



Health Sector Reform in the Republic of Yemen

Strategy for Reform

*Ministry of Public Health
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Foreword

The Ministry of Public Health (MoPH) is proud to present its *Health Sector Reform Strategy*, set forward in this document. It is my belief that this strategy will mark a new beginning for the Ministry of Public Health, and will allow the Ministry to meet the health care needs of the Yemeni people with safe, effective and affordable health care.

The Ministry is highly appreciative of the commitment and support for its reform by the President of the Republic, Ali Abdullah Saleh, who has declared governmental reform to be essential in the coming years in order to promote the development of the nation. The health sector reform is an integral part of the government's overall reform program, and exists within the framework of this comprehensive reform.

I am especially proud that Yemen's health sector reform was initiated by the MoPH itself rather than by external organizations. Formulation of the strategy followed a careful internal analysis by Ministry staff of current system weaknesses and potentials. The fact that the strategy is 'home-grown' makes it more realistic and appropriate to the context of Yemen. At the same time, donors and other foreign organizations and individuals working in the field of health have supported the MoPH in this effort by providing encouragement, funding, and information. The Ministry greatly appreciates this support.

The decision to carry out a health sector reform was not taken lightly. Reform is a major task that can only be justified if the problems of the present system are sufficiently serious, and if less radical solutions to remedy these problems have already been attempted. In this decade, it has become clear that, indeed, the MoPH is in a deep crisis, and that minor adjustments to the system are not sufficient to remedy this crisis. The crisis is not only financial, but is also a crisis of quality of care, and of accountability to the public. It has become clear that the system in place does not fit with the present realities in Yemen. For this reason, the various technical solutions attempted by the Ministry of Public Health in the past have not been successful. With the reform, the Ministry has adopted a *systems approach*, rather than a purely technical one, which it believes will be the key to the transformation of the sector into one which is efficient and innovative, and able to provide good quality care equitably to both its urban and rural populations. The reform especially targets the poor, who have the greatest need for inexpensive, accessible and good quality health services.

Health sector reform is a major undertaking, and it will require a sustained effort on the part of the Ministry of Public Health to accomplish it. The Ministry, however, cannot succeed if it is alone in this effort. It will require the commitment of the government as a whole, especially the Ministry of Planning and Development, Ministry of Finance, and Ministry of Civil Service, all of whose policies and support will have a major impact on the success of the reform. Donors to the health sector will also be requested to assist in new ways in order that sustainability of the system becomes a reality, and does not remain just a catchword.

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Executive Summary

The Ministry of Public Health (MoPH) has put forward a Health Sector Reform (HSR) Strategy, designed to address the failures of the current health system. In this volume, the current health care situation is described, health system failures are analyzed, and the strategy for reform resulting from this analysis is outlined.

The government's health system is in a state of prolonged crisis, a crisis that has worsened dramatically in the past decade. Long term underfunding, poor management, and a health system model poorly suited to Yemen's needs have combined with a downturn in the economy and with a high population growth rate, to create a health system increasingly unable to meet the health care needs of the Yemeni population. Mortality and nutrition indicators remain high compared to other countries in the region, and the quality of health services as well as the coverage of the population with these services remains low. The following are indicators of the crisis the government health sector is in:

- The worsening of some health indicators, such as malnutrition, in this decade;
- A government per capita health care budget of only \$3.60 in 1996, which covers only a fraction of the health care need, according to international benchmarks;
- Lack of essential drugs and services in government health facilities, leading to a bypass rate of between 42 to 73%;
- An immunization coverage rate of only 28%;
- Lack of geographic access, with only 30% of the rural population having access to health care, and with only 50% access overall;
- Out-of-pocket contribution of households to health care costs of 75%, with the government's contribution only 25%. This is the lowest government contribution in the region, with other governments contributing between 33 and 86% of total health care costs.

The crisis of the health system has long been recognized by the MoPH and donors alike, and technical input solutions and piecemeal reforms have been attempted in order to improve the system. For example, in the 1990s, partial solutions such as experimentation in cost sharing, and encouragement of the private health sector through economic incentive programs, were instituted. However, these measures have not produced the improvements hoped for in terms of health care quality, coverage, and accessibility. In order to bring about these improvements, the MoPH has, in the end, found it necessary to engage in a detailed analysis of the current health system in order to understand where the essential problems lie. This analysis has resulted in the proposed strategy for reform.

Overall, the reforms concentrate on greatly improved management systems, decentralization of numerous management functions to the level of the district, cost sharing with the users of health services, a stronger policy and management role for the MoPH, and a smaller role in direct service provision.

Key elements of the reform will include the following:

- Decentralization
- Redefinition of the Role of the Public Sector
- District Health Systems (DHS)
- Community Co-management
- Cost Sharing
- Essential Drugs Policy and Realignment of the Logistics System
- Outcome-based Management System with an Integrated Focus on Gender
- Hospital Autonomy
- Intersectoral Cooperation
- Encouragement of Participation by the Private Sector and NGOs
- Encouragement of Innovation
- Sector Wide Approach to Donor Funding and Programming

The reform will take place in two phases: (1) an *initiation*, or learning phase, in which all key aspects of the reform will be initiated, lessons learned, key legislation passed, district health systems put in place in at least 40% of districts, revisions of the financial system initiated, and major actors brought on board; and (2) a five year *consolidation* phase in which the lessons learned in the initiation phase can be fashioned into long term systems, policies and regulations, and the remainder of the districts brought into the district health system.

The initiation phase is set to coincide with the remainder of the First National Five-Year Plan for Health Development for the years 1996 - 2000. By the year 2001, it is expected that the consolidation phase will begin. The consolidation phase will coincide with the Second National Five-Year Plan for Health Development for the years 2001 - 2005.

Reform strategies fit within the bases and principle for health development policies and strategies, as outlined in the MoPH's Five-Year Plan. The Ministry remains committed to a primary health care approach, and to the goals of *Health for All*. The Goals and Principles of the MoPH, as articulated in its Health Development Policies and Strategies (HDPS) document will be the guiding principles for the provision of health services, as are the six targets adopted by the National MCH-FP Integrated program.

The reform, however, takes one step back from these goals in recognition of the fact that before any of these goals can be reached, the MoPH needs to focus on system building. It has been the weaknesses of the system that have prevented the MoPH from reaching its health goals in the past, and it is only through fundamental reform of the system that these technical goals can be met. The process of system building will take at least 50% of the energy of the MoPH in the coming three to five years.

The reform especially targets the poor, through a variety of mechanisms designed to meet their needs. The long-term objectives of the health sector reform program are as follows:

- 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 MoPH's vision is that Yemen is to become a nation of healthy individuals, families and communities through creating a system which is equitable, affordable, accessible, efficient, technologically appropriate, environmentally adaptable and consumer friendly, with an emphasis on quality, innovation, health promotion, and respect for human dignity, and which promotes individual responsibility and community participation towards an enhanced quality of life. The HSR is the means through which this vision will be accomplished.

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infection
BDN	Basic Development Needs
CBD	Community Based Distributor of Contraceptives
CDD	Control of Diarrheal Disease
CHC	Community Health Committee
CHW	Community Health Worker
CRC	Convention on Rights of the Child
CSO	Central Statistical Organization
DDC	District Development Committee
DHC	District Health Council
DHS	District Health System
DHMT	District Health Management Team
EPI	Expanded Program for Immunization
FP	Family Planning
HDPS	Health Development and Planning Strategy
HF	Health Facility
HFC	Health Facility Committee
HFT	Health Facility Team
HMI	Health Manpower Institute
HPSD	Health Policy and Manpower Planning
HSR	Health Sector Reform
IMR	Infant Mortality Rate
LBW	Low Birth Weight
MENA	Middle East and North Africa
MCH	Maternal and Child Health
MMR	Maternal Mortality Rate
MOF	Ministry of Finance
MoPH	Ministry of Public Health
NGO	Non-governmental Organization
ORS	Oral Rehydration Solution
PHC	Primary Health Care
PHCW	Primary Health Care Worker
STD	Sexually Transmitted Disease
SWAp	Sector Wide Approach
TBA	Trained Birth Attendant
TFR	Total Fertility Rate
U5MR	Under Five Mortality Rate
UNICEF	United Nations Children's Fund
WHO	World Health Organization
YDMCHS	Yemen Demographic Maternal and Child Health Survey

Strategy for Reform

I PREFACE

Yemen's government health sector is in a state of crisis, a crisis which has worsened in the past decade due to increased population pressures, low public sector spending levels, poor sectoral planning and management, and the existence of an ever enlarging health sector infrastructure to support. The MoPH, acknowledging this crisis, has begun to put in place a series of programs designed to improve the quality, efficiency, and accessibility of health care for the population. These programs, which will be outlined in this paper, form the core of the MoPH's *Health Sector Reform (HSR) Program*.

The task of reform is huge, and the financial as well as the management resources at the disposal of the MoPH are limited. The Ministry will phase its efforts, beginning with the most crucial and implementable programs of action. The MoPH invites other government sectors and institutions, NGOs, and the donor community to join with it in its reform program in order to systematically improve health care for the people of Yemen.

This volume will describe the current health care situation, analyze health system failures, and outline the strategy for reform resulting from this analysis. This strategy paper will serve as a general framework for reform. As such, no attempt has been made to delineate in detail each of the major policies deriving from the reform e.g. health manpower policies. As the reform emphasizes a bottom up, as well as a process approach, the details of a number of these policies will follow from initial experience building up district health systems. The contents of this strategy paper will serve as an overall guide for such policies.

II BACKGROUND

II.a The Health Situation in Yemen

Yemen's health situation is one of the least favorable in the world. Poverty, closely spaced pregnancies, and low health awareness combine to start off the life of 19% of Yemeni children low birth weight (UNICEF, 1997). Low birth weight, in turn, is one of the main contributors to Yemen's very high infant and under-five mortality rates. Other reasons are inaccessible and unaffordable health care, low educational levels of parents, and low access to water and sanitation.

Malnutrition is also high, and apparently rising, the latest figures from the 1996 Multiple Indicator Cluster Survey showing that the level of moderate to severe wasting was 15.9% in 1996, compared to 12.7% in 1992 (CSO, unpublished). This survey shows that almost half of Yemeni children (45%) are below average height-for-age. Only two countries in the world have a higher rate of wasting and only 13 have a higher rate of stunting.

Maternal health and health care indicators are also dire, and compare unfavourably with those of other countries in the Middle East and North Africa region. Some telling indicators are the following:

Maternal mortality rate* **	1,000-1,400/100,000 births
Total fertility rate***	7.4
Prenatal care***	26%
Postnatal care***	5%
Contraceptive prevalence rate**	7%

(*MoPH, 1995, **UNICEF State of the World's Children, 1997, ***YDMCHS, 1994)

One of the most serious health risks for Yemeni women is their extremely high fertility rate. At 7.4 (CSO, 1996), the total fertility rate (TFR) is one of the highest in the world. High fertility levels are a health concern because of the added stress they place on the bodies of women, and the higher mortality risk these women incur. Children born after short birth intervals also suffer higher levels of morbidity and mortality. In addition, high fertility levels are of major concern for the development of the country, because Yemen's resources, especially its water resources, cannot support a rapidly expanding population. The population growth rate is faster than the expansion rate of health facilities, while the expansion rate of educational facilities only just keeps up with population growth.

Some comparisons of Yemen's key health indicators to other countries in the Middle East and North Africa are as follows:

Health Indicator	Yemen	Egypt	Jordan
IMR 1997 (per 1000 live births)	76	54	20
U5MR 1997 (per 1000 live births)	100	73	24
% of new-borns low birth weight 1990-97	19%	10%	7%
% of births attended by trained personnel 1990-97	43%	56%	97%
% of women immunized against tetanus 1995-97	17%	61%	40%

Source: *The State of the World's Children 1999*

Yemen remains in the early stages of the epidemiological transition, with morbidity and mortality from communicable diseases still predominating over non-communicable diseases, and with high levels of malnutrition prevailing. The most common and serious health conditions Yemen faces are diarrhea, malnutrition, complications of pregnancy, acute respiratory infections, and malaria. AIDS is becoming increasingly prevalent, and non-communicable conditions such as cancer, heart disease and trauma are also on the rise (World Bank, Radda Barnen, UNICEF, Volume II, 1998).

II.b The Government Health Sector in Yemen

Yemen adopted the PHC approach in 1978, the year of the Alma Ata Conference. To implement this approach, Yemen has utilized a traditional facility-based, three tier health delivery system of health units, health centers and hospitals. This system has been gradually expanding, and geographic coverage has risen from 10% in 1970 to an estimated theoretical 50% at present (real access to services, as measured by the presence of *services* within health facilities, rather than simply the presence of *health facilities* themselves, is substantially lower). Health manpower has similarly expanded, with health manpower institutes (HMI) now operating in eleven of Yemen's eighteen governorates, and with private and public universities also graduating health staff in large numbers.

Adherence to this traditional health facility based model of health care, which sought the expansion and proliferation of government health facilities and health manpower as the solution to Yemen's health care needs, went largely unchallenged throughout the 1980s. Almost from its inception, however, the health system has suffered from numerous structural and service delivery problems including poor quality of services, low staff morale, lack of essential drugs, inadequate levels of running costs, low efficiency, underutilization, leakage of resources out of the system into private hands, lack of rationalization of service usage, and lack of equity in the distribution of facilities and manpower. Despite these and other problems, donors and government alike continued to support this system, attempting to improve it through capital investments, training, minor structural adjustments, and the injection of donor funds. Throughout, it was severely underfunded by government.

During this same period, Yemen's economic situation was weakening, and finally reached a point of crisis in the early 1990s, due to a series of internal and external events. Yemen's economy at

that time was characterized by declining productivity, spiralling inflation, devaluation of the Yemeni rial, a large and inefficient public sector, increasing poverty, high unemployment, and a large foreign debt. It was with this dramatic economic downturn that the MoPH began to seriously question the potential and sustainability of its model. While in 1995, Yemen launched an economic reform program, which resulted in significant economic improvement at the macro-economic level, poverty continued to rise. In 1998, the fall in petrol prices, with consequent severe budgetary cuts in government programs, served as a reminder that the crisis was far from over, and that both citizens and the government sector would be constrained in their spending ability for some years to come.

