

- A political workshop for Al-Shura Council, Parliamentarians and political parties on October 3, 2005
- A high ranking meeting with the most important members of the Cabinet (planned).

The workshops were intended mainly to achieve gradually a consensus of the team and all relevant stakeholders and partners on possible futures of health insurance in Yemen.

2.5 Other methods

Many visits of public and private health care providers and field trips to the Governorates of Aden, Amran, Dhahran and Taiz were done together with Yemeni professionals and partners.

2.6 Comparative assessment

All these sources of information were important to shape the understanding of international and national study partners. Yet, even with all these sources of information main uncertainties remain as well as many doubts regarding the value of the evidences gathered. It seems to be very difficult to get reliable and valid and updated statistical data. It was tremendously difficult to find such simple data as a listing of all diagnoses in one hospital that matches with the total number of cases in a given period of time. Furthermore, many statistics show an excessively high proportion of round numbers, indicating that the figures were not taken seriously or were invented.⁴ It was nearly impossible to find updated data on the employment situation in Yemen as well as on the number of employees in government service. Therefore educated guesses had to be used where data were missing or seemed to be wrong or invented. Uncertainties prevail. Health systems research needs strengthening and empowerment in Yemen.

3. Baseline assessment of context

3.1 Society and economy

3.1.1 Basic features

After the unification of two Yemeni states in 1990, after a civil war in 1994 and after difficult economic adjustment policies Yemen is now enjoying peace, democracy and a free market economy. Even before, Yemen experienced noticeable improvements, as shown in the following table.

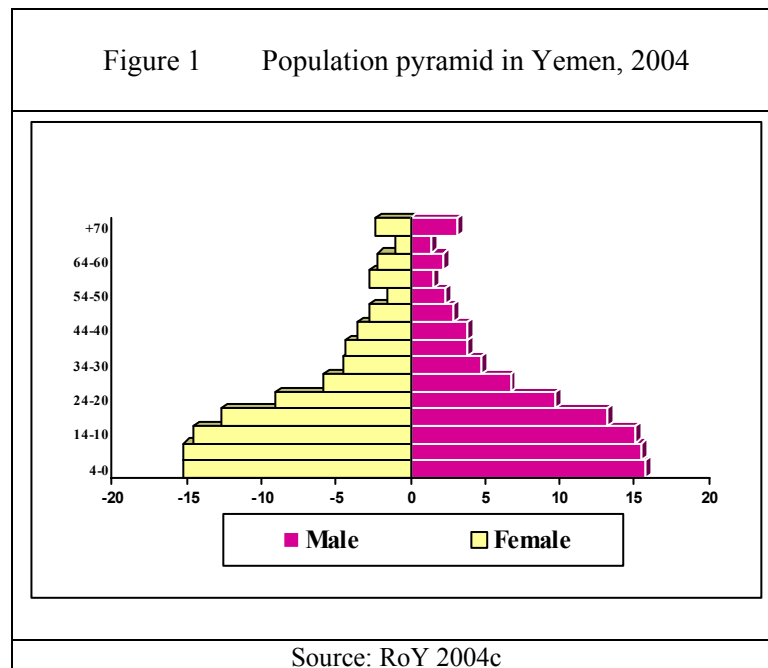
Year	1980es	2003	Change (%)
Health status			
Access to basic health care	30 % (1986)	42 %	40
Life expectancy at birth in years	46 years (1986)	59	28
Infant mortality rate per 1000 live births	130 (1989/90)	82	37
Births attended by trained personnel	12% (1984)	27 %	125
Maternal mortality ratio (per 100000)	1000 (1987)	570	43

Sources: World Bank 1990, WHO 2005a, World Bank 2005a, World Bank 2005b, Fairbank 2005, MoPH&P 2005a

⁴ For instance, in the statistical data about outpatient treatment in Al-Thawra Hospital in 2004, almost half of the monthly production numbers (46,57 %) are multiples of 10, more than one third (35,29 %) end with round 50es or 100s, and a quarter (24,75 %) of all statistical numbers end with even hundreds (RoY 2005, p. 14). See chapter 18 of Part 3 of our study reports.

Still, there are at least three basic features that characterize the current living conditions of close to 20 million Yemeni people:

- Most of the population lives in scattered settlements with fewer than 500 people far away from the coverage of public services. (RoY 2004b)
- Two thirds of Yemeni population can not afford buying sufficient food to meet their basic nutritional requirements. (UNDP 2005)
- The population growth is proceeding with more than 3% per year and enriches the country with a very young population as can be seen in the next figure.



The discovery of oil resources and currently rising oil prices seem to be a good opportunity to solve these problems. Nevertheless, oil production is already falling and oil reserves are dwindling. A sustainable solution of the most pressing development problems needs more than oil and remittances from Yemeni workers abroad.

3.1.2 Cultural issues

Islam has a long tradition in Yemen where 98% of the population are Moslems and religion plays an important role in the society. While religious differences are not openly acknowledged as divisive, they exist between regions and population groups without having major impact on social and political life. In various parts of the country, where cultural and religious traditions are still more alive than in the big cities, people are different in how they emphasise social protection. In some areas more than in others, the concept of insurance is still linked to “*haram*” what means something forbidden according to the Koran. Thus, the idea of prepayment and insurance should be applied in a different way, for instance in the sense that people put some money in the paradise through a current account dedicated to finance medical aid for the poor and indigenus. This might help to make Yemeni aware about the conceptual relationship of health insurance to traditional, religion-based mutual-aid and self-help initiatives.

On the one hand, circumcision of male children is prescribed by the Koran and very common in Yemen, and on the other hand, female genital mutilation is also still present in various parts of the country.⁵ This is relevant for the health care sector because it represents an additional source of income

⁵ Nearly two out of every five Yemeni women declare to have been undergone female circumcision; this proportion decreases according to the level of education of the women (41,7% of illiterate and 24,2% of women with higher education) PAFAM 2004, p. 150).

for health care providers, and some providers seem to generate relevant income by offering this service in a health unit or centre. Altogether, most Yemenis tend to perceive health care as a market product they have to pay for. This attitude has been fostered by the implementation of cost-sharing in the early 1990ies. The idea of risk sharing and pre-payment, two core elements of health insurance, is widely unknown or hardly understood by the majority. Even for a series of stakeholders in the country, health insurance means first of all building health care facilities and mainly hospitals, and not a financing mechanism for the costs of medical care.

Historically, communities have participated in financing health care in Yemen, with the participation based on Islamic tradition in the form of the religious tax called *Zakat*. This tradition derived from Koranic teachings, obliges Moslems to make charitable donations once a year for the benefit of the poor. *Zakat* is re-distributional, since resources are transferred from the wealthy to the poor, and when linked to health financing has the potential to have positive equity impacts; health care that is subsidised by *Zakat* becomes more affordable and therefore more accessible for the poor. People take *zakat* seriously, but they are reluctant to pay to public, Government-run organisations because they doubt if the donated money really assures them a place in heaven when it is misused. According to the Minister of Social Affairs and Labour, the 2,5 % of income Muslims have to give for *zakat* would amount easily to 70 – 100 billion YR per year if they were collected by a trustable institution.⁶

Beside *zakat*, the Islamic tradition in Yemen has created and fostered a series of additional solidarity practices and experiences that are worth to be taken into account in the design and performance of a national health insurance system. The following table gives an overview of indigenous solidarity practices and terms that can be identified in Yemen:⁷

Table 7 Solidarity practices in Yemen	
<ul style="list-style-type: none"> ● (<i>Mubadara</i>) community development initiative ● (<i>Gharrama</i>) Community Sharing during conflicts ● (<i>Kafalah</i>) Long-term or short-term guarantee or security (paying charges of poor families, students, prisoners, orphans,⁸ etc. by an individual, a welfare institution, etc. ● (<i>Sadaka Gariah</i>) Philanthropy - specially for community facilities ● (<i>Awkaf</i>) Endowments ● (<i>Zakah</i>) Alms especially the one that does not go through Government's channels ● (<i>Dain/ Salaf</i>) Credit with no interest ● (<i>Ifa'a</i>) Exemption ● (<i>Muqayadhah</i>) Accepting alternatives such as goods, crops, etc. □ (<i>Sandouq</i>) Community Welfare Fund, Taxi drivers partial insurance, etc ● (<i>Tasgeel</i>) Assisting linking the poor, disabled, specific patients, etc to the Government programs ● (<i>Pharmacy, Ma'aradh, or Dukan Kheiry</i>) (Welfare grocery, welfare ceremony, etc) Cost Sharing from a welfare point of view ● (<i>Musahama</i>) Contribution in cash, materials or kind for a community service ● (<i>Hamla Khairiah</i>) Welfare fundraising campaigns ● etc. 	<p>مبادرة غرامة كفالة</p> <p>صدقة جارية أوقاف الزكاة</p> <p>(التي ليست عبر الحكومة) الدين (سلف بدون %) إعفاء مقايضة</p> <p>صندوق خيري</p> <p>تسجيل المحتاجين مع برامج دكان ، المساعدة الحكومية صيدلية او معرض خيري مساهمة حملة إلخ</p>
Source: Oxfam	

⁶ Oral communication of the Minister during a meeting on August 3rd 2005.

⁷ According to information and data raised by Oxfam in the course of the preparation of the implementation of Community Health Insurances Systems in Yemen (Bagash 2005).

⁸ The social neediness of orphans reflected in several welfare programs in Yemen is not surprising because the proportion of children under 5 with one or both natural parents dead is 4.8% (range 2.3% - 8.1%), and additionally 0.9% are not living with a natural parent (range 0.5% - 1.8%) (UNICEF 2003, p. 12).

With regard to specific health-related tasks, the following local solidarity schemes exist in Yemen:

Table 8 Solidarity schemes in Yemen	
<ul style="list-style-type: none"> ● Philanthropy Pharmacy □ Community Health Centre / Welfare Hospitals or Cooperative Units (Combination of resources) ● Credit ● Active cost-sharing or private work in the same public health centre (<i>very deficient exemption system</i>) 	<p style="text-align: right;">صيدلية الصدقة الجارية مركز صحي مجتمعي / مستشفى خيري أو وحدات تعاونية (تتعدد فيها طرق الدفع و المصادر) الدفع الأجل تفعيل لنظام المشاركة في الكلفة مع إضافة خدمات بنظام القطاع الخاص في نفس المرفق العام (الإعفاء)</p>
Source: Oxfam	

In spite of the long tradition and culture of solidarity schemes in Yemen, knowledge about their existence, performance and scope is scarce. The detection of such systems where certain persons or groups practice mutual aid and support turned out to be a slow and step by step process. That shows that on the political and decision-maker level, very little is known about how people in the country tackle with an insufficient social protection. During the study, a considerable number of solidarity schemes could be revealed all over the country. The survey with opinion leaders discovered quite a number of schemes that were not known before. Most of them lack sufficient resources as well as basic administration and management capacities. However, many national social security systems started to develop from small-scale informal self-help organisations (Bärnighausen 2002, p. 1560f). This might also be one viable approach in Yemen where trust in government-run initiatives is severely damaged and where people have confidence in small and well-known social groups.

According to statements from citizens, however, the current social and economic development affects the social cohesion and confidence in Yemen. People feel that businessmen and local merchants are less supportive and betraying traditional solidarity. This makes it difficult to create local committees or to raise money for operation and maintenance of community projects. Rapid urbanisation has put traditional sources of support and stability under a great deal of stress. In recent years, NGOs have been growing rapidly in number, reaching more than 2.400 by 1999. The NGOs, which are mainly charitable, have been established in the major cities.

Illiteracy is still a major facet of Yemen although recently a strong expansion of school facilities increased the supply side. (Habtoor 2002a) But on the demand side, cultural attitudes and the geographical dispersion of the population hinder a better enrolment and education. This is a very negative production factor for health, since a healthy lifestyle – in spite of all problems of poverty – depends very much on the level of awareness and literacy of mothers and girls, especially. Education is one of the most essential production factors for health.

Polygamy is a persisting condition in Yemen where 6.3 percent of wives are married to polygamous husbands, with a higher share in urban settings. However, it seems to disappear slowly as younger women are less likely to share their husbands with other women (age 20-24: 5 %; 45-49: 8 %). These percentages decrease according to women's educational level from 6.6 percent among the illiterate to 4 percent among the holders of secondary certificate and above. However, in practice most health benefit schemes in Yemen include the option of polygamous husbands, while they do not even cover one husband of female employees. As long as polygamy is socially accepted, a health insurance system has to take it in account; on the other hand the definition of membership offers an option to influence the number of polygamist family settings.

Child marriage is frequent in Yemen and affects mainly girls as soon as they reach the age of puberty. Poor families tend to consider daughters as a big burden on income and try to resolve their difficult economic conditions by “selling” female children and by getting rid of the need to sustain them as

early as possible. A recent field study supported by Oxfam revealed that child marriage is mostly present in the Governorates of Hadramaut and Hudeida. It confirmed that girls who marry at young age leads to far too early pregnancy, and lose opportunities of education and acquisition of skills that would allow them to get a suitable income (Yemen Times, 22nd Sept. 2005).

Another characteristic element of the Yemeni society is the low participation of women on society level. This becomes evident for instance comparing the accident statistics of the country's largest specialised hospital Al-Thawra in Sana'a: Only 3 out of 100 victims of traffic accidents in 2004 were female, while more than 13 % were children. Regarding formal sector employment, national female staff occupies less than one out of 26 work places owned by Yemeni citizens in private companies.⁹ On the other hand, mainly in rural areas women are often exposed to the double burden of family management and income generation through work in the field. Although the Constitution of the Republic of Yemen declares equal rights between men and women, the latter do not have the equal chances to participate in public life. In general, women are not taken as serious as men, and in public meetings male representatives tend to laugh about female speakers. With regard to health care and health insurance it will be important to stress social constraints in traditional areas. In many cases, access to needed care for women is restricted because they need male escorts for applying to health facilities, and they have to be seen by female health workers, who are not readily available at health facilities in most of the country.

Another important asset of the socio-cultural setting in Yemen seems to be relevant for the implementation and perspective of a national health insurance system. As mentioned above, tribal structures and hierarchies are still in place all over the country, mainly in the highlands and in Eastern governorates. Nation-building is an ongoing process, and social identity refers rather to community and tribal settings than to the Yemeni state. This is reflected in the existence of numerous small scale solidarity schemes while a perspective of overall society solidarity is still missing or underdeveloped in most citizens. In addition, the persisting impact of tribal structures on society can explain the relevance of paternalistic patterns in social groups and individuals. For instance, company-driven health benefit schemes rely to a certain extent on case-to-case decisions of the leading personnel. And the population shows a high expectation to receive support from others, let it be a charitable organisation, the Ministry of Health who is expected to grant a series of services for free, or an international donor or development agency. When it comes to start initiatives and to assume responsibility, many interviewees hesitate or withdraw and express the expectation that the Government or any other "leader" makes the first steps.

3.1.3 Socio-economics¹⁰

Population growth is still high in Yemen. The most recent official figures hint at 3.02% (RoY-MoPIC 2005), close to what in an independent health survey was measured with 3.1%. (Soeters 2004) Urbanisation in Yemen is estimated at about 5% and is growing at almost double the population growth rate. (NN 2005) Close to 9% of the population live in the largest city, Sana'a. About three quarters of the population lives outside urbanised areas and 80% of the rural population live in scattered settlements with less than 500 people (RoY 2004b). The average household size is estimated at 8.14 household members (UNICEF 2003, p. 12). Surveys show that the poorest households average 9.8 people (Soeters 2004, p. 13). According to another survey, the average family size in Yemen is 7.0; while 40 % of households have more than 7 members, 26.5 % have 1-4 and the remaining 32.9 of Yemeni households 5-7 individuals (PAPFAM 2004, p. 12).¹¹

⁹ 26,089 women amongst 685,402 salaried persons. Source: Results of Labour Force Demand Survey in Private Establishments 2003

¹⁰ In the following only those basic features will be mentioned that have an impact on health seeking behaviour and on health services delivery and financing.

