Government of Viet Nam

COMPREHENSIVE DEVELOPMENT DESIGN
FOR THE HEALTH SYSTEM IN VIET NAM
TO 2010 AND VISION BY 2020

Ha Noi, June 30th, 2006
COMPREHENSIVE DEVELOPMENT DESIGN
FOR THE HEALTH SYSTEM
IN VIET NAM TO 2010 AND VISION BY 2020

To implement the Solution No.46/2005/NQ/TW dated 23/02/2005 of the Polite Bureau on the prevention, protection and care for the people’s health in the new circumstances. And the Decree No.32/1998/CT-TTg of the Prime Minister on the comprehensive design for economic-social development in the period till 2010, the Ministry of Health has designed a comprehensive plan for development of the health sector for the period till 2010 and 2020 in order to continuously provide the services for protection, caring and promotion of the people’s health to actively contribute to the process of the economic-social development of the country.

The comprehensive design for development of the health system is a step to simplify the strategy on protection, prevention and caring for the people’s health in the period till 2010 and the vision to 2020; to be the basis for the consistent development among the areas and levels of services of the health sector in line with the following principles:

- To develop the health system oriented to equity-effectiveness, to combine the harmonized development between specialized and general health care services, between prevention and promotion with curative care, and rehabilitation, and between traditional and modern medicine.

- To expand the facilitates to provide health care services following the geographical population region in order to create opportunities for every inhabitant to have access for the use of health protection, prevention and care for health with improving quality.

- To ensure the appropriateness with the economic and social development of the country, to strengthen the activities related to socialization in protection and promotion for people’s health in the new circumstances.

The scope of the comprehensive design has focused on the activities to consolidate and reorganize appropriately the network provisions of health care services to the people, including: consultation and curative care services – rehabilitation, preventive medicine services - health promotion, traditional medicine and pharmacy and grass-root health care services.
In parallel with the developing a comprehensive design for the health system development, the Ministry of Health is working on the specialized rearrangement, such as: reorganization of the consultative and curative – rehabilitation network; reorganization of the training network and human resources development for health … and the national policy on drug in Viet Nam; strategy for development of the pharmaceutical sector by 2010, the national policy on medical equipment from 2002 to 2010, the plan of action for development of traditional medicine and pharmacy, the plan of action on health information, education and communication, the strategy on reproductive health, HIV/AIDS prevention and control strategy … which has simplified and provided the solutions and plan of actions for the implementation of the comprehensive design for the development of the Vietnamese health system.
PART ONE
SITUATIONAL ASSESSMENT

A. NATURAL AND SOCIAL-ECONOMIC CONDITIONS AND
CHARACTERISTICS AFFECTING THE PEOPLE’S HEALTH STATUS AND
THE HEALTH SYSTEM.

I. Natural and social-economic conditions and characteristics

1. Natural conditions and characteristics

Viet Nam is located at 8°35 to 23° northern latitude, from 102° to 110° eastern latitude, bordering the Republic of China to the North, the Peoples Democratic Republic of Laos and the Kingdom of Cambodia to the west, and the Pacific Ocean to the east. Viet Nam has a land area of 330,000 square kilometers ranking at 56th in the world.

In the northern area: the typical climate is tropical and para-clinical. The North-East monsoon (in winter) from October to March of the following year, the remaining time of the year will be affected by the south west monsoon (summer). There are 4 different seasons per year. The weather and climate of Viet Nam have been the key factors to affect the disease and epidemiology characters in the region.

The Central and southern areas: The weather is affected by two different seasons:
- The dry season: from November to March of the following year, the weather is hot, sunny for a long time, the average temperature is about 28 to 33°C, the highest temperature may be up to 40°, the lowest is from 25 to 26°C, the humidity is from 75 to 85.
- The rainy season: it lasts from April to October; the average annual rainy quality is about 1300 to 1500 mm.

2. Socio-economic conditions and characteristics:

2.1. Economic issue:

Within the last ten years, the Vietnamese economy has been continuously stable and developing with a rather high speed, average GDP is about 7%, the growth rate of various regions is rather unified. In the period 1998-2002, the development investment funds for the whole society were increased (at about 30-31% GDP). The proportion of the poor households was decreased quickly (within 10 years (from 1990 to 2000), it is decreased about 2/3 number of the poor households); the World Bank as one of the countries that have best achieved the poverty eradication and poor elimination has assessed Viet Nam. However, Viet Nam has still been ranked in the group of poor countries in the world. GDP per capital in 2003 was at the level of USD 430. By the end of 2003, there were 1,609 million poor households, occupied an allocation of 9.51% entire total households in the country.
2.2. Target groups supported by the social policies:

In the past years, the policy on giving privileges to the meritorious people which has been focused on the target groups who have contributed a lot to the achievements in the last two resistant wars, with 7 target groups, these number of people have been stable for the last many years.

In the recent years, the number of other policy target groups such as: retirement, losing labour capacity, minority, the people in the disadvantaged areas, the meritorious people and their family members, the poor, the disabled, the people infected by orange agent … have been increased from 6.37% in 1985 to 20% in 2003.

Although the Government has made efforts in poverty eradication, the rate of the poor has reduced dramatically down to 7% in 2005. If the new standard for the poor can be applied, the rate of the poor in 2005 will be about 26.0%.

The priority policy of the Government on consultation and curative care for the children under 6 has allocated an amount of 11% of the population to be in this target group.

The above-mentioned target groups have close relation with the current and future need for health care delivery.

2.3. Population – Administration unit: (as of 1 April 2004)

- Population: 82,018,000
- Administration unit: 10,776 communes and 662 districts.

The average population increasing speed in Viet Nam has been remained for many years at the rate from 1.3 to 1.4%; with the mentioned rate, the population of Viet Nam has increased about 1 million people. Only in 2003, the population development rate was about 1.47%.

The age group pattern is as follows:

- Under 15 years old: 29.25%
- From 15 to 59 years old: 61.93%
- From 60 years old above: 08.82%

This data shows that the population in our country is young in comparison with other developed industrialized countries but has been being getting older as other countries in the region.

The mechanic population-increasing rate in the urban areas area getting high; in 2002, the rate was 2.68% and in 2003, it was 4.29%; while the population-increasing rate in the rural areas has been reduced regularly; in 2002, it was 0.88% and it was 0.53% in 2003. The two mentioned rates shows that the urbanization speed in our country has been developing very fast.
The area, population and population density show that the need of utilization of the health care services has been changed in each zone, and requires a respond from the health care services providers.

II. The people’s health status and the disease pattern:

1. Disease status:

The people’s health in the recent years has been improved dramatically, the mobility frequency has been reduced but in fact for some special diseases, the mobility and mortality are still very high.

– Infectious diseases (caused epidemic)

The diseases, can be immunized for prevention and control by vaccines such as: diphtheria, whooping cough, measles … However, there are still some diseases that have the high mobility and mortality, such as encephalitis, hepatitis …

Some of the previous diseases having high mobility and often caused epidemics such as: cholera, typhoid, plague … have been reduced dramatically now and there were no more epidemics caused by them.

In the recent years, some new emerging diseases in our country such as: SARS, avian influenza transmitted to human being caused by influenza type A – H5N1… However, we have detected them in time and found out the appropriate treatment diagram.

HIV/AIDS infection has been increasing annually; recently, the number of cumulative mobility and mortality are as follows:

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV infection</td>
<td>33,747 (cases)</td>
<td>76,180 (cases)</td>
<td>90,380 (cases)</td>
</tr>
<tr>
<td>AIDS</td>
<td>5,120</td>
<td>11,659</td>
<td>14,428</td>
</tr>
<tr>
<td>Death</td>
<td>2,764</td>
<td>6,550</td>
<td>8,398</td>
</tr>
</tbody>
</table>

Some of the infectious diseases caused a large number of the mobility cases (in the past, they were grouped as social diseases) such as tuberculosis, malaria … Even if a lot of efforts have been made, the mobility and mortality of the mentioned diseases are still developing so complicated, especially tuberculosis and HIV-tuberculosis.

The number of patients with tuberculosis in the last 5 years has no sign of reduction, but has the tendency of increasing. The number of new cases is 50,000 to 60,000 annually. In 2003, the number of tuberculosis infection in Viet Nam was ranked 13th within 22 countries having the highest number of tuberculosis cases in the world and the total number of TB cases in Viet Nam occupied 11% the total of TB cases in the Western Pacific Region.

(See in the annex attached)
The number of the malaria cases in 2003 has been reduced a half in comparison with 1999. Especially, the death caused by malaria within the mentioned time has decreased 5 times. However, the number of mobility cases in 2003 was still high, with about over 164,000 cases (equivalent to 203.5/100,000 inhabitants). (See in the annex attached).

- **Non-infectious diseases:**

  - Hypertension: The annual data of the national health survey in 2002 shows that:
    Above 16 years old: 15.1% for male and 13.5% for female.
    And over 65 years old: over 50% people have the signs and symptoms of hypertension.

  - Oncology diseases: According to the 2003 statistics data, there are 1.86% mobility and 3.54% mortality caused by oncology diseases in hospital. This is only the rate of hospital mobility and mortality, not taken into account the survey data with a large size at community.