The consequences of the economic crisis for the government health sector, combined with the effects of rapid population growth, have been dramatic. The per capita budget for the sector dropped by 37% between the periods 1990-1993 and 1994-1996, crippling an already underfunded system (World Bank, Radda Barnen, UNICEF, Volume II, 1998). Rapid inflation has meant that government health workers, in common with all civil service employees, have seen a dramatic drop in their real wages. A 1996 analysis of wages of public health sector employees in four governorates showed that between 50 and 80% of these employees per governorate received a level of wages that placed them below the poverty line (ibid.). Since that time, cost of living increases, the removal of government subsidies from wheat and other basic items, and stagnating wage levels have combined to increase poverty of government health workers even more. This has exacerbated the pre-existing problem of health workers diverting patients from government facilities to their private practices, and the demanding of "under the table" payments within the public sector.

During the period 1990 - 1995, donor funding accounted for approximately one quarter of total funding for the health care system, leading to serious concerns about its sustainability. The situation of subsectoral programs such as essential maternal and child programs is even more serious. In 1996, donor funds accounted for well over 50% of the operational costs of core maternal and child programs such as EPI, essential drugs, ARI, CDD, and MCH/FP (ibid.)

Yemen's economic crisis has resulted in significantly fewer government resources available per capita than in the 1980s, leaving a gap in social services which has not yet been filled. Poverty and unemployment remain high, with poverty unofficially estimated at 30% in 1997, up from 19% in 1992 (World Bank, Radda Barnen, UNICEF, Volume I, 1998). The country's social safety net programs cover only a tiny proportion of the need, and some are not yet operational. Within this environment, the ability of citizens to afford health care has been seriously compromised, and their access to the preconditions for good health i.e. education, water, sanitation, and economic well being have been jeopardized. Given this economic environment, the MoPH judges it imperative that health sector reform addresses issues of equity and cost as its central issue.

The economic situation has placed the MoPH in a particularly difficult dilemma. In order to meet the needs of the people, and especially the poor, it must provide services at low cost. At the same time, in order to provide the services needed by the people, it must increase its resource base, which inevitably means asking citizens to pay some percentage of the cost of government services, without which it will remain crippled. However, the World Bank Public Expenditure

Review for the Health Sector (World Bank, 1998) estimates that citizens already pay up to 75% of total health care costs out of their own pockets, with government contributing only 25%. Within this environment, introducing cost sharing measures, while at the same time decreasing overall health care costs for the consumer, will require skilful management.

Since Reunification in 1990, and especially since 1995, there has been increasing awareness by government and donors alike that the health system model followed in Yemen is not affordable by the Yemeni government, nor is it capable of meeting the needs of the population. The system has been driven by an ideal of covering the entire country with health units, health centers and hospitals, and providing free health care for all, regardless of the fact that some segments of the population can easily afford to pay for health care, and do not require free care. The economic consequences of this model were not costed out at its initiation, and years into the building up of this system, it has become clear that continuing down this road will cost far more than the Yemeni government can afford, even under greatly improved economic circumstances. In addition, the output i.e. low patient to staff ratios, and lack of real services, has not justified the input, even under better economic circumstances.

As the system has expanded, running costs have been insufficient to support the infrastructure and staff put in place, resulting in the breakdown of the system. Health facilities are in disrepair, the supply of drugs and equipment is severely limited, and lack of funds for supervision and the carrying out of management functions has led to poor quality of care, lack of services, and inefficient use of the resources which *are* available. Despite there being a sizeable number of government health facilities and health manpower in place, patients are forced to bypass the system for more expensive private health facilities, because of lack of services in these government facilities. A recent study found that the bypass rate was between 42 to 73% per area studied (World Bank Discussion Paper, 1998). As a result, the government health service sector has become grossly under-utilised and health staff are idle.

Since recognition that the health system, as it is presently designed, is unsustainable, government and donors alike have been introducing some changes into the system. The two most important innovations have been (a) expanding the role of the private sector through a deliberate policy of economic incentives, and (b) introducing cost sharing schemes such as fee for service and revolving drug funds on an experimental basis.

The first of these innovations has been rational from the point of view of providing alternative curative care services for patients who can afford to pay for them. One study has shown that by 1996, between 22 and 52% of outpatient visits per area studied took place in private facilities (ibid.). However, the regulatory role of the government health sector is weak, and it has been unable to ensure that the rapidly expanding private health care sector is providing safe and good quality care. While studies of the private sector are nearly non-existent, anecdotal evidence shows that issues of safety and quality of care in the private sector are a major issue, and that effective regulation is imperative. One of the only studies that looked at the private sector was a 1997 WHO study of laboratories in Yemen. It found that overall quality and reliability of services was poor, and that the lack of acceptable quality Yemeni laboratories seriously jeopardized the ability of physicians to make accurate diagnoses (Browning, 1997).

Another problem with the present role of the private sector is that it appears to be geographically competitive and overlapping with, rather than complementary to, the public sector. Private practices tend to be set up on the doorstep of public facilities, rather than in areas where government services are lacking. A 1996/1997 four governorate survey found that those districts with the highest number of government facilities also contained the highest number of private facilities, while those with the lowest number of government facilities contained the least number of private facilities as well (Beatty et al, 1997). The private sector also plays only a small role in advancing the MoPH's overall health goals, providing few targeted services such as family planning, antenatal care, and health education (ibid.).

Experience with the second innovation, that of cost sharing, has shown that while cost sharing is potentially a very useful strategy for Yemen, the overall management structure of the MoPH will need to be revised before it can manage such a scheme well. As it is currently practiced in many facilities, patients are now paying for services that were previously free, with no apparent improvement in quality. There is no management system in place which helps managers of health services see the effects of their fee system on quality of care (Tibouti, 1995). Second, there is evidence that, as currently practiced, the institution of fees for services may be seriously compromising the accessibility of health services, which are already highly inaccessible to many (World Bank, Radda Barnen, UNICEF, Volume II, 1998). These and other serious issues will need to be addressed before cost sharing will lead to more accessible, higher quality, and ultimately more affordable services. While it seems, on the face of it, a contradiction to expect cost sharing to lead to more affordable services, such an outcome is entirely possible with a well managed system, if it takes advantage of low cost generic drugs, and institutes efficiency measures. In particular, by government making available previously unavailable low cost generic drugs, and by providing these and other services at all levels of the system, thus obviating large transportation costs to more distant facilities, significant savings can be realized.

Experience with both these innovations has convinced the MoPH that piecemeal reforms and innovations are not sustainable or effective, and that a full scale reform, which takes into account the system, as a whole needs to take place. In particular, the lack of management systems within the public sector to support these innovations has led to higher costs for the consumer without any proven improvement in quality or accessibility.

Some indicators of the crisis the government health sector is in, and its inability to meet the needs of the population are the following:

- The worsening of some health indicators, such as malnutrition, in this decade. (previously quoted).
- Per capita health care budget of only \$3.60 in 1996, which covers only a fraction of the need as compared to international benchmarks (World Bank, 1998). During the 1990 to 1996 period, public health care expenditures in Yemen averaged only 4.2% of total public expenditures, compared to 6% for MENA countries, and 5% for least developed countries (UNICEF, 1998).
- Low annual per capita outpatient utilization rates of only .58 to 2.7 in different areas of

the country (World Bank Discussion Paper, 1998).

- Lack of essential drugs and services in government health facilities, leading to a bypass rate of between 42 to 73% (ibid.).
- An immunization coverage rate of only 28% (YDMCHS, 1997) despite clear prioritization of this program in Yemen, and despite the fact that this is the simplest of all technical programs to implement.
- Chronic underutilization of government facilities due to issues of quality and lack of services, with an average daily health care visit to staff ratio of only 2.2 (Beatty et al, 1997). This leads to large inefficiencies in the use of the government health sector's capital and human investments.
- Low geographic access, with only 30% of the rural population having access to health care, and with only 50% access overall (MoPH, 1995).
- Patients being forced to use private facilities, despite their unaffordability, because of lack of services in government facilities (World Bank Discussion Paper, 1998). As a result, the out-of-pocket contribution of households to health care costs is 75%, with government contribution only 25%. This is the lowest government contribution in the region, with other governments contributing between 33 and 86% of total health care costs (World Bank, 1998).
- A largely unregulated and low quality private sector, with many private facilities unlicensed. A recent WHO study found almost no medical laboratories providing an acceptable standard of service (Browning, 1997).
- Low quality of government service, with the same WHO study finding *no* government laboratories included in the study of acceptable quality, making accurate diagnosis of disease very difficult (ibid.).
- Availability and usage of NGO health services is low.
- Lack of financial access of the poor, with the poorest quartile of the population using health facilities 35 to 65% less often than the most well off quartile (World Bank Discussion Paper, 1998).
- Low usage of preventive care i.e. preventive visits constitute only .6 to 6% of total outpatient visits (ibid.). Such an overemphasis on curative care has low cost effectiveness, leading to large inefficiencies in the use of the health care budget.

II.c The Need for Change

Given the lack of quality, efficiency, and accessibility of the present health care system, the MoPH realizes it needs to be restructured in order to better meet the needs of the population, recognizing not only what are priorities in terms of disease entities, but also coming to terms with the constraints people face in affording and accessing care. At the same time, it recognizes its own budgetary limitations, and that there are less expensive and more efficient ways to meet its goals than it is now employing. Specifically, it will need to do several things, the details of which will be enlarged upon in later sections. These are:

- Make health care less expensive for the population by (a) providing good quality health services closer to where people live through district health systems, and by (b) decreasing the current cost of drugs, since drugs and transportation are the two highest health care costs to patients, constituting between 64 and 82% of all out-of-pocket health care expenditures (World Bank Discussion Paper, 1998).
- Emphasize preventive services, since these offer a much higher cost savings per disease condition than curative care e.g. immunization against polio costs a tiny fraction of the rehabilitation costs of a child afflicted with this disease.
- Make more efficient use of government resources through improved budgetary and management systems, and by placing management resources in the hands of district authorities and communities, who are closer to the people who need to use the health services. Other efficiency gains will be made from instituting a functioning referral system, and by shifting the budget from urban and tertiary care facilities to basic health facilities, and to rural facilities.
- Set boundaries on the public health service delivery system i.e. government will limit its service delivery role to one which is financially and managerially feasible. Through effective regulation and policy decisions, make the resources of the private and NGO health care sectors work towards the meeting of national health goals. Because so little is now known about these two sectors, the first action related to this set of policies will be to carry out a study on the issue.
- Increase the resources flowing into the government health care sector through the provision of higher allocations from the national budget, and through the introduction of cost sharing and community financing schemes. Cost sharing schemes will be designed in such a way as to *decrease* the costs consumers are now paying for health care, rather than increasing them. In practice, this will mean that essential drugs offered through cost sharing schemes will be significantly less expensive than similar quality drugs in the private market (where public sector patients now purchase them because of lack of drugs in the public sector), that training and management systems will encourage shorter (and therefore less expensive) prescription lists, and that these and other essential health services will be offered throughout the government health facility structure, especially rural areas, therefore saving consumers high transportation costs to urban facilities, facilities they now overuse due to lack of services in peripheral facilities. Such a scheme has already been shown to create cost savings to consumers in some of the experimental cost sharing programs.

- Include a multi-sectoral approach, phased in once the basic management and health delivery system is in place. This approach is necessary because health in Yemen is a result of a wide variety of factors i.e. awareness and education, a clean environment, water and sanitation, and adequate economic means, not only health service availability. In contrast to most earlier attempts at intersectoral cooperation, the current approach will be district rather than centrally based, in order to capture community involvement and provide incentives to well functioning district health systems.
- Create policies and implementation strategies that are gender enlightened. Neglect of this in the past has led to health services that did not target adequately the needs of women. As a result, Yemen has one of the highest maternal mortality rates in the world, and a low female to male health provider ratio, which makes it culturally difficult for women to access health care. Health care strategies, staff hiring policies, incentive policies, monitoring indicators and all other aspects of the work of the Ministry will need to be based on a gender analysis to address this issue.

II.d The Health Sector, Major Actor in Development

The low level of functioning, and the underfunding of the present government health system has serious implications not only for direct health care issues, but also for Yemen's economy, and its development as a whole. As such it is in the best interest of the government as a whole that the health system is functioning well. Some important examples of the role the MoPH can and must play in the economic and social development of the country are as follows:

Decreasing Days of Productivity Lost due to Illness

Morbidity is high due to lack of preventive measures, and a high proportion of illnesses are left untreated or are treated inadequately due to the unaffordability of health care as well as the low quality of care. As a result, work productivity is low, negatively affecting the development in the country. A 1996 study showed that .9 to 1.8 days are lost to illness each month for heads of households, and that school children lose an average of 1.1 to 2.2 days of school a month due to illness (World Bank Discussion Paper, 1998). This loss of productivity among different categories of productive family members demonstrates the economic costs of poor health, and lack of access to health care.

Freeing up Resources for Investment

Economic development cannot take place without significant financial investment by the population. However, the high costs of poor health and health care divert money away from development purposes. Currently, health care is the third largest expense of households, following food and qat, and, as previously noted, households shoulder three quarters of total health care costs, with government shouldering only one quarter. Households regularly go into debt paying for health care, or sell off their economic assets. Between 18 and 40% of households who require hospitalization for one of their members go into debt, and between 7 and 27% must sell off assets to pay for this care. Similar, though less striking economic compromises have to be made for even minimal outpatient care (ibid.). As such, the high costs

of health care divert money away from development purposes.

Improving Balance of Payments through Improved Drug Policies

The highest proportion of out of pocket health care expenditures goes towards the purchase of drugs i.e. between 43 and 73% of total out of pocket health care costs (ibid.). Several studies of drug prescribing behavior show that 42% of drugs prescribed are unnecessary (see, for example, Walker et al, 1990). Expenditures by households on unnecessary drugs divert resources away from development purposes, and their importation from abroad exacerbates Yemen's balance of payments problem. Encouraging the importation of low cost generic drugs, and improving prescribing practices so that fewer drugs are used, has important economic consequences at the level of the household, and for the national economy.

Decreasing Population Pressures

The MoPH has a key role to play in promoting and making available family planning methods, in order to ease the economic burden on struggling families, and to decrease population pressures on social services such as education and social welfare. With one of the highest population growth rates in the world, Yemen is facing a severe drain on its resources, especially water, which is dwindling at an alarming rate. In 1994, annual water usage was estimated at 0.7 billion cubic meters, or one third greater than annual water replenishment (World Bank, 1997).

Implementation of the Convention on Rights of the Child (CRC)

Yemen ratified the CRC in 1991, which commits it to implementing its articles. A number of these articles refer to the health and survival of children as an essential right. The MoPH has an essential and unique role to play in honoring the government's commitment to this convention, which asserts the right of every child to appropriate health care and to life itself (Beatty et al, 1998).