¹¹ All demographic figures appear to be doubtful in the Yemeni country context; please note that not more than 10.8% of children under 5 have a birth certificate (range 0.7 - 46.4%), and in the capital of Sana'a this proportion is only 6.9 %! (UNICEF 2003, p. 12).

People live in an increasingly deteriorating environment. This is due to an economic development that is nearly unregulated. There is no effective control on the use of fertilizers and pesticides. The most important aspect is the water situation: Yemen consumes water above its renewable water resources.

Agriculture and fishery is the most important economic sector for the population. But there is no food security for many people. Indicators on nutritional deficiencies hint at this: stunting 39%, wasting 13%, underweight 39%, low birth weight 19%, total goitre rate 32%. (Aoyama 1999) Child malnutrition is at 46% (RoY 2004b). “In terms of food security, Yemen is classified as a low-income and food deficit (LIFDC) country and imports over 75% of its main staple, wheat. While food availability seems to be well secured from imports, access is constrained by low purchasing power. Extremely high rates of malnutrition, low birth weight, and infant mortality in many areas of Yemen hint at serious chronic food access shortfalls. Although food availability at the national level appears to be adequate, a substantial section of the population cannot meet its food consumption requirements due to lack of resources. The food security status of households is also threatened by other natural factors such as droughts, disease outbreak, and floods, which have an impact on incomes of poor households.” (UNDP ny) Inadequate and wrong feeding practices even in better educated socio-economic population groups intensify the problem. (Assabri 2001, p. 16f)

Some social indicators like the illiteracy rate and access to health care emphasise Yemen’s situation as one of the poorest and less developed countries in the world. Amongst the population of 10 years and above, about two thirds of the male and less than one out of three women are able to read and write, with some differences between urban and rural settings. School attendance of girls is just below 50%, whereas 75% of the boys attend schools. (Yemen family health survey 2003)

Table 9 Percent distribution of the population (10 years and older) by educational level, sex and place of residence

Educational level	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Illiterate	15.2	40.5	27.7	31.1	57.7	53.2	27.3	69.1	47.0
Read & write	29.1	24.5	26.8	31.8	15.0	23.4	31.1	17.3	24.3
Primary	13.2	9.9	11.6	12.8	4.7	8.8	12.9	6.0	9.4
Preparatory	17.2	11.4	14.4	12.1	2.8	7.5	13.4	4.9	9.2
Secondary	18.2	10.6	14.4	9.7	1.2	5.5	11.8	3.5	7.7
University	6.6	2.6	4.6	1.9	1.0	1.0	3.0	0.7	1.0
Not stated	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5
Number	7602	7428	15030	23492	23076	46568	31094	30504	61598

Source: Yemen Family Health Survey 2003, p. 15

Lack of literacy and basic schooling are reflected in obvious skill shortages and skill gaps on various societal levels. Skill is the ability to perform a task to a predefined level of competence, and skilled workers should get returns from the improved productivity in terms of higher remuneration. Skill shortages have potential impact not only on employment, but also on a range of other economic measures such as productivity, earnings, and economic growth (Mehran 2004, p. 21ff). A relatively low level of professional qualification affects the internal development of the Yemeni society on different levels.

Unemployment is dramatic in Yemen, especially for the young generation, which is estimated at close to 50% (Yousef 2004). It is officially stated as 11.5% (RoY-MoPIC 2004) but other estimates hint at 35% (Al-Serouri 2001, CIA 2005). This has a strong impact on health insurance. This impact is further aggravated by the fact that most employment is in the informal sectors of agriculture and fisheries. The following table shows the employment structure in 2002.

Table 10 Employment and income structure in 2002		
Sector	Workers	Income
Agriculture and fisheries	2163	56078
Mining	18	36830
Small industries	144	15509
Electricity, gas, water	12	2359
Buildings	262	4986
Commerce and hotels	484	18250
Transportation	134	3771
Banks	32	15705
Personal and social services	245	2499
Government	432	56888
Total	3926	212875
Source: Ministry of Planning and International Cooperation in Workers Union brochure. No explication of units mentioned		

It is remarkable that the income of more than 2 million workers in agriculture and fisheries equals the income of 432.000 government employees. Updated data were not available. This data does not match with a measured labour force of 4.091.000 in 1999 and a projected one for 2005 of 5.116.000 workers and employees (Mehran 2004). Labour productivity is considered to be low. Chapter 15 of part 3 of our study report gives some data of a recent labour survey 2003, which contradicts the above presented data, since it labels agriculture, hunting and forestry at 1.29% of the surveyed workers and 0.09 in fishing. (RoY-MoPIC 2005) In this survey the sector “wholesale and retail trade and maintenance” ranges with 49.97% at the top of the listing.¹² Uncertainties regarding the employment structure prevail. This refers to estimates of the formal employment sectors, too. It was not possible to get an updated figure on the employees and workers in government administration, i.e. especially in the ministries.¹³

Inequalities are rampant, regarding all aspects: living conditions, housing conditions, access to public services. “Income inequalities are pervasive in the country. Inequality in Yemen mirrors a typical low income economy where the richest 10% get 34% of the national income and spend 25.5% of all expenditures while the poorest 10% of households spend a mere 3.5%. Increased poverty and unemployment and worsened income distribution are reflected in the Gini coefficient of 0.426.” (UNDP ny) Most neglected are several especially marginalized groups, like the al-Akhdam, refugees and returnees.

3.1.4 Poverty

“In recent years poverty has increased dramatically in Yemen. The poor have become poorer, and the livelihood of many has become less and less sustainable. Depending on the definition applied, 30-40% of Yemeni households are impoverished and the majority of these are located in rural areas. A growing number of people lack access to adequate housing, safe drinking water, health care services, education, income and sufficient nutrition. Most natural resources, which could be used to build sustainable livelihoods, have been overexploited, depleted or polluted.” (UNDP ny)

Extreme poverty ranges at 42% of the population availing of less than 1 US\$ per day per person. To satisfy the basic nutritional needs 1.50 US\$ are needed. “The majority of the population, 69.6 per cent in rural areas, and 57.8 per cent in urban areas (adding up to 66.9 per cent at the national level), could

¹² This might be explained by the sampling of this survey.

¹³ The Ministry of Civil Services and Insurances is updating the data and had promised to provide them to the study team.

only afford a consumption level which catered for minimum food requirements plus what is deemed as normal for non-food expenditures at that level of food consumption. Once we add to this the not insignificant share of the population who live marginally above the poverty line and hence live on the edge of poverty and vulnerable to minor economic fluctuations, the phenomenon of mass poverty in Yemen becomes more pronounced.” (UNDP 2005) All data stem from 1998 and 1999. A new household budget survey is underway and results will be available by 2006.

In one of the most remarkable books sponsored by the World Bank, the situation of the poor in Yemen was addressed through focus group discussions and interviews trying to evoke “the voices of the poor” (Narayan 1999)

Table 11 Poverty in Yemen
<p>Yemen: Trying to Find Help for Disabled Daughter</p> <p>Since her daughter's disability, Sharifa went back and forth many times to the Ministry of Social Affairs in order to register her daughter with the Social Welfare Fund because of her handicap. She spent large sums on transportation, and was finally registered and received 1200 YR. She thought that this sum would continue as a monthly stipend, but she was told it was only a one time payment. She suspected that she was registered and then the government officials stole her money during the subsequent months, but she is not certain of this, and is not certain of her rights regarding the Social Welfare Fund. Not succeeding with the government social safety net program, Sharifa tried to get help from one of the powerful shaikhs. To do this, she had to prove that she had a legitimate need by gaining an official paper, or “waraq.” The process to get the waraq is long and tedious. First, someone must write up her story, then she must get neighbours to testify to the truth of her story, and finally, the aqil must testify. She finally completed the process, and armed with her waraq, she went to the office of the Sheikh. She was made to come back several times before finally being brought before him. He put the paper behind his jambiya (Yemeni sword) and told her to come back. When she came back, he told her that he couldn't find the paper. She then appealed to the women in the Shaikh's household, but couldn't get them to listen to her. In a final attempt, she found someone from her village working at the office of the Shaikh as a soldier and sought his help getting her another audience with the Shaikh. But when she went back to follow-up, they continued to say they had lost the paper. At this point she gave up.</p>
Source: Narayan 1999, p 83

Poverty is not only nutritional and income poverty, that nevertheless is very severe in Yemen. Some experts estimate these levels in the meantime at above 50% of the population, which can not be verified by data. Poverty is especially and additionally the lack of voice and participation in social and national affairs, the lack of empowerment.

3.1.5 Macroeconomics

„Yemen, one of the poorest countries in the Arab world, reported strong growth in the mid-1990s with the onset of oil production. It has been harmed by periodic declines in oil prices, but now benefits from current high prices. Yemen has embarked on a structural adjustment program supported by the International Monetary Fund (IMF) designed to modernise and streamline the economy, which has led to substantial foreign debt relief and restructuring. International donors, meeting in Paris in October 2002, agreed on a further \$2.3 billion economic support package. Yemen has worked to maintain tight control over spending and to implement additional components of the IMF program. A markedly high

population growth rate and internal political dissension complicate the government's task. Plans include a diversification of the economy, encouragement of tourism, and more efficient use of scarce water resources.” (CIA 2005)

GDP purchasing power parity per capita	800 US\$ per head (2003 est.)
Household income by percentage share	<i>lowest 10%:</i> 3% <i>highest 10%:</i> 25.9% (2003)
GDP real growth rate	2.8% (2003 est.)
GDP structure in %	Agriculture 15 % Industry 45 % Services 40 %
Agricultural products	grain, fruits, vegetables, pulses, qat (mildly narcotic shrub), coffee, cotton; dairy products, livestock (sheep, goats, cattle, camels), poultry; fish
Industries	crude oil production and petroleum refining; small-scale production of cotton textiles and leather goods; food processing; handicrafts; small aluminium products factory; cement
Industrial production growth rate	3% (2003 est.)
Exports	crude oil, coffee, dried and salted fish
Export partners	China 31.7%, Thailand 20.3%, India 15.6%, South Korea 4.9%, Malaysia 4.3% (2003)
Imports	food and live animals, machinery and equipment, chemicals
Import partners	UAE 12.9%, Saudi Arabia 10.2%, China 8.9%, US 4.9%, Kuwait 4.4%, France 4.1% (2003)
Budget	<i>revenues:</i> \$3.729 billion <i>expenditures:</i> \$4.107 billion, including capital expenditures of NA (2003 est.)
Military expenditures - percent of GDP	7.9% (2003)
Public debt	39.5% of GDP (2003)
Debt external	\$6.044 billion (2003)
Inflation rate (consumer prices)	10.8% (2003 est.)
Exchange rates	Yemeni rials per US dollar - NA (2003), 175.625 (2002), 168.672 (2001), 161.718 (2000), 155.718 (1999)
Economic aid – recipient	\$2.3 billion (2003-07 disbursements)
Source: CIA 2005	

The dominant sector of Yemeni economy is the oil sector. It contributes to about one third of GDP but employs less than 1% of the work force. Oil exports comprise close to 90% of the exports and oil revenues finance about three quarters of government expenditures. Fluctuations in the oil prices affect Yemen considerably. Export diversification is lowest in MENA.

In 1995 a stabilisation and structural adjustment programme was initiated in cooperation with the IMF and the World Bank (WB). Its basic intention was to restructure and to transform a planned and state controlled economy into a free market economy. Reforms were initiated towards deregulating and liberalizing foreign trade, modernizing the banking system, privatising state owned companies, etc. A noticeable macroeconomic stabilization, a freely convertible currency exchange and a reduction of the inflation rate were achieved. Fiscal reforms aimed at reducing high government subsidies. Reducing the huge wage bill in the civil services was another aim that did not materialise, yet. The shifting from a deficit budget to a surplus budget affected sector budgets, e.g. the health and education budgets. A tight control over spending is still being done. It obliges all sectors to fight for bringing effectively into

practice their justifiable spending demands. Spending is not always in the public interest and according to rational reasoning: Vested interests intervene, and corruption is wide-spread. Tax revenue as percentage of GDP decreased to 7.1 percent of GDP in 2003. (UNDP 2005) It is much too low to be considered a fair financing. Progressive taxes have to be scrutinized, e.g. on qat, land, petroleum and many customs exemptions.

Real GDP growth projected by the Economists Intelligence Unit at 2.3% for 2006 is significantly below the population growth. A projected 17.5% inflation rate will affect especially food prices and is adding to a rather grim outlook. (EIU 2005)

3.1.6 Development policies

Adjustment policies and readjustment policies are necessary, but not sufficient to solve the problems of Yemen. Macroeconomic growth would have to be at a two-digit level to reduce poverty significantly. Population policies need powerful and far-reaching institutions that still have to be build up or strengthened. The treasury of Yemen is its population, its potential human capital. Human capital is build up best by investing in education and health, in “brains and bodies”. Human and social capital should not be overlooked in its potential for social and economic development. A “new” philosophical dimension of development policies is needed. The time of old receipts is over.

The “macroeconomics and health” debate (Sachs 2001) demonstrates and underlines that health is a strong productive factor for attaining and strengthening social and economic opportunities and development; health is a driver of economic development, and health and education are the most powerful tools for alleviating poverty. This is the conclusion of a high-ranking group of health advisers like Jeffrey Sachs, including Nobel laureates in economics, e.g. Amartya Sen and Robert Fogel. Health creates economic and social opportunities for attacking poverty and this is the main development issue after the turn of the millennium. Within this context, the conceptual framework for sustainable development in Yemen puts the three pillars of the World Bank report on “Attacking poverty” (World Bank 2001) into the following equation: empowerment in security creates opportunities, or in other words: subsidiarity and solidarity generate sustainability.

- Empowerment is related to the principle of “subsidiarity”, meaning that governments should be active only if regions, communities, families and individuals could not do it better themselves. Health production is very much based on the empowerment of individuals, families and community based organizations to prevent diseases, to protect and promote health and to use informed self-help, as well as on the empowerment of local governments and health care institutions to perform effectively, efficiently and at a very good quality.
- Security stands for the old principle of “solidarity”. Empowerment would be endangered without safety nets and a risk pooling that caters especially for the indigent, the poor and for vulnerable populations.
- A sustainable social and economic development is very much based on the empowerment of a civil society with all its layers – individuals, families, communities, local and national governments. Empowerment, nevertheless, needs safety nets and social protection measures, e.g. to overcome risk aversion. Empowerment in security creates opportunities for political, social and economic development. Health is wealth.

Human capital and social capital are the often neglected drivers of development. They need a revival in Yemen. Brains and bodies are sufficiently available. They need empowerment, guidance and stewardship.