- **Traffic accidents: in 1994 and 2003**

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cases</td>
<td>13,760</td>
<td>20,969</td>
</tr>
<tr>
<td>Wounded cases</td>
<td>14,174</td>
<td>11,996</td>
</tr>
<tr>
<td>Death cases</td>
<td>4,907</td>
<td>20,847</td>
</tr>
</tbody>
</table>

The traffic accidents have been increasing constantly in the past 10 years, only in 2003 the number of accident and wounded cases had reduced dramatically in comparison with 2002, but the number of deaths had increased a lot, from 4,905 death cases in 13,760 accidents in 1994 up to about 21,000 death cases in about 21,000 accidents in 2003. It means that the average is about 1 death caused by an accident.

2. **Disease and mortality patterns:**

The proportion of mobility according to each group of diseases:

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Infectious diseases</td>
<td>55.51</td>
<td>59.10</td>
<td>37.63</td>
<td>27.44</td>
<td>26.13</td>
</tr>
<tr>
<td>Non-infectious diseases</td>
<td>42.65</td>
<td>39.05</td>
<td>50.02</td>
<td>60.61</td>
<td>60.80</td>
</tr>
<tr>
<td>Injury and accidents</td>
<td>1.84</td>
<td>1.85</td>
<td>12.35</td>
<td>11.95</td>
<td>13.00</td>
</tr>
</tbody>
</table>

If we classify the diseases by three big groups (infectious – non-infectious – accident and injury), it is obvious that the non-infectious and accident and injury have increased fast in the recent years. However, the infectious diseases are still very common and occupied an allocation of over 26.0% in the total of mobility cases.

The children malnutrition status: the rate of malnutrition children under 5 (based on the weight in line with age) as follows: in 1996: 43.9%, in 2000: 33.1% and in 2004: 26.3% and in 2005 to be reduced to bellow 25%.
There is a tendency of reduction for the children malnutrition rate annually, till 2005 we are able to achieve the set-up target of less than 15%.

The rate of newborn cases with low weight (<2500 gram): 7.3%/year in 1998; 7.1%/year in 2000 and 6.5%/year in 2002 and 5.88%/year in 2003 in comparison with the set-up target of less than 7%/year in 2005.

3. Food hygiene and safety status:

The food poisoning cases are still large, annually; there is about 1.3 to 1.5 million of food poisoning cases.

A very worried situation of food poisoning is the potential poison caused by the chemical agents that were used in all types of food. While the Ministry of Health and other related sectors has no laboratory to assure that the poisoning causes and status can be identified quickly to define appropriate measures for prevention and provision of curative care for the victims.

The residue of the vegetal protection chemistry is still high and the control activities are facing with a lot of shortcomings.

4. Environmental issue:

The status of environmental pollution has been getting worse, especially the pollution caused by the use of chemistry. The living waste, production waste and solid waste in hospitals have not yet managed properly.

The industrial working environment, the health status of the workers and the occupational health:

At present, many industrial zones were established and developed quickly, however, the infrastructure was poor, to make the environment of these areas heavily polluted by the industrial and living waste, noise, smoke, dust and poisoned air.

Only in Ha Noi, according to the result of the 2000 survey, the working environment of the workers after 10 years with their jobs (1991-2000) by looking through all the indicators (proportion in % of samples the over the permitted standard) are as follows:

<table>
<thead>
<tr>
<th>Indicators</th>
<th>The year of 1991</th>
<th>The year of 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition of the micro climate</td>
<td>29.0%</td>
<td>57.7%</td>
</tr>
<tr>
<td>Noise</td>
<td>25.9%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Poisoned smoke</td>
<td>32.2%</td>
<td>24.4%</td>
</tr>
</tbody>
</table>

Indicators on industrial hygiene in 2000 have been improved in comparison with the previous 10 years, but the level of over the permitted standard was still high. Only the indicators on micro climate over the permitted standard increased twice in comparison with indicator in 1991. In the period 2001-2005, the supervision, monitoring and implementation of indicators related to industrial hygiene were promoted, however, the urbanization speed and the expand of the industrial zones … the possibility of having the
environment hygiene over the permitted standard was so great if there were no positive measures on technology and environment.

5. Situation on occupational injuries: In parallel with the industrial development, the occupational injuries has been increasing regularly in the last 3 years as follows:
The number of occupational injuries in 2002 in comparison with 2000 had increased from 3,361 cases to 5,000 cases, number of workers suffered the injuries increased from 3,470 workers/year in 2000 to 5,003 workers in 2002. Only in a few cases, there were more than 1 worker suffering the injury.

B. THE REAL CONTEXT OF THE VIET NAM HEALTH SYSTEM

The health system in our country has been established and developed in many years, especially the grass-root health network has been consolidated and developed. However, the health system has been renovated slowly, and not yet met with the market economy oriented to the socialism and the change of the disease pattern.

I. THE HEALTH NETWORK FOR CONSULTATION, CURATIVE CARE AND REHABILITATION:

1. Health network for consultation, curative care – Rehabilitation follow 4 different levels:
   - Grass-root level: The commune health stations (CHS), the health stations at factories, construction sites, manufactures, state-run farms and schools have the responsibilities to provide the primary health care services. There are a total of 11,565 commune health stations and health stations.
   - District level: The inter-commune policlinics (ICP), the district hospitals and hospitals belong to various Ministries and sectors: they are the level to provide curative care with simple techniques, to deal with some intensive cases and common diseases.
   - Provincial level: there are general hospitals and specialized hospitals to meet with the most of requirements on curative care at specialized level.
   - Central level: consists of general hospitals and specialized ones under the direction of the ministry of Health.

With the above mentioned structure, there are many advantages but a lot of shortcomings are also obvious: The health sector manages the system throughout from the central to commune/hamlet levels so that it can unify the professional techniques, concentrate on solving the focused problems in order to protect, care and promote the people’s health. However, the high centralization will limit the initiatives and creative minds at other health facilities and the other sectors, committees and mass organizations and local authorities at peripheral levels. Most of the time, it can not be consistent among the duties to protect and care for the people’s health by providing local budgets and mobilizing the local and community resources.
In the recent years, the non-public curative care network has developed quickly, by 30 June 2004, there were 30,000 private clinics, 8,378 private chemistries, 2,974 chemistries of the joint-stoke manufactures; 10,317 pharmaceutical agents and 9,087 pharmaceutical boxes at the commune health stations; 450 manufacturing facilities for traditional medicine … Especially, there are 36 private hospitals in the location of 9 cities/provinces with 2,538 beds, equivalent to 2% number of beds in the whole countries, including 4 hospitals with foreign investment.

The private hospitals mainly focus in big cities: there are 5 private hospitals in Ha Noi with 158 beds, 18 private hospitals in Ho Chi Minh City with 1,631 beds, 4 hospitals in Da Nang with 242 beds, 3 private hospitals in An Gang and 2 in Binh Duong. There is one private hospital for each of Binh Dinh and Hai Phong.

2. Number of public hospitals and beds over 10,000 inhabitants

In 2005, there are about 1,056 hospitals with 143,385 beds in the whole country. The average is 17.24 public beds/10,000 inhabitants, in the recent years, the number of beds has been increasing but so slowly that makes the average number of the number of beds/10,000 inhabitants not increased obviously; in other side, the number of hospitals and beds are not located equally in some regions.

- There are 611 district hospitals with 50,337 beds, occupied about 35.106% the total number of public beds in the whole country and achieved 6.05 beds/10,000 inhabitants. The average is 1 beds to server 1,652 inhabitants.

- There are 350 provincial hospitals (both general and specialized) with a total of 74,598 beds, occupied about 52.03%, the average is 9.0 beds/10,000 inhabitants. The average is 1 beds to server 1,115 inhabitants.

Only the number of provincial general hospitals consist of 106 hospitals with 42,639 beds, the average is that each bed in the general hospital servers 1,950 inhabitants.

- There are 30 central hospitals with 13,510 beds, occupied 9.42%, the average of 1.62 bed/10,000 inhabitants.

- A part from those, there are 65 health facilities belongs to other Ministries, sectors with 4,940 beds, occupied 3.44%, contributed 0.59 bed/10,000 inhabitants (not including the curative care facilities belongs to the Ministries of Defense and Public Security).

3. The frequency of occupying beds at various levels of management:

<table>
<thead>
<tr>
<th></th>
<th>1995</th>
<th>1999</th>
<th>2002</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central hospitals</td>
<td>90%</td>
<td>102%</td>
<td>116%</td>
<td>120%</td>
</tr>
<tr>
<td>Provincial hospitals</td>
<td>95%</td>
<td>96%</td>
<td>98%</td>
<td>102%</td>
</tr>
<tr>
<td>District hospitals</td>
<td>Maintains in many years at the average rate from 75 to 85%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reasons to cause the overload at top levels are:

i) there are no clear distinction of technical level in curative care;

ii) caused by the poor conditions of the district health facilities;

iii) Convenient transportation, it is easy for the patients to by pass to higher level;

iv) The capacity to pay the hospital fee among the population has been increased;
v) The requirements for consultation and curative care with high and multiple quality have been increased.

4. The professional activities on consultation and curative care:

Out-patient treatment:
The average total of consultation times per bed in 2004 is 829.6/bed, increased about .4 times in comparison with 2000. The total number of out-patients in the period 1994-2000 occupied about 36% total number of hospitalized ones, and it was 57% in 2004.