II.e Health Sector Reform; Context and Long Term Objectives

Reform of the health sector will take place within the overall context of government reform. A number of trends are occurring at the national level, which will be supported by, as well as support the sectoral reforms of the MoPH. Some of the most important of these are decentralization, democratization, civil service reform (or modernization), and financial restructuring. By placing its sectoral reform within the overall administrative reform of the nation, the MoPH can best serve the development needs of the country, and receive the support it needs to succeed in its reform efforts.

The long term objectives of the health sector reform program are as follows:

- 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 MoPH's vision is that Yemen is to become a nation of healthy individuals, families and communities through creating a system which is equitable, affordable, accessible, efficient, technologically appropriate, environmentally adaptable and consumer friendly, with an emphasis on quality, innovation, health promotion, and respect for human dignity, and which promotes individual responsibility and community participation towards an enhanced quality of life.

III ELEMENTS OF HEALTH SECTOR REFORM

III.a Key Elements

The primary thrust of the reform will be to put into place efficient, effective, and responsive *systems*, based on an analysis of system weaknesses as presented in the body of this document, and in Annex I. This systems based approach is a departure from earlier strategies, which were *project* based. This change in approach is expected to result in a sustainable and functioning health system that will provide an effective base for essential technical programs such as EPI, MCH/FP, malaria, etc. Key elements of the reform will include the following:

- Decentralization
- Redefinition of the Role of the Public Sector
- District Health Systems (DHS)
- Community Co-management
- Cost Sharing
- Essential Drugs Policy and Realignment of the Logistics System
- Outcome-based Management System with an Integrated Focus on Gender
- Hospital Autonomy
- Intersectoral Cooperation
- Encouragement of Participation by the Private Sector and NGOs
- Encouragement of Innovation
- Sector Wide Approach to Donor Funding and Programming

III.b Decentralization

Decentralization is the key reform upon which all other aspects of the reform depend. The rationale for decentralization is well known i.e. the greater efficiency and effectiveness to be gained by managers at the district level in planning and implementing health services for their populations. In addition, other key aspects of the reform, such as community participation in management, cost recovery, and the setting up of effective motivational systems cannot be implemented if the overall system remains centralized, as it is now. It also has important democratic and psychological consequences for those who participate in such systems, creating greater motivation and commitment to the system. These are two important intrinsic elements almost entirely missing from the present health system, with grave consequences for its effectiveness and responsiveness. Through district and subdistrict level participatory management, health workers will have the satisfaction of understanding their health care situation through their own analysis, they will be able to act quickly and with effectiveness, and they will have community support, all of which create a feeling of ownership and commitment.

Decentralization of the health sector is occurring within the context of overall decentralization of government in Yemen, and is being designed to take advantage of new local administrative structures. Currently, general administrative decentralization is being planned, with the draft Law for Local Administration currently before Parliament. This law is designed to strengthen local government, and to decentralize a number of governance functions to the level of the district. Expected key provisions of this draft law are elections of local officials at district and lower levels, raising of revenues locally, and local management of development projects. As currently designed, this draft will create more control of health and other services by local authorities, and will support decentralization of the technical sectors down to the level of the district.

The type of health system decentralization planned for Yemen under the reform is primarily **deconcentration** to the level of the district i.e. the transfer of some key management and financial functions to the district level. Limited budgetary decentralization from the national to the governorate level already began in 1995, with governorate health offices being given partial control over chapters one (salaries and wages), two (operational costs), and five (investment costs for building and medical equipment). In the case of hospital autonomy, in which it is proposed that public hospitals will be managed by autonomous hospital boards (this system to be explained in a later section), a more radical **delegation** type of decentralization will also take place i.e. organizations outside the regular bureaucratic structure of the MoPH will be delegated some of the service provision responsibilities which have been, up to now, totally publicly controlled. Autonomy of basic health facilities will follow, based on the experience with hospital autonomy.

The borders of a health district will follow, as much as possible, the same borders as the present administrative districts in Yemen. However, in cases where districts are exceptionally small or large, and where road systems and geographic features make it practical, the present administrative districts will be split or combined, in order that each health district will serve a population of approximately 100,000.

The new role of the MoPH, to be dealt with in more detail in the following section, will focus on planning and regulation as well as the provision of public health and preventive services. 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. It will have a managerial role, which includes the following components:

- Allocation of resources to district health facilities
 - within national guidelines
 - according to strategic plans of districts
 - with service agreements or contracts with providers of health services

- Human resource planning
 - ensuring availability of professional staff, based on location and need
 - training plans based on needs assessment

- Monitoring and regulation
 - activity and outcome data
 - professional regulation
 - oversight of cost sharing schemes
 - contracts and licenses

- Monitoring of referral system within the governorate
 - according to national guidelines

Within the district, district health systems will carry the primary responsibility for health service planning and provision within their districts, including private and NGO health services. At the district level, the administrative structures set up will reflect a strong role for both the community and the district health office. The district level administrative structure includes:

District Health Council (DHC), composed of community members, sectoral, and government health staff. The local district health council will be comprised of both appointed and elected members in addition to sectoral directors for health, education, water, agriculture etc. The Council will have a policy, planning and coordinating role for the district.

District Hospital Board, composed of key representatives from the health facility committees in the district, the director of the hospital, and other key district level officials. The Board will have a planning, budgetary and regulatory role in the management of the hospital.

District Health Management Team (DHMT), composed of key district health staff. Its role will include the following:

- ensuring local implementation of national strategies
- local health service planning
- operational management of staff and facilities other than autonomous units
- technical support, training and supervision
- data collection and information management
- health education
- collaboration with other sectors
- promoting community participation and mobilisation
- ensuring the functioning of referral systems and appropriate access to health services
- coordination with and regulation of private and NGO facilities.

Below the level of the district, a number of structures such as health facility teams and health facility committees will be set up to ensure community participation and team management. Descriptions of these structures, as well as further details on district level structures, are elaborated in annex II.

III.c Redefinition of the Role of the Public Sector

Reform of the health sector in order to create efficient and equitable health services has meant defining new strategies. The implementation of some of these strategies will exist *within* the public health care provision system, and some will exist *outside* it in the private and NGO sectors, but be more strongly regulated by government than previously.

In addition, reform strategies require that there be a matching of service provision by government with budgetary realities. Given the current low budgetary support for the health sector, and even with increased support in the future, it is clear that the reform will necessarily have to limit the size of the government's health care provision system. As such, *the present idea of building up a comprehensive facility based e public health service delivery system will need to be abandoned.* Devising alternative strategies which make more efficient use of *existing* facilities and manpower, and matching the needs of the population with strategies which can meet these needs most cost-effectively will be encouraged at the national, governorate and district level. In summary, building a reform strategy which recognizes the budgetary limitations it works under has resulted in the following implications for the role of the government health sector:

- Realistically redefining the limits of the public health service provision system
- Developing policies for encouraging and regulating alternative health care providers i.e. a safe private and NGO health sector
- Rationalizing the budget with effective and efficient reform strategies

With this in mind, the MoPH will redefine its role in three crucial ways. First, at the national level, it will take on a stronger and more effective policy and regulatory role, in order to improve the quality and efficiency of the *entire* health sector, whether it be government, private, or NGO. The new role of the MoPH will focus on strategic planning, including human resource planning, and the development of national health policies and priorities; coordination, monitoring and evaluation; financial audit; legislation and regulation; ensuring availability of public health programs; and quality assurance.

Second, the MoPH will redefine its role so as to strengthen its ability as a public health, as opposed to a service delivery institution. That is, it will develop its capacity in the area of overall disease control and health promotion, in order to capture the efficiency that can be gained by prevention, promotion, and early intervention. At present the MoPH runs a number of vertical disease control programs but does not have the capacity to effectively detect, control, prioritize, and plan the public health management of these diseases. The MoPH will budget and restructure to develop this added capacity.

Third, it will set limits on its role as a service provider. While continuing, for the present, to act in the role of a service provider at the basic health service level, especially for the poor, the public health system will gradually phase out of direct service provision at the hospital level. Eventually, depending on the experience with hospital autonomy, the public sector will also

phase out of service delivery at the basic health services level. The role of the public health sector in health service provision will be as follows:

- to provide basic, *limited* curative health services on a cost sharing basis with the public, especially targeting the poor
- to provide basic preventive services such as EPI, nutrition, and health education for the entire population
- to engage in communicable disease control programs for the entire population, especially for those diseases which have large externalities. This will include CDD, malaria, schistosomiasis, tuberculosis, hepatitis, AIDS/STDs, leprosy, and rabies control activities.

Under the current system, despite a large number of health facilities, the lack of services within, and lack of confidence in these basic health facilities at the level of the village and district, force the Yemeni people to by-pass these facilities for governorate and national level government health care facilities, or for the private sector. This creates high health care expenditures for the consumer, and large inefficiencies in the system, with government health manpower and health facilities in the periphery standing idle. It also leads to an extremely low rate of utilization of preventive services, because people can only afford to seek health services when their condition is serious i.e. they are already very ill.

There has historically been a poor fit between the conceptualization of the present health facility based system and the reality of the needs of the population, one important aspect being the unique geographic spread of the population. The scattering of the population into over 100,000 hamlets and villages makes the previous idea of a stationary, facility-based system within one hour walking distance of 80 to 90% of the population an impossibility, and the least efficient and affordable of all possible strategies. There has also existed a lack of rationalization of health care strategies with the budget available to carry out these strategies. This has led to persistent and unexamined attempts to create a massive and comprehensive health facility based public service provision system. Consequently, attention to the planning of alternative, and less costly strategies has been minimal.

Cost and efficiency considerations, as well as an analysis of present health care needs and potentials had led to the design of a four-pronged public sector service delivery mechanism, with firmly established limits. These limits allow the meeting of the above described service provision goals of the public sector at a price it can afford. In addition, and more important, it provides services at a price the public can afford. The system is efficient for both the government and for the health care consumer. The following mandate for government services will guide the provision of these services:

People will not have to travel farther than their health district to meet 80 - 90% of their health care needs, good quality and affordable services for hospitalization will exist in every large health district, in every governorate and at the national level, and serious illness can be treated competently in-country.

First, a **district health system (DHS)** will be put in place with a minimum standard of **one staffed and functioning district level health facility per district**. As stated earlier, a health district will be based on the current administrative district border wherever possible, but where districts contain a population significantly smaller than 100,000, and have logical road access between them, two or more administrative districts will be combined to form a health district. Similarly, very large or geographically spread out districts will be split up. The district level health facility will be a district health center/polyclinic if the population is less than 100,000 and a district hospital if the population is greater than this. Other existing district level facilities will be made functional to the maximum level possible given the budget, but priority will go to the district level facility. Civil service, budgetary and management policies will be put into place which support the district health facility to provide a full range of services, and do not attempt to expand the number of facilities within the district until the existing facilities are functioning and well utilized.

Second, and existing under the district health system, will be community based health services (CBHS). The CBHS concept modifies the previous concept of covering the entire population with *health facility based* services i.e. health units and health centers. In this new service strategy, community health workers such as trained traditional birth attendants, community educators or contact mothers for MCH/FP will extend the work of the facility based health staff, who are unable to reach all households in their catchment areas with preventive services. This level of volunteer or semi-volunteer health service provider is necessary because one or two PHC workers can never change the knowledge, attitudes and practices of a catchment area population of 5000 people, which had been the assumption under the system until now. These health workers, selected by their communities, will be trained to assist in carrying out preventive services. After an initial period to judge their competence, attitude and reliability, they will be allowed to make a small profit from their work by linking up with the essential drugs cost recovery program. They will be trained and supplied by the DHS staff to do simple diagnosis and treatment, and be supervised through outreach from health units and health centers within whose catchment area they fall. This cadre will be primarily women.

Third, district, governorate and national level 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. Hospital autonomy will be described in section I.

Fourth, the MoPH will coordinate with Sana'a and Aden Universities to provide training for key medical specializations in-country i.e. general practitioner, anesthesia, ophthalmology, community medicine and public health, and health care management. These specialists will be the manpower to provide medical care and public health management at the district and higher levels throughout the country.

These four service provision strategies are designed to provide a basic level of good quality services, which fit within the present budgetary level. The overall scheme, and its advantages over the present system in terms of accessibility can be diagrammed as follows:

Present: Mild illness----->governorate ---->national

Reform: Mild illness-----> village CBHS

Present: Basic health needs-----> governorate ----->national

Reform: Basic health needs-----> district facility

Present: Hospitalization ----->national facility
poor quality of care

Reform: Hospitalization ----->district, governorate & national facility
good quality of care

This reorganization will increase the quality and accessibility of health services and decrease their cost by making services available at geographically accessible locations, and by making these services function through better budgetary support and improved management systems. At the same time, this scheme recognizes that there are budgetary limits, and works within them. In order to implement the above scheme, certain key efficiency and equity measures will be taken under the reform. They are the following:

Running Cost Budgets: The governorate health offices, following guidelines from the MoPH, and following an overall agreement with the Ministry of Finance, will assign a base running cost budget to each district based on a formula which takes into account number and type of facilities, current utilization rates, and type of services offered. Running cost budgets will be increased based on increased utilization rates. This contrasts with the present system of assigning budgets on a historical basis, with only a loose relationship to the effectiveness and efficiency of budgetary use. After an expenditure review, adjustments will be made between the different chapters of the budget, with the expected result that running costs budgets will be increased, and investment budgets decreased.

Construction: A partial moratorium will be placed on construction of new facilities until the existing ones within each district are functioning efficiently, i.e. staffed, equipped, and with adequate running cost budgets. In addition, health facility management teams will be expected to show overall utilization rates greater than a set minimum within these existing facilities before the district will be eligible to carry out new construction. Until these conditions are met, the construction budget will be limited to constructing district health facilities in districts where there are none, for upgrading existing facilities based on usage and function, and for constructing health facilities in unserved areas of populations greater than 50,000.

Health Manpower Training: No new student intakes for technical training courses e.g. nursing, will be accepted until a study of manpower needs has been carried out throughout the country. A partial exception will be community midwifery and female PHCW training. This will continue even without a manpower needs survey, but will be based on community selection of candidates, and a rational policy for geographic selection of this 'woman' power. New courses will target districts taking part in the district management system, and will accept candidates from those communities and chosen by those communities. During the interim period, health manpower institutes are to shift focus from long term training to upgrading of skills e.g. rational use of drugs, upgrading clinical skills for midwives, management skills, etc.