What	For whom	Why?	Topic	Agent
Empowerment subsidiarity)	of individuals and families	to prevent avoidable diseases	Health education and promotion	Health
		to apply informed self-help, e.g. with drugs	Drug accessibility, affordability	Health
		to fight for good governance, wherever	Capacity building	Education
	of civil groups	to support families and neighbourhoods	Discovery and inclusion	Education
	of local governments	to work in the public interest	Effectiveness, efficiency mgt	Education
		to do what families /groups can not do	Public health, out and inpatient care	Health
		to support those who can not support themselves	Social protection	Health
	of national government	to regulate in the public interest	Regulation, supervision	Civil society
		to do what other levels can not do	Tertiary care, reinsurance funds	Health
	in security (solidarity)	with quality health care	to deliver services of high quality	Good service delivery, wherever
with social protection		to help the helpless	Social protection measures	Health
with insurances		to pool high risks	Social health insurance	Health
with policies		to avoid man-made catastrophes, e.g. wars	Wider health policy	Health
with disaster preparedness		to mitigate other catastrophes	Wider health policy	Health
and other measures		to sustain peace	Wider health policy	Civil society
creates opportunities (sustainability)	economic growth	through “macroeconomics / health link”	At the micro-economic level, too	Development
	social development	through increased participation	Bottom-up capacity building	Development
	political commitment	through reinforcement of democracy and accountability	Empowering a civil society	Development

3.2 Health Sector

3.2.1. Health status

Yemen faces major challenges in improving the health status of its population. The basic social and economic determinants of health are in a dire state: poverty is widespread, participation in primary education is low, in particular for girls, illiteracy rates are high, and access to safe drinking water and proper sanitation is very limited. With 42% of the population living under the absolute poverty line of US\$1 per capita per day, Yemen is the country with the highest national poverty rate in the MENA region, where the average of people living in absolute poverty lies at 2.8% (World Bank 2004). Only 28.5% of women and 69.5% of men can read (World Bank 2005b), and only 48% of girls and 66% of boys complete primary school. Only 9.6% of the rural population has access to safe drinking water compared to 52.4% of the urban population (MoPH&P 2005a).

In addition, more than half of the population faces high geographic and financial barriers to access even basic health services, an issue dealt with in more detail in Section 3.2.2. As a result Yemen's health indicators remain among the lowest in the region.

Table 14 Basic health status indicators in Yemen and the Middle East and North Africa (MENA) region			
	Year	Yemen	MENA average
Health status			
Life expectancy at birth in years (male)	2003	57	67
Life expectancy at birth in years (female)	2003	61	70
Infant mortality rate per 1000 live births	2003	82	n.a.
Maternal mortality ratio (per 100000)	2000	570	162
Probability of dying (per 1000)			
▪ under age 5 years (male)	2003	119	n.a.
▪ under age 5 years (female)	2001	106	n.a.
▪ between ages 15 and 59 years (male)	2001	298	n.a.
▪ between ages 15 and 59 years (female)	2001	227	n.a.
Source: WHO 2005a, World Bank 2005a, World Bank 2005b. Note: n.a.: reliable data not available neonatal mortality alone was 37 per 1000 live births, early neonatal mortality 27 per 1000 live births.			

In 2003, life expectancy at birth for men was 10 years lower than the average of countries in the Middle East and North Africa (MENA) Region, for women it was 9 years lower. The maternal mortality ratio is more than three times higher than the MENA average, which highlights the inequalities facing women when seeking health care in Yemen as the MENA region has already one of the worst inequalities in health and health care between men and women compared to other world regions. This is also evident from the catastrophically high levels of illiteracy among young women in Yemen compared to men. Currently, primary school enrolment in the year 1998/99 was 44.8% for girls and 75.8% for boys which is low compared to other Arab countries, e.g. Egypt (89.6% for girls and 95% for boys) or Syria (88.9% for girls and 95.9% for boys), and to other low-income countries such as China (94.7% for girls and 91.8% for boys) (UNDP/Arab Fund 2003). In addition, in Yemen only 4.2% of girls complete primary school compared to 14.8% of boys (MoPH&P 2004). These data are particularly worrying as female literacy and education are known to be major determinants of population health. Yemen is also one of the few countries in the region where malnutrition is a major problem, particularly among children. In 1997, 52% of children under 5 were stunted, 46 % were underweight (World Bank 2005).

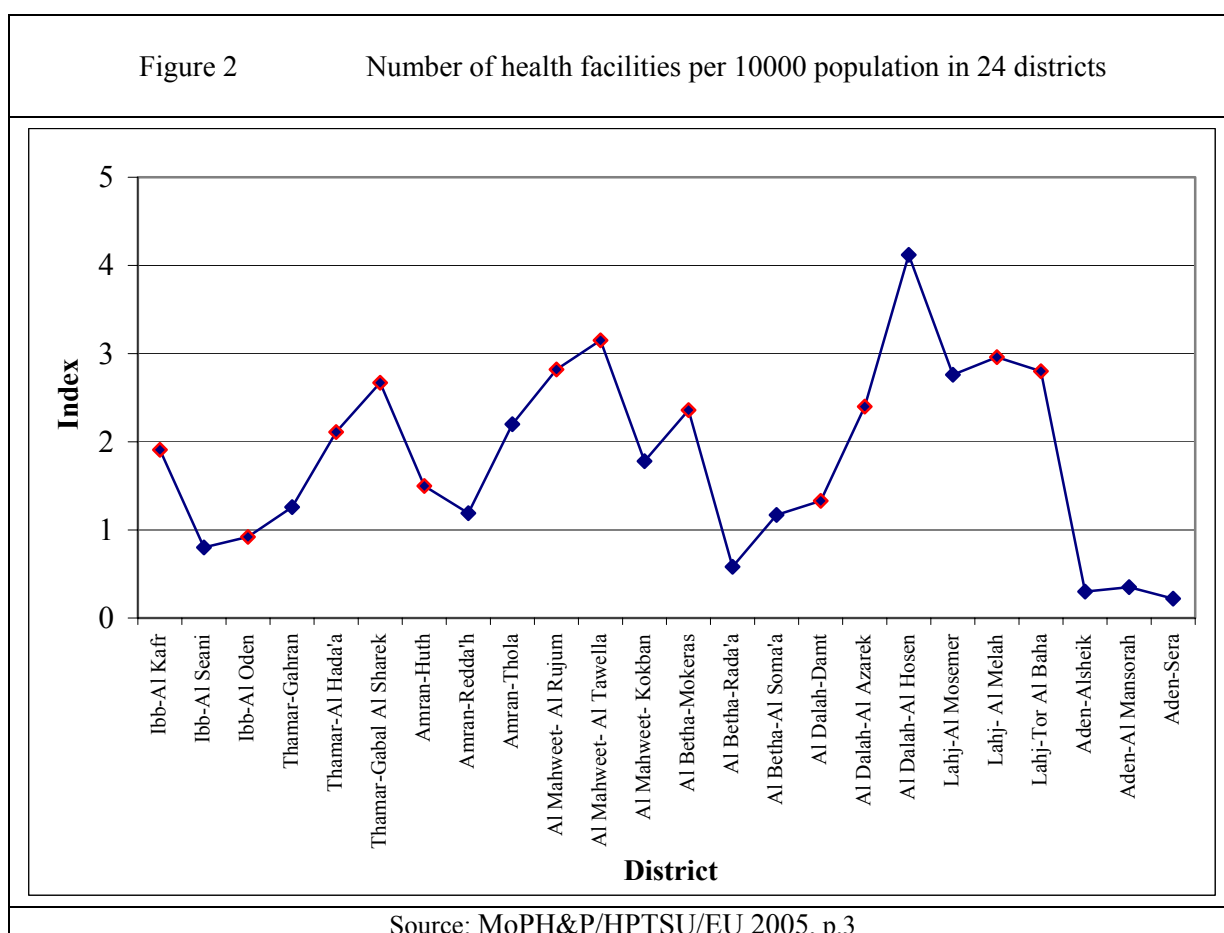
Population growth, at 3.02 percent per year (RoY-CSO 2004), is among the highest in the world. Family planning programs in place have contributed to reduce the fertility rate to 6.5 in 2003 (RoY-CSO 2004), but in several parts of the country the reach and impact are still limited and could be enhanced. Avoidable infectious diseases are still prevailing, and cause a relevant number of life years lost (MoPH&P 2005a, p. 105). At the same time, the incidence of injuries and chronic diseases such as cancer and heart diseases seems to be on the rise, although general conclusions have to be made with caution because the sample size the diagnosis was based on is very small (Soeters 2004, p.37). In 2003, 13.1% of male and 17.2 % of female patients treated in public health services presented chronic diseases (PAPFAM 2004, p. 30). Thus, Yemen is facing the typical pattern of a developing country exposed to the double challenge of a high rate of persisting infectious diseases and a clear increase of chronic and degenerative health problems. The available indicators demonstrate an urgent need to improve the basic living conditions of the population including access to the most basic health services, while at the same time preparing for a rising demand for more costly specialised health services.

A major part of the case-load of curative services, in particular hospitals, would be avoidable by simple preventive and basic primary care. For example, during our mission we visited the emergency department of Saba'in Hospital in Sana'a City. About 80% of the children (most of them under one year of age) present in the department at the time of the visit suffered from diarrhoea which in the majority of cases is due to wrong feeding practices according to staff. This is also a good example how basic literacy in mothers and the most basic health education and information activities can help to prevent morbidity, mortality (some of the children were severely dehydrated) and costs to the health care system. According to the disease reports by health centres and hospitals from 2003, which are far from being complete and reliable, by far the most common conditions involve the respiratory system (307428 cases) followed by burns and wounds (92503 cases), urinary infections (85279 cases), skin disease (84254 cases), gynaecologic and obstetric cases (45314 cases) not counting complicated deliveries (4947 cases), diarrhoea (33748 cases), tooth decay (33233 cases) and typhoid (22395 cases) (MoPH&P 2004). Although it is difficult to estimate the exact proportion of avoidable cases due to lack of more detailed information, it is clear that a majority by appropriate preventive and primary care services.

3.2.2 Health care utilisation and access

It is estimated, that only about 42% of the total population have access to public health facilities. Health care is far more accessible in urban settings, but in rural areas, only 24% of the people have access to government facilities. And, in remote areas, such as the North East of the Country, there are basically no health care facilities available within geographic reach.

In a survey carried out in 24 districts by the MoPH&P with support from the EU Health Sector Reform Support Program, a variation in the density of health facilities between 0.2 and 4.1 per 10,000 population was observed (see Figure 2).



The problem of inadequate access to care is compounded by a low quality of care that is provided. There is a pervasive inadequacy of needed supplies and equipment, even where adequate staffing is given (MoPH&P/HPTSU/EU 2005). Standards of care, treatment protocols, basic regulations (and their enforcement), and poor maintenance of facilities and equipment are usually lacking. These factors are compounded by insufficient supervision, poor management practices, lack of planning, and low morale among health personnel. All of these factors lead to under-utilisation of existing staffed facilities, and to poor health outcomes among the population intended to be served by those facilities.

Lack of access due to limited geographic coverage is compounded to some extent by exclusion due to need for cash payments required to receive care: the direct costs of paying the fees required for consultations and/or prescription drugs are already high, and additional costs of transportation to facilities increase the financial barriers especially for the poor. Access to needed care for women is also limited by social constraints in traditional areas — the need for male escorts to facilities and the need to be seen by female health workers, who are not readily available at health facilities in most of the country.

The geographic and financial barriers to care are reflected in low utilisation rates, even for the most basic health services. For example, only 27% of births are attended by skilled personnel, only 50.6% of pregnant women in the cities and 26.1% in rural settings receive a prenatal tetanus vaccination (MoPH&P 2005a). While nearly half of the children under 5 hold a vaccination card (46,8%), coverage of childhood vaccination programmes varies between 15,9% for complete Hepatitis B (3 doses), 26% for poliomyelitis to 64% for measles, 68% for DPT3 and 73% for BCG (UNICEF 2003, p. 13; MoPH&P 2005a).

In obvious contrast to the exclusion of a relevant population group from access to adequate health care, the Yemeni society is characterised by a surprisingly high degree of medicalisation. While preventable and curable disease still prevail and basic health needs are not met for most Yemeni, the focus of any debate of health care and health insurance is put clearly on secondary and tertiary care. This is certainly due to the great influence of health professionals on sector policy decisions, where clinical experience seems to have a higher value than public and community health knowledge. But citizens also tend to perceive health care and health insurance directly related to hospital treatment, while prevention and primary care are usually underestimated and neglected.

However, focussing health care on specialised treatments is far away from meeting the major challenges of Yemen. International research regarding the role of health for overall economic development and poverty reduction stresses that improvements in health have the potential to produce a high return (Sachs 2001). The positive impact on economic growth of health interventions are highest for preventive measures and primary care, while investments in specialised health care provision have only a minor effect on population health. These findings have recently been confirmed for Yemen. Although the average contribution of education appears to be most relevant for economic growth (35,4 %), it is still high for health (23,4 %) and far more relevant than the impact of capital investment (8,8 %). But the same study points out that expanded immunisation programs are not only very cost-effective, but also produce the highest return for every Rial invested (El-Zaemey 2005, p. 19).

The gap between objective and felt health needs in Yemen has produced a series of facts that are difficult to turn back and that have to be taken in account when planning and implementing a national health insurance system in Yemen. On the one hand, the ambitious goal to create a national system obliges politicians and decision-makers to face the unmet needs of the poor and rural population improving mainly prevention, promotion and primary care. On the other hand, lacking access and low quality of government services have resulted in a rapid growth of the private sector in the urban and semi-urban parts of the country. As prices for health services in the private sector are double to 10 fold those in the public sector and basically unaffordable to the majority of the population, the growing private supply is unable to cover basic needs of most citizens, and less of the poor. However, the private sector is an important stake-holder when it comes to implement a health insurance system in

Yemen. Thus, population needs and interests of influential groups have to be carefully equilibrated in order to find the best ways towards sustainability and universal coverage.

3.2.3 Health care delivery and payment

The MoPH&P operates a four-tiered system of health care facilities, delivering primary health care in health units and centres at the village and district levels, secondary care at rural (district) and governorate hospitals, and tertiary care at referral hospitals in Sana'a and Aden. In addition to the public healthcare system, which despite being public requires high cost-sharing by patients, two parallel systems operate. The second sub-system consists in private hospitals, health centres, pharmacies and medical practices which are basically unregulated and only offer services on a fee-for-service basis and to company employees covered entitled to health care benefits via their employers who have contracts with these providers, which in turn are mainly limited to the hospital sector. The third sub-system is the informal private provision of care by doctors and other health personnel such as midwives and nurses, who are officially employed in the public sector but who practice outside of their workplace in the afternoon against fee-for-service payments, which create perverse incentives to self-refer patients from public to "private" informal care settings to achieve higher incomes well known from many health systems which operate informal parallel healthcare systems, e.g. many countries in Central and Eastern Europe. In general terms, the current health care system faces a series of different constraints: limited health service coverage, inadequate health facilities, low quality of services, shortages of quantity and quality of human resources, low remuneration and lack of incentives, lack of coordinated management, monitoring and information system, limited financial resources, inadequate community involvement, inadequate management, monitoring, data availability and quality assurance. These conditions pose big challenges in the development of human resource and, thus, in social and economic development (UNDP/RoY 2005, p. 13).

3.2.3.1 Public health

Yemen faces serious economic and social challenges affecting the public health sector and its efforts to improve the general health situation nationwide. This country with its vast ancient history of civilization is reviving and its modern history has been a story of struggle towards prosperity (MoPH&P 2005b, p. 5). Although a series of public health activities are in place in Yemen, a consequent and clearly defined public health policy is lacking. This is certainly due to the recent development of a health system in a country where only 30 years ago a vast majority of citizens were lacking any kind of reliable health care supply. Facing such a complex and huge demand, the Government focussed on those activities that seemed to be of utmost importance in the very moment, building up health care facilities in some remote areas, improving infrastructure of existing centres, and organising basic preventive activities.

A key public health activity in Yemen is the Expanded Program on Immunization (EPI) which started 25 years ago. Currently immunisation services are covering seven preventable diseases: tuberculosis, poliomyelitis, diphtheria, pertussis, neonatal tetanus, measles, and since 1998 hepatitis B. The program offers its services through the public health sector network via fixed, mobile and outreach services. The goal of the public vaccination strategy is to increase coverage rates and ultimately achieve universal coverage, introducing pentavalent vaccine from 2005 onwards. The program aims also at a 60% coverage of tetanus and tuberculosis for pregnant women by 2007, interruption of the indigenous measles virus and eliminating neonatal tetanus by the year 2006.