Hospitalized treatment:
Number of hospitalized days/patient is 7 to 7.5 days, the proportion of the movement of patients/bed is 51.1 times/year; the general mortality rate in hospitals is 5.7%.

5. The health facilities and supplies and equipments for curative and rehabilitation:

Within 5 years, there are 497 hospitals to be invested for upgrading with a total of 3.14 million square meters. A lot of modern specialized hospital equipment were provided to hospitals at central and provincial levels. However, in comparison with the need of health care service provisions, most of the health facilities, premises, water and electricity, common equipment of all hospitals at three levels: Central, provincial and district are not yet met with the minimum standard and not yet met with the need and assigned duties. (except some of the hospitals with annual international aids and some hospitals that recently being upgraded).

❖ The Central hospitals: In the recent years have been invested with the state budgets (to invested to specialized health centre) and using the ODA project funds.

❖ The Provincial hospitals are mainly being constructed many years ago but having not enough funds to maintenance regularly. In the aspect of equipment in comparison with the standard issued by the Ministry of Health in 2002, it is clear that only 5% of the hospitals having modern equipment in picture diagnosis wards but mainly located at big cities such as Ho Chi Minh City, Ha Noi; 50% total number of these hospitals to meet with over 80% equipment listed in the standard one and there is no hospital that can meet with 100% of the standard list.

❖ The district hospitals: about 30% of the district hospitals were invested with some items from the ODA funds (premises and equipment for technical units). Up to now, there are about 50% of general district hospitals to be equipped to a maximum amount of 70-80% of the required standard suppliers and equipment.

A part from the public consultation, curative and rehabilitation network, the non-public network for consultation, curative care has been established and developed, till 30 June 2004, there were 30,000 private clinics, 36 private hospitals in the areas of 9 provinces/cities with 2,538 beds, occupied approximately 2% numbers of beds countrywide (among them 4 hospitals were funded by foreign investment). In general, the non-public network is still fragment, self-established, not yet been supported from the Government and managed closely. Besides, there are 5 private hospitals receiving the licenses for operation but not yet established and/or under construction and not operated yet.
II. PREVENTIVE MEDICINE NETWORK:

The preventive medicine network has been established and developed widely from the central to district and commune levels. The preventive medicine network and health promotion has been divided into 4 levels:

- Central level with 14 units, including 11 Institutes (among them, there are 5 central institutes and 6 regional institutes), 2 centres for production and quality control of vaccines.
- Provincial level: there are preventive medicine centres in 64 provinces/cities, 28 centres for prevention and control of Malaria; 7 centres for international health control; 4 centres for occupational health and environment; 22 centres for prevention and control of social diseases and 11 health centre for different Ministries, sectors and 2 centre for prevention and control of HIV/AIDS.
- District level: there are preventive medicine teams at district level, and mobile teams for mountainous districts, the MCH/FP teams. At present, these teams have the responsibilities to implement the national objective health programmes and directly solve the key problems related to epidemics, emergency preparedness, food poisoning, family planning.
- Communal level: The commune health stations implement the whole activities of preventive medicine, epidemic or diseases control and prevention, provide the primary health care and common health care services to people.

III. GRASS-ROOT HEALTH NETWORK:

1. The health facilities: by the end of 2003, there were 317 communes having no communal health stations, occupied about 2.95% total number of communes and approximately; among them: there were 140 communes at the Mekong delta, 41 communes in the High Plateau, 40 communes in the North West area. This number contains mainly newly split communes or the communes affected by the natural disasters or flood that damaged the whole facilities.

2. The health workers: By 2003, there are medical doctors working in 6,953 commune health stations, occupied about 65.4%; and mid-wives working in 9,900 CHS, occupied 93.1%. There are an average number of 4 health workers in a commune health station.

3. The professional supplies and equipment: In general, the medical equipment for commune health station are not enough and sufficient. The rate of commune health stations having refrigerators or cold chains is about 9.9%, among them it was 5% at the rural areas and 10.8% at the remote one. About half of the commune health stations are having the sterilized equipment and 12.2% health stations having equipment for specialized consultation, such as the visional chart, Ear-Nose-Throat set for consultation. In 2003, the Luxemburg Government supported 5,000 refrigerators for commune health station, increased the rate of commune health stations having equipment to keep the vaccines to 50%.
IV. HUMAN RESOURCES FOR HEALTH:

1. The network of training schools and categories of training:

- Central level: is managed by the Ministry of Health including 9 universities, 1 high-school, 3 secondary schools, 1 technical school for medical equipment. A part from that, there are 2 medical universities (Hue and Thai Nguyen) and one medical Faculty of Tay Nguyen University are managed by the Ministry of Education and Training.

The Medical Universities are now training 7 categories of health workers, those are: general medical doctors, traditional medicine doctors, dentist, pharmacists, bachelors of Public Health, Bachelors of nurses and bachelors of medical techniques. Some of the Medical and Pharmaceutical universities are assigned with duties for postgraduate training: such as the doctorate degree, master degree and specialists at levels I and II.

Besides, there are 5 classes of secondary school training in hospitals, central and regional institutes.

- At provincial level: There are 55 secondary medical and technical schools, 2 high schools and 4 centres for training of health workers and 2 medical faculties of medical university. The medical and pharmaceutical secondary schools are having responsibilities to train medical and pharmaceutical technicians, secondary nurses and midwives. A part from that there is a system of vacation training in the medical and pharmaceutical secondary schools and high schools.

- District level: In some districts, there are training centres newly established with the key responsibilities to organize retraining and continuous training courses, which are conducted by the health workers at higher levels and supported the national objective health programmes for communal health workers.

2. Training Capacity to provide human resources for Health:

Annually, the number of trained health workers are about 3,000 post-graduate health workers, 3,500 medical doctors, dentists, traditional medicine doctors, 870 bachelors of various areas, over 1,000 Pharmacists at university level and 700 students from the high schools and about 7,000 students from the secondary medical and pharmaceutical schools.

3. Total number of health workers by the end of 2003:

- According to the health statistics data of the Ministry of Health, total number of the health civil servants are 241,498, including:

<table>
<thead>
<tr>
<th>Type of Health Workers</th>
<th>Number</th>
<th>Occupied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central level</td>
<td>about 29,561</td>
<td>12.24%</td>
</tr>
<tr>
<td>Local level</td>
<td>202,471</td>
<td>83.84%</td>
</tr>
<tr>
<td>Other sector</td>
<td>9,466</td>
<td>03.92%</td>
</tr>
</tbody>
</table>

- The rate of health workers providing services to people are:
<table>
<thead>
<tr>
<th>Inhabitants severed by 1 medical doctor</th>
<th>1,700 inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhabitants severed by 1 medical doctor or assistant doctor</td>
<td>844 inhabitants</td>
</tr>
<tr>
<td>Ratio of medical doctor/10,000 inhabitants</td>
<td>5.88</td>
</tr>
<tr>
<td>Ratio of medical doctor and assistant doctor/10,000 inhabitants</td>
<td>11.86</td>
</tr>
<tr>
<td>Ratio of nurses/10,000 inhabitants</td>
<td>5.95</td>
</tr>
<tr>
<td>Ratio of university pharmacists/10,000 inhabitants</td>
<td>0.77</td>
</tr>
</tbody>
</table>

If we exclude the number of health workers working in other ministries and sectors, the rate of health workers working at local levels are 88.22%.

In general, the situation of health workers in the health sector are not assured in quantity, structure and social welfare.

- For medical doctors: the ratio is 5.88 medical doctors/10,000 inhabitants, however, the distribution are inconsistent, the lower levels are lacking of medical doctors, especially the district level.

- University pharmacists are facing with a severe situation of deficiency, at the present, it is at the ratio of 0.77 university pharmacists/10,000 inhabitants; there are some hospitals having no university pharmacist.

- The ratio of nurses and technicians/medical doctors is about 1.5 (however, the recommendation of World Health Organization is 4-5 nurses and technicians/1 medical doctor).

- The living conditions of most of the medical doctors are low, while the policy on salaries, and welfare to health workers are not improving dramatically.

VI. INVESTMENT AND HEALTH CARE FINANCING:

The estimated implementation of the health budget planning in 2004 are as follows:

- Expenditures in health using the state budget was 10,038 billion dongs occupied 4.9% grand total of state budget, including:
  - Expenditure for development investment: 2,611 billion dong, occupied 26.0% of the total expenditures in health;
  - Expenditure for health administration: 7,427 billion dong, occupied 74.0% of the total expenditures in health;
- Expenditures from the user fees and health insurance was 2,965 billion dong.

The grand total of the 2 expenditure sources for health in 2004 was 13,003 billion dong, occupied 1.8% GDP.

In the past few years, although the government investment to health has been increased, the total expenditures in health were still low in comparison with the actual need. The state budget expenditure for health sector in the period 2001-2005 was 46,862 billion
The grand total of state budget expenditure was 59,365 billion dong, achieved 1.89% GDP.

- The financial health management mechanism at local levels is inconsistent and facing with difficulties.
- Many local authorities are still using the budget allocation norm/bed in line with the old norms applied in 1998, while the salaries and other expenditures for health workers using the minimum levels of salaries had already spent about all of the mentioned norm.
- While the investment of the Government was limited, the other sources for health through partial user fee and health insurance were facing with a lot of short-comings, the target groups receiving special waves for user fees were increased regularly, that makes the health facilities get worse.