Human Resource Distribution: Human resource policies, worked out *in conjunction* with the

Ministry of Finance, and the Ministry of Civil Service, will be based on district needs, to ensure distribution of qualified medical and technical staff to district level facilities. Major policies will need to be developed to deal with two critical human resource issues. One, to the greatest extent possible, all technical staff below the level of physician will be recruited from the health facility area within which they are expected to work, and be chosen by their communities. This will create the most suitable, trusted, permanent, and accepted health cadre. HMIs will modify their acceptance criteria to accept these candidates. Two, Yemeni physicians and medical specialists will be attracted to work in district hospitals and health centers through the establishment of an incentive system. This incentive system will include attractive hardship allowances for serving in remote districts, the financing for which will come from the current budget used to hire expatriate health staff. Rather than paying large salaries for foreign staff, Yemenis with similar qualifications will be recruited in their place at approximately half the cost. This will create cost savings for the Ministry, and long-term sustainability of funding of district medical staff. Also included in this incentive system will be prioritization of scholarships for medical staff who have served at the district level. The awarding of scholarships will be based on years served in a district facility, as well as quality of service, as determined by the district health management team. Overstaffing of some facilities, especially urban hospital facilities will be dealt with through hospital autonomy systems, whereby hospital boards will decide the appropriate staff mix, and be given the authority to hire and fire in order to accomplish their goals efficiently.

III.d District Health Systems (DHS)

Description

At the core of all government service provision activities is the district health system (DHS). The district will be the basic unit of service provision and will be the basic cost center for health sector funding, as well as the basic strategic unit. As such, it will be at the center of the management system, and the building up of management capacity will begin at this level. As noted earlier, health districts will follow the political boundaries of the current administrative districts, but may combine or split these administrative districts based on issues of population size and geographic linkages with road systems. The needs and capacities at the district level will determine the type of support tasks required at higher levels of the system i.e. the governorate and national level. Experience in district management during the initiation phase of the reform will determine the degree of autonomy that the district will have in deciding health packages, devising service provision strategies, and managing budgets under the consolidation phase. It will also determine the type of supervision and quality control required from higher levels, as well as financial arrangements, and other elements of a national management system. Key innovations of this approach are the following:

- Management by team work, not individuals
- Community authority and participation
- Management decentralized to district level

The consolidation phase of the reform will utilize the experience of the initiation phase in building up a district system. Even preceding the publication of this document, a process of

district management has already been initiated in selected districts. It will be further developed, evaluated, and modified during the initiation phase.

Both urban and rural models of district health systems will be initiated during the first phase of reform. Urban primary health care has been particularly neglected in the past, resulting in overdependence of urban populations on hospital outpatient departments, and the resulting wastage of high level and costly human resources, as well as inconvenience and lack of preventive services for those urban populations seeking care. An urban model will be developed which provides good quality preventive and basic curative services which leaves hospital outpatient departments free to concentrate on emergency and referral cases requiring specialists. Referral mechanisms between different levels of care will be particularly important in urban settings, and realistic and workable systems of referral will be developed in this respect.

There are 229 districts in the country, the majority of which are rural. As of mid 1998, donor activities took place in 33 districts, and by early 1999, it is expected that 58 additional districts will receive donor assistance, primarily through GTZ and World Bank/UNICEF projects. This creates a total of 91 districts currently or soon to be receiving donor funds. However, of the projects already in progress, the activities are of numerous types e.g. technical training, vertical program implementation, service provision, infrastructure development, provision of essential drugs, cost recovery, community development, and recently, building up of management systems. These projects, even though they take place within districts do not all work from a district health system focus. During the initiation phase, the task is to transform these disparate project activities into a sustainable and comprehensive strategy for reform consistent with district management. Donors will be requested to bend their focus from service provision to management, with service provision following logically from the building up of local management structures. Coordination mechanisms will be set up whereby donor organizations that have minimal flexibility to shift their focus to management will be paired with organizations which can incorporate a more intensive management focus, with management preceding technical input. By the end of the initiation phase, it is expected that 40% of districts, existing in all 18 governorates will have district management teams in place. Local management in these districts will be initially supported in varying degrees by project funds. Project funds will focus on capacity building rather than technical inputs in order to create sustainable systems.

Principles and Approach of Adopting a District Management System

Reform means change, and is threatening for those within the system who will now have to share power and adopt a team approach, not only with their co-workers, but with the community as well. The team work, transparency and bottom up approach necessary to this approach will require a major shift in thinking, and it can be expected that it will be resisted by those who do not yet understand it.

For this reason, all those at different levels of the system involved in the district management approach will need to be sensitized and trained. The pace of reform will be largely determined by how long it takes to bring the different actors on board. The process of how reform is introduced will be at least as important as the substance of the reforms themselves. Countries

that did not respect this fact have experienced significant delays in the implementation of reform, or have failed completely.

It is possible to convince most of the present decision makers and power holders that spreading information, delegating responsibility, collaborating with informed and motivated staff, and producing better outputs is rewarding, and leads to job satisfaction. The cadres who will gain more freedom and responsibility at the district level must be convinced that they will lose in the long run if they abuse their newly gained freedom, and that they can only cope with new tasks and challenges if they acquire new skills through training. Incentive and motivational systems will be put in place to encourage current power holders to adapt to and eventually embrace the new requirements.

Overall, the process of sensitization and training will be guided by the principles of participation and active learning. From the outset, district teams will be at the center of planning and managing the reforms in their districts, within a general framework of guidelines, guidance, and support from higher levels. Higher levels will set quality assurance guidelines, monitor performance, and create incentives for high quality performance, but districts will have considerable space for innovation and flexibility in programming and planning. The basic principles involved in district management will be decentralization, integration of services, involvement of the communities, effective use of resources, partial privatization, and accountability. The steps of implementation at the district level will be as follows:

- Carrying out a Situation Assessment and Problem Analysis
- Elaboration of a Target-oriented District Health Development Plan
- Writing a Plan of Activities
- Determining Responsibilities for Action, and Budget Required
- Establishing Cooperation with Governorate Health Office and MoPH
- Monitoring and Evaluation
- Continuing Education

III.e Community Co-management

Basic to the district health management system is the concept of community co-management. Community co-management is important to the reform because it will help accomplish three things.

- It will ensure that the health system is responsive to the needs of the population
- It will help ensure transparency of financial dealings and decrease the opportunities for corruption
- It will enable the health system to pull in additional resources through community resource mobilization

At different levels of the system, community members will have significant management roles. For this purpose, the following committees will be set up. The following outline shows the system level at which the community members will participate, the health facility they relate to, and the overall structure and functions of the boards and committees within which they

participate. As management skills are weak both within the health system, and the community, training will take place to support the building up of these skills.

NATIONAL LEVEL: **Central Hospital (>300 beds)**
Hospital Board: 7 nominated community members (govern with others)

- *Sets rules, regulations and standards for operation of hospital*
- *Sets targets for performance*
- *Plans the major activities*
- *Develops the budget*
- *Fixes the schedules of fees and charges*
- *Controls expenditures and presents the accounting report to general assembly*
- *Mobilizes additional resources*
- *Monitors performance*

GOVERNORATE LEVEL: **Governorate Hospital (60-100 beds)**
Hospital Board: 6 nominated community members (govern with others)

- *Sets rules, regulations and standards for operation of hospital*
- *Sets targets for performance*
- *Plans the major activities*
- *Develops the budget*
- *Fixes the schedules of fees and charges within a range set by MoPH*
- *Controls expenditures and presents the accounting report to general assembly*
- *Mobilizes additional resources*
- *Monitors performance*

DISTRICT LEVEL: **District Health System**
District Health Council (DHC): Nominated community members (govern with technical and other members)

- *Meets quarterly*
- *Approves admission of HF/community group to cost sharing program after recommendation by District Health Director*
- *Assures that rules and standards are respected*
- *Monitors the development of cost sharing program*
- *Arbitrates in cases of conflicts between partners of cost sharing scheme*
- *Accepts and follows up in cases of complaints of personnel, patients, and communities*
- *Fixes the quota of poor families for exemptions in the catchment populations*
- *Assures the provision of free drugs by the government for the exempted population*

District Hospital (up to 60 beds)

Hospital Board : 4 reps from HFC, & key personnel & officials in district

- *Sets rules, regulations and standards for operation of hospital*
- *Sets targets for performance*
- *Plans the major activities*
- *Develops the budget*
- *Fixes the schedules of fees and charges*
- *Controls expenditures and presents the accounting report to general assembly*
- *Mobilizes additional resources*
- *Monitors performance*

BASIC HEALTH FACILITY LEVEL: Health Center and Health Unit

Health Facility Committee (HFC): 5-9 elected community members
Uneven number, with females at least 2/5, 3/7, or 4/9
Half from outside community of HF location
1 representative from each uzlah (subdistrict) served

- *Represents the interests of the target population to the health facility*
- *With the HFT, it controls quality of services, discusses problems, & finds solutions*
- *With the HFT, it fixes the schedule of fees & within the regulations, the purposes for which the revenue is going to be used*
- *Shares 2 accounts for cost sharing with HFT*
- *Names 2 signatories for the account*
- *Its signature is needed to authorize any financial transaction*

COMMUNITY LEVEL

All Communities

Community Health Committee(CHC): 5-10 members elected by community

- *Selects community health workers such as TBAs, CHWs or CBDs (community based distributors of contraceptives) for training*
- *Guides the volunteers*
- *Helps them to create awareness for disease prevention & health promotion in community*
- *Organizes their remuneration from community resources*
- *Controls accounting system for drugs and money if volunteer does curative work*
- *In some cases, provides a representative to the HFC*

The different committees and councils as well as the new categories of health workers such as community health workers will be closely monitored, especially in the early stages, to assess how well these bodies are working, and whether the community co-management strategy needs to be adjusted.

III.f Cost Sharing

Developing countries have been offering "free" health services to their population in past decades. Unfortunately, the budgets that governments are able or ready to provide for the health sector do not generally allow the establishment of health services that can meet even the most basic demands of the population. The infrastructure of health services in developing countries is rarely sufficient, essential drugs are often not available and medical personnel are demotivated because of low salaries. Even referral hospitals in the capital cities often have to advise patients to have their diagnostic tests carried out in a private laboratory and to buy the drugs in a private pharmacy for sometimes twenty times the price the government could offer, provided drugs were purchased through proper tenders on the international market.

Even wealthy industrialized countries cannot afford to offer free health services. The user contributes substantially to his/her health care costs through direct payment, insurance schemes, or indirect taxes which may swallow up to 40% of a monthly salary. Also, in traditional societies, health services were and are not free. The herbalist, bonesetter or birth attendant are usually paid in cash or kind. After long experience with attempting to provide free services, it has now been accepted in nearly all developing countries that an important solution to budgetary problems in the health sector will be that the user of services contributes to their financing.

In Yemen, as in many other countries, the health services are under a severe financial strain which can not be resolved with the present budgetary allocations. The funds provided for health care provision are insufficient and the burden of obtaining adequate quality care is left to the individual patient, often at high cost. Budgetary allocations and donor subsidies are spent to temporarily and partially alleviate the burden on the health care consumer but the funds do not circulate back into the system to maintain even the most basic services. To complicate matters, the funding available to the system is often inappropriately allocated under inflexible budget headings, which often do not correspond to local needs. Also, it is an open secret that there are hardly any health facilities where the staffs, due to their low salaries, do not solicit "under the table" contributions from patients. Cost recovery in Yemen is being initiated in order to resolve these issues and to create the possibility to deliver essential health care services to the people at an affordable price, with a fee system, which is both transparent and public.

In Yemen, the introduction of cost sharing has been facilitated by the publishing of the official document, "Forward Looking Policies and Strategies for Health Development in the Republic of Yemen", produced after the First National Conference for Health Development in February, 1994. Following the publishing of this document, a task force of the Donors' Coordination Committee in the Ministry of Public Health has elaborated the details of an appropriate cost sharing system for the district level, and the draft for the law, which covers this innovative policy. A Cost Sharing Guide has been prepared by this task force in which the system has been described.

The objective of the cost sharing strategy in Yemen is to secure sufficient funds through revenues from fees and charges for services in order to improve maintenance of facilities and supply of drugs, as well as the motivation and performance of health personnel.

In contrast to private facilities, the government does not expect full cost recovery through user

charges. The government remains fully responsible for personnel costs, investments, preventive health programs, and subsidies to disadvantaged regions and population groups. Cost sharing is meant to shift the budgets set free through user contributions to health promotion and disease prevention.

Cost sharing in Yemen depends on two types of charges. The first is fee for service, or user fees, for curative services. In Yemen, it is expected that user fees will contribute approximately 10-15% (World Bank, 1998) to overall running costs in government facilities. The 1998 Public Expenditure Review (ibid.) estimates that for NGO and community owned facilities, revenues may reach as high as 70% of running costs. The second type of charge will be for essential drugs. The government will import low cost, good quality, generic essential drugs, and recover 100% of the costs for these basic essential drugs through client payments into a revolving drug fund.

In order for the revolving drug fund to be successful, four aspects of the overall health system must be put in place. Some of these have already been initiated. First is the reform of the central drug procurement and distribution system. Four regional stores for drugs and medical appliances have been established in Sana'a, Hodeidah, Aden and Mukalla which will in turn supply a number of governorate stores. The headquarters in the MoPH will concentrate on drug policy issues, calculation of the national demand, international tendering, central procurement, allocation of free drugs as well as subsidies to regions, and monitoring of the national supply system. It is planned that the Logistic Unit for Drugs and Appliances in the MoPH will become a public company once experience has been gained in this new system.

Second, in order to protect the population against misuse of drugs and to reduce the consumption of drugs, much weight will be given to training of health staff in rational prescribing. This has already begun in a number of districts.

Third, effective cost sharing depends on functioning district management system and community participation. In Yemen, cost sharing will first be introduced at the district level. Districts which have developed a minimum capacity in service delivery and management, where political support can be expected and where poverty among the population is not too serious a limiting factor will be selected first. Within the district, cost sharing will be started in the health centers that have more developed technical and managerial skills, then be introduced to health units, and after that to rural hospitals, where the system needs to be more complex due to the variety of services offered, and later to the village level once a community based health care system has been established.

Fourth, because the main financial objective of cost sharing is to make adequate funds available at the service level, the revenue from cost sharing will stay with the health service where it was generated in order to avoid losses on its way through the different administrative levels. Transparent, community co-managed control systems will be put in place to ensure that funds are used appropriately, according to guidelines set up at a national level, and, within this, according to district management decisions.

The Public Expenditure Review for the Health Sector (World Bank, 1998) made note of the

necessity for government to ensure that in addition to outpatient fees, hospitalization fees must remain modest and affordable for most households. Hospitalizations are presently experienced as catastrophic events for most households, completely unaffordable for many, and for others, leading to debt and the selling off of assets. As such, a strategy will need to be developed for making necessary hospitalizations affordable. Cost sharing, as it relates to hospitalizations, will be studied further during the initial phase of the reform, and financing and fee structures will be put in place. It will be implemented hand in hand with restructuring, and with the institution of efficiency measures in hospitals, which are currently resource inefficient. The section on hospital autonomy deals more fully with these issues.