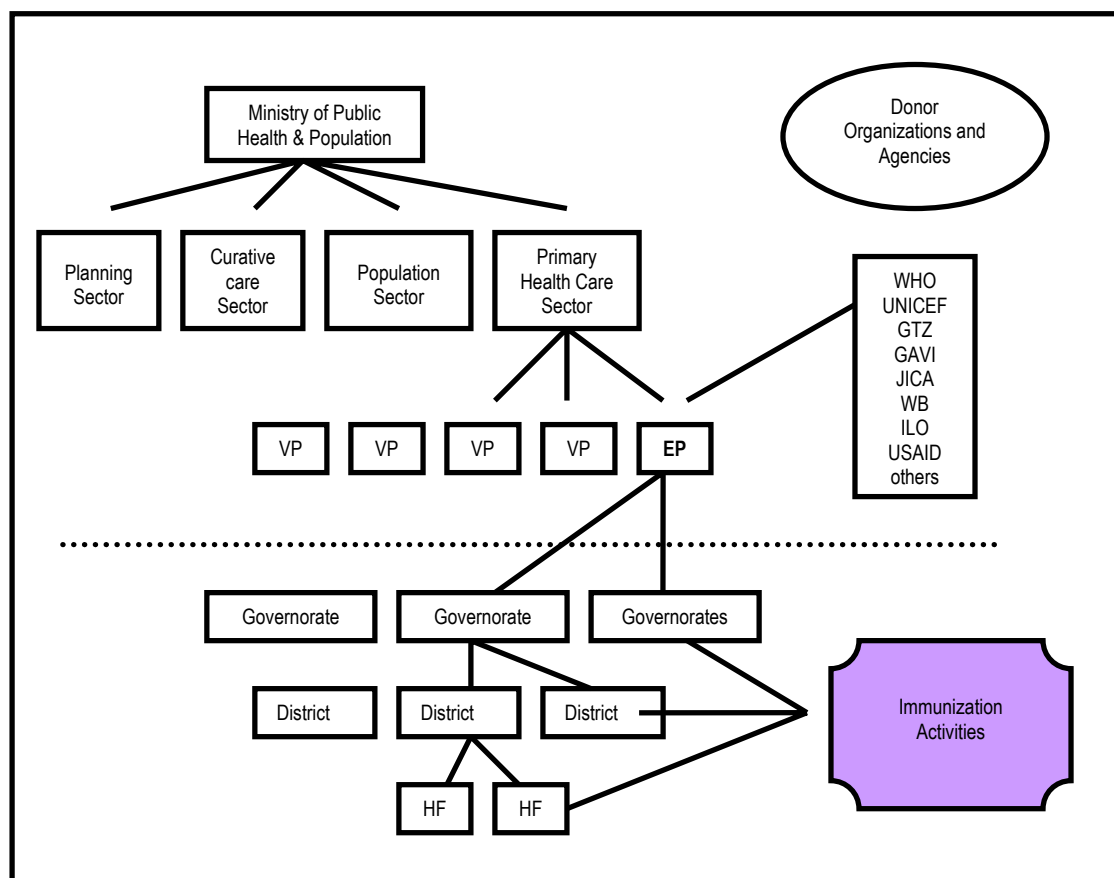
However, immunisation rates are still unsatisfactory (see above), and the recent outbreak of poliomyelitis that was considered an eradicated diseases underlines dramatically the need of further and more effective vaccination campaigns. The World Health Organisation (WHO) gives financial and technical support to the Yemeni Government as long as the national program turns out to be insufficient, but further efforts to channel resources and to provide adequate strategies are needed. In 2003, total expenditure for immunisation was not more than 14.1 million US-\$. That equals a per

capita cost of 70 Cents or less than 2 % of per capita health spending. Thus, doubling the expenses for vaccination programs in Yemen would have a negligible effect on total health expenditure and could be easily compensated by reducing non cost-effective services and irrational drug use.

By mid 2004 the MoPH&P was restructured aiming at effective management of its various activities and ensuring synergy. A new sector for Primary Health Care translates the focus of the Ministry towards providing a basic package of essential services to the vast population and ensuring integrity of services in the field. The forth following diagram illustrates the new organigram.

On the central level, the national health priorities to enhance the PHC system have been accompanied by introducing a sector for PHC in the new structure of the MoPH&P and increasing central and governorates budget to PHC related activities. The role of the MoPH&P is being defined in a new way, and the Ministry will focus increasingly on planning and regulation, as well as the provision of public health and preventive services. At the same time, it will gradually phase out of a direct role in the operational management of curative health services. The governorate health office will also cease taking direct responsibility for the operational management of health services and play rather a managerial role. Besides the above mentioned preventive programs, public health policy will be focussing on the provision of a limited scope of basic curative health benefits on a cost-sharing basis, especially targeting the poor (MoPH&P 2005b, p. 17). In addition, communicable disease control programs for the entire population are considered a public health task, especially for those diseases with relevant externalities like infectious diarrhoeal diseases, malaria, schistosomiasis, tuberculosis, hepatitis, AIDS/STDs, leprosy, and rabies (ibid, p. 18).

Figure 3 The organigram of the Ministry of Public Health and Population



Source: MoPH&P 2005b, p. 12, modified slightly by authors; VP = vaccination program; HF = health facility.

In spite of the large number of public health facilities in the country, however, the current lack of services and of confidence at the level of the village and district force the people to by-pass the public first level providers and to look for care in governorate and national level government facilities, or in

the private sector. This creates high health care expenditures for consumers and huge inefficiencies in the system, with government health manpower and health facilities in the periphery standing idle. Cost and efficiency considerations, as well as the analysis of health care needs and potentials led to the design of a four-pronged public sector service delivery mechanism, with firmly established limits that allow for achieving essential public sector goals regarding affordable health care provision. The system is expected to be efficient for both the government and for the health care consumers (MoPH&P 2005b, p. 18).

One major step will be the implementation of a district health system (DHS) that provides a minimum standard of one staffed and functioning district level health facility per district. Under the roof of a district health system, community based health services (CBHS) will be provided for the public. Governorate and national hospitals will be supported to provide good quality services, guided by an autonomous board of directors under a new system of hospital management called hospital autonomy. However, the described strategy and project developed by the Ministry of Health reveals a far-going lack of adequate public health care in the field and an insufficient and ineffective linkage of health care provision on the various levels. Further attempts are needed for improving the adequacy, accessibility and affordability of publicly provided health care services.

3.2.3.2 Outpatient care

In the public sector, outpatient care is provided in health units and health centres, which are most of the time staffed with nurses, midwives and auxiliary health workers, such as vaccination officers, with support from local administrative officers and technical support from the Governorate health office. About one in ten health centres has 2-5 beds. These are often manned with a general practitioner. Most doctors working in outpatient care see their patients in hospital outpatient departments or in their private clinics. Most doctors working in the public sector in the morning provide private consultations in the afternoon – either in private hospitals or in their own clinics.

In 2004, there were 65 health centres with beds, 535 health centres without beds, 2.075 health units and 333 mother and child health centres in the public sector (MoPH&P 2005d). These numbers have to be interpreted with caution, as on numerous occasions the information provided by health centre and governorate officials to the MoPH&P are exaggerated in order to obtain more funds from the central budget. For this reason, the MoPH&P has started to conduct a survey of health facilities; although this study can only refer to the data from six Governorates that had been included until the end of September 2005. The ongoing MoPH&P-survey will bring up more detailed information about the scope of health care in Yemen. In the small sample available until now, however, it has already become apparent that there is a wide discrepancy between the officially provided data and reality. The GTZ consultancy team has itself visited a rural hospital in Dhamar Governorate, which had no beds and would have had to be reclassified as a health centre without beds, i.e. two levels below its official level. Another vivid example for obvious lacks of available primary health care is the Centre in Massiab located in a spacious building with traces of reasonable, but unused equipment. The health centre lies fallow, and the staff is not present. This is certainly due to missing supervision, control and also demand from the people, but misuse on the local level seems to hamper the situation at the expense of the population (compare Al-Shura Council 2005).

Table 15 Density of primary care facilities in relation to the population size in Governorates. Numbers of health facilities are for 2004, population size for 2003							
Governorate	Population (2003)	MCH Centres	MCH Ctrs/ 10000	Health Units	Health Units/ 10000	Health Ctrs w/o beds	Health Ctrs w/o beds/ 10000
Sana'a City	1834293	29	0.16	4	0.02	1	0.01

Table 15 Density of primary care facilities in relation to the population size in Governorates. Numbers of health facilities are for 2004, population size for 2003							
Governorate	Population (2003)	MCH Centres	MCH Ctrs/ 10000	Health Units	Health Units/ 10000	Health Ctrs w/o beds	Health Ctrs w/o beds/ 10000
Sana'a	1115547	54	0.48	163	1.46	101	0.91
Aden	559572	8	0.14	1	0.02	16	0.29
Taiz	2532594	6	0.02	122	0.48	78	0.31
Al-Hodeidah	2157293	0	0.00	137	0.64	41	0.19
Lahej	701086	0	0.00	134	1.91	18	0.26
Ibb	2214030	4	0.02	135	0.61	74	0.33
Abyan	463333	36	0.78	109	2.35	10	0.22
Dhamar	1320971	105	0.79	141	1.07	44	0.33
Shabwa	505139	0	0.00	80	1.58	17	0.34
Hajjah	1512309	20	0.13	155	1.02	22	0.15
Al-Bayda	622598	2	0.03	76	1.22	28	0.45
Hadramawt	936355	35	0.37	234	2.50	6	0.06
S'ada	660374	7	0.11	75	1.14	8	0.12
Al-Mahweet	495823	3	0.06	117	2.36	5	0.10
Al-Mahra	78104	6	0.77	66	8.45	4	0.51
Marib	251565	0	0.00	53	2.11	17	0.68
Al-Gouf	481202	1	0.02	121	2.51	27	0.56
Umran	1085259	6	0.06	86	0.79	7	0.06
Al-Dhal'a	444175	11	0.25	66	1.49	11	0.25
Total	19971622	333	0.17	2075	1.04	535	0.27
Source: Own calculations based on data from the MoPH&P (2004). The newly created Governorate of Reima with a population of 385000 inhabitants is not included in the population figures, as its inclusion/exclusion in the MoPH&P statistics is inconsistent in the annual MoPH&P report. Notes: MCH: Mother and Child Health, Ctrs: Centres, w/o: without							

The density of primary care services per population varies considerably between Governorates, as depicted in table 15. The density of Mother and Child Centres ranges from 0 to 0.79 centres per 10.000 population with an average of 0.17; the density of primary care health units ranges from 0.02 to 2.51 per 10.000 population with an average of 1.04; and the density of health centres without beds ranges from 0.01 to 0.91 per 10.000 population with an average of 0.27. This variance also persists if Sana'a City is not taken into consideration. The density of primary care services thus varies by factor 80 to 100 between regions. This reflects a complete lack of a rational algorithm for governmental resource allocation according to the health needs of the population.

The voice of the people

*“We need staff to be honest”
 “They should care for all patients not only rich and elite”
 “They should be taught that we are integrity on their neck”*

Source: Al-Serouri 2004

The MoPH&P provides some elementary data on the private sector. In 2003, they accounted for 115 private health centres, 545 physician clinics, 709 specialist clinics, 260 dental clinics, and 41 midwifery clinics in the country predominantly located in the cities of Sana'a, Aden and Dhamar (MoPH&P 2005a). However, as with the data on public health facilities, these data have to be

interpreted with great caution. Many private clinics that have been licensed have never been opened. The number, size or quality of private providers is currently not monitored by the MoPH&P, which accounts for private provider licenses using a handwritten list in chronological order of licensing.

Outpatient care utilisation data are only available for services provided by hospitals and health centres with beds and thus not very representative (MoPH&P 2005a). In a study for the World Bank, Beatty et alii (1998) conducted a survey in 1996 among 884 households in four geographic areas of Yemen on health care utilisation and out-of-pocket expenditures on health. They elicited annual outpatient utilisation rates are 0.99 for rural Sana'a, 1.34 for Sana'a City, 1.74 for Taiz, and 2.73 for Lahej. They also found a high variation of utilisation rates by age group, with lower than expected rates for the under 5 year olds in rural areas, despite the fact that the mortality rates and the burden of disease in this age group is particularly high in Yemen. Another noteworthy finding were higher utilisation rates for boys aged 6 to 15 years compared to girls of the same age. As there is no biological reason for this difference, these rates may denote gender related discrimination of girls. This was also reflected in differences in health expenditures for outpatient care between boys and girls (Beatty 1998).

3.2.3.3 Inpatient care

In rural areas, some inpatient care is provided by health centres with beds, but most care is provided in rural hospitals and Governorate hospitals. In 2004, there were an estimated 65 health centres with a total of 270 beds in the country. 124 rural hospitals stated to run 3903 beds and 44 Governorate hospitals provided 8.769 beds (MoPH&P/EU 2004). The validity of these official numbers underlies the same systemic limitations as outlined in the section on outpatient care. The density of inpatient beds ranges between 1.19 beds per 10.000 population in Hajja to 33.8 beds per 10.000 population in Al Mahra Governorate, with an average of 6.48 beds per 10.000 (Table 16).

Table 16 Density of inpatient beds per population. Data on health facilities from 2004, data on population from 2003

Governorate	Population (2003)	Beds in health ctrs	Beds in health ctrs/ 10000	Beds in rural hospitals	Beds in rural hospitals/ 10000	Beds in governorate hospitals	Beds in governorate hospitals/ 10000	Total beds/ 10000
Sana'a City	1834293	0	0	60	0.33	1680	9.16	9.49
Sana'a	1115547	0	0	191	1.71	50	0.45	2.16
Aden	559572	7	0.13	0	0.00	1330	23.77	23.89
Taiz	2532594	0	0	203	0.80	1396	5.51	6.31
Al-Hodeidah	2157293	0	0	90	0.42	513	2.38	2.80
Lahej	701086	12	0.17	838	11.95	238	3.39	15.52
Ibb	2214030	0	0	345	1.56	480	2.17	3.73
Abyan	463333	0	0	330	7.12	240	5.18	12.30
Dhamar	1320971	0	0	101	0.76	184	1.39	2.16
Shabwa	505139	0	0	250	4.95	150	2.97	7.92
Hajjah	1512309	0	0	30	0.20	150	0.99	1.19
Al-Bayda	622598	0	0	120	1.93	1000	16.06	17.99
Hadramawt	936355	217	2.32	647	6.91	574	6.13	15.36
S'ada	660374	34	0.51	93	1.41	50	0.76	2.68
Al-Mahweet	495823	0	0	90	1.82	100	2.02	3.83
Al-Mahra	78104	0	0	120	15.36	144	18.44	33.80
Marib	251565	0	0	5	0.20	90	3.58	3.78
Al-Gouf	481202	0	0	210	4.36	100	2.08	6.44

Table 16 Density of inpatient beds per population. Data on health facilities from 2004, data on population from 2003

Governorate	Population (2003)	Beds in health ctrs	Beds in health ctrs/ 10000	Beds in rural hospitals	Beds in rural hospitals/ 10000	Beds in governorate hospitals	Beds in governorate hospitals/ 10000	Total beds/ 10000
Umran	1085259	0	0	0	0.00	210	1.94	1.94
Al-Dhal'a	444175	0	0	180	4.05	90	2.03	6.08
Total	19971622	270	0.14	3903	1.95	8769	4.39	6.48

Source: Own calculations based on data from MoPH&P (2004). Notes: #: number, Ctrs: Centres

The four tertiary hospitals in Sana'a City provide between 241 and 500 beds each. In Aden, there are two tertiary hospitals with 199 and 405 beds, respectively. A number of other Governorates, for example Hadramaut and Taiz have one or even two tertiary hospital of similar size. Otherwise, most hospitals have between 30 and 100 beds (MoPH&P 2005a).

