in executive by law of this law, also to take into consideration, in case of estimating the residual permanent disability for cases of sickness, to document whether the case is complete or partial disability.	**To be postponed**
Article (34) Contributions revenued to the organization and it's branches are exempted, according to the stipulations of this law, from all kinds of taxes, also all documents, forms, cards, contracts, certificates, printers and all other writable works needed to implement this law, are exempted from any taxes.	**OK**
Article (35) All kinds of finance of the organization and it's branches, fixed or transferred and all it's investment activities, are exempted from all kinds of taxes, also, all the activities of the organization and it's branches are exempted from being covered by stipulations of laws governing supervision and control over insurance institutions.	**OK**
Article (36) Exempted from court fees all levels of justice claims related to implementing stipulations of this law either from the side of organization and it's broaches or from insured.	**OK**
Article (37) Staff of the organization or it's branches, who are directed to investigate it's activities, have the right to enter work places during regular work times, to do the needed investigations, review the documents, books, work papers, writings, files and documents needed to implement the stipulations of this law. A decree from the Minister of public Health and population in cooperation with the Minister of justice, is issued concerning the conditions, situations and authorities of this mission	**To be postponed**
Article (38) Governmental and administrative facilities have to supply the organization and it's branches with needed data about the number of those who are covered by stipulations of this law, their geographical distribution, situations, professions and all what is needed to implement it's activities	**OK**
Article (39) All finance revenued to the organization or it's branches according to stipulations of this law have the priority over all other kinds of finance either transferred or fixed and revenued directly after justice fees.	**OK**

Annex 2 Recommendations of members of Al-Shura Council, Parliament, Political Parties and Ministry of Public Health and Population regarding the introduction of a national health insurance system in Yemen – 3rd October 2005

Towards a national health insurance system in Yemen
Political summary of findings and recommendations

1. A national health insurance system should be supported. This is the result of the independent expert study contracted to a German Consultancy firm (GTZ) in cooperation with World Health Organization (WHO) and International Labour Office (ILO). Real actions and allocations for building up health insurance should be undertaken now, e.g. for setting up a centre for health insurance competence.

2. Government health expenditure declined during the last years in comparison to GDP and overall government expenditure. Therefore additional support by the Ministry of Finance has to be given for attacking avoidable and infectious diseases (e.g. malaria, ARI, diarrhoea), supporting primary health care and strengthening prevention and health promotion. At least an 100% increase is needed or even significantly more. The role of the Ministry of Finance is very important for improving the health system in Yemen and for making it effective and efficient and to overcome the difficulties of the heavy underfunding of current costs of public health facilities and to improve women's access to health services, especially. The MoF should facilitate the restructuring of health care by supporting health insurance from its beginning.

3. Regarding health insurance, a step by step approach is recommended starting with the government sector, either (a) with the security sector (military, police, and security police) and the educational sector, or (b) with all government sectors in Sana'a and Aden. Furthermore (c) the existing health benefit schemes of private and public companies should be networked.

4. The health insurance law proposal should be approved with some minor modifications.

5. An independent and autonomous centre for health insurance competence should be build up with (a) a cabinet decree for instituting it, (b) a yearly budget of 200 million YR given by the Republic of Yemen, and (c) with additional international support from the World Bank funds.

6. Step by step a national health insurance authority has to be build up that replicates the good experiences of the Social Development Fund and adapt them to an independent, credible, accountable and transparent Health Insurance Authority. This authority will guide the incremental approach towards social and national health insurance in Yemen.

7. At the beginning this centre will (a) strengthen all health insurance endeavours in Yemen, (b) discover, analyse and support existing health insurances in the private and public sectors, (c) contract studies on the situation of health and health care, accreditation of providers, and other relevant topics for supporting the step by step introduction of health insurance, and especially (d) design and conduct training on health financing, health economics, health management and health insurance management together with other partners (e.g. University of Sana'a, CSHS in Syria). (e) Public awareness campaigns and health education will be supported, too.

8. A Fatwa for supporting health insurance for the poor and the needy should be advocated for, to be able to use in the future some Zakat and Endowment funds to support health and health care. A nationwide campaign for health insurance should disseminate the basic ideas of the importance of health insurance and about health and education as essential drivers for macroeconomic and social development.

9. In the context of introducing health insurance a number of laws and decrees have to be reviewed and revised, especially the decrees on cost-sharing for health care in public facilities, the 1% salary deduction for work injuries, and various tax laws.

10. Setting up of social health insurance is a social process. All stakeholders and the many experts on public health and health insurance should be involved, especially the Al-Shura Council, members of the Parliament, political parties and

- solidarity schemes, health insurance projects, employers' and employees' associations or unions, civil society organisations, universities, women organisations and other outstanding experts, partners and stakeholders supported by
- ministries, especially those responsible for finances, health, social affairs, civil services, endowment, and those that might adopt health insurance soon, e.g. defence, interior, education.

They should form an advisory board of a Centre for Health Insurance Competence.

Sana'a, 3rd October 2005

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