Cost sharing is only one component of financing, and its role is designed to be complementary to other financing mechanisms such as government financing. The way in which cost recovery fits in with other financing mechanisms will be outlined in section III.h.

III.g Essential Drugs Policy and Realignment of the Logistics System

In Yemen, as in many other countries, people measure the quality of health services by the possibility of obtaining essential drugs through them. The Yemeni health system has, in recent years, delivered very poor health services in this respect, one of the main problems being the poorly functioning logistics and supply system for essential drugs as well as for medical supplies.

In recognition of this, the MoPH has taken a number of steps over the past two years to initiate an efficient and acceptable essential drugs program which aims to make available a reliable supply of low cost essential drugs through government facilities. As a first step, donors have made available an initial supply of free essential drugs. This supply will be used to start up a revolving drug fund, on a cost recovery basis. An Essential Drug Strategy and a Drug Policy, which supports this and other measures related to drug supply is being implemented in a stepwise fashion.

As part of this strategy, the Ministry has drawn up plans to reorganise its logistics sector into an autonomous unit that will be able to recover the costs of essential drugs and medical supplies from the users, users who will not only be MoPH health facilities, but also others such as the armed forces, NGO's, charities etc. All supplies will be sold at cost price plus 10% against budget allocation or cash to the users, thus establishing a basis for a sustainable system. In addition, the distribution system will be strengthened by renovating, building, and/or equipping stores at regional, governorate and selected district levels.

Besides logistics, there are many other unsolved problems in the pharmaceutical sector. In the public as well as private sector, prescription practices are irrational due to the perception among the public and among many professionals that "more is better". Weak diagnostic skills, and lack of proper examination of patients are also major issues. In addition, the private drug sector is currently well developed, badly controlled, and making handsome profits on unnecessary drugs, often in collaboration with prescribers.

The MoPH has made the decision to first initiate programs to improve the public health service sector, and then the private sector in relation to drug supply and practices. Initially, it will assure the provision of safe, efficacious and affordable drugs and medical supplies in the public sector, raise the level of prescribing skills at all levels of care, change the expectations about drugs of the population at large, and put a stop to the leakage of public sector drugs into the private sector.

Closely following these actions will be a private sector reform initiative. Actions will be taken to control importers, stop smuggling, license the businesses of legitimate service providers, close the businesses of those who are not eligible for licenses, and attempt to reestablish a code of ethics to this sector. Since the sale of pharmaceuticals is a lucrative sphere for private business, many influential people have entered this market, and it is expected that there will be considerable resistance to the reform measures. Implementation of this aspect of the reform will require political support.

III.h Outcome-based Management System, with an Integrated Focus on Gender

It is clear that decentralization is going to be a complex task which will profoundly affect the authority and role of each level of the system. Much more work needs to be done on devising the details of the system. Besides the reform strategies which have already been outlined in this paper, there are a number of management system tasks that will need to be worked out. Major outstanding tasks of decentralization in Yemen are:

- modification of the legal and regulatory framework;
- clarification of fund flow mechanisms, procurement systems, and human resources management;
- development of central level staff to act as technical program specialists, and as general management advisors to lower level staff ;
- setting of clear national standards and service norms to ensure equity and quality assurance;
- designing and implementing an ongoing system of monitoring to guard both equity and quality in service provision;
- setting explicit criteria for sharing resources between resource units (i.e. districts) that take into account equity, performance, and disease burden differences;
- revising and designing new management systems, processes and linkages e.g. planning, budgeting, human resource management and management information.

Assistance from donors will be sought to help the MoPH in these management tasks. A Health Sector Reform Support Unit is in the process of being set up, and technical support to this Unit as well as early experience from the field will help to design systems and to set up the policies and regulations necessary to support the new structure and functions of the government health sector.

Some of the known problems in current management are in the areas of financial management and motivational systems. The reform will deal with them in the following ways:

Motivational Systems District Management Teams will be given a large measure of flexibility in working out their service provision systems. At the same time, overall support, guidance and guidelines by the MoPH will be provided to ensure that the entire system is working towards the same goal, albeit with appropriately individualized strategies at the district level. One way the MoPH will support the process is through providing resources to districts on a motivational basis. Some of the motivation policies built into the system will be the following:

- Formulas for assigning running cost budgets will be based on usage of facilities i.e. the more active the facility, the higher will be the running cost budget awarded. This will motivate the district to not only increase the availability and quality of services; it will also motivate the facility and district to provide statistics for the health information system
- Putting in place a district health system and initial improvement of district health services including the devising of a two year plan, will make districts eligible for basic needs assistance e.g. water projects, school assistance, micro-enterprise projects etc.
- The higher the patient per staff ratio, the greater the amount of fees that can be used for supplementing salaries.
- Districts will be expected to show overall utilization rates above one visit per capita per year before they will be eligible for new construction. This will encourage greater activity and the filling in of statistics forms.
- Donors will be encouraged to use competent local personnel working in the public services as temporary consultants on specific tasks, thus offering an opportunity for additional income to capable and reliable local experts.

Financial Management Reforms A number of weaknesses and inefficiencies exist within the MoPH regarding financing. The MoPH recognizes that it is crucial to correct these weaknesses if the reform is to succeed. Indeed, without reform of the financial management systems, health sector reform cannot take place. Some of the inefficiencies which exist arise from current Ministry of Finance regulations, and some are due to internal MoPH financial management issues. The major issues are as follows:

From Ministry of Finance:

- Allocation of the budget by the Ministry of Finance on a historical basis rather than based on needs of the system, or tied to the outputs of the system. This creates inefficiencies caused by lack of a sufficient running cost budget for existing facilities, and provision of a capital budget for new facilities which are not themselves tied to a guaranteed and sufficient running cost budget.

- Ministry of Finance procedures which create long delays in receipt and use of the budget. With the financial systems now in place, even director generals sometimes have to wait three months to gain even simple items for administration such as stationery. The delays on the service provision side are even more serious.
- Inflexible budgetary regulations, with inability to transfer funds from one chapter to another according to local need.
- Lack of transparency of rules and regulations by the Ministry of Finance regarding budget use.

Within MoPH:

- Leakage of resources such as vehicles, drugs and equipment out of the system and into private hands.
- Lack of a transparent financial system within the MoPH.
- Overcentralization of budgetary decision making, with districts unable to use their budgets flexibly according to local need.
- Lack of management systems that tie outcomes to budgetary allocations.

Financial reforms will be put in place during the initiation phase to correct these inefficiencies. They will be as follows:

Financial Reforms	
Problem	Solution
<p><i>Ministry of Finance</i></p> <ol style="list-style-type: none"> 1. Allocation of budget amounts on historical basis 2. Delays in receipt and use of budget caused by complicated procedures, inflexible regulations, lack of transparency 	<ol style="list-style-type: none"> 1. MoPH to carry out costing exercise of service provision, and for management functions at all levels of the system. Based on this figure, and output targets, to negotiate agreement with MoF on budgetary amounts. 2. Financial management expert to work with MoF and MoPH to work out efficient and transparent budgetary procedures that meet the requirements of both ministries.
<p><i>MoPH</i></p> <ol style="list-style-type: none"> 1. Leakage of resources & lack of transparency 2. Lack of budgetary decision making at level of district 3. Lack of relationship between outcomes and budget 	<ol style="list-style-type: none"> 1. Engage financial management expert to work with ministry designing transparent financial systems. Replace current control system (of resources) with a reward and penalty system for missing/misused items. Joint community/health sector management and control systems at district and community level. 2. Gain permission from MoF to provide a lump sum budget to districts based on a running cost formula. This may need to be on an experimental basis at first in order to show its merit. 3. Design a system of outcome targets that can be measured to show progress of the reform program, and in the quality and level of services. Tie budget incentives to this.

District health care activities will be financed through MoPH funds, user fees, private payment for essential drugs, and community fund raising efforts, as well as contributions by donors and NGOs. It is recognized that the minimal budget of the MoPH, even with efficiency measures, and community participation, should be considerably higher than it is at present. In 1996, the latest year for which figures are available, the MoPH budget was \$3.60 per capita, with the system paralysed due to insufficient funds to run its programs. The MoPH will attempt to use this small amount more efficiently but even with efficiency measures, revolving drug funds, and fee for service, this amount will not be enough to expand the system to the remaining 70% of the rural population not currently covered by the system. Expansion will depend on the awarding of

an additional budgetary amount by the Ministry of Finance. Financing assumptions under the reform at the level of the district are as follows:

<i>Financing Mechanisms</i>	<i>Expected Magnitude</i>
MoPH budget	will cover 85-90% of running cost needs of existing facilities; will cover salaries for human resource needs; will cover construction and equipment costs according to policy; will cover adequate service provision management costs i.e. supervision, quality assurance; will cover policy, management and administration work of MoPH; will cover public health and preventive programs
<i>(increased budget will be negotiated based on indicators increased coverage for health services)</i>	
User fees	will cover 10 - 15% of running costs of district health facilities
Revolving drug funds	will cover 100% of costs of essential drugs
Community funds	will provide further supplementation of running cost budget of subdistrict level facilities, up to 70%
Donor funds	will supplement the implementation of the reform with support for management, training, experimental programs, monitoring, and infrastructure
NGO funds	will target geographic areas and populations of special need such as low income groups

One special aspect of management and monitoring that cross-sects all programs of the reform is that of gender. A guide to guarantee that all policies and programs are gender aware will be incorporated into the reform, including the way in which monitoring is carried out. Neglect of the issue in the past has resulted in services that are inappropriate or inaccessible for women, in the lack of female staff to care for the needs of women in a culturally appropriate way, and in the general lack of health services for women. The health service statistics presented in the first part of this paper bear witness to the effects of the lack of a gender sensitive health policy. Lack of such a policy has also resulted in strategies that women cannot participate in, and in lack of women in senior positions of responsibility. In the future, all these issues will continue to be important, and new programs such as those of community participation and district health councils will present special challenges. If a special effort is not engaged in to make these new structures gender appropriate, then access and the appropriateness of services will continue to be problematic, with consequent poor health indicators for women.

III.i Hospital Autonomy

Hospital autonomy refers to a management system for hospitals whereby the hospital is awarded a lump sum budget by the MoPH in return for agreed levels and standards of service. This type of hospital management creates the potential for more flexible and efficient management, which can respond to the needs of the local situation. The hospital is run by a local management board and trained managers, who make decisions about staffing and controlling expenditures. They have full power to hire and fire, and to reward their staff. Freedom from government civil service regulations, and the freedom to use their budget flexibly gives these hospitals the possibility of greater efficiency and effectiveness. The main features of an autonomous public hospital are the following:

- It is established by law as a statutory body.
- It has a Board of Governors or Trustees who are non-executives and who are appointed by the Minister with recommendations from local communities for district hospitals.
- The Board appoints a Chief Executive who is accountable solely to the Board.
- There is an Executive Management Team whose core members should be a doctor, a nurse, and a finance director.
- The Board is accountable to the Minister of Public Health for the performance, financial and otherwise, of the hospital.
- All staff are appointed by the Board on terms and conditions determined by the Board. The Board decides on the numbers and skill mix, and has freedom to hire and fire staff within the relevant employment legislation.
- The Board receives funding subject to written service agreements which set out the volume, range and quality of services to be delivered.
- The Board may raise its own income, which it may retain to improve services e.g. from private beds.
- The Board uses commercial accounting standards and practices but remains subject to government audit.
- The Board adopts Standing Orders and Standing Financial Instructions that regulate its conduct of meetings and its business and financial affairs.

The rationale behind establishing a system of hospital autonomy in Yemen has to do with the poor state that hospitals are in in Yemen. Studies by the World Bank and expert consultants have highlighted the weaknesses. Hospitals and health centers in urban areas are overstaffed, yet there are shortages of doctors and other health workers in rural areas, and not enough money for supplies, drugs, equipment and maintenance. The physical conditions within hospitals and health centers fall below levels of acceptability e.g. it is common to find broken water and sewerage systems. A recent report on diagnostic services indicated that not a single public laboratory in Yemen meets basic international standards (Browning, 1997). Given the current conditions in hospitals, it is almost impossible to practice good medicine and to provide modern standards of care.

Some of these problems are caused by lack of funding, but perhaps fifty percent of what little

funding is available is lost through theft, wastage and inefficiency attributable to poor management. Without a radical change in management, this state of affairs has little chance of improving. The central "command" system of health service management which currently operates in Yemen has become discredited in other countries for the poor quality of results and resistance to change.

Hospital autonomy is in line with the MoPH's overall reform policy, which encourages decentralized management and the meeting of targets, rather than being output oriented. It also is consistent with the MoPH's new role, which concentrates on strategic planning i.e. policy development, monitoring, and quality assurance, and steps back from direct service provision. It goes one step further than other aspects of the reform in that it separates the funding from the delivery of services. The success of the autonomy model with respect to hospitals will point the way for using this model for other aspects of service delivery e.g. district health management. Hospital autonomy will start in stages, beginning with three pilot hospitals at district, governorate and national levels.

III.j Intersectoral Cooperation

Evidence from different parts of the world show that major determinants of health status are outside the domain of health care services, and that for health to improve, more than simply health services must be provided. Data from India, for example, show that IMR was reduced by 50% by doubling the income of poor families. Studies in other parts of the world have shown that literacy and education are significant factors in reducing morbidity and mortality of mothers and children. History also shows that improvement of health in Europe was achieved because of improved housing, water and sanitation, education, better income, and other aspects of overall development.

Water, sanitation, education (especially of girls), and poverty are widely recognized to have some of the most profound effects on health. These effects are well documented, and without addressing such issues, health cannot improve significantly. In Yemen, as in most countries of the world, intersectoral cooperation at the national level has been engaged in to address these issues, but efforts in this direction have not yet yielded beneficial results. Extra layers of bureaucracies tend to get set up, but little effect has yet been seen.

For this reason, and in line with its overall strategies of decentralization and community participation, the MoPH reform strategy will promote intersectoral cooperation at the level of the *district* and the *community* rather than at the national level. It will do this through establishing Basic Development Needs (BDN) projects, and through setting up cooperative links with the Social Fund for Development. Projects will focus on the following issues:

- Poverty alleviation through setting up micro-enterprise projects
- Girls' education
- Provision of safe drinking water
- Sanitation and environmental health
- Improvement of health facility infrastructure

The intersectoral projects will be established at the district level. Assistance starting such projects will be offered to districts that fulfil the following criteria:

- District, or portions of district, are poverty areas
- District already has a functioning district health management team in place
- District, and project areas within the district, has demonstrated a commitment to health by an immunization coverage rate over 80%, and has either female health care providers, or candidates for training in place

Three BDN projects have already been initiated, and experience with these will guide further stages of implementation and geographic expansion. The MoPH recommends strongly to broaden DHCs as soon as possible to become District Development Councils (DDC) with representatives of key sectors being members, thus creating a forum to discuss, initiate, support and monitor intersectoral projects.