<i>The opinion of the leaders</i>	
6 % of opinion leaders say: Health insurance should contract public providers only	8 % of opinion leaders say: Health insurance should contract private providers only

Source: GTZ&EC survey 2005

Concerning utilisation data it is noteworthy that most hospitals do not provide data on admissions or discharges to the MoPH&P. For example out of 11 hospitals in rural Sana'a Governorate only one (Bani Matar Hospital) provided the required data (MoPH&P 2005a+e). The World Bank survey from 1996 (Beatty 1998) thus provides the only representative data on inpatient utilisation in Yemen. They found that utilisation of inpatient services varied dramatically by location. In rural Sana'a and Taiz, utilisation was under 1 hospitalisation per 100 population per year, whereas for Sana'a City and Lahej utilisation rates were 2 and 2.5 per 100 population per year, respectively (Beatty 1998). Like in most countries, average hospitalisation rates were higher for females (1.7/100/year) than for males (1.2/100/year), except in the Governorate of Taiz, where they were equally low for both sexes (0.9/100/year). Both the inpatient and outpatient utilisation rates are low in international comparison. For example, in Egypt 3.3 per 100 inhabitants per year were admitted to hospital in 1994 (Beatty 1998).

3.2.3.4 Long-term care

Long-term care in Yemen is provided by families, nearly exclusively. There are no public facilities for the elderly or chronically ill requiring long-term nursing care. We have not come across private facilities catering for this need neither. Al Gumhuri Teaching Hospital in Sana'a City incorporates a centre for the rehabilitation of handicapped people which is run by the Mother Theresa charity. A National Centre for Rehabilitation works in Sana'a with 112 staff in outpatient care. Per month it applies on average 10.000 rehabilitative applications like hotpack, Galvan, hydro therapy, and exercises. Its cost-sharing share of the total revenue of 64 million YR per year is only 6%, which indicates a pro-poor approach.

3.2.4 Health care financing

National health account data of 2003 were updated by WHO by end of September 2005 (Driss 2005). The following table summarises the most relevant updated data on health care financing in Yemen.

Total Health Expenditure	115,102,000,000 YR 627,000,000 US-\$
Estimated per capita household expenditure in 2003 (1998 prices)	64.543 YR
Total Health Expenditure per capita	33 US-\$
Total Health Expenditure as % of the GDP	5.6%
Total household expenditure on health in 2003, current prices	39,292,240,138 YR 214,038,284 US-\$
Total per capita households expenditures on health in 2003 (current prices)	11,3 US-\$
Household out-of-pocket payments as % of Total Health Expenditure	57%
Public expenditures	32%
Private expenditures	59%
International donors	9%
Source: Driss 2005	

The most recent update of the national health accounts for Yemen reveals the following purposes households in Yemen are spending their money for health care on.

Uses	Spending YR (millions)	US-\$ (millions)	% of total
Medicines and drugs	24,086	131	37,1%
Treatment abroad	31,253	170	48,1%
Doctors' fees	3,851	21	5,9%
Surgery	2,082	11	3,2%
Medical supplies	1,572	9	2,4%
Hospital stays	864	5	1,3%
Other	1,297	7	2,0%
Total households expenditures	65,005	354	100%
Treatment abroad paid by MoF	1,108		
Treatment abroad paid by employers	1,400		
Treatment abroad by MoF and employers	2,508		
Source: Driss 2005			

The figures are different according to different sources. This is quite understandable since all such data is based on very rough estimations and educated guesses. There is no way of accounting for national health as accounting for a small company. The total amount spent for health ranges between about 26 US\$ and 69 US\$ according to different sources. (Constable 2002, Soeters 2004, Rhodes 2004)

The highest share in the national health accounts has the household when paying for health at the time of use. This is exactly what health insurance tries to revert into pre-payment. WHO calculates 66% as the private share of total spending for health, the health accounts arrive at 62%, the World Bank estimated 75% for 1998. The most recent estimate arrives at 59%. Private spending is especially high for catastrophic diseases. This is indicated by the fact, that 40% - according to the most recent

estimate: 48% - of it goes for treatment abroad. What holds true for the rich, applies to the poor, too. The following table gives an idea of the private spending for hospital admissions of mainly rural households; however it has to be mentioned that the survey is based on a relatively small sample and might not be representative. But even with this small number there is one treatment abroad mentioned and measured.

	Number of admissions	Average cost for admissions, including one special case – needing referral to Syria
Government health facilities	8	\$ 184.55
Private health facilities	8	\$ 328.60
TOTAL	16	\$ 245.04

Source: Soeters 2004

Private spending for health increased after the government introduced cost-sharing since 1997 for public facilities. A flat entry or ticket rate is for example 50 Rial per visit plus payments according to a fee schedule, e.g. ultrasound 800 YR and gynaecological examination 100 YR. Such fees are determined by local councils and vary accordingly. Cost-sharing income is given

- 40% for staff
- 40% for covering current costs
- 10% for education and promotion
- 10% for stationary and other office expenses.

The voice of the people

*“You have to buy everything from the market (private pharmacies) even operation’s requirements”
 “If you who have money you would be treated. If you don’t have money you would not”
 “If you have Rials all workers will serve you ... If not they will not care about you”*

Source: Al-Serouri 2004

Advantages were seen in increased resources, increased quality and supply, patients value paid services, incentives for staff. (Oxfam 2001) Disadvantages were studied by Oxfam: wide variations and large deficiencies, rare written guidelines, ad hoc exemptions, community representatives do not play a role in it, financial management and record keeping were weak, and costs-sharing was seen to have no effect on quality. Staff morale was not improved but cost-sharing increased a profit orientation of them. Quite some waste of revenues was discovered (Al-Serouri 2001). User charges generate nowadays quite some revenues for public health facilities. Estimates range from 1 billion YR per year (MoPH&P cost-sharing department), via 4 billion a year (Rhodes 2004) to more than 10 billion a year, considering for example that Al-Thawra hospital with 863 beds has yearly revenues of 1.7 billion YR (Tarmoom 2004) and Al-Jumhuri Hospital in Sana’a with 450 beds generates 15 million YR per month¹⁴ as compared to a total of 12,672 beds in the country. A small country hospital run mainly by Chinese specialists generates a yearly 10.35 mio YR revenue in a 104 bed hospital with a 30% occupancy rate. (Tarmoom 2003).

Exemptions for cost-sharing in public facilities are given to about 10% of the patients. The share varies between the different visited hospitals, ranging from 1 to 40%. Rules and regulations have been established, but they are usually or at least very often not followed. Some facilities have committees to decide. Most often it is the discretion of the staff to decide. In many cases soldiers, policemen “and VIP” are exempted, even from paying for drugs from the drug fund, where exemptions were not foreseen.

¹⁴ Telephone interview result of a team member with administrator of hospital.

<i>The opinion of the leaders</i>	
78 % of opinion leaders say: Cost-sharing is bad and unfair	84 % of opinion leaders say: Cost-sharing is not well organized
<i>Source: GTZ&EC survey 2005</i>	

To lower the private costs for health care a revolving fund for drugs was set up country-wide with quite some beneficial impacts in reducing drastically the prices for essential drugs for the users. These drugs are sold in the public facilities with a mark-up of 10% and with a clear allocation algorithm, i.e.

- 2% for physicians
- 1% for the director
- 2% to the pharmacist
- 5% for transportation of drugs

An evaluation study shows: “The costs of drugs (where available) in public facilities are still high (though much lower than in private pharmacies¹⁵), exemptions policies (for the poor) are inconsistent and not well-administered,¹⁶ the distribution system remains extremely inefficient,¹⁷ and the “revolving” nature of the Drug Fund is not functioning.¹⁸ ... Earlier this year, the MoF completely cut off financing for the Drug Fund, noting that it had accumulated debts said to be over YR 2 billion for drugs it had distributed and was supposed to have been paid for.¹⁹” (Fairbank 2005) In the meantime the drug fund is not any longer continued due to additional problems of graft and corruption. Politically it is seen as a hint that the funding of funds is full of risks. The Cabinet is said to have decided recently, not to allow new funds.

On the basis of available price lists and additional information, the study team has developed a rapid estimation of health care costs for hospital treatment of a series of frequent health problems. The data calculated try to give an idea of the official cost-sharing expenses. The assessed treatment pattern were selected according to practical criteria (well-defined benefits and prices, reasonable treatment standards, etc.) and do not proclaim to be complete. However, they give an idea of what people have to spend on health care, although they do not take in account additional under-the-table payments. The following table gives an overview of estimations of total official prices for some treatments in selected hospitals.

Table 20 Estimated total official cost-sharing for selected common medical treatments
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¹⁵ The above-cited YemDAP Evaluation found that “median prices in the private pharmacies were, on average, 665% of prices in public pharmacies” (p. 5), “the lowest prices in private facilities were still 3.5 times higher than those in public pharmacies” (p. 14), and government facilities often offered “other drugs at a variety of prices, sometimes significantly more expensive than the stipulated cost price plus 10%” (p. 14).

¹⁶ A Household Survey conducted by the above-cited Final Evaluation found that the “very poor” (17% of the sample) spent on average US\$19.8 per health care visit on drugs—“which was more than the average for all socio-economic groups in the sample” (p. 6).

¹⁷ Although the Drug Fund can only sell drugs to government facilities, it is commonplace for those facilities to purchase and sell (at hefty mark-ups) additional (even competing, branded) drugs from the private sector. Moreover, the Drug Fund delivers up to its four regional stores only, and the inefficient distribution system from those stores to the facilities “remains unchanged and very inefficient” (p. 17).

¹⁸ Facilities were supposed to deposit revenues from sales of drugs into a central bank account, and local proprietary accounts were not allowed. But not all facilities opened central bank accounts, and yet most of them continued to get drugs from the Fund. Without a bank account, however, facilities had an incentive to stock and sell drugs purchased from the private pharmacies, undercutting the purpose of the Drug Fund.

¹⁹ The MoF does not finance the Drug Fund directly, but does provide funds through a budget line item for “drugs and medical supplies” that provides funds to facilities to purchase drugs from the Drug Fund. This line item, however, was being used to pay for only a fraction of the drugs actually supplied to the facilities, which either relied on donated drugs or on the willingness of the Drug Fund to provide replacement drugs in return for promises to pay later. The Drug Fund supply and financing facility was never supported by all donors. As noted in the above-cited Final Evaluation, “most donors (UNICEF, UNFPA, World Bank) still have their own procurement and distribution chains” p. 12).

Health problem/treatment benefits	No.	Al-Thawra Sana'a	Al Jumhuri Sana'a
Cholelithiasis			
Cholecystectomy with cholangiography	1	35,000	30,000
Hospital daily allowance surgery public / private	5	7,500 / 40,000	5,000 / 15,000
Total		42,500 / 75,000	35,000 / 45,000
Cholecystectomy by laparoscopy/MIS			
Cholecystectomy by laparoscopy/MIS	1	20,000	30,000
Hospital daily allowance surgery public / private	2	3,000 / 16,000	3,000 / 6,000
Total		23,000 / 36,000	33,000 / 36,000
Acute Appendicitis			
Simple Appendectomy	1	10,000	8,000
Hospital daily allowance in surgery public / private	3	4,500 / 24,000	3,000 / 9,000
Total		14,500 / 34,000	11,000 / 17,000
Uncomplicated delivery			
Birth cephalic presentation, episiotomy and joint	1	5,000	0
Ultrasound	1	900	750
Immediate attention of the newborn	1	0	2,000
Hospital daily allowance obstetrics public	3	4,500	3,000
Total		10,400	5,750
Coronary heart disease			
Coronary artery bypass grafts	1	3,800,000 ²⁰	Ø
Hospital daily allowance coronary unit (CU)	4	8,000	
Hospital daily allowance medicine	10	15,000	
Rx thorax ap and lateral (2 exp.)	1	600	
Sessions of integral physiological treatment (CU)	4	0*	
Sessions of cardio-respiratory training	10	0*	
Transfusion in operating theatre	2	0 ²¹	
Total			
Diaphysiarian o metaphysiarian osteosynthesis			
Diaphysiarian o metaphysiarian osteosynthesis	1	40,000	30,000
Hospital daily allowance surgery public / private	10	15,000 / 80,000	10,000 / 30,000
Sessions of ergometric training	15	0*	0*
Sessions of motoric re-education	20	0*	0*
Removal of osteo-synthesis material	1	20,000	8,000
Hospital daily allowance surgery public / private	2	3,000 / 16,000	2,000 / 6,000
Total		78,000 / 156,000	50,000 / 74,000
Health problem/services			
	No.	Al Saeed Taiz	Private hospital level
Cholelithiasis			
Cholecystectomy with cholangiography	1	60,000	60,000 ²²
Hospital daily allowance surgery public / private	5	20,000	40,000
Total		80,000	
Cholecystectomy by laparoscopy/MIS			
Cholecystectomy by laparoscopy/MIS	1	80,000	70,000 ²³
Hospital daily allowance surgery public / private	2	8,000	16,000

²⁰ The pricelist of the heart centre in Al-Thawra Hospital specifies services in US-\$, for instance open heart surgery for 20,000 \$.

²¹ Covered through blood donation by relatives.

²² Al-Hureibi, Al-Motoakl, German Yemeni

²³ German-Yemen Sana'a and Al-Hureibi Hospital Sana'a

Table 20 Estimated total official cost-sharing for selected common medical treatments			
Health problem/treatment benefits	No.	Al-Thawra Sana'a	Al Jumhuri Sana'a
Total		88,000	
Acute Appendicitis			
Simple Appendectomy	1	40,000	25,000/30,000 ²⁴
Hospital daily allowance in surgery public / <i>private</i>	3	12,000	24,000
Total		52,000	
Uncomplicated delivery			
Birth cephalic presentation, episiotomy and joint	1	15,000	5,000 ²⁵
Ultrasound	1	1,000	1,200
Immediate attention of the newborn	1	1,000	2,000
Hospital daily allowance obstetrics public	3	12,000	24,000
Total		29,000	32,200
Coronary heart disease			
Coronary artery bypass grafts	1	Ø	Ø
Hospital daily allowance coronary unit (CU)	4		
Hospital daily allowance medicine	10		
Rx thorax ap and lateral (2 exp.)	1		
Sessions of integral physiological treatment (CU)	4		
Sessions of cardio-respiratory training	10		
Transfusion in operating theatre	2		
Total			
Diaphysiarian o metaphysiarian osteosynthesis	1	140,000 ²⁶	100,000
Hospital daily allowance surgery public / <i>private</i>	10	40,000	80,000
Sessions of ergometric training	15	15,000 ²⁷	30,000
Sessions of motoric re-education	20	20,000	40,000
Removal of osteo-synthesis material	1	20,000	40,000
Hospital daily allowance surgery public / <i>private</i>	2	4,000	16,000
Total		239,000	306,000
Sources: Own calculations on the basis of available pricelists (Al-Thawra Hospital 2005, Al-Jumhuri Hospital 2005, Al Saeed Specialised Hospital Taiz 2005) and additional information from providers			

With regard to cost-sharing, it is not even clear if all such revenues are declared properly and not considered to be informal and under-the-table payments for the private use of the staff in public facilities. This is extremely difficult to investigate because official user fees are regularly topped up by unofficial extra money claimed by health workers for a big array of services and treatments. The implementation of cost-sharing in public health care facilities has pushed wide open the door of commercialisation of health care and induced a generalised culture of cash in. For instance, physicians use to demand one third or even half of the official user fee as extra payment in order to deliver a certain medical service, nurses and midwives are a little bit more modest but also ask for extra payment.