C. GENERAL ASSESSMENT

1. Key achievement:
Over the last 10 years, the mission of protection and care for people’s health in our country has made important achievements.

- The local health network has been consolidated and developed; 100% communes are covered by the services of health workers, by the end of 2004, about 68% commune health stations were covered by the services of medical doctors and 93.3% hamlets are having health workers’ services.

- The preventive medicine measures for prevention and control of diseases and epidemics have been implemented actively, many dangerous diseases and epidemics were contained and controlled such as the cholera, plague and malaria … especially the SARS and Avian Influenza (H5N1) epidemics.

- Annually, there are over 90% of children under 1 were vaccinated with 6 different types of vaccines; the mobility and mortality rates of 6 diseases prevented by vaccines in children were reduced dramatically; some diseases, such as polio in children has been eradicated and newborn tetanus was eliminated.

- The consultation and curative network has been invested for upgrading and really made advanced achievement. The system to provide health services were expanded, the ratio of illness cases receiving health care services was increasing. There are some high techniques in diagnosis and treatment were applied successfully and popularly in our country.

- The network of traditional medicine and pharmacy was consolidated, there are traditional medicine hospitals in 70% provinces and cities; there are wards or teams of traditional medicine and pharmacy in 50% number of institutes, general hospitals.

- The drug and equipment supplies has made much efforts than before, and have assured about 40% drug needs for people with domestic produced drugs.
People in most of the region, areas have been provided with good health care services; the health status of the people has been improved regularly; the average life expectancy has increased from 65 in 1988 to over 71.3 in 2003. The ratio of maternal death has reduced from 2% in living newborn (in 2980) down to 0.85% (in 2003), the mortality rate of infant (under 1) was reduced from 78% living newborn (in 1985) down to 18% (in 2004) and the mortality rate of children under 5 was reduced from 81% (in 1985) down to 32.8% in 2003 and less than 30% in 2005.

In general, our country has achieved the general indicators in health, much better than other countries with the same income/habitant, and contributed to increase dramatically the human development index (HDI).

2. The shortcomings and challenges:

A part from the above-mentioned achievements, the activities for prevention and caring for people’s health in our country has been facing with deficiencies and shortcomings.

- The health system has been renovated slowly, not meeting with the development of the marketing economy with socialist orientation and the changes of the disease patterns; especially the local medical network for consultation and curative care has not yet been allocated appropriately in some regions, the overload situation at some top level hospitals were really hard.

- The organization and operation of the preventive medicine were facing with a lot of shortcomings; the environment hygiene and food safety were not yet controlled closely; the infectious diseases that may cause outbreaks that can re-emerge, while some of the dangerous epidemics, such as food-and-mouth disease, Ebola, SARS, Avian Influenza (H5N1) have been emerged in many countries and in our country, which can cause a pandemic at any time.

- The quality of health care services has not yet met with the people’s requirements, that are getting more and more variety and the condition of health care service for the poor people, the people at the remote and minority people living in the disadvantaged areas.

- The capacity of production and provision of drugs were weak, the drug prices were not stable and still very high in comparison with the people’s income.

- The health infrastructure, equipment for the health facilities were lacking and poorly supplied; especially the equipment status of the district hospitals was too back-ward, not having enough capacity to solve all the problems causing by common diseases and some typically specialized diseases of the respective area.

- The investment for health is still limited and inconsistent; the investment for health facilities in the past many years was based on the state budget so that it was too limited and caused a context of fragment, inconsistent and overlapped investment. The investment to the two high-technology specialized centres in Ha Noi and Ho Chi Minh City for the last 7 years has only achieved 20% of the planned and endorsed investment total can be taken as an example.
The norm for budget allocation per inhabitant, in combination with the co-efficiency for health in accordance with the Decision No.139/2003/QD-TTg dated 11 July 2004 of the Prime Minister had assured more equity for various regions, areas (the mountainous area will receive 1.7 times of the delta area). However, in line with the detailed calculation, the allocated norm for the mountainous region need to be about 2.5 to 3.0 times more than the budget allocation norm for the delta area in order to assure the good quality of health care services for the people in the mountainous area, because the mountainous provinces can not mobilize other than the source for health from the mentioned budget allocation.

While the state investment is limited, other incomes for health through the partially user fees and health insurance are facing with a lot of difficulties, and the number of target groups being waved by hospital fees were a lot.

The social welfare for health workers were not yet improved, there are policies, for health workers especially health workers at local levels, which were not yet implemented appropriately and many local authorities kept holding the shift allowances or poisoning allowances of health workers. In many places, the hamlet/village health workers were not yet paid with allowances for their services so that the health activities at community were not effectively implemented. The salary policy for health workers was inappropriate.

Regional and International Integration: the Health sector has been able to expand its bilateral and multilateral cooperation, exchange the experience and knowledge in medical science, the expand the foreign investment through the joint-ventured mechanism and collaboration… however, we are not yet having adequate capacity in management, lacking of knowledge in international laws, limitation in using foreign languages so that we often face with difficulties and getting lost in cooperation and collaboration with foreign counterparts.
PART 2
DEVELOPMENT FORECAST

1. Forecast on population size and development:

Although the speed of population increase, in general, and the birth rate in our country has been reducing dramatically, the population has been still increased at about 1.3%/year. Viet Nam currently stands at 14th rank in the world in terms of population size, by 2050 Viet Nam will rank at 15th and become 1 of the 16 countries with over 100 million population. The Viet Nam population will continue increasing in the next 10 years, according to the forecast of the Statistics General administration, the Viet Nam population will be about 81.86 to 82.35 million by the end of 2005; about 88.6 million in 2010 and about 100 million in 2020.

By 2010, the population structure will be changed in comparison with the current one. The ratio of the elderly will be increased because of the increasing in life expectancy. The number of children will have a tendency of being reduced but still occupied a high ratio and they are still the special target groups receiving priorities in health care services. In the next 10 years, Viet Nam will be the nation with elderly population (the elderly will occupy over 10% of the population). This is also a challenge for the health sector the disease pattern will be changed, the chronic and common diseases for elderly people will be increased.

The speed of urbanization will be high to make the population increase in urban area, that causes the pressure to the infrastructure system, such as transportation, safe water supply, waste management, solid waste management, environment hygiene, the increase of occupational injuries and especially traffic injuries.

2. Social-economic development:

- By 2010, the income/capital will be about USD 900-1,000, the size of the national economy will be USD 88 billion. By 2020, our country will become an industrial one. The rate of the poor will be reduced from 24.0 (in 2005) down to 11-13% (in accordance with the newly applied standard for the poor in 2006-2010 duration – Decision 170 of Prime Minister - QD 170 TTg).

- The Orientation for social-economic development in 2006-2010 is development against three stable feed: economy – society and environment. It will make a breaking stage in changing of the economic mechanism, production mechanism in each sector and each area.

  o To continue investing to construction, upgrading the infrastructure with big size to create the advantaged capacity for social-economic development. To focus on the urban infrastructure development.
  o To develop and improve clearly the quality of the human resources to meet with the cause of the country industrialization and modernization.
  o To improve the potential capacity and increase the effectiveness of the science and technology to the cause of social and economic development.
To manage and develop a stable natural and environment resources, to minimize the harm caused by environment to people’s health.

To develop social culture, to solve effectively the hot social problems; to improve the living condition of the people in both material and spiritual condition; to construct a stable social structure.

To develop the regional territories basing on the mobilization of each region advantages and to quickly change the economic structure.

To consolidate the security and defense resources to combine with the social economic development.

3. The forecast on requirement for protection, caring and promotion for people’s health care services:
From the analysis of the all factors related to health, the forecast on requirement for protection, caring and promotion for people’s health care services in the coming period:

3.1. The infectious, communicable disease will continue their prevalence:
- Malaria, dengue fever, tuberculosis, HIV/AIDS and other sexually transmitted infections, pneumonia, diarrhea, typhoid, Hepatitis B, Japanese encephalitis B.
- Especially the new emerging disease that have been becoming dangerous epidemics caused by the wide virus from wide animal and poultry and transmitted to human such as SARS, foot-and-mouth diseases and AI type H5N1…

3.2. Diseases related to nutrition, digestive system which have been existing and expanding in Viet Nam:
- Malnutrition in children, especially children in the remote, mountainous and poor areas and the obey in children and adults in advantaged areas and cities.
- The hematology diseases, especially the Leucosis diseases and marrow failure function in children.
- Diabetes.
- The kidney diseases, especially the diseases related to kidney failure

3.3. The newly emerging health problems which were not being efficiently studied and prevented effectively.
- The food poisoning, drug poisoning including addict drugs, curative care drugs and cosmetics.
- All types of injuries including in traffic, occupational health, at the community, at the entertainment areas and at home. Especially the trauma that caused the highest/leading cause of death in Viet Nam (2003-2004).
- Addict in smoking at diseases caused by tobacco smoking;
- Abused of alcohol drinks and diseases caused by drinking too much alcohol.