III.k Encouragement of Participation by the Private Sector and NGOs

The private sector is presently largely unregulated. A number of regulations exist, but in practice, there are no consequences of malpractice, nor standards which are enforced. There is enough anecdotal evidence available to conclude that quality and safety standards in the private sector are low, although formal studies are few. The previously mentioned WHO study on standards of laboratory service provides one example of the low level of care available (Browning, 1997). Regulation is urgently needed in order to ensure that the public will receive safe and responsible care in the private sector, and in order that the private sector provides care that complements rather than competes with the public sector. In addition, local NGOs have received very little attention in the past by the MoPH, and there are very few NGOs active in the health field. Currently the Ministry is looking for ways of involving local NGOs that can address the needs of the population, especially the poor.

The MoPH has begun to address the regulatory needs of NGOs and the private sector. Initially, it has entered a resolution to the Cabinet regarding private practice, which is the first step towards regulating private practice. It has also opened a department for NGO relations in the Ministry.

Beyond this, the situation of both private practice and NGOs will need to be studied further in order to put in place regulations and incentives that will encourage safe and effective practice, and help to meet the goals of the MoPH. As such the next step will be an analysis of both NGOs and private practice upon which to build sound policy and regulatory decisions.

III.l Innovation

District Management Teams, MoPH officials, NGOs and donors will be encouraged to find the most effective, efficient, and equitable methods of health care provision, and to this end, will be encouraged and supported (donor funding will go towards this activity) to experiment with innovative methods of health care delivery, whether the care be preventive or curative, and whether it be provided through the public, NGO, or private sector. One example of where innovation is needed is in the area of over-the-counter drugs. For example, common ailments such as mild diarrhea without dehydration should be treatable within each village, and not necessitate direct service provision by the public sector. This can be accomplished by a strategy of allowing small private shops to sell non-prescription drugs and other health goods. Examples of health goods which can be distributed through such a system are ORS packets and safe motherhood kits. This strategy is one, which is outside the public sector, but is regulated by it. Similar strategies have worked well in other developing countries, as they encourage equity in health care provision, are safe, and require only a minimal public sector investment. In addition, they take the burden of providing unnecessary services off of the public sector, and thus create efficiency gains for the sector.

III.m Sector Wide Approach to Donor Funding and Programming

Changing Relationships between the MoPH and Donors

The funding approach taken by the MoPH will be what is commonly known as a **sector-wide approach (SWAp)**. Such an approach, also called a **one basket approach**, means that the way in which the MoPH and donors interact financially changes fundamentally. In this approach, two things happen. One, donor procedures are harmonized, so that they follow one system. Two, donors use *national* systems for monitoring performance, and procurement of goods and services, with strong coordination in financial management. In the sector-wide approach, funds from donors and from government will no longer be used for different purposes. Advance payments will be made by both for agreed upon purposes, rather than reimbursements being paid for specific expenditures. The management arrangements for this system will be put in place gradually, in recognition that this is a major reform which will require the building up of a management system trusted by both donors and the government, and one which will meet the accountability needs of both.

This system is in contrast to the current approach, which is a traditional *project* approach, in which donors, for a defined period of time, assume responsibility for specific costs for specified programs, often in selected geographic areas. Fundamental to this type of approach is the model of donors setting up a system within government health services, handing it over to government once the donor withdraws, theoretically leaving behind a functioning and sustainable system.

The project approach has been in place for nearly 30 years, ever since the early 1970s, when donors first began providing aid to Yemen's health sector. It is being increasingly criticized as a model which does not achieve the goals set either by government or by donors. As noted in the 1998 World Bank/Radda Barnen/UNICEF Health Situation Analysis for Yemen (1998), "All major donors have worked closely with the MoPH and governorate health offices, seeing their role as the establishment of a system which could be handed over eventually to the Yemeni government to run. However, it is now known that this general approach has not achieved its objectives."

The main criticism of this type of approach is that program effectiveness has typically lasted only as long as the donor input. With the pullout of the donor, systems collapse, and sustainability is minimal. This is due, not only and not even primarily for financial reasons. It is, rather, related to the fact that donor projects tend to exist at levels below the main system input and decision making levels, those that determine the overall functioning of the system. Donor projects tend to tinker with details of an overall system which contains many acknowledged weaknesses, and which fundamentally and often negatively affects all levels and aspects of the system. Donor projects are partially immune to these effects only for the life of the project. The removal of the donor means removal of that immunity, at which point the weaknesses of the system then take over. Besides lack of sustainability, other criticisms of a project approach are that it leads to piecemeal and uncoordinated changes, overall management of the national system remains weak, and that the approach is expensive, cost-ineffective, and top-heavy with foreign personnel, with too little transfer of management skills to nationals.

Against the background of this experience, the sector wide approach has many potential advantages for both donors and government. These are:

Government

- More donor support will go towards the real costs of the health system, and less will go towards salaries of foreign experts
- National management systems will be strengthened, and national managers will have more discretion over programs and program funding.
- The MoPH will be able to plan in a more efficient, less fragmented manner.
- Because of greater and more efficient use of resources, the government will be able to meet its goals in the health sector, thereby increasing government credibility during the critical period of structural adjustment.

Donors

- Due to integrated management procedures from the *start* of the project, rather than a "handover" mechanism at the *end* of the project, the potential for building

sustainable systems, and for real donor impact will be much greater.

- Donors will work at a higher level of the system, as well as assisting at the grass roots level, providing greater guarantees of effectiveness.
- The putting in place by government of key reforms preceding phase two (consolidation phase) of the sector-wide approach provides significant guarantees of government commitment and success.
- There will be greater transparency of financial and resource management, and improved information for planning, due to the mutual setting of standards, procedures and indicators of achievement.

A sector wide approach would not have succeeded if the government had not decided to institute a health sector reform strategy designed to create fundamental changes in the system. Donors have been understandably cautious about a one basket approach in the past, given the weaknesses of the health system. However, with the initiative of health sector reform, the preconditions for a successful sector-wide approach have been put in place. In addition, initial experience with this approach in other developing countries has been positive, and can help inform the Yemen experience.

The initiation of the sector-wide approach will occur in two stages. In the first, or **initiation phase**, which is scheduled to take place over two and one half years (August, 1998-December 2000) an interim strategy will be put into place. Under this strategy, government will put in place key initial financial and administrative conditions required for the reform to succeed e.g. streamlining of financial procedures, passing of key legislation, further development of policy, and initiation of civil service incentive systems. This will provide donors with the assurance that sufficient commitment of government exists for the approach to work. In addition, current or proposed donor projects will be fit into the framework of the overall reform, gaps identified and filled, and additional donor support sought for management of the reform. Finally, conditionalities of the SWAp will be jointly negotiated by government and all donors involved, and a program of work agreed upon.

In the second, or **consolidation phase**, a true sector-wide approach will be put into place. This means that donors and government will join common funding and management arrangements. Under this system, common objectives will be set, strategies defined, and indicators of achievement devised and measured. A special structure will be set up within the MoPH to accommodate joint government/donor management of health systems.

The sectoral policies and strategies which donors will be involved with under the reform will be broader than those that donors have been involved with in the past, as they will be concerned with the sector as a whole. As explained elsewhere in this document, the aim of the reform is not to create a monolithic public sector program, but rather to provide limited government service as well as to manage the health sector as a whole, public, private and NGO. As such, donors as well as government will be involved with policies regarding the management of private and NGO service in addition to public sector management.

Initial Criteria on Unifying Donor Projects

Through negotiations with donors, proposed or ongoing projects in the health sector will be modified in order that they fit into the overall district development plan, and contribute directly to the reform process. This does not mean that donors will be asked to fit their support into an inflexible pre-determined mold of district health system reform, because the system has not yet been fully tested or developed, and donor expertise will be required to help contribute to the shape of the reform. Rather, donors will be asked to switch focus from a technical project type of approach which has been shown to be unsustainable, to one which is management oriented, and which contributes to local learning. The two and one half year interim period before the SWAp takes full force will be an opportunity for projects and government to build up experience carrying out the reform without a drastic change in mode of operation. Donors will be requested to study the reform and suggest ways in which their funding and technical support can contribute to the reform process. In this phase, donor projects should be guided by the following principles:

- All projects working below the level of the MoPH should be *district based*, and support different aspects of the district health management system i.e. they should not focus on villages in isolation of the district, nor on governorates in isolation of districts.
- The projects should work in direct coordination with the district health staff, and contribute to building up management capacity of these staff.
- Transfer of management skills should be the implicit goal of each project, not only service provision, in order that long term local management capacity of the system is created.
- Projects must engage in monitoring of output and impact, as well as cost effectiveness, in order that their experience contributes to the reform.
- Each project must develop mechanisms to share information about progress of their project with the MoPH and other donors.
- Projects should follow the guidelines established by the MoPH for providing incentives to local staff.

IV PHASES AND APPROACH OF THE REFORM

IV.a The Process of Reform

Health sector reform involving decentralization of major functions is a complex undertaking. Experience in other countries has demonstrated that the process needs to be (1) participatory, in order that it will be accepted, as well as responsive to the needs of local populations, and (2) monitored and evaluated in order to keep the reform on track and to convince major players to support the reform.

Baseline monitoring and evaluation of this effort will be essential for three reasons. First, it will be necessary to guide the reform. Indicators will need to be chosen both within districts and at a national level which monitor the progress of the reform, and to detect any problems which arise. Second, it will be necessary to convince major stakeholders who will need to alter their policies and regulations to assist the reform e.g. Ministry of Finance and Ministry of Civil Service. If the reform is on track, efficiency and quality gains will be made, and these need to be demonstrated to high level decision makers. Third, in countries where local progress has been monitored, a new "culture of accountability" has begun to develop. This is badly needed within the Yemen context.

Experience in other countries has shown that the best managed local health systems are those that involve as many key actors as possible in planning for decentralization and in its implementation. As such, the broad based participation of stakeholders will be an essential part of the reform process. Through participatory training methods, workshops, seminars, and other means of sharing experience, the MoPH will attempt to gain the commitment and understanding of as many actors as possible, both within and outside the health sector. Attention to this process means that reform will not be purely a technical process, but a political process as well. Both time and budget will be reserved for consensus building activities.

IV.b The Pace of Reform

Learning from the experience in other countries, implementation of the reform will be flexible, and process oriented. A basic time plan will guide the pace of the reform, but the pace will also be determined by the readiness of districts to move from one phase to the next.

In order to accommodate these process needs, the reform in Yemen will take place in two phases: (1) an **initiation**, or learning phase, in which all key aspects of the reform will be initiated, lessons learned, key legislation passed, district health systems put in place in at least 40% of districts, revisions of the financial system initiated, and major actors brought on board; and (2) a five year **consolidation** phase in which the lessons learned in the initiation phase can be fashioned into long term systems, policies and regulations, and the remainder of the districts brought into the district health system.

The initiation phase is set to coincide with the remainder of the First National Five Year Plan for Health Development for the years 1996 - 2000. It will end with national and district conferences, as well as evaluation activities consolidating the experience of the entire initiation phase. By the year 2001, it is expected that the consolidation phase will begin. The consolidation phase will coincide with the Second National Five Year Plan for Health Development for the years 2001 - 2005. Health reform is a complex process, and is expected to be ongoing even ten or fifteen years from now. However, the five year consolidation phase will be the time period in which the major reform tasks will be accomplished i.e. all major policies and legislation related to the reform will be finalized, the district health system will be firmly established in all districts of the country, and the reorganization of the MoPH will have taken place along decentralized lines.

IV.c Support Structures for the Reform

An administrative structure has been designed to support the HSR. This consists of a HSR Core Group which is the policy and decision making body for the reform, an Intersectoral Cooperation Committee for HSR which is the body that coordinates the work of all the different ministries who have a role in the reform, and the Health Sector Reform Support Unit (HSR-SU), the technical office set up to guide and support the reform. This structure exists directly under the Minister's office. (See Annex V for a diagram.)

The HSR-SU is the main working body linked directly with other Ministry structures to support the reform on a daily basis. It has the following tasks:

- To set realistic year plans for carrying out the reform
- To identify bottlenecks and deficiencies in the system, and to correct them
- To set realistic indicators of achievement and monitor the progress of the reform
- To identify training needs and meet them
- To promote the reform both inside and outside the MoPH
- To trouble shoot at different levels of the system

Initially, staff of the Unit will consist of the following:

- | | |
|---|------------|
| • Health Service Planning and Management | national |
| • Manpower Development Expert | national |
| • Community Mobilization Expert | national |
| • Financial Management Expert | national |
| • Various short term health sector reform experts | expatriate |
| • Support staff | national |

The exclusive task of the Unit is to move forward the reform. Because this is a large task, a special Unit is required in order to keep the effort from getting fragmented. However, setting up a special unit runs the danger of overlap with other departments of the Ministry, because so many of the tasks are interrelated. To avoid overlap and interference, the role of the Unit in

relation to other ministry departments will be supportive and inclusive, rather than becoming a parallel management structure. It does not take over the role of different departments; rather it supports those departments to manage the reform. For example, any research involving the reform is carried out through the research department of the MoPH, but with special support from and in coordination with the Health Sector Reform Support Unit. Likewise, monitoring is carried out through the planning department, training through the training department etc. Field trips for the purpose of trouble shooting will include staff from those departments involved in the problem. In this way, all departments of the MoPH will benefit, will be strengthened, and will support the reform. Donor funds will be sought to resource this unit.

V PROGRESS TO DATE

Health sector reform is not being planned in a vacuum and indeed has been underway for several years, with the pace of activity accelerating in the last two years. Some of the major accomplishments to date are the following:

- Experiments in Cost Sharing since the early 1990s which has helped establish the requirements for Cost Sharing to work
- The resulting proposal for cabinet resolution, "Cost sharing for Health Services"
- Initial building up of a district health system
- The establishment of a new logistics, procurement and supply system for drugs in preparation for a semi-autonomous company
- Initial health mapping to establish the extent of system needs (currently underway)
- Gradual consensus building about the need for health system reform
- The proliferation of private health care facilities
- Drafting of a number of cabinet resolutions which establish the legal basis for the reform
- Limited decentralization of budgets to governorate level
- Open recruitment for high level administrative posts within the MoPH

VI RELATIONSHIP OF HEALTH SECTOR REFORM TO THE FIVE-YEAR PLAN 1996-2000

Reform strategies fit within the bases and principle for health development policies and strategies, listed in the First Five Year Plan, and included in this document in annex III. It remains committed to a primary health care approach, and to the goals of Health for All. The Goals and Principles of the MoPH, as articulated in its Health Development Policies and Strategies (HDPS) document will be the guiding principles for the provision of health services, as are the six targets adopted by the National MCH-FP Integrated program.