²⁴ Al-Hureiba: 25,000; German-Yemeni Hospital: 30,000 YR

²⁵ Fee applied in Al-Saba'in Hospital.

²⁶ Operation fee 120,000 plus 20,000 for osteosynthetic material (plate).

²⁷ Physiotherapy not included, has to be hired outside the hospital; estimation 1,000 YR per treatment

<i>The opinion of the leaders</i>
<p>90 % of opinion leaders say: Informal payments are often given (about 200 YR for PHC and 2000 YR in hospitals)</p>
<i>Source: GTZ&EC survey 2005</i>

Health care workers justify their demand for extra-money with the very low salaries paid in the public sector, and also with the need to buy their own equipment for having adequate working conditions. Indeed, chronic under-equipment of public health care facilities reduces quality and efficiency and delivers another justification for under-the-table payments and corruption. In an equal way, under-payment of the staff is a major issue that has to be stressed also facing the challenges of a national health insurance system. Physicians earn between 20,000 and 30,000 YR monthly in a public hospital, and nurses and midwives do not get more than 15,000 YR, that is clearly less than the private sector pays and produces corruption and arbitrarily high charges for patients.

For the patients there is a high private spending at time of use

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

<i>The voice of the people</i>
<p><i>“One sold his land when his wife needed operation... Unfortunately she died at the hospital...He lost both, his land and his spouse”</i></p> <p><i>“A head of household died after he had snake bite... simply because his family has no money to take him to the hospital... so his family lost the earner and becomes dependent on others’ help”</i></p> <p><i>“One has a shop but he sold it to cover for his treatment abroad ... he has a heart disease ...now he went back to scratch”</i></p>
<i>Source: Al-Serouri 2004</i>

About 28% of health care financing originates in government sources, only. The most recent update of the national health accounts calculates with 32,228,560,000 YR from government (Driss 2005), while other sources had hint at only 19 billion YR for the year 2004. (Rhodes 2004) There is a bewildering variety of funds of various ministries to be used for health. The Ministry of Finance and many other ministries use funds, especially for supporting treatment abroad in case of need. Ministry of Finance keeps a strict control by means of direct allocations to recipients administered by their own employees in the Ministry of Health and other intermediaries. Professional resource allocation dialogues between the ministries seem to be rare. Some argue that a big gap exists between budgets and expenditures. The most recent public health expenditure review was not so clear on this issue. There is a very imbalanced allocation of government funds with an excessive spending for investment and highly insufficient budgets and expenditures for recurrent costs. New hospital investments aggravate the need for recurrent and operation costs (Fairbank 2005). Altogether, health sector allocations were shrinking in relative terms during the period 1998 to 2003 (Driss 2005):

- Index for total government expenditure (1998-2003) 260.3
- Index for GDP growth (1998-2003) 244.9
- Index for government health expenditure (1998-2003) 239.1

“There is very little coordination, at all levels of government, of plans with budgets. Actual spending differs, often considerably, from approved budgets, and there is no accountability for budgets or spending levels. The representatives of the Ministry of Finance seem to exercise a disproportionate degree of control over spending at all levels of the government health system, and the budgeting and disbursement practices do not seem to support implementation needs of government programs. The timing of the release of investment funds is counterproductive to smooth execution of planned projects, and the release of funds for current operations, requiring invoices in advance of disbursement, makes it very difficult for health managers to have the resources they need when they need them.” (Fairbank 2005, p. 25) From the point of view of health professionals recurrent funds are provided at levels far below requests and needs. From the point of view of the officials in the Ministry of Finance many of the requests are unfounded in terms of an effective and efficient expenditure pattern. The result is a severe under-funding of public health care. (Constable 2002) Main victims are the cost-sharing patients who have to compensate for this.

<i>The opinion of the leaders</i>	
91 % of opinion leaders say: Cost-sharing leads to postponement of treatments	63 % of opinion leaders say: Exempted diseases are not exempted from cost-sharing
<i>Source: GTZ&EC survey 2005</i>	

3.2.5 Health care benefits

Currently, the Ministry of Public Health and Population does not define a benefit package that has to be provided to the general population by public hospitals, health centres or health units. The management of each institution is thus free to offer a range of benefits as they like - the preferences of the population were not evaluated, the catalogues are not based on evident needs. In the best case, the benefit packages might be based on the expertise of the health professionals and the available equipment. In the worst case, the benefits offered are tailored to maximise cost-sharing revenues and revenues from informal payments in a health facility. Because of rudimentary and unreliable statistics on the health services actually provided at all levels of the health care system it is virtually impossible for the Ministry or for an external reviewer to get a picture of the benefits currently provided to the population without recurring to major audits. Likewise, utilisation data from the private sector is not available. Therefore, some proxy measures have to be taken into account to get a rough picture of benefits and prices of health services currently offered to patients in Yemen.

<i>The opinion of the leaders</i>
77 % of opinion leaders say: Drugs should be included in benefit package of health insurance
<i>Source: GTZ&EC survey 2005</i>

One proxy measure used here is utilisation data based on health surveys. Others include MoPH&P and hospital statistics as well as official price lists of hospitals and financial statistics from company health benefit schemes.

Survey data: According to the Beatty et alii (1998) survey, the majority of health care visits in the survey population were for curative care. In rural areas only 0.6 to 2.4% of outpatient visits were for preventive care. In urban areas, the preventive care was sought in 6% of visits. The reasons for seeking care elicited in this survey give a rough idea of the demand for health services in Yemen (Table 21).

Table 21 Hospital prices in Sana'a City - July 2005

	Public Hospitals			Private Hospitals		
	Al-Thawra Hospital	Al Gumhuri Hospital	Saba'in Hospital	Yemen German Hospital	University Sc.&Tech. Hospital	Dr Al Hureibi Hospital
Outpatient clinic -daytime	200	200	100	770	800	500
Emergency clinic - night	200		150		1200	500
Consultant called from outside	500				2500	2000
Consultant in hospital	na			1350	1200	500
Specialist doctor	500	200			800	
Consultant foreign doctor				3850		
Investigations						
ECG	500	500		1350	1500	850
24h-ECG	4000			8850	9000	
Echocardiography	2000	2000		4400	5000	
Cranial CT	8000	8000	6000	9400	30000	10000
EEG	3000			6350	6000	6000
Operations	**			***	****	
Appendectomy	10000	15000		50000		30000
Herniotomy	20000	25000		50000	50000	45000
Hemorrhoidectomy	7500	12000		37500	40000	20000
Thyroidectomy (subtotal)	20000	20000		62500	110000	65000
D&C	5000	9000	5700	19000	20000	3000
Caesarean section	10000	25000	10200	65000	70000	40000
Normal delivery	5000	7000	2200	25000	25000	20000
Circumsicion		1500	500	5800	5000	2500
* 3200 on admission, independent of length of stay , ** companies are charged the double of public prices - for late payment , *** = plus anesthesia, **** plus operating theatre fee						

Ministry of Health and Population statistics: The most up to date utilisation statistics are made available by the MoPH&P in its annual report. The latest is from 2003/2004. As the MoPH&P records some basic indicators such as numbers of outpatient visits, number of surgical operations, immunization coverage, and laboratory diagnostics (routine blood, biochemistry, urine analysis, stool analysis) and statistics on radiological and other investigative exams (organ-specific e.g. digestive system, number of electrocardiograms).

Hospital statistics: Hospital statistics provide a much clearer picture of services offered at secondary or tertiary level. A detailed list is available for services offered at Al-Thawra and Al Gumhuri Teaching Hospital in Sana'a. Service statistics for 2004 for each department in both hospitals show a wide spectrum of surgical interventions carried out which could be from any tertiary hospital.

Hospital price lists: Table 21 gives an overview of prices of selected interventions in a number of major hospitals in the capital city, comprising both public and private hospitals. As was apparent from interviews with a number of hospital directors, hospitals do not know the costs of individual services or interventions provided. Hence, the erratic prices both within hospitals and between hospitals. Prices in Yemen do seem to reflect willingness to pay more than actual costs. This applies both to public and to private hospitals. The only example of a cost-revenue calculation encountered was open heart surgery at the Yemen German Hospital, where costs of providing an operation team were known to cost US\$ 42,000 per month. This by far exceeded the revenues from an average of 10 operations provided per month. Therefore the service had to be stopped recently.

3.2.6 Quality management

Public Sector: The MoPH&P is responsible for quality assurance in the curative care sector of public hospitals and has a division for quality assurance in its Cost Sharing Directorate. In theory, the division is supposed to carry out regular audits of all hospitals in Yemen. However, the number of audits planned for 2005 is 11 hospitals, 4 of which are in Sana'a City, 1 in Aden, and 2 in each of 3 other governorates (Ibb, Lahaj, Haja) (MoPH&P 2005i). Audits are done with a number of checklists, specific for outpatient departments, emergency rooms, wards, and laboratories. However, only basic structural components are thus assessed (MoPH&P 2005f). Neither processes nor outcomes are monitored. On top, according to informal information from the MoPH&P, not even these basic audits are carried out.

In theory, in case of non-fulfilment of quality criteria, the MoPH&P makes a recommendation to the hospital director with an agreed deadline for the improvements to occur. Then another audit is to be carried out after 2-3 months. If quality criteria are still not fulfilled, budget implications via the Deputy Minister for Curative Care would ensue.

Concepts of clinical quality management were unknown to the interviewed ministry officials. In health facilities, no training in quality management takes place, nor are quality management systems anywhere in place in institutions. Officially, coordinators of quality assurance in Governorates have been appointed, but their role is not defined and the MoPH&P officials do not see any activities emanating from them concerning quality assurance or improvement. Currently a pilot project for quality assurance is conducted in Khalifa Hospital (Al Serouri and Al Sofeani 2005), and a National Quality Plan for Yemen has been developed, which is however still very much at the conceptual phase (Ovretveit 2002). Quality education comprises workshops since 2 years for health officers of Governorates: The introduction of a quality assurance syllabus in the curricula of Health Institutes, which are responsible for the training of paramedical staff, is planned. A booklet has been developed for this but has not yet been implemented.

The opinion of the leaders

89 % of opinion leaders say:
I expect good services with health insurance

Source: GTZ&EC survey 2005

Private Sector: Quality assurance in the private sector is also the responsibility of the MoPH&P. However, this is separate from the quality assurance programme for public hospitals. The Division for Private Medical Services is responsible for the licensing of private facilities. A handwritten list of all private facilities to whom a license has been granted is kept there, which comprises e.g. 542 second level hospitals and 168 private health centres (August 2005). However, the list is virtual as many facilities are either not yet or no longer operational and the MoPH&P has no knowledge about current activities of private providers. More recently, a licensing checklist similar to the audit checklists for public hospitals has been introduced. Again, only structural aspects of quality are assessed. Another problem is that many licenses have been granted before this new mechanism was introduced and audits of private facilities are currently not carried out. As was evident from interviews with hospital directors from private hospitals, quality management in hospitals is currently limited to basic sanitary activities that would fall under the label of hospital hygiene in developed countries. Again, modern clinical quality management systems are not in place. This is also demonstrated by some of the hospital statistics and price lists, which show that procedures that are now considered inappropriate practice in most cases are still widely practised in Yemen, such as tonsillectomies and adenoidectomies or grummetts for ear infections.

<i>The voice of the people</i>
<p>“The government spoke about Health For All but it is a fake... in reality they should call it Sickness For All”</p> <p>“We are not too impetuous ... although we are approaching 2005 we will be satisfied if you receive services similar to what we used to have in 1995”</p>
<i>Source: Al-Serouri 2004</i>

3.2.7 Satisfaction of clients

Only few studies on the satisfaction of clients with health services in Yemen have been carried out. In a survey on community participation conducted by Al-Serouri (2004), a question on whether people in al Shamayatayn (Taiz) could understand and accept pre-payment schemes for health prompted a stormy emotional response about the poor quality of health services at the district hospital as well as at other health facilities. All expressed their dissatisfaction with the currently provided services. Although they realize that the cost of the services already lay on the citizens they stressed that people are not willing to accept pre-payment unless they can see a sensible improvement in service quality (Al-Serouri 2004). Citations from interviews included the following:

In an evaluation of a quality management system in Khalifa Hospital (Shamaytayn, Taiz) some questions on client satisfaction with services provided by the hospital were asked. Fifty-six percent of interviewed patients mentioned that the staff attitude was good compared to 29% who say it was fair and 16% who mentioned that the staff attitude was poor. Overall, 15% of patients were very satisfied with their visit compared to 48% who were satisfied and 37% who were not satisfied. The main reasons behind satisfaction were: nearby services, good staff attitude, cleanness and others e.g. effective treatment. The main reasons for dissatisfaction were: late doctor, poor organization in entry to consultation room, others e.g. lack of drugs, poor attitude and poor lab results (Al Serouri/Al Soufeani 2005).

Soeters et al (2004) conducted another survey in four Governorates. They found that the *perceived quality* of respondents is better in private health facilities than in government facilities. In particular there was a large difference concerning the perceived respect of health workers whereby only 41% of the respondents thought that government health workers were respectful compared to 85% in the private sector. The perception of the availability of drugs in both public and private health facilities was below 50%, but particularly low in government health facilities with only 16%. Another quality problem seemed to be the long waiting times with only 16% of respondents thinking that the waiting time in government health facilities was reasonable (Soeters 2004).

3.2.8 Reform agenda

A good health sector reform has to address the main issues of health sector performance. World Health Organization tried to measure performance of all countries (WHO 2000), admittedly with some flaws as problems but in a straightforward and relevant way. This could serve as a stimulus for health sector reforms. The comparative findings of WHO are shown in the next table.

WHO Health system attainment and performance ranking *	Attainment of goals						Health expend. per cap. in international dollars	Performance	
	Health		Responsiveness		Fairness in financial contribution	Over-all goal attainment		On level of health	Overall health system performance
	Level DALE	Distri-bution	Level	Distri-bution					
Saudi Arabia	58	70	67	50-52	37	61	63	10	26
UAE	50	62	30	1	20-22	44	35	16	27
Morocco	110	111	151-153	67-68	125-127	94	99	17	29
Qatar	66	55	26-27	3-38	70	47	27	53	44
Egypt	115	141	102	59	125-127	110	115	43	63
Libya	107	102	57-58	76	12-15	97	84	94	87
Lebanon	95	88	55	79-81	101-102	93	46	97	91
Iran	96	113	100	93-94	112-113	114	94	58	93
Iraq	126	130	103-104	114	56-57	124	117	75	103
Syria	114	107	69-72	79-81	142-143	112	119	91	108
Yemen	141	165	180	189	135	146	182	82	120

* all figures refer to the ranking of countries between 1 and 191. Source: World Health Organization (2000): The world health report 2000. Health systems: improving performance. Geneva (WHO) 2000

The health sector reform initiated in 1998 and formulated finally in 2000 addressed especially the following goals (MoPH&P 2000a)

- adequate/universal access to health care services
- equity in both the delivery and eventually the financing of health care
- improved allocative and technical efficiency of the service delivery system
- improved quality of health services
- system's long run financial sustainability.

The main health sector reform components were

- Decentralization.
- Redefinition the role of the public sector.
- District health system.
- Community involvement
- Cost sharing.
- Essential drug policy and Drug Fund.
- Outcome based management focusing on gender.
- Hospital autonomy.
- Intersectoral cooperation.
- Encouragement of private sector & NGOs.
- Encouragement of innovation.
- Sector Wide Approach.

This long list of components demonstrates quite clearly what a Herculean job had to be initiated. It started with a very good assessment of problems, opportunities and threats. Some good achievements could be accomplished but in view of the overwhelming problems and obstacles, especially in the areas of financing, not all could be done according to the plans and expectations. Many problems still have to be solved and we name just those that affect specifically the areas covered by our health insurance study.