3.4. Non-communicable diseases has been having a tendency of increasing dramatically while Viet Nam has so little of experience in this area:
- Cardio-vascular diseases, mental disease and mental health, cancer diseases and occupational health diseases, the heritable and congenital diseases, including the consequences of orange agents, gerontology and health care for the elderly.
3.5. The diseases related to environment polluted: mainly the occupational environment in workplace, such as small and middle enterprises; environment facing with urbanization; management of industrial waste and living waste and management of hospital waste.

In the duration to 2020, while Viet Nam mainly becomes an industrial country, the need for health care will be changed basically from the preventive medicine to curative care and rehabilitation mainly for the solution for communicable diseases to resolution for infectious diseases and non-communicable diseases, injuries, accidents and poisoning.

The health indicators of the advanced industrial countries in the world show that the life expectancy will be from 77 to 79; the birth rate and the natural population development ratio will be less than 1%. It is forecasted that by 2020, the health indicators of the Vietnamese will be about the same level that other industrial countries has currently achieved, however, there is a need for preparation of equipment, infrastructures, knowledge and professional skills to mainly solve the diseases that are common to the advanced industrial countries and having tendency to be increased in Viet Nam.
PART THREE
DEVELOPMENT DESIGN OF THE HEALTH SYSTEM IN VIET NAM
TO 2010 AND THE VISION BY 2020

I. BACKGROUND INFORMATION FOR THE DESIGN
- Documents on the policy, strategy for social economic development, and health sector development policy of the Communist Party and the Government of Viet Nam through various conferences. (especially the XI Conference of the Viet Nam Communist Party).

- The solution of the Political Bureau number 46-NQ/TW dated 23 February 2005 on the activities related to protection, caring and promotion of people’s health in the new situation.

- The Directive of the Prime Minister number 32/1998/CT-TTg dated 23 August 1998 on the activities related to comprehensive design for social-cultural and economic development in the period to 2010.

- Decree number 49/2003/ND-CP and 172/2004/ND-CP dated 29 September 2004 of the Government regulated the organization of professional institutions belong to the Provincial and district People’s committees;

- Decision 35/2001/QD-TTg dated 19 March 2001 of the prime Minister endorsed the strategy for protection, caring of people’s health in the period of 2001-2010.

- The regional strategies, designs for social economic development for the period of 2010 and 2020;

- Especially based on the real context, disease pattern and the need for protection, caring and promotion of the health and development of the Vietnamese race in the coming period.

- Other basis for this: Ordinance on food Safety, the national strategies on HIV/AIDS prevention and control; national strategy on malnutrition prevention and control; strategy on reproductive health; strategy for development of the pharmaceutical sector; the national drug policy; the national policy on medical equipment…

II. VISION OF THE DESIGN

1. To design the Viet Nam health system oriented to equity – effectiveness and stable development, including the attachment of the high technology of health care to the primary health care, harmonizing combination between preventive medicine – promotion of health care and curative care and rehabilitation, between traditional and modern medicine.

2. To develop the health system appropriately to meet with the social-economic development of the country, at the same time to mobilize the potential resources of the society. To basically meet with the requirements for protection and caring of people health in each period.
3. To develop the network of health care services provisions based on the population cluster to create more access for people to be provided with health protection and care with increasingly high quality.

III. OBJECTIVES OF THE DESIGN:

1. **General objective:** To develop the Viet Nam health system to regularly become modern, completed and consistent from the central to local levels oriented to equity, effectiveness and advanced to be capable to meet with the regularly high and variety needs of the people on protection, caring and promoting health’ to reduce the mobility and mortality, to promote health and increase the life expectancy, to improve the quality of life; to strive for achieving and over achieving the indicators for health, as identified in the strategy for protection and care of people’s health in the period 2001-2010.

2. **Specific objectives:**

   2.1. To consolidate and develop the preventive network to be able to forecast, conduct survey (surveillance), detect and control of diseases, to control the food safety in order to reduce the mobility and mortality caused by diseases and food poisoning.
   - To actively prevent the epidemics in order to avoid pandemics.
   - To prevent and control dangerous diseases and the infectious factors, causes of the epidemics especially the new-emerging epidemics.
   - To prevent non-communicable diseases and injuries prevention.
   - To control the number of people living with HIV to less than 0.3% population by 2010 and no increasing additional number in the following years.

   2.2. Consolidate, reorganize the network for consultation, curative care oriented to:
   - To develop the network of consultation, curative care in line with the population cluster; the health professional at local levels can be managed vertically by sector, to ensure that all the people can be accessible to good quality of health care services in the most convenient manner at all levels.
   - To ensure the systematic and continuous manner of the health professional at all levels of curative care and the balancing and appropriate development between the general hospitals and specialized hospitals and/or high-technology area.
   - Gradually implement the reallocation of the infectious/dangerous diseases treatment areas to appropriate areas.
   - To strive for 2010-2020 to have the number of beds/10,000 inhabitants (excluding the beds at communal health stations) achieved at 20.5 beds and 25 beds, including 2 and 5 beds of the private hospitals.
   - Maintain, consolidate and modernize the existing traditional hospitals at national level to achieve the class I hospital, to develop some more traditional medicine and pharmacy hospitals in provinces having not traditional hospitals yet, at the same time to become practical basis on traditional medicine for special training facilities.
2.3. To consolidate and finalize the local health care network, to improve the possibility for access to essential health care services with good quality for people. By 2010, to ensure that there will be stable facilities for communal health stations in most of the communes and 80% communes will achieved the national standards on commune health care.

VI. CONTENTS OF THE DESIGN FOR DEVELOPMENT OF THE HEALTH SYSTEM IN VIETNAM

To develop the Viet Nam health care system oriented to the promotion of socialization in health, among which, the public health plays an important role; and basically meet with the needs for protection, caring and promoting the people’s health in each period with high technology, appropriate with the social economic conditions; to assure the equity and effectiveness in supplies and utilization of the health care services with good quality.

The public health, established and owned by the Government, will be managed, directed and invested for development in order to provide services to all classes of people in the area of protection, caring and promoting the health, especially the services to the poor, low-income target groups, children under 6 and other policy target groups.

The private health sector are owned by private owner, established in line with the regulation of the Ordinance for private medical and pharmaceutical practice. Among which, the private hospitals are promoted and supported to develop, collaborate with and support the public health care services in the cause of protection, caring of people’s health.

The Government will unify in medical professional management country wide from the central to local levels including both public and private health care.

1. Development of the preventive medicine network:

To develop the preventive medicine network comprehensively from the central to local levels, in order to pro-actively prevent and control of diseases, control the food safety to meet with the increasing need on protection, caring and promoting of people’s health care, to assure that the preventive medicine facilities will have enough condition and capacity to implement the professional duties of the sector within the new context.

1.1. To develop the network of preventive medicine:

a. Central and regional health facilities for preventive medicines:

To continue the development investment for the preventive medicine institutions at central level with special functions as the leading institutes in the area of preventive medicine in country wide or at the regional level, including:

- The National Institute of Hygiene and Epidemiology, the Tay Nguyen Institute of Hygiene and Epidemiology, the Nha Trang Pasteur Institute and Ho Chi Minh City Pasteur Institute to take over the responsibilities to carry out research on epidemiology, micro-biology and immunology, including research on HIV/AIDS prevention and control; to provide professional directions to all provincial preventive medicine centres and preventive medicine centres of other Ministries and sectors in
the cause of actions for diseases prevention and control; to organize the training for postgraduates and technical health workers specialized in the preventive medicine area.

- The National Institute of Malaria, Parasitology and Entomology, Ho Chi Minh City Institute of Malaria, Parasitology and Entomology, and Quy Nhon Institute of Malaria, Parasitology and Entomology to carry out researches on epidemiology, Parasitology and Entomology related to malaria and Parasitology and Entomology; to provide technical directions in the are of malaria control and prevention and to train the professional technicians.

- The Institute of occupational health and environment; National Institute of Nutrition; Institute of Hygiene and Public Health to carry out research on occupational health, environmental health, school health, occupational health prevention, nutrition and food safety and hygiene; to provide postgraduate and graduate training for specialized areas as assigned.

These institutes have been encouraged to develop to assure the capacity to forecast, quickly diagnose and in time control of the agents causing new diseases, especially the dangerous communicable diseases, new emerging diseases; to train postgraduate health workers specialized on preventive medicine and following functions and duties of each institute to carry out the directions, support to lower levels in activities related to prevention of epidemics and to solve the illness risks for community health. To gradually develop the leading institutes to achieve the levels of the South East Asia.

In the period to 2010, to strengthen the development investment to the existing institutes, especially the National Institute of Hygiene and Epidemiology, Pasteur Institute in Ho Chi Minh City and Pasteur Institute in Nha Trang, the Tay Nguyen Institute of Hygiene and Epidemiology, and other Institutes of Malaria, Parasitology and Entomology including the national one to be at a real national level to bring into full play the efficiency in providing professional direction to all levels and medical scientific researches.

To upgrade the laboratories on safety biology achieving international standard at level 3 in the National Institute of Hygiene and Epidemiology, and regional institutes such as Pasteur Institute in Ho Chi Minh City and Pasteur Institute in Nha Trang, the Tay Nguyen Institute of Hygiene and Epidemiology. At the same time to develop the some laboratories at other institutes to achieve the high techniques and advanced and modern technology at the same levels with developed countries in the region. To orient till 2020, at least there will be one safety biology laboratory in Viet Nam to achieve the international standard at level 4 (planned for one in the National Institute of Hygiene and Epidemiology) and most of the safety biology laboratories at provincial level will achieve the international standard at level 2.