The reform, however, takes one step back from these goals in recognition of the fact that before

any of these goals can be reached, the MoPH needs to focus on system building. It has been the weaknesses of the system which have prevented the MoPH from reaching its health goals in the past, and it is only through fundamental reform of the system that these technical goals can be met. The process of system building will take at least 50% of the energy of the MoPH in the coming three to five years.

Priority Diseases

The five year plan of the Ministry of Public Health set priorities to improve health based on the use of several criteria for each disease i.e. (1) it is of great public health importance either because of its incidence or its complications, (2) it has a clear effect on a large portion of the community and on socio-economic development, and (3) it can be tackled easily with interventions showing impact over a reasonable period of time. The disease priorities of the MoPH, listed in order of importance, are as follows:

- Diarrhea
- Malnutrition
- Complications of pregnancy, delivery and puerperium
- Acute respiratory infections
- Malaria
- Schistosomiasis
- Tuberculosis
- Accidents
- Hepatitis
- AIDS
- Leprosy

With the initiation of a district based system, the priority disease list will be used in a different way than formerly. Each district will be expected to provide services and programs which address the priority diseases which are prevalent in that district. Some diseases of national priority, such as leprosy, tuberculosis, schistosomiasis and malaria may not be present in each district, and ascertainment of their absence will exempt these districts from setting up services to address them. Districts will have freedom to set up their own types of programs for these diseases as long as these programs can be shown to be technically suitable. Those diseases which are present within districts should be tackled according to their importance in that district. Statistics will be expected from each district according to a national formula. The national and governorate levels will provide technical expertise and training on these diseases to district staff.

VII RELATION OF HEALTH SECTOR REFORM TO POVERTY ALLEVIATION

As stated in a recent article of the British Medical Journal, "Poverty has many dimensions - lack of education, inadequate housing, social exclusion, unemployment, environmental degradation, and low income. Each of these diminishes opportunity, limits choices, undermines hope, and threatens health. Economic indicators focus primarily on income poverty, whereas health indicators provide a measure of the multidimensional nature of poverty. For this reason health

should be the pre-eminent measure of the success or failure of development policies in the next century' (Haines, 2000).

The health sector reform strategy clearly addresses issues of poverty, poverty being a large and growing problem in Yemen. As stated in the MoPH's vision and long term objectives for the HSR, the reform aims at creating a system that is *equitable* and *affordable*, with *universal access* to health services. In addition, each of the elements of the reform addresses poverty in some way. There are five general mechanisms through which different elements of the reform address issues of poverty i.e.:

- Through specifically targeting the poor. Exemptions for the poor will be an integral part of fee for service and drug revolving fund schemes. In addition, through mapping exercises, the MoPH will identify areas of high poverty, and work with local NGOs and charitable societies to specially target these areas with increased funding and services.
- Through creating universal access i.e. by bringing more affordable services closer to where people live. Through the provision of low cost essential drugs, and the availability of these drugs and other services in all health facilities and outreach programs, the entire population, including the poor and the near-poor, benefit, by paying lower transportation and direct service provision costs. In addition, by providing health services that are more affordable than previously, the reform diminishes the amount that the near-poor and average citizen need to borrow and the assets they need to sell off in order to pay for health care; these two practices characteristically plunging these *not-yet-poor* into eventual poverty.
- Through efficiency and innovation, which create more and better services for the same cost. Many elements of the reform target efficiency e.g.
 - ⇒ Decentralization and district health management, which aim at more efficient use of resources through the decision makers being closer to the ground and understanding how best to use resources for the local population.
 - ⇒ Redefining the role of the public sector in such a way that it puts its resources to the best use i.e. policy, quality assurance, regulation of the entire sector, and preventive and communicable disease programs, and leaves an ever increasing share of curative care to the private sector.
 - ⇒ Instituting community co-management, to help ensure that the health services provided are those that the community truly needs, and to decrease the loss of resources to corruption, through greater transparency and accountability to the *users* of the system.
 - ⇒ Improved, outcome-based management systems for human resources, service provision, and finances, in order that resources are used more efficiently, with less waste and redundancy, with greater transparency and accountability, and with a greater potential to achieve a measurable outcome.
 - ⇒ Hospital autonomy, which captures greater efficiency and effectiveness for the same cost by utilizing flexible, non-beaurocratic management systems through the community through the Board of Trustees, as opposed to the central 'command' system of health service management currently in operation for hospitals.
 - ⇒ Encouraging the participation of the NGO and private sector, so that they can share the cost of meeting the needs of the population with government. Efficiency is gained through government not spending its limited resources on providing curative services to that sector of the population that can afford private care, and by ensuring better quality and safer care

by the private sector, and decreasing unnecessary tests and drugs.

⇒ Encouraging innovation in health care provision and financing, in order that the most efficient and low cost methods are put in place.

- Through pulling more resources into the health sector. Cost sharing, the revolving drug fund, and gaining a larger share of the government budget all benefit the poor by providing more and better services, with an overall shift of resources from the relatively advantaged to the relatively disadvantaged. Better health care contributes to better health, which contributes to the greater productivity and earning potential of the poor.
- Through a multisectoral approach to the improvement of health. The BDN and other community based multisectoral approaches respond directly to the needs of the poor by assisting to institute development schemes that improve their lives.

Poverty specific indicators will be devised for the reform, and its progress in meeting the needs of the poor will be monitored.

VIII AREAS WHERE DONOR SUPPORT IS NEEDED

As elaborated earlier, the type of donor support requested will shift to new areas. Some of the most pressing of these areas are the following:

- District health systems
- System management at all levels
- Financial management systems
- Urban health (as a special category of district health systems)
- Improvement of tertiary care
- Hospital autonomy
- Innovations and system building to increase access to PHC
- Training and education needs of the reform
- Health manpower planning
- Health information systems, using a bottom up approach
- Service integration
- Quality of care
- Basic development needs
- Innovations for effective health education
- PHC, especially EPI, malaria, MCH/FP
- Health care package at different levels of the system

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Annex I: HEALTH SECTOR PROBLEM ANALYSIS

a. Deficiencies of the Present System

The MoPH has identified six core *system input* deficiencies which must be addressed if health care is to improve significantly. Each of these core issues will be directly addressed by the reforms. These issues are as follows:

Inadequate management systems

This is the key problem of the health system. The current management system suffers from overcomplicated bureaucratic procedures, a poor match between resources and program needs, an emphasis on activities rather than targets, an inability to control the private use of vital public resources such as vehicles, an inability to enforce its rules and regulations, lack of meaningful supervision systems, lack of information systems, and lack of incentives to its employees for service improvement and innovation. The result of this management system is low output, inefficient use of resources, lack of quality, lack of innovation, and lack of sustainability.

Low government budgetary allocation to the health sector

As noted earlier, the Yemeni health care consumer pays 75% of his/her health care costs, with government meeting only 25%. Without a larger share of government allocations, the MoPH will be seriously crippled in any effort it makes to improve health care, especially for the poor. As such, the health sector share of the budget needs to increase. At the same time, the previously intended scope of MoPH services is too large to be affordable by government, even with a greatly enlarged budget. The MoPH must redefine its role and target its services in order to best serve the needs of the population, while handing over some financial and service delivery responsibility to the private sector, NGOs, and the public at large, especially those who can afford to pay for health care. In addition, it must phase its expansion at a realistic pace which takes into account budgetary limitations.

Inefficient use of resources

A management issue of particular importance is the irrational distribution and use of resources, which has led to inefficiencies and waste. Health manpower and physical infrastructure have expanded rapidly in recent years without a similar increase in running cost budget. This has resulted in wastage of the hardware of the system, with low patient to health care provider ratios, and low health facility usage. In addition, the current health system model results in a lack of outreach services and over-dependence on stationary care facilities. This is an unrealistic strategy given the geography and level of health care awareness of the population of Yemen. The geographic dispersal of the population means that they can not easily reach these stationary facilities for all their needs, and low health awareness means that that many remain unaware of the need for preventive and early curative services, and as such need a proactive health service. Also, the system has not been able to put in place or enforce a rational allocation of resources, with some parts of the country without health facilities and staff, and others with too many. In particular, resources are over-allocated to urban areas. Finally, the system has encouraged over-allocation of curative over preventive services. These inefficiencies create heavy financial burdens on the system with minimal gains.

Overcentralization of budgetary and planning processes, with poor community involvement

The MoPH has made important gains in the decentralization process, by decentralizing the budget as well as decisions making in a number of areas. However, over-centralization of a number of tasks remains, which creates inefficiencies in health service delivery, and lack of commitment and responsibility at the level of the service provider. While district level health staff are ideally placed to understand the health needs of the population and to plan for these needs, district health system structures which could make use of this expertise are not in place. Instead, planning, financing and supervision of district and subdistrict health facilities are managed at a distance from the governorate and national level, leading to many gaps and inefficiencies in service provision. The most serious of these is that the health system has become *health facility based* rather than *population based*, with health facilities serving only small catchment areas rather than being planned to serve the entire district. In addition, community involvement is nearly absent except in terms of payment for services. Without a stronger community voice in the management of health services, acting as a lobby for their health needs, services will remain under-utilized because they will not meet the perceived needs of the population.

Government policies outside the MoPH which have a negative impact on the health sector

Besides lack of adequate budgetary allocations to the health sector, two essential issues outside the MoPH hinder the ability of the Ministry to improve its health care delivery system. These are civil service policies (Ministry of Civil Service), and cumbersome financial guidelines (Ministry of Finance). Civil service policies set salaries below a living wage, forcing public service employees to divide their time between their government jobs and the competing private sector; the mix of civil service employees is incomplete at the administrative and service delivery level; remuneration for overtime and travel is inadequate; gross overstaffing occurs at some facilities, some levels, and for some categories of staff, creating a huge drain on the health sector budget with very little benefit; and incentives and policies to encourage staff re-location in needy rural areas do not exist. The government's current Civil Service Reform Program is expected to address some of these issues, but will need a strong lobbying effort by the MoPH in order to meet the special staffing needs for health. In terms of financial systems, non-transparent and excessively complicated financial procedures cripple the administrative and health service delivery functions, with even small items requiring numerous signatures and several days to several months follow-up in order to process. The Ministry of Finance policy of awarding incentives to its employees if they return part of the budget unspent each year creates a further reason to delay the budget. In addition, the budget is assigned primarily on a historical basis, with lack of rational links between level of financial resources and program needs. Both civil service and financial guidelines will need significant reform in order to make them responsive to the needs of a functioning health sector.

Inefficient use of donor input

The health sector has been the recipient of significant donor resources over the past 20 to 30 years. However, much of this donor input has been wasted. While the hardware provided by donors such as buildings and equipment has tended to remain within the health care system, and training support has resulted in significant numbers of health manpower being put in place, the *systems* set up by donors have, by and large, disappeared. This is due, primarily, to lack of an

effective and cohesive national strategy into which donor efforts could be set. Coordination among donors has also been weak. Donors have been allowed to carry out their projects in isolation of a mechanism to sustain these inputs and to incorporate them into a cohesive system. This has resulted in low sustainability of donor projects, and low benefit to the health system as a whole. Another key cause of low sustainability of donor projects is lack of long term coordination of finances to projects i.e. when a donor pulls out, government resources are shifted to another project or area, leaving the original project areas and the infrastructure built up under that project under-resourced.

b. Effects of Deficiencies

As a result of these system input problems, the following system output deficiencies have resulted:

- Low access to health services
- Low efficiency
- Low quality of services
- Low staff motivation
- Lack of accountability
- Corruption and leakage of resources out of the public sector
- Lack of sustainability
- Lack of innovation

c. Actions Needed

Through its health sector reform program, the MoPH intends to significantly improve health care services through a number of highly focused and targeted actions. For each of the six problems identified under system input issues, a list of action points have been identified from which the reforms will be built. These will be tied to key reform elements addressed in section III. They are as follows:

Adequate management systems

- At the central and governorate level, analyze management failures, and design and implement an outcome, rather than activity based management system.
- At the district level, design district health systems which will become the *center* of the service delivery system.
- Provide adequate resources into this system, including trained staff, and rational cost budgets. Institute effective control mechanisms to identify and stop abuses.
- Supervision systems, information systems, financial systems, and manpower all need to be designed in coordination with a decentralized, outcome-based, target-oriented management system.
- MoPH to take on a stronger public health role, which will focus on prevention, health

education, disease control, prioritization of diseases, and the encouragement of cost effective health care strategies, in order to capture the efficiencies inherent in such strategies.

Adequate budgetary allocation to the health sector

- Lobby to increase the government's share of resources to the health sector
- Redefine the role of the public sector in order that it may use its limited resources in the most efficient way i.e. limiting its role as a service provider, and expanding its role as a regulator and policy maker, and as a public health institution e.g. disease control, health education and defining disease priorities. Increasingly, service provision should be carried out through autonomous rather than government facilities.
- Before implementation of any strategy (including ones initially funded by donors), cost it out for its cost/benefit on a national basis, its long term recurrent cost implications, and the savings/costs to the health care consumer. Choose strategies with a high benefit to cost ratio.
- Implement policies which encourage the private and NGO sectors to invest in health responsibly, and in a way which complements rather than competes with government services.
- Implement cost sharing schemes which increase services, and which decrease costs to the public health sector as well as the consumer.
- Phase service delivery expansion at a realistic pace which takes into account budgetary limitations. In particular, the district level should be the target for the first five-year phase.
- Encourage experimentation with low cost, high efficiency health delivery mechanisms e.g. food fortification, and private distribution of ORS to village shops.
- Seek donor assistance in learning about and acquiring low cost technology (e.g. inexpensive x-ray equipment) before expansion of a nation wide district hospital program and other initiatives, in order that cost savings can be made in both the purchase and eventual repair of such equipment. All major purchases of equipment should be tied to a maintenance and repair plan.

Efficient use of resources

- Provide a guaranteed running cost budget to each health facility based on rational criteria such as patient load, in order that manpower and investment hardware can be efficiently utilized. Eventually, running cost budgets will be provided to autonomous health facilities in agreement for the provision of a set number of basic services.
- Encourage outreach in order to make better use of staff time, and in order to increase patient to staff ratios. Make use of community volunteers, or semi volunteers for special tasks.
- Put in place and enforce meaningful financial and manpower policies and incentives which transfer human resources from over-served to under-served areas.
- Institute incentive systems at district and governorate levels, which reward activities which demonstrate an improved cost-benefit ratio.
- Focus a higher proportion of resources on effective preventive and early curative care.
- Integrate resources and activities of the different vertical programs e.g. vehicles and

supervision visits.