- Related to the strained relationship between Ministry of Finance and Ministry of Health there should be intensified and professional dialogues between them. Integrating public health experts in the Ministry of Finance and health economists and financing specialists in the

Ministry of Health would be helpful. This might lead to a better understanding and to increased transparency of transactions and allocations. This should overcome also the rather inefficient use of public funds in the health system and the very unsystematic allocations of funds for priority issues, assessed according to the best knowledge of public health experts. A forum on health insurance could be a mediator between public health and financial professionals.

- Extension of coverage of health services for the rural population could eventually be fostered by contracting of providers – either linked to a non-governmental organization, or public or private – for health care provision in remote areas, as e.g. experience in Guatemala with good success. This can include also the hiring of Yemeni or foreign physicians to build a small team with about two midwives to be operated mobile, using the physicians house or any other site as headquarters. The introduction of a performance oriented payment system would be important. Improving drastically the provision of health care in rural areas is one of the basic requirements for a social and national health insurance system. As long as this could not be contracted by a national health insurance authority to the best local resident providers, government health care provision has to be improved drastically in this area of highest priority.
- Reforming the regulatory and policy making responsibilities of the MoPH&P through clearly expanding its Health Policy Department and assigning it supervisory power over issues like quality assurance, accreditation, licensing, health care financing and the like. A step by step separation of regulatory, financial and provider functions of the Ministry of Health should be followed. The discussion on a new division of labour between a future health insurance authority and the Ministry of Health should not be retarded but started immediately, even before decisions are made on the implementation of health insurance.
- Establishment of a clearing house for new and innovative ideas of health care delivery and financing and of a forum – assisted by the international expert community – for regular policy presentations, discussions and dialogues, including study tours for committed key actors to observe replicable innovations elsewhere. International donors will be helpful in this domain. This includes also the discovery of best health care management practices in respect to all the various health programmes and health delivery modes in Yemen, awarding the best and replicating their lessons and messages first in demonstration sites and then nationally. Among the best discovered health care management projects in the Philippines, for example, were many local health care financing projects, solidarity schemes and micro-insurances. (Schwefel 1995) They could bring in a new and fresh focus for policy debates at the national level and for improving a national health insurance law proposal.
- Policy dialogues on advantages and disadvantages of decentralization should be strengthened. It should not be the goal to follow fashionable international policy trends but effectiveness and efficiency of the best division of labour of the various stakeholders involved should be the main criterion. This might result in regaining a centralistic policy for some tasks and strengthening community participation for other tasks. This question has its implications for health insurance and some interview partners warned not to oversee the chances of decentralization but also not the risks that were experienced, e.g. by the corrupted drug fund, which was a brilliant idea but fell into the trap of corruption. This issue, too, has to be addressed time and again in policy dialogues.
- Strengthening of a health and management information system that gives transparency on workload and production of health facilities, the pattern of diagnoses and treatments and other essential components of a meaningful and pragmatic quality assurance and efficiency increase programme. Reliable and valid data is missing in all sectors of the Yemeni society. This hinders transparency and makes it difficult to design evidence-based policies. For health insurance it is a real bottleneck.
- The gender bias of the health system has to be overcome, especially by incorporating many more women in decision making processes and at the implementation level close to the clients.

<i>The opinion of the leaders</i>	
47 % of opinion leaders say: Health insurance should contract just the best providers	46 % of opinion leaders say: Health insurance should contract a mix of providers
<i>Source: GTZ&EC survey 2005</i>	

3.2.9 Remaining problems and summary

“It is important to stress however that it is not envisaged to address issues such as accreditation, certification, licensing, health insurance, privatization, or private sector development during the life span of this reform program.” (WB 2000, p. 28) Health care financing and health insurance are most important remaining problems to be solved in the health system of Yemen.

The impact of private out-of-pocket payments for health care is already extremely high with regard to official cost-sharing charges. However, the situation is aggravated by largely introduced unofficial payments to the health care staff that uses to charge well-defined amounts of money as precondition for health services, at least from those whom they consider able to pay. Health care workers explain there demand for extra-money with the very low salaries paid in the public sector and the need to buy their own equipment they use for work. Thus, underpaid staff and under-equipment of health care facilities have to be faced in order to defeat under-the-table payment and widespread corruption. This situation hints at another facet of the above mentioned remaining key problem.

Within the figures for Yemen it is clear that the share between primary care and hospital care is skewed towards inpatient services and that the distribution of hospital services around the country is heavily biased in favour of the major cities (Constable 2002). All reform endeavours could not solve yet this problem and the over-arching problem of a very low efficiency and effectiveness of health services. Poor man’s diseases like diarrhoea, acute respiratory diseases and a large prevalence of infectious diseases prevail. Most of deaths, diseases and suffering are avoidable. But it is not avoided properly by prevention, promotion and primary health care. The health services sector is divided into three sub-sectors, a public one, a private one and one in-between, where public servants informally do private jobs. Most part of the services is privatised, de facto. Public health services are sold on the market and compete with the other sectors. A few public domains and enclaves survived: most of the too few preventive services and the free provision of services for selected diseases and chronic conditions. The recent outbreak of polio has clearly shown that all undertaken measures so far have not yet been sufficient for tackling with the difficult socio-cultural and geographic conditions in Yemen and that further efforts will be necessary. In spite of clear legal dispositions and even a presidential decree, evidences regarding the lack of enforcing free care for catastrophic and chronic conditions hint at remaining problems, too. The decision to provide priority services for free depends rather on casual and arbitrary decision of the personnel involved than on transparent and reclaimable rights.

The persistently high share of private health expenditure at time of using health services relates to another essential problem that derives precisely from the reasons why this study was commissioned: mainly the lack of pre-payment, solidarity or insurance schemes offering effective social protection from the financial risks of bad health. But the extremely high ratio of out-of-pocket payments has also to do with the cost-sharing policy introduced since more or less one decade. In Yemen, the typical and unavoidable undesired effects of user fees in health care are intensified by a large problem regarding the application of waivers and exemptions. And the financial burden of health care expenditure on households is even higher because the health care market is lacking regulation, suffering from an advanced privatisation of service delivery, and from the inefficiency of potentially cheaper public providers. In this context, the contracting out of services to just the best providers all over the country and for all its population by the future national health insurance authority should be considered as a

revolutionary measure for restructuring health care. Government would then retreat to its basic functions of regulation and stewardship, providing policies, ensure full legal status, monitor and regulate schemes, and enforce accountability and quality of health care delivery.

3.3 Social security and protection

3.3.1 Private risk management

In case of catastrophic health conditions the citizen in Yemen is mostly left alone. He has to pay or play the role of a bargaining beggar at public service points. He is usually not getting free health care. The same applies to all structural or random shocks that may hurt a family in cases of flooding, fire, robbery, crop failure, inflation, currency adjustments, unemployment, accidents, famines, i.e. all the ‘small’ catastrophes that can destroy the existence of individuals, families and even extended families. Strategies to deal with such shocks include:

- *Risk reduction*: actions, taken in advance of a shock, which reduce the probability that the risk event will occur. In terms of government policy, this would include (for example) economic policy measures to minimise the risk of inflation or currency crisis.
- *Risk mitigation*: actions taken in advance of a shock which reduce the magnitude of the potential risk event. Examples from the household level include diversification of livelihood strategies (so that if the return to one activity declines dramatically subsistence or income can still be obtained from other activities); taking out insurance (formal or informal); and cultivating social ties which might be of assistance in the event of a crisis.
- *Risk coping*: actions taken once the risk has occurred which reduce – or distribute – the effects. Examples include selling assets, reducing consumption, or undertaking more physically risky or socially unapproved activities to earn a livelihood.” (Norton 2001)

None of these strategies can be found in Yemen at an extended level.

For women, especially, risk management is difficult as can be seen from the following excerpt from the “voices of the poor” elicited by the World Bank.

Table 23 Risks of women’s risk management
<p>“In many societies, women have little access to police stations and going to police stations may be a dangerous act in itself. In Yemen, for example, women stated that they cannot access police stations because the police will laugh at them and their families will not allow it.</p> <p>“A woman cannot go alone, but only with her husband or brother or neighbor. Even if a crime was very serious, and even if the police station were very close, socially it is not accepted for a woman to go to a police station. If there were a police station staffed by women on the other hand, women stated that they could go there, either alone or with male relatives”</p>
Source: Narayan et al. 1999, p. 77 (World Bank: Voices of the Poor)

At the private level “saving” can be such a strategy. But negative savings in terms of almost permanent indebtedness of many poor to local money lenders is as widespread as are real savings in kind and assets, be it dried food, ornaments or cattle. When poverty and under-consumption prevail, saving is not only a further postponement of consumption but a reasonable way of life reducing conspicuous consumption and using scarce resources even more efficiently, an important example of which is investment in health and education for the own children. Such kind of rational adjustment policies of families to the persistence of random shocks are certainly existing in Yemen, but they still have to be discovered, described, analysed and replicated. An educational empowerment programme

for adults and the inclusion of such topics in the curriculum at schools is still missing. Private risk management is not yet supported by public programmes. People are left alone with their shocks of life.

Table 24 How poor communities in Yemen cope

To assess the coping mechanisms of poor communities in Yemen, a 1998 social protection field study targeted communities identified as very poor by their level of household income — in this case less than 5,000 riyals per month. The 1998 food poverty line, as defined by Yemen's statistical office, was about 2,500 riyals per person per month, or 20,000 riyals for a household of three adults and five children. The study asked the participants to prioritize how they would spend an additional 5,000 riyals per month. More than 85 percent said they would spend the entire amount on food. Four percent would spend some on clothing, four percent on repaying loans, and fewer than 1 percent on medicine or medical treatment.

How do these families survive? Informal lines of credit helped in the short term. Some 47 percent of those questioned owed money to relatives or neighbors and 42 percent owed money to local retailers or traders. Some 60 of the participants owed up to 20,000 riyals, 15 percent up to 40,000 riyals and 9 percent up to 100,000 riyals. In such poor communities, the capacity to repay is extremely low: around 65 percent of those who had borrowed had not paid back their debts, 15 percent had partially repaid them and only 20 percent had fully repaid them.

The study revealed that the unpaid or partly paid debt, especially to retailers or traders, was essentially a running line of credit, with the debtors paying off what they could when they were able. Debts to family and neighbors were usually much smaller and tended to be repaid quickly. The participants did not mention public assistance programs as a possible source of income in times of crisis. Indeed, very few public assistance programs had reached into these communities.

Source: World Bank 2001 quoted in Economic Research Forum 2002, p. 105

“Most of the poor communities in Yemen rely on some sort of informal risk mitigation mechanisms. The mitigation mechanisms include borrowing and reliance on charitable and voluntary organizations.” (Al-Arhabi 2000)

3.3.2 Public risk management

In Yemen, public risk management strategies are widely unknown, and according to the information gathered no publicly run systematic and continuous harm prevention program is in place. The study-group did not reveal any kind of state-run disaster control or relief plan in the country, however experience shows that in specific situations (for instance during the second war on Iraq) ad-hoc evacuation plans as well as disaster relief strategies were designed. However, according to available information, none of the well-staffed armed forces is permanently prepared to prevent or mitigate national emergencies or disasters.

Various factors might explain the lack of public risk management in Yemen. The country has not been affected by severe natural catastrophes during the last decades, and it is not very likely to suffer from earthquakes, very large floods and inundations. The relatively recent nation-building and the complicated socio-political situation in the country are to be considered important reasons for inexistent public emergency prevention and mitigation programs. The traditional socio-cultural structure of the Yemeni society was based mainly on smaller and relatively isolated social groups, and risk management was rather a challenge for tribal organisations and other sub-groups, and not perceived as a task to be taken by the State. However, a Human Assistance Project for Confronting Torrents and Catastrophes has been created recently with financial support from the European Community. Meanwhile, the 37,000 Euro project has initiated a campaign giving training courses and

workshops in order to equip Yemen with qualified people and technical expertise to handle natural disasters (Yemen Times, 12th Sept. 2005).

With regard to the strategies mentioned above (3.3.1), a series of public risk reduction strategies are in place in Yemen, namely the applied labour market policies, schooling, education, and other state-run training programs. Risk mitigation comprises public sector pension systems, mandated insurance for certain risks like labour accidents and occupational diseases, death and disability, and health care (Art. 118, Labour Law). And the existing risk coping strategies cover public works and investments in infrastructure and services; public transfers to the needy like orphans and widows; social assistance for the poor through the Welfare Fund, the Workers Fund, the Social Fund for Development, and others (Al-Arhabi n.y., p. 6). Undoubtedly, the different public funds are performing in very heterogeneous ways. The Welfare Fund has obvious lacks of efficiency and pays ridiculous amounts of money to the beneficiaries that have not been adapted to inflation since many years. On the other hand, the Public Works Fund and mainly the Social Fund for Development have an excellent reputation in Yemen, have achieved an unusual level of transparency and trust in the country context and contribute effectively to poverty alleviation and development.

3.3.3 Pension/disability/death schemes

Pension funds and risk coverage in case of disability and death schemes are important parts of the social security system. Regarding the goal of building up a national health insurance in Yemen pension funds might be interesting in at least two ways:

- First in the perspective of being part of the benefit package of the national health insurance system (some health insurance schemes e.g. cover funeral costs).
- Second as to the question whether existing schemes could be used technically for supporting or even building up a national health insurance authority, at least in the sense of being country-based „models of good practice“.

In any case, their experiences should not stay unused, e.g. with regard to collecting contributions and managing the membership of a large number of people.

Yemen has already quite a diverse practice with existing pension schemes. There are five funds: secret police, police, military, public and private. The responsibility of the authorities changed often. Up to 1999 public and private pension authorities were under one roof. The Public Pension Authority was under the Ministry of Social Affairs and Labour until 2000, then it was shifted to the Ministry of Civil Service and Insurance. The General Authorities for Insurances & Pensions have a formal and financial autonomy according to special laws. They are supervised by a board chaired by the Minister of Civil Services and Insurances and composed by a representative of the Central Bank, the Ministry of Finance, the Ministry of Trade and Industry, the Ministry of Planning and Development, and the Chief of the General Authority. Their global tasks are registration of members, contribution collection, dispensing of pensions and the investment of reserves.

The public pension fund at present has about 450,000 enrolees and gives pensions to 61,000 retired beneficiaries. The members of the public pension fund come essentially from three sectors: ministries, public companies and mixed companies.

Year	Total retired	Retirement pensions	End of service compensation	Undertaking expenses	Work injury expenses	Other insurance expenses	Total
2002	54.721	6.040.542.000	30.631.000	12.267.000	2.304.000	28.237.000	6.113.981.000
2003	57.411	7.228.989.000	23.909.000	20.544.000	1.817.000	29.388.000	7.304.647.000

Year	Total retired	Retirement pensions	End of service compensation	Undertaking expenses	Work injury expenses	Other insurance expenses	Total
2004	59.932	8.792.499.030	22.373.486	26.175.883	21.600.725	37.410.293	8.900.059.417
Sources: Public Corporation for Insurance and Pension, Statistical Yearbook 2004							

The contributions are collected as proportional deductions from total salaries. The employer pays monthly 6% (plus 1 % for work-injuries); the employee pays 6 %. Before the year 2000 pension contributions were levied from the basic salary, thereafter from salary plus allowances. Allowances are nearly 100% of salary. Current salaries in the public sector are estimated at about 25.000 YR before deductions. The volume of the pension contributions is around 20 billion YR per year, on the other side there are pension expenditures of about 9 billion per year. A huge profit is accumulating, currently. The accumulated reserve is around 140 billion YR. A 16.5 billions YR income from investments was generated in 2004.