To establish two well-equipped laboratories on chemical insecticide and bacterial poisoning with modern and consistent equipment to be located in the North and the South, to achieve the Viet Nam standard in 2010 and the international standard in 2020.

To establish a national centre of quality assurance and control for food safety at the national institute of nutrition to overtake the additional function of food safety quality
assurance and control for the northern provinces, at the same time to establish 4 regional centres of quality assurance and control for food safety located at Nha Trang, Can Tho, Ho Chi Minh City and Dac Lac to achieve the Vietnamese standard in 2020, to meet with the need for food safety to serve the country industrialization process and to export cereal and food to international and regional markets.

b) Provincial preventive medicine centres:

Gradually establish and develop the system of provincial preventive medicine centres to be strong enough to control the communicable diseases, food safety, occupational health and environmental hygiene, school health and nutrition. To upgrade and standardize the laboratories at provincial preventive medicine centres to achieve the safety biology laboratories at level 1. Except some laboratories at provincial preventive medicine centres at provinces as representative of some regions and/or in some big cities belong to central management, should achieve the safety biological laboratories at level 2, to assure of the capacity to solve the preventive medicine problems of the mentioned provinces and to provide technical and professional support to other provinces within the region if needed.

The preventive medicine units at provincial level consist of: preventive medicine centre, centre to control and prevent HIV/AIDS, centre for health Education, Information and Communication and in some provinces, there are centre for prevention and control of malaria, centres for international medical quarantine, centre for occupational health and environment and centre for occupational health and environment of some Ministries and sectors.

- The provincial preventive medicine centre includes specialized wards, divisions such as: Epidemiology, occupational health, food safety and nutrition, environmental hygiene, school health. The Centre for social diseases prevention and control has been gradually combined with the provincial central for preventive medicine in order to reduce the number of focal points.

- To establish and develop the centre for prevention and control of HIV/AIDS at all provinces based on the number of organizations that are currently involving in the activities related to HIV/AIDS control and prevention. Among them, the centres at big cities and provinces, where the HIV/AIDS prevalence are higher, will receive priorities for development investment in order to contain the expansion of HIV/AIDS within the province and at the same time to technically support those centres to control and prevent HIV/AIDS at other provinces.

- To continue consolidating and developing the existing centres for international medical quarantine, at the same time to establish some new ones at provinces having the border gates such as at the border or international airports or ports…. At present there is no centre for international medical quarantine to carry out the health assurance and food safety quality assurance at the bordering gates.

- To consolidate and develop the centres for occupational health and environment at various Ministries and sectors and at the provinces and big cities such as Nam Dinh, Can Tho, Dong Nai, Binh Duong and Ho Chi Minh City). To establish some additional centres in Ha Noi, Thai Nguyen, Quang Ninh, Thua Thien Hue and Da Nang .. in order to protect the health of the workers, especially the concentrated
industrial zones, and in some sectors those consists of many workers. To minimize the environmental affects to the health status of workers.

- To upgrade the existing malaria control and prevention centres at provinces where the malaria prevalence is still high. After the year of 2010, these malaria control and prevention centres at provinces with the new cases detected within 5 continuous years is less than 100 new cases/100,000 inhabitants will be combined with the provincial preventive medicine centres to continue to carry out the duties of malaria cases management and epidemic surveillance.

- To invest for standardization of provincial centres for health information, education, and communication in both material facilities, equipment and human resources in order to improve the capacity in providing activities related to IEC to multiply the various types of health promotion, to gradually socialization the activities on IEC.

- To consolidate and invest for development to Reproductive health centres in both materials, equipment and human resources capacity in order to assure the provisions of maternal care services to mothers in both pre, and post-natal care, newborn care and infant care. Together with the gyno-obstetrical wards of general hospitals or specialized hospital on gyno-obstetrics, to carry out preventive and treatment care to infectious diseases at gyno-obstetrical areas and sexually transmitted infection, HIV/AIDS. To early detect and treat the cancers at the gyno-obstetrical areas, to prevent and treat the inanimate cases and provide safety abortions, to well manage the complications, post-abortion care. To provide guidance, equipment for family planning and to direct the family planning activities for local levels.

c) District preventive medicine units:

To establish and develop the centres for preventive medicine and health promotion at district levels to carry out the duties: hygiene prevention, surveillance, detection and control of epidemics, control and prevention of HIV/AIDS, to control the food safety and hygiene, reproductive health care, health information, education and communication and participation in construction of healthy and cultural villages in the area.

By 2006, it will be completed with the establishment of district preventive medicine centres, consolidate the organizational structures and operation to timely detect of infectious diseases, epidemics and agents for epidemics, to find active solutions to pro-actively control of epidemics and control of the sources of outbreak and the existing epidemics in the area. To be able to manage the number of cases with social diseases and dangerous diseases to provide them to be treated at the community.

To minimize the newly constructions of laboratories for district preventive medicine centres but using the laboratories at the district general hospitals and laboratories at the inter-district general hospitals. The district preventive medicine centres will be invested with private laboratories only when there is a real need that van not be met or collaborated by the laboratories at the district general hospitals and laboratories at the inter-district general hospitals.
1.2. Production and quality assurance of vaccines and biological products:

To promote the vaccines and biological productions oriented to industrialization and modernization using the new technology to improve the domestic production capacity to meet with the people’s need for essential vaccinations and biological productions with high quality.

**By the year of 2010:**

- The facilities to produce vaccines and biological productions will meet with the WHO standard on Good Manufacturing Practice (GMP).
- The production and provision of 10 types of vaccines for the National Expanded Programme for Immunization; among them some of the vaccines can be exported.
- Provide about 50% of the using need of vaccines and essential biological production for the domestic market.
- To export vaccines and biological productions to overseas market.

**By the year of 2020:**

- To efficiently provide 100% of the using need for the National Expanded Programme for Immunization; to modernize the production technology, to transfer technology and receive the copy rights for vaccine and new biological productions. To develop the production with new vaccines added to the list of existing 10 vaccines in the current list.
- To provide 80% of the using need of various types of vaccines, essential biological productions for the market and at the same time to export vaccines and biological productions.
- To multiple the mechanism for marketing and production of vaccine and biological products, among them, the state-owned manufacturers will be the key factors. To promote the private and foreign investment to develop the vaccine and biological productions in Viet Nam.
- The Government will invest mainly to establish some researching and producing facilities for essential vaccines and biological productions at central level to provide services to National Expanded Programme for Immunization and to control and prevent some common diseases (such as tetanus, rabies, snake bites, hepatitis A, B and C…). They are in details:
  - To develop three researching institutes, testing productions of vaccines and biological productions for human use at three regions (North, south and central), to achieve the international GPM standard, to implement the technology transfer to facilities, vaccine manufacturing facilities with big sizes.
  - To invest in depth with the high technology assembly for vaccine and biological production using for human achieving the GMP in order to assure the quality and to meet with the basic need foe domestic use, and to move forward to export, especially vaccines for prevention of children health and biological productions used at hospitals;
  - To gradually share the vaccine and biological productions manufacturing facilities with workers and among the stakeholders.
- To upgrade and modernize the centre for quality control of vaccines and biological productions to achieve the regional level, to be able to assure quality of vaccines and biological productions (for both locally produced and imported ones) in line with the international standard.

1.3. To develop the non-public preventive medicine centres:
The Government creates conditions and promotes the various organizations, individuals both in Viet Nam and overseas to register for establishment of facilities to provide preventive medicine health care services such as consultation on health, consultation for prevention and control of HIV/AIDS, family planning, carrying our business, supplies of vaccines and development of laboratories .. as regulated in the Ordinance for private medical and pharmaceutical practice.

2. Development of the network for consultation, curative care and rehabilitation

2.1. The network for consultation, curative care has been developed to assure mechanical system and arrangement in line with the population clusters with the appropriate size at peripheral levels of treatments appropriate to the people’s requirements for consultation, curative care; to implement the classification of technical levels based on the special functions, duties for integration to reduce number of focal points; to assure the development in order to achieve the objectives for equity, quality and effectiveness of the curative care system country wide. To implement the socialization for protection, caring and promoting people’s health.

2.2. To consolidate, reorganize the treatment levels from bottom up:

- To organize the treatment levels of hospital systems in line with 3 levels of profession from bottom up in the ladders of treatment, at the same time to assure the decentralization to meet with the various levels of requirements for health care in the community, and to meet with the continuation of various levels of profession in the same system. The different levels of treatment will have various requirements of professional competency of the human resources, equipment, infrastructures and operational budget. These are the basis for developing investment plan, training of human resources appropriately.