- Improve the organization of the logistic system for drugs and medical supplies.
- Institute referral systems to ensure that primary care is not being carried out by physicians and other relatively expensive staff.
- Implement staffing standards at each level of the system, which create the correct mix of clinical skills, male/female staffing patterns, and patient to care giver ratios. Increase in staffing to be tied to increased patient load and service provision.

Decentralization of budgetary and planning processes, with effective community involvement

- District health systems to become the core of the health service delivery system. Planning, information systems, budgetary control, financing, and service delivery to be centered at this level.
- Within the district system, communities to be given a strong voice in management of their facilities through participation in health committees and health facility boards.

Improving government policies outside the MoPH to have a positive impact on the health sector

- MoPH to attempt to influence civil service reform to meet the needs of the health sector i.e. cut staffing in some categories, increase wages of remaining staff, protect vital categories of staff (especially female staff), and include new staffing categories according to need.
- Gain approval to put into place policies which encourage the rational redistribution of health staff to underserved areas.
- Gain approval to set reasonable incentive, overtime, and per diem rates, based on current prices.
- Identify bottlenecks in financial procedures, and work with the Ministry of Finance to streamline the most important of these. For example, running cost budgets for district health systems often do not arrive in full. One solution is to directly deposit district budgets into bank accounts rather than going through the governorate health offices.
- Cost out each aspect of the health care system, including supervision, service delivery and quality control, and use this as a basis for budgetary requests

Efficient use of donor input

- MoPH to request donor input on the basis of a cohesive national reform strategy which will sustain the inputs of donors once they have pulled out.
- During the agreement process, donors will be responsible for costing out the long term financial implications of their programs in their project proposals i.e. running costs required in the future, financial effects on the consumer, and total cost if duplicated on a national level.
- MoPH to set guidelines for donor input e.g. reporting process, incentives allowed etc.

- MoPH will seek donor assistance in acquiring uniform brands of low cost technology which can be duplicated on a national level, making initial costs, and eventual repair costs lower.

Annex II: Suggested Composition and Function of Committees and Boards

A. Composition of Committees and Boards

NATIONAL LEVEL

Central Hospital (>300 beds)

Hospital Board

Head of the Local Administration

Head of the Municipality

DG-Health of the Municipality

Hospital Director

2 Heads of Departments

Hospital administrator

7 nominated community members

GOVERNORATE LEVEL

Governorate Hospital (60-100 beds)

Hospital Board

Representative from Governor's Office

DG of the Health Office

Hospital Director

One Head of Department

Hospital Administrator

Head of Municipality

6 nominated community members

DISTRICT LEVEL

District Management

District Health Management Team (DHMT) (appointed by District Health Director)

4-8 members e.g.

Curative Services

Community Health Outreach

MCH and FP

Supply and Use of Drugs

Health Education

Environmental Health

Administration

District Health Council (DHC)

Director from District

Head of the future Local Council

District Director of Health

Director of District Health Center or Hospital

Representatives of organizations involved in district health development

Equal number of community members to elected members of local HFCs

District Hospital (up to 60 beds)

Hospital Board

Director of District or his representative

Head of District Health Council

Hospital Director

One Head of Department

4 representatives from HFC elected by members of all HFCs in the district

Health Facility Team (HFT)

Director of facility

Heads of Departments

Other key personnel from work units such as pharmacy, personnel, etc.

BASIC HEALTH FACILITY LEVEL

Health Center with or without beds

Health Facility Team (HFT)

Director of facility

Heads of departments

Other key personnel from work units such as pharmacy, personnel, etc.

Health Center and Health Unit

Health Facility Committee (HFC)

5-9 elected community members

Uneven number., with females at least 2/5, 3/7, or 4/9

Half from outside community of HF location

1 representative from each uzlah (subdistrict) served

COMMUNITY LEVEL

All Communities

Community Health Committee(CHC)

5-10 members elected by community

B. Functions of Committees and Boards

NATIONAL LEVEL

Central Hospital (>300 beds)

Hospital Board

Sets rules, regulations and standards for operation of hospital

Sets targets for performance

Plans the major activities

Develops the budget

Fixes the schedules of fees and charges

Controls expenditures and presents the accounting report to general assembly

Mobilizes additional resources

Monitors performance

GOVERNORATE LEVEL

Governorate Hospital (60-100 beds)

Hospital Board

Sets rules, regulations and standards for operation of hospital

Sets targets for performance

Plans the major activities

Develops the budget

Fixes the schedules of fees and charges

Controls expenditures and presents the accounting report to general assembly

Mobilizes additional resources

Monitors performance

DISTRICT LEVEL

District Management

District Health Management Team (DHMT)

Meets frequently e.g. every week

Responsible for technical performance of all health services in the whole district including organizing the training of staff, maintenance of facilities, transport, supplies, and admin. of cost sharing

Proposes to DHC which facility & its respective community fulfills the criteria for fulfilling the cost sharing program

Organizes the training for cost sharing

Supervises the functioning and development of cost sharing in the facilities

Reports irregularities in cost sharing to the DHC

District Health Council (DHC)

Meets quarterly

Approves admission of HF/community group to cost sharing program after recommendation by District Health Director

Assures that rules and standards are respected

Monitors the development of cost sharing program

Arbitrates in cases of conflicts between partners of cost sharing scheme

Accepts and FU in cases of complaints of personnel, patients, communities

Fix the quota of poor families for exemptions in the catchment populations

Assure the provision of free drugs by the government for the exempted population

District Hospital (up to 60 beds)

Hospital Board

Sets rules, regulations and standards for operation of hospital

Sets targets for performance

Plans the major activities

Develops the budget

Fixes the schedules of fees and charges

Controls expenditures and presents the accounting report to general assembly

Mobilizes additional resources

Monitors performance

Hospital

Health Facility Team (HFT)

Manage all facility-based services

Manage all outreach activities

Administer the local cost sharing scheme

Meet regularly with the community of the catchment area

Answerable to Hospital Board

Technically guided and controlled by DHMT

BASIC HEALTH FACILITY LEVEL

Health Center with or without beds

Health Facility Team (HFT)

Manage all facility-based services

Manage all outreach activities

Administer the local cost sharing scheme

Meet regularly with the community of the catchment area

Answerable to Health Facility Committee

Technically guided & controlled by DHMT

Shares 2 accounts for cost sharing with HFC

Names 2 signatories for the account

Signature is needed to authorize any financial transaction

Health Center and Health Unit

Health Facility Committee (HFC)

Represent the interests of the target population to the health facility

With the HFT, it controls quality of services, discusses problems, & finds solutions

With the HFT, it fixes the schedule of fees & within the regulations, the purposes for which the revenue is going to be used

Shares 2 accounts for cost sharing with HFT

Names 2 signatories for the account

Signature is needed to authorize any financial transaction

COMMUNITY LEVEL

All Communities

Community Health Committee(CHC)

Select community health workers such as TBAs, CHWs or CBDs (community based distributors of contraceptives) for training

Guide the volunteers

Help them to create awareness for disease prevention & health promotion in community

Organize their remuneration from community resources

Control accounting system for drugs and money if volunteer does curative work

In some cases, provide a representative to the HFC

Annex III: The Bases and Principles for Health Development Policies and Strategies (HDPS)

1. The HDPS are based on, and is in accordance with, the fundamental right of all citizens to attain a full range of health care and services, in the most equitable fashion, without bias according to location or any other factors.
2. They reaffirm prior commitment by the Yemeni Government to health related international and regional conventions and the like, such as Alma-Ata Declaration (1978); the Global Strategy for HFA/2000 (1981); the Amsterdam Declaration of the International Forum on Population in the 21st Century (1989); the World Declaration on the Survival, Protection, and Development of Children (1990) and its Appendix entitled "Goals for Children and Development in the 1990s"; the World Declaration and Plan of Action of the International Conference on Nutrition (1992); and the Rio De Janeiro Declaration on Environment and Development (1992). They reaffirm too that this commitment is not conflicting with the national goals and the specific positive criteria of the Yemeni Community.
3. They also reaffirm the validity and relevance of the endorsed national quantitative and qualitative goals, objectives and prioritized interventions such as: the National Population Strategy and its Plan of Action (1991); Safe Motherhood Policies and Programmes (1991); and the General Economic Memorandum presented by the Government to the Round Table Conference held in Geneva (1992).
4. They recognize that improved health of the individual, the family and the society is most central for the nation to achieve overall socio-economic development. It is for this reason that the Government is determined to pursue and intensify the search for appropriate mechanisms to translate the HDPS into action.
5. They acknowledge that health, population, resource and environmental issues are inextricably interrelated. Hence HDPS express a concern that future health development efforts should be exercised within a clear national commitment to bring about a sustainable relationship between the people resources and development. Any plan or programme aiming at one aspect of development (e.g. agriculture, industry) should discuss the extent to which it will affect health, and measures should be introduced in the plan or programme to avoid or minimize any potential health problems.
6. Realizing that health development goals and objectives cannot be attained and sustained by the health sector alone, the HDPS seeks to obtain broad-based inter-ministerial support for health development, and to call for effective participation of government institutions, voluntary agencies, the private sector, multilateral and bilateral donors and, foremost, community participation.
7. The HDPS reaffirm the need for a managerial process for national health development, this is scientifically based and systematic, including a proper management information system and

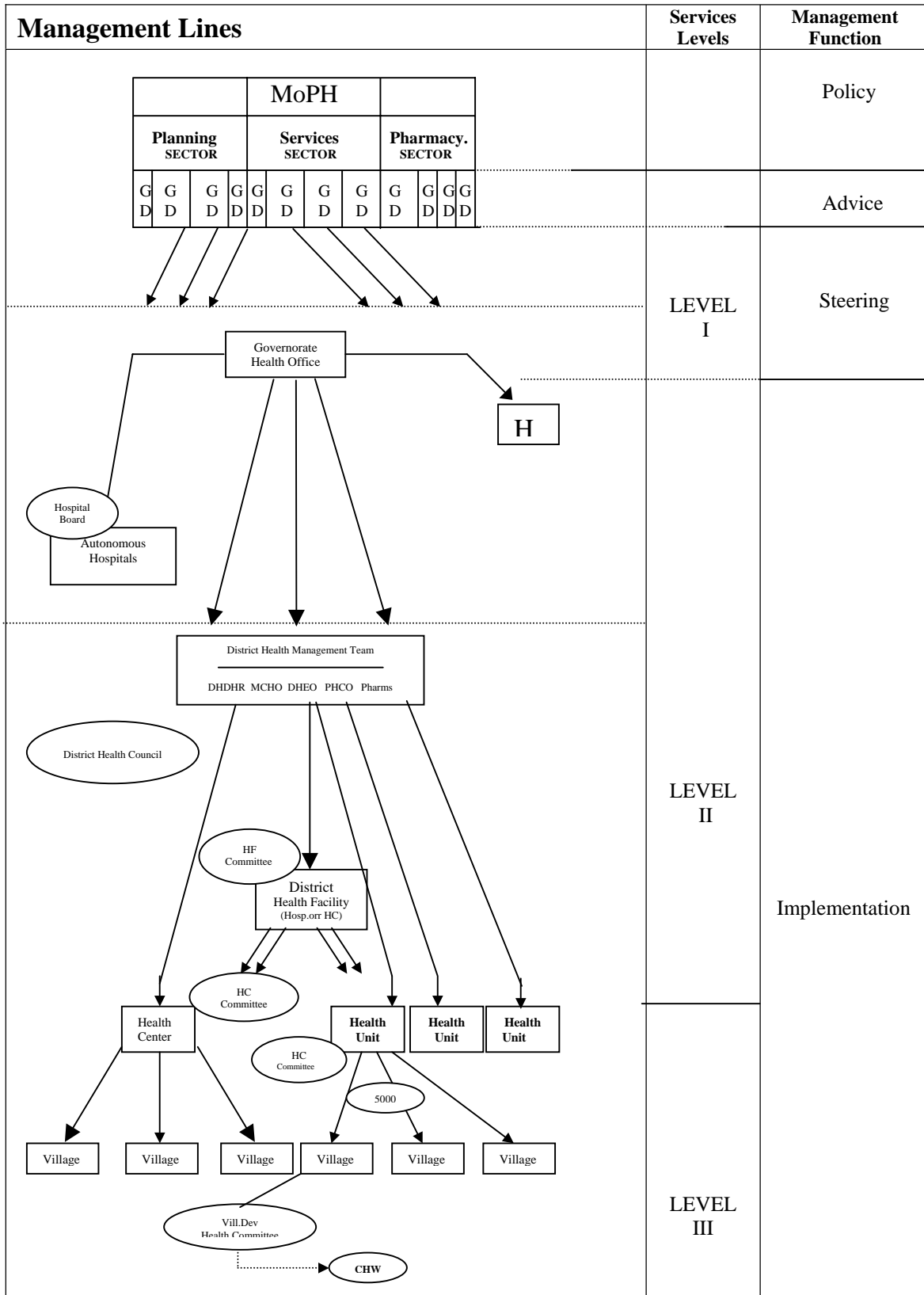
adequate use of all available information. Health service research, multi-disciplinary in nature, should be used to provide information not otherwise available.

8. They recognize the importance of continuous monitoring and, as necessary, the need for reviewing, modifying and accelerating implementation of the strategy for achieving health for all by the year 2000 based on PHC. Along this strategy, special attention shall continue to be given to encourage maternal and child health, breast-feeding, the provision of adequate nutrition, rapid expansion of immunization, oral rehydration therapy, widening coverage with clean water, basic sanitation, health education, provision of essential drugs, and to integrate health programmes into education, agriculture, employment and rural/urban development policies and programmes. The use of appropriate technology is an essential element in all these activities.

9. They affirm the importance and validity of the decentralized approach for the health services delivery system, that is acceptable to Yemeni cultures and traditions.

10. Noting with great appreciation multilateral and bilateral development efforts in support of the country's health development initiatives, the HDPS calls for collective commitment to accelerate self-reliant development in the health and social fields.

Annex IV
HEALTH MANAGEMENT SYSTEM & SERVICE LEVELS



** CHW=Community Health Worker, *GD=General Directorate, *HC=Health Center, *HF=Health Facility, *HMI=Health Manpower Institute

Annex V
DIAGRAM OF THE HSR MANAGEMENT STRUCTURES