The contributions are deposited at the bank account of the public pension authority at the central bank. Because of the decentralised structure (according to the Local Authority Law) the money firstly goes in form of wages / salaries from the Ministry of Finance to the districts, they calculate the contributions and give them back to the central level and then it goes to the central bank. The staff who manages the pension scheme comprises around 1,000 persons in 22 branches all over the country.

There is a certain equivalence between the total amount of contributions and the pension. In addition there is a systematic adjustment of the pensions: the pensions are increased automatically by half of the growth of the average employees' income (50% dynamic adjustment). For public employees the full entitlement to pension benefits arises at the age of 60 years and after 35 years of service. In case of work injury or professional disease they get up to 100% of the entitlement. In the case of a lethal accident / injury the widow or (young) children receive also the full pension. Partial entitlements are given after 30 years of service, for males after 25 years of service at the age of 50, for females after 20 years of service and 46 years of age, or after 25 years of service for prisoners. Theoretically there could be double pension entitlements for those public servants who worked also in the private sector. In reality it is very seldom because people so far are obviously reluctant to pay a second contribution. Further benefits refer to work injuries / disability / death:

- lump sums (up to 200 US\$) used e.g. for medical treatment.
- pensions according to limb taxing,
- full pensions if disabled,
- and if applicable death benefits.

There is no medical benefit package for work injuries treatment and rehabilitation.

How do the beneficiaries get their money? The benefits are paid either to an individual bank account of the pensioners or - for those who have none - to a special account at the post office.

Military	15.866,2
Civilian	8.581,8
Min of Interior	2.781,6
Total	27.229,6
Source: RoY/CSO 2005	

The army's pension fund actually receives contributions from 350,000 members and pays for 104,710 pensioners. Financial basis is a 6% contribution of the members' salary and an additional 6% government's contribution. The basic salary of soldiers is around 13,000 YR; with additional bonuses it arises to around 20,000 YR. After 20 years of service the average salary is at about 30,000 YR. The average pension therefore is around 20,000 Rials per month. In June 2005 the scheme realised around 1.3 billion YR income and 1.6 billion YR expenditures. The investment return last year was at about 18 billion YR. A pensioner of the army receives a full pension after 20 years of service. The military pension fund's administration includes four departments: monitoring/evaluation, budget, salaries and information. It has a staff of 137 employees in July 2005. The data department has got actual information about pensioners and their families (in the average a member has five relatives); computer-based data collection and identification via photo are parts of the system.

The pension fund of the police insured in July 2005 115,000 policemen and paid 18,630 pensioners. The average salary at the police is at about 20,000 YR. Contributions and the benefit package are similar to the army's pension fund. In this case there is a monthly contribution of the Ministry of Finance of 220 million YR plus 120 million YR subsidies from the government. On the other hand there are expenditures of 275 million YR. The police pension fund itself invested 6.5 million US\$ in the Saudi-German hospital, in driving schools and in buildings. A merging of the police and the security police pensions funds was proposed some time ago. Since the fund of the security police is said to produce deficits, a merger is understandably controversial from the police fund's point of view. The administration has got 160 employees, working in six departments: salaries, finances, investment, legal affairs, management affairs and planning. They plan to build up a new department for a computer-based data-collection. Actually there is no identification of pensioners and paying members via PC-based photo practised as in the Army, but it is planned for the police pension fund, too.

Beside the public schemes there is a private pension fund. According to the law the private pension insurance is mandatory for companies with 5 and more employees. Pay-roll deduction rates are set at 6% for the employees and 9% for the employers. At the moment there are only 6,543 companies registered and 5,530 companies continue to pay pension contributions. Up to now 180,000 members were first registered at the private pension authority but less than 80,000 are continuing. Most of the private companies in Yemen do not pay appropriately to the pension fund and many are said to not declare properly the wages. It is estimated that not even 15% of the private companies that should join the pension fund are doing so.

Sana'a City	29500
Taiz	17634
Al Hadeida	11875
Aden	9457
Hadramaut	7813
Ibb	1845
Dharmar	350
Total	74382
Source: Private Pension Fund	

To the many non-continuing former members, the private pension authority has repaid them lump sums contributions in the value of 760,906,934 YR since the start of this institution. Lump sum repayment is done if there are not more than 109 months of contribution payments. Pensions are given only after a minimum of 180 months of contribution payment. In principle the pension fund contributions can be paid back to the members, if they change the company.

Table 28 Private pension benefits received by end of 2004	
Deaths	6316875
Disability	2662610
Old age	9505616
Total	18485101
Source: Private Pension Fund	

The Chairman of the Private Pension Authority is nominated by the government, although employers and employees are paying all the contributions. The private pension fund, too, has to deposit its funds at the Central Bank.

What does the current practise of pension funds in Yemen mean for a national health insurance system? Yemen has got pay-roll insurance schemes that are working. Though their productivity might get improved the management experience and the data-infrastructure could be used for supporting directly or indirectly a social health insurance scheme. One option is to build up health insurance schemes for the army and the police. It is principally possible to manage the health fund and the pension fund under “one roof”. This option has got theoretically the advantages of realising synergies and building up the system rapidly with employees that have got already partly a suitable qualification. The data-warehouse could also be used for the data-administration of the health insurance scheme. Of course it is also possible to run two independent schemes under “one roof” in the same sector. In this case it is necessary to ensure the data-transfer because the pensioners might also be contributing members to the health insurance fund. Interviews with the heads of both public pension funds in August 2005 indicated that there is a basic readiness for such cooperation. Nevertheless, a pension fund and a health insurance fund are quite different to manage. Just one example is the contracting of medical providers, what needs very special qualifications.

3.3.4 Accidents and work injuries protection

Many laws and ministerial resolutions deal with occupational health and work injuries. The Ministry of Social Affairs and Labour as well as the Ministry of Civil Services and Insurance are entrusted active roles for supervising the responsibilities of the public and private employers according to the labour law. According to the law, work accident insurance should be paid by the employer in the amount of 4% of the salary. 1% of the employee’s salary is deducted for work injuries, too. It could not be established beyond doubts what is done with these contributions, if they are paid at all. Most sources indicated that there are no specific relevant benefits provided. There is no unit or department of occupational health in the MoPH&P.²⁸

An work injuries or accident insurance scheme usually pays a specific amount for a specific injury, for example for the loss of a limb. Policies might also include a certain cash benefit for the family in case of a death caused by a work accident. Many countries have created a social insurance system in which medical costs of accidents (or illnesses) are paid by a health insurance scheme and a disability scheme (integrated in the health insurance or pension scheme) pays for income losses due to disability resulting from either accident or illness. In Yemen the Labour Law²⁹ includes already different stipulations for the private sector for occupational health and safety (see ninth section of Labour Law), e.g. employers have to provide health care for employees, and in case of illness or accident employees are entitled to continuous or intermittent sick leaves according to defined rates (see Articles 79-82 of Labour Law). Interviews indicated that these regulations and benefits are observed in private

²⁸ Chapter 27 of part 3 of our study report presents a documentation on occupational health from the point of view of workers unions in Yemen.

²⁹ Relevant chapters of the Labour Law are reproduced in chapter 25 of part 3 of our study report.

companies but with a different range as to the concrete benefit packages. There is a similar practise in the public sector which operates in general on a more comprehensive level than in the private sector. This practise covers mainly larger and medium scale companies on an acceptable level.

The law proposal on health and work insurance covers actually both: general health insurance and work-insurance. Nonetheless, a discussion is recommendable for deciding whether the country wants to combine labour-related health care with a national health insurance system. Many countries are running a separate system paid by employers only for covering work accidents and occupational diseases. In most Western countries, coverage of work accidents and labour diseases relies exclusively on the employers. The idea is based on the fact that there is an evident relation between work and accidents / illnesses and that the labour conditions have an enormously influence on the health status of the employed. Therefore it is opportune that the employer has an incentive to create (relatively) healthy work conditions by paying the costs or, if there exists a scheme, by paying 100% of the contributions. Yemen's Labour Law follows this view and even expands the duties of employers, for example by the stipulations as to continued pay of income in case of disability because of illness or injury. In practice, however, this has lead many companies to link their health benefit schemes directly to the legal obligations to cover work-related health costs. Interviews with company representatives in charge of administering health benefit schemes showed that no clear distinction is made between health and work insurance with regard to legal obligations.

We recommend thinking about those stipulations also regarding future competitiveness of Yemen's economy on the world market. Building up a modern health insurance system even might enforce private investment in Yemen. Legal dispositions like the exclusive responsibility of employers for paying sick leaves surely will also be discussed under that focus. Compared to other countries, Yemen's labour law benefits employees with relatively high and long-term payments in case of disease. This might be a disincentive for foreign investments in Yemen.

3.3.5 Unemployment protection

Social protection of the unemployed is given mainly by the extended family. One worker has to feed five dependents. There is one special and one general unemployment related public policy in Yemen. Temporary employment is given through public work projects and the social development fund. Low paid overstaffing of public administration is a more generally applied policy. A civil service reform supported by the European Community was intended to master this problem. In view of the mass unemployment and the mass poverty in Yemen, there is one especially reasonable policy: human capital formation in the spirit of empowering people to create and to find and to fill jobs appropriately. A human resource development strategy is a key element of the development strategy of Yemen.

3.3.6 Long-term care protection

The Social Welfare Fund of Yemen provides a

- permanent safety net for “orphans, women without supporter, permanent and complete disabled, permanent and partial disabled and poor and needful parties” (RoY 1999) and a
 - temporary safety net for short- or middle-term disabled, left-alone-families, prisoner families.
- Support is given in kind or in cash. Eligibility is based on findings of the national poverty survey of 1999 and the household budget survey of 1998. Updates of these surveys are expected to be available in 2006. Since 1996 until the end of 2004, the social welfare fund supported 647.333 cases with 2.8 million individuals. 43% of the beneficiaries are left-alone-women (i.e. widows, divorcees, spinsters), 18% senile persons, 16% handicapped. They receive currently 1.000 – 2.000 YR (5-10US\$) per quarter of the year. The yearly budget of the social welfare fund is about 15 million YR (78.000US\$) and this is very low in view of mass poverty. Furthermore there are reports on corruption and faked beneficiaries of the fund and on its high overheads. Non-governmental and charitable organizations can not fill the gap between supply and need. Long-term disabled have to rely on families, neighbours and traders. Often they end up in permanent indebtedness without escape.

3.3.7 Further insurance markets³⁰

Twelve companies share the insurance market in Yemen. United Insurance has a market share of 32% in terms of the market premiums ratio, Trust is following with 13%, Mareb with 12% and Yemen General Insurance with 11%. Other suppliers are relatively small. The growth ratio of United is quite considerable with 33%, even if it is surpassed by Islamic Insurances with 46% and Watania with 59%. They offer the following products.

Table 29 Insurances' portfolios in Yemen Direct premiums in YR	
Motor and workmen's compensation insurance*	1.983.078.000
Marine cargo insurance	1.610.316.000
Miscellaneous accidents	1.184.168.000
Fire insurance	1.097.187.000
Life insurance	611.147.000
Engineering insurance	309.760.000
Total insurance premiums	6.795.656.000
* These two different products could not be separated appropriately. Numbers of insured clients or companies were not provided. Source. Mr. Adel Y.M. Al-Qubi	

Insurance markets are dominated by risks. Aman Insurance for example, in 2004, had a loss ratio of 1.419 % on fire and Trust had a loss ratio of 81% in 2003, when all other companies had loss ratios ranging from 0% to 31%. Loss ratios were higher for fire in 2004. This demonstrates clearly the need for re-insurances in all insurance markets. It is replicated in marine cargo loss ratios exceeding 144% for United in 2003 and of 362% in Saba. Nearly all other insurance companies were lucky to be below 50%. Regarding miscellaneous accidents in 2003 and 2004 all loss ratios were below 100%. The highest loss ratio was experienced at YI&RE insurance in the engineering sector with 3.876%.

Altogether, only 40 YR or 0.20 US\$ are spend yearly for insurance per head of the population. This is very low in international comparison. It reflects a not so positive connotation of insurances in the Moslem World, especially related to products like life insurance. When the University of Sana'a offered it to its professors and instructors, many rejected it because of being "haram", i.e. not according to the prevailing values.

3.3.8 Main policies

Mass poverty and mass unemployment render difficult redistribution and social protection strategies. The mass of the population is left alone with coping and mitigating shocks. Family bonds and kinship-based networks and remittances from family members abroad are the most successful escapes. Entire families can continue to stay or can fall back into extreme poverty if risks and shocks are beyond the limited capabilities of poverty plagued families. Safety nets and social protection measures are urgently needed, because *and* in spite of high poverty prevalence. The main policies in this regard have to be reassessed

- Micro-finance
- Public work programmes
- Social funds
- Consumer food subsidies
- Cash assistance
- Pension schemes

³⁰ Data collection was done by Mr. Adel Y.M. Al-Qubi, specifically hired for this purpose.

Except for the pension schemes, this is beyond the scope and purpose of this report. It is within the scope and purpose of this report to reiterate that investment in human and social capital is very important in this context. Education and health are not only drivers of development they are also very effective measures of social protection. Nevertheless, the government has to give back-up and stewardship. This is missing to a large extent, still, in Yemen.

The Poverty Reduction Strategy Paper of 2002 (RoY 2002) addressed three overall basic goals: “

- (i) Achievement of economic growth, creation of job opportunities and expansion of the economic opportunities for the poor by remedying the structural causes of poverty, focusing on the prevention of poverty and providing sustainable means of livelihood.
- (ii) Enhancement of the capacities of the poor, increasing their assets and the returns derived from such assets, towards more equity by improving the social, productive and economic conditions of the poor and those who are close to the poverty line.
- (iii) Reduction of the suffering and vulnerability of the poor by supporting the SSN (social safety net).”

Its four axes or pillars were defined as

- Achieving economic growth
- Human resources development
- Improving infrastructure
- Granting social protection

In its fourth pillar “social protection” two areas are mentioned specifically: social safety nets and social security. Social security intends to achieve a “vertical expansion in the security system to include health insurance and horizontal to cover a larger percentage of employees in private enterprises and self employed”. The second was not achieved, so far, but it has to be mentioned clearly that the existence of pension funds in the public sectors is a very important achievement, even if they could be improved and strengthened, still. To the first one, this study on a national health insurance system for Yemen tries to contribute.

4. Existing health benefit / insurance schemes

4.1 Solidarity schemes

Nobody plans to be sick or disabled, but illness and accidents happen. With the high cost of health care and the fact that it is increasing according to the inflation-rate, the average Yemenite family will not be able to manage health care costs without some assistance. Compared with Yemen’s 75%- out-of-pocket financing of health costs – some of the interviewed Yemenite experts estimated the amount even higher – most industrialised countries have established hybrid systems in which the public sector, which has the greater share of responsibility, works alongside the private sector, both in the funding of health care. Even with insurance, out-of-pocket expenses can be quite high, making it necessary to include funds for health care in the family budget. A good health insurance program protects against economic disaster in two ways. First, health insurance that covers medical treatment in hospital, surgical and other medical expenses will greatly reduce personal expenses. Second, disability income insurance will replace at least a portion of income lost due to illness or accident. The latter was a central motivation in many European countries in the 19th century to build up both community-based and company-based sickness funds. In the early 20th century the national German statistics for example had counted round about 70.000 of them. Most of them were community-based, others were company-based or for special groups of employees or professionals. The most important risk package in the very beginning was the continued pay of wages in case of sick leave, later the package covered also medical treatments and drugs, the treatment for family members (wife/partner, children) was included according the principles of solidarity. Nowadays the number of sickness funds in Germany is strongly reduced (round about 260), they are required by public statute to balance income and spending and they are not allowed to make a profit. Later on a Health Care Structure Act gave almost every insured person the right to choose a sickness fund freely. To provide all sickness funds with a level field for