- Each hospital will be in charge of a certain number of population clusters, many hospitals in the same territory will establish a group of techniques at different levels and hospitals level, from simple at beginning to complicated and high technology, supportive to professional techniques. It is necessary to pay attention to the geographical conditions, transportation, especially in the mountainous areas, Mekong delta, the large provinces and districts with low density of population, the transportations are poor and disadvantaged and also pay attention to the disease pattern in each area.

a) Level 1:

It is the level of hospital to register the first patient, including the district general hospitals, inter-regional general hospitals, sector hospitals, to carry out the basic health care techniques, which are general to register the patients from the community or the health facilities at grass-root levels.
- There will be one district general hospital or inter-district general hospital with all minimized standard (level III) in each region of district and inter-district population cluster to carry out treatment functions at level 1 with the key specialized areas: Medicine, surgery, Gyneco-Obstetrics, Pediatrics, Infectious, Ear-Nose-Throat-Dental care, general laboratory and pictorial diagnosis. Subject to the specific need for curative care from the people in the district and inter-district to establish the required wards and balance between the number of beds among the various wards in the hospitals to be appropriate with the disease pattern and to meet with the services requirements. The bed size of hospital level 1 will be 50 as the minimized number and not over 200 beds subject to the population density in the serviced cluster. The average ratio will be 1 beds to server about 1,500 to 1,700 inhabitants.

- When the number of hospitalized patients increased, it is necessary to improve the treatment quality to reduce number of days in hospital or increase the number of beds in day time in order not to increase the number of beds over 200,

- Within the towns that already have the central general hospitals, there will be no need for establishment of the district general hospitals. The current hospitals in the towns under the province or district hospitals not far from the provincial general hospitals, if they are not really having their roles and functions activated with low effectiveness, they should be gradually changed to inter-communal policlinics.

- Within the ministerial or sector hospitals: to consolidate and reorganize the current hospitals with the orientation that to keep only the hospitals with high efficiency and good quality of treatment care and hospitals with key functions for occupational health care and rehabilitation should be upgraded to achieve the minimum standard of hospitals at level III, to provide health care services to workers, civil servants in the sectors and population in the cluster. Those hospitals operate following the mechanism for the administrative unit with income, to move forward to self-arrange the budget in 2010; other general hospitals will be handed over to the local authority or become joint-stock managed hospitals.

- The Government encourage the sectors to establish the general hospitals and rehabilitation hospitals to provide health care service for occupational health, operating in line with the socialization mechanism (funds mobilized by the sector itself to cover all the expenditures for operation and activities).

- With the inter-communal policlinics belong to the district general hospital, it is only given priority for development to the mountainous, remote and disadvantaged areas where the commune health stations are not having capacity to carry out the comprehensive consultation, curative care to treat the common diseases.

- With the inter-policlinics at the cities/towns, it is necessary to improve them with investment to increase the access to health care services with high quality for the people, at the same time to minimize the patients to access the provincial, regional and central hospitals for curative services, to contribute to the reduction of overload context at higher levels hospitals.

- Besides the hospital network, the communes with commune health stations, to carry out functions for primary health care, providing consultation, curative care to
common diseases, diagnosis and manage the primary health are at commune level, providing preventive medicine, health promotion, consultation, curative care and rehabilitation, to solve the main problems in primary health at the community (including the consultation, curative care for all the target groups without health insurance).

- A part from that, in the towns and cities with the inter-commune maternity house (for both public and private sectors) to carry out the duties of delivery/maternity care and care for pregnant women. This model should be developed widely, to improve the reputation, quality of health care services to increase the convenience for pregnant women at delivery, to reduce the normal delivery cases at provincial hospitals and to contribute to reduction of risks at pregnant periods and the abuse of surgical techniques at high level hospitals. At the same time, this model should be invested oriented to socialization and joint-stock.

b) **Level 2:**

To carry out the curative care for patients with higher techniques, those are more specialized and professional; it is the level with higher techniques than the level 1, to achieve rather advanced or advanced quality of service, to register the patients referred to by the level 1 and will be the level to register the largest number of patients after 2010. The level 2 consists of provincial general and specialized hospitals and some sector hospitals. The hospitals at level 2 are the practical hospitals for the medical and pharmaceutical schools within the cities or provinces.

- In each province, there is at least a central provincial general hospital either complete of incomplete to achieve the minimize standard of a hospital at level II; to gradually develop the central provincial general hospitals (at province/city with high population, economic development to have adequate capacity for budget balance) to become a complete general hospitals to achieve the standard of hospital at level 1.

- The central provincial general hospital: having the size from 300 to 800 beds and the average is that 1 bed at hospital of level 2 will serve from 1,600 to 1,800 inhabitants in the province and surrounded areas.

- In the next period, it is continued to consolidate and develop the specialized hospitals to ensure that in each province, there will be some specialized hospitals appropriate with the needs for specialized curative care of the population cluster in the region. With the number population receiving service more than 1 million, there can be possibility to establish the specialized hospitals: such as gyno-obstetrics, pediatrics, nursing care and rehabilitation. However, subject to the disease pattern and the requirement for health care services of the local population, the provinces with less than 1 million population can also develop some specialized hospitals with appropriate sizes, and it is necessary to calculate the effectiveness, operational expenditures and the possibilities for sustainability to meet with the social-economic condition of the province.

- To only establish a tuberculosis hospital at provincial level when the mobility rate of the province with more than 1 million population is above 1,200 patients, among which over 50% were positive AFB.
- If taken into account all the general hospitals and specialized hospitals at level 2, the average ratio will be each bed to serve from 900 to 1,100 inhabitants.

- Some of the big sector hospitals, such as the Transportation hospital, the Agriculture and rural development hospital, and the Post and telecommunication hospital … will implement the functions of the hospitals at level 2, with the size from 150 to 400 beds to provide service to workers and civil servants in the sectors and the population within the located area of the cities (some districts).

c) Level 3:

It is the final level in the treatment ladders, to carry out the specialized techniques and to register the patients from the lowest levels. This level consists of central hospitals, the regional high technology general hospitals and some specialized hospitals of cities participating in the high technology specialized health care centres, to achieve the minimized standard of hospital at level I (except dome specialized hospitals to provide treatment to social diseases such as Tuberculosis, Leprosy and Mental health). After 2020, any hospitals at level 3, those are not able to meet with the standard for hospitals at level I will be combined or removed to local levels or become a join-stock one.

The hospital at level 3 will play a very important roles as the final level hospital in the treatment ladder with the following functions and duties:

1. it is the final level of curative care in the treatment ladder, to carry out the high specialized technology, to play an important role as the leading hospital country wide or in the region.

2. It is the first level to apply the advanced medical techniques. Some hospitals belong to the high technology centres have the responsibilities to develop the leading scientific techniques, to improve the medical qualifications to catch up with other countries in the region and in the world.

3. To direct the techniques for the lower levels in providing curative care and implement the national health programme, at the same time to have the responsibilities to construct and design the network for health care services for specialized curative care.

4. to collaborate with medical and pharmaceutical universities to carry out the training and retraining duties for health workers. To become practical area for medical and pharmaceutical universities/schools.

5. To have international cooperation in each areas under the guidance of the Ministry of Health;

6. To carry out research, collaborate with the researching institution, the medical university, schools. High schools to implement the medical science researches.

- In the next period, it is necessary to maintain and develop the central general hospitals with the size from 500 to 1,500 beds, (only the general hospitals to provide services to civil servants will have smaller size, depending on the number of target groups).
To continue consolidating and upgrading the current specialized hospitals, to develop more specialized hospitals to meet with the need of specialized diseases that have been increased dramatically such as the infectious diseases, cardio-vascular diseases, gerontology and dermatology …

2.3. The specialized medical centres and the regional centre for high technology:
- It is necessary to early complete the specialized medical centres in Ha Noi, at central region (Hue and Da Nang), Ho Chi Minh City, at the same time to prepare for the condition to develop another medical high technology centre at the Mekong delta in Can Tho.
- To establish and develop the regional general hospitals to achieve the standard for hospitals at level I, to participate in researching, applying advanced technology in medicine, to provide services to consultation and curative care for people’s health and to support the technical profession for the provincial hospitals, and at the same time to be practical facilities for the regional medical and pharmaceutical universities/schools.

In the period of 2006-2010 and after 2010, to complete the development investment for regional general hospital with the size from 500 to 1,000 beds, achieving the standard of hospital at level I, as bellows:
- In the North West area: to develop at regional general hospital in Son La;
- In the North East area: to develop the national general hospital in Thai Nguyen to become a completed general hospital.
- In the Red River delta: A part from the development for hospitals belong to the specialized medical centre in Ha Noi, it will be developed with Viet Tiep general hospital in Hai Phong to carry out the regional general hospital for the North side of the Red River and the general hospital of Nam Dinh to carry out the duties of the regional general hospitals for the South side of the Red River.
- The North Centre: To develop the Nghe An General Hospital to become a complete general hospital to carry out duties of the regional general hospital.
- To be located between the North centre and the South centre coaster with a specialized medical centre Hue-Da Nang including a Central general hospital in Hue, the hospital C in Da Nang belong to the Ministry of Health and the Da Nang general hospital. At the same time a new central hospital will be established in Quang Nam.
- The South centre: A part from the development of the specialized medical centre Hue-Da Nang, it will be developed with the regional general hospitals based on the foundation of Khanh Hoa provincial general hospital and the provincial general hospital in Quy Nhon (Binh Dinh province).
- The High Plateau: to develop the Dac Lac provincial General Hospital to become a regional hospital for the high plateau region.
- The South East area: to develop a specialized medical centre in Ho Chi Minh City, including national hospitals managed by the Ministry of Health such as the Cho Ray...
Hospital, Odonto-Stomatology and Maxillo-facial Surgery hospital, Thong Nhat hospital and some other general and specialized hospitals in Ho Chi Minh City.

- The Mekong delta are: to prepare for the development of a national general hospital in Can Tho to carry out duties of specialized medical centre, to develop Tien Giang general hospital to carry out duties of the regional general hospital. To upgrade the central general hospital of Kien Giang to become a complete general hospital to provide services to the provinces within the Long Xuyen quadrilateral.

2.4. The network for patient referral in emergency cases: to continue being invested for development and expansion:

- To add more first aids stations along the main road where accidents often occur.
- To equip the first aids kits, emergency transportation, to train with technical and professional skills for patient referral in emergency cases.
- To maintain the system of emergency service of 115, which was established by the health sector in big cities and provinces.
- The Government encourages and makes convenience for the organizations, individuals to participate in the professional practice, to develop the referral transportation for emergency cases.

By 2010, in the whole country, there will be 1,171 public hospitals with 164,000 beds, the average will be 18.5 beds/10,000 inhabitants and will be located with the following levels:

- Level 1: with 57,350 beds, occupied an allocation of 34.97% total of the public beds in the whole country and achieved 6.50 beds/10,000 inhabitants. (the number of beds increased in comparison with 2005 with 3,073 beds).

- Level 2: with 86,840 beds, occupied an allocation of 52.94% and achieved an average of 9.80 beds/10,000 inhabitants. (The number of beds increased in comparison with 2005 with 13,942 beds, including some hospitals at level 1 to be upgraded to the level 2).

- Level 3: with 19,810 beds, occupied an allocation of 12.08%, and achieved an average of 2.20 beds/10,000 inhabitants. (The number of beds increased in comparison with 2005 with 3,600 beds).

2.5. Private clinics and health facilities:

The private medicine consists of the general and specialized hospitals, general and specialized policlinics, centres for health consultations; drug manufacturing facilities, drug business undertaking, medical equipment, vaccines and biological products … to be managed by the provincial Departments of Health and the supervision of the District Divisions of Health.

Based on the Ordinance on Private medical and pharmaceutical practice number 07/2003/UBTVQH dated 25 march 2003, the Circular to provide guidance No. 01/2004/TT-BYT dated 6 January 2004 of the Ministry of Health to provide guidance on
the private practice on medicine and pharmacy, the individuals or organizations are allowed to register the having licenses to carry out medical and pharmaceutical practice.

The Government will create opportunities and encourage the development of the private general and specialized hospitals in cities, towns, and the private general policlinics in the locations with high population density, and far from the public health facilities. To encourage the establishment of centres for health consultation and the model “Family physician” in big cities like Ha Noi, Ho Chi Minh City, Da Nang, Hai Phong … and the model “Home Health care” in order to share the burden of diseases and illness at the community, at the same time to create a healthy competition between the public and private health care services in the region. Gradually implement the private consultation and curative care using the health insurance card to make it more convenient for the population, first of all will be the implementation of consultation, curative care for the poor, children under 6 following the health insurance card for children and consultation and curative care for the disabled following the health insurance card for the disabled.

By the year of 2010, there are private health care services in the most of the provinces, big cities. It is encouraged for the existing private clinics to be upgraded to become general or specialized policlinics, with quality assurance as regulated by the Ministry of Health. By 2020, there will be private hospitals in the most of provinces and cities.

The private hospitals will be classified following the Level standards issued by the Ministry of Health and will also involve in the consultation and curative care services as equal as other health facilities.

To establish and develop the private nursing houses, focusing on providing health care services and rehabilitation for the elderly and the disabled.

The Government creates opportunities for the Vietnamese citizens to establish and develop the joint-venture or joint-stock hospitals with the foreign investment and even establish hospitals with 100% funds from overseas.

3. TO DEVELOP THE NETWORK FOR TRADITIONAL MEDICINE AND PHARMACY:

Traditional medicine and pharmacy has a potential role in the cause of protection and caring for the people’s health. To combine with the modern medicine, the traditional medicine and pharmacy has contributed dramatically to the cause of consultation and curative care for the people.

The network of traditional medicine and pharmacy includes: The national hospital for traditional medicine; the National Hospital for Acupuncture, The provincial hospitals for traditional medicine, the Wards for traditional medicine and pharmacy in national or provincial general hospitals, the wards or groups of traditional medicine and pharmacy in district general hospitals or inter-regional general hospitals subject to the size of beds.

- To retain, consolidate and modernization of existing hospitals for traditional medicine at the central level in Ha Noi to achieve the standard for hospital at level 1, to carry out functions for leading hospital for traditional medicine and pharmacy, to support on professional techniques for the development of provincial hospitals for traditional medicine and pharmacy, at the same time to be the practice places for specialized training facilities.
- To prepare the conditions for establishment of a hospital for traditional medicine and pharmacy in Ho Chi Minh City in the period to 2020.

- To upgrade the Thua Thien Hue hospital for traditional medicine and pharmacy to be able to participate in the Specialized Medical Centre for the Centre region, at the same time to be the practice place for the Hue Medical University.

- To invest for development of the existing provincial hospitals on traditional medicine and pharmacy; to establish additional provincial hospitals for traditional medicine and pharmacy to ensure that there will be one hospital for traditional medicine and pharmacy in each province at standard of hospital at level II.

- The district general hospitals with the size of 150 in-patient beds and more can establish a ward on traditional medicine and pharmacy and if the size is less than 150 beds, only a group of traditional medicine and pharmacy should be established integrated inside the General Medicine Ward.

- The commune health stations with health workers specialized on traditional medicine and pharmacy to provide consultation and curative care for the people including the treatment methods using no drug, having a garden with the Southern herbals at the station with at least more than 40 types of herbals as indicated in the list of herbals issued by the Ministry of Health.

- To develop the scientific research on production technology for drugs using herbals of the traditional medicine and pharmacy, to gradually modernize the process of production and maintenance of the medical materials, to keep the gene sources, plants, animals for special drugs. To find out and carry out research to detect new plants in traditional medicine and pharmacy for appropriate usage. To re-design the zone for planting herbals and feeding special animals to maintain the existing medical materials.

4. TO CONSOLIDATE, COMPLETE THE GRASS-ROOT HEALTH NETWORK:

To consolidate, finalize the grass-root (commune and hamlet/village level) health network in order to well carry out the primary health care services, to meet with the need of basic health care services with good quality for all people, especially the poor, the people in disadvantaged areas; to implement the equity and effectiveness in protection, caring and promotion for the people’s health.

For the professional development: The commune health station assure the capacity to carry out the duties on Primary Health Care, primary diagnosis and treatment for common disease, and the common first aids and to primarily provide intensive care for the accidents and injuries occurred at the commune. To implement the management of social diseases as assigned, decentralized by the district and provincial health service.

To upgrade and expand the commune health station in both health facilities, equipment and human resources. The average number will be 1 commune health worker to serve from 1,000 to 1,200 inhabitants subject to the served population cluster and the transportation condition for the population. (Except in big cities, each commune health worker has to serve from 1,400 to 1,600 inhabitants).
- The communes to have population over 10,000 will be added with more health workers or to have more contractors. In some communes with spread shape, difficult to access all the households because of transportation, or the commune to be divided into two areas (top and bottom because of the shape) and far away from the nearest health facility (other commune health station or inter-communal policlinic, district or inter-district general hospitals, sectoral health facilities or military health station ...), it is necessary for this commune health station to established two posts (one key station and one facilitated post, each post to serve at the minimum number of 4,000 inhabitants) to increase the possibility to access the public health services for people.

- For the commune health station with over 5,000 inhabitants, apart from the duties on preventive medicine and common curative care, they also carry out the curative care for some specialized areas such as ophthalmology, dental and ear –nose-throat.

- With communes in the mountainous areas, where the commune spreads out in length, difficult for transportation but the number of population is not big enough, at least there are 5 commune health workers and will be supported with more hamlet health workers.

- In each hamlet/village there will be about 1 to 2 health workers providing health care services with the qualification at least of primary medical education.

- In the commune in cities and towns, the commune health stations mainly carry out duties of preventive medicine and providing health information, education and communication, there will be at least three professional health workers as designated including medical doctor, so that it is not necessary to develop the specialized health workers (similar to hamlet/village health workers), but only develop the volunteer team in line with each cluster.

- In the enterprises, farms and workshops and business centre with the number of workers from 200 to 500, it is necessary to have 1 to 3 health workers to provide health care service. The enterprises with over 500 workers will need a health station with a medical doctor to provide service. The manufacturers with 50 to 200 workers require a health workers with secondary level to provide service.

- With the schools from the primary level to the secondary level, there should be 1 to 2 health workers in each school to provide health care services, at least one of them will have the level of medical secondary school. In the University, high school and professional secondary schools, there should be 2-3 health workers with at least 2 medical doctor to provide health care services.

By 2010, 100% commune health station will be constructed stable and well-equipped in line with the Ministry of Health standard in order to carry out duties as regulated. 80% number of commune health stations to have medical doctors (among them 100% commune health stations at the delta and midland area and 60% commune health stations in the mountainous area); 100% commune health stations having midwives or the MCH/FP assistant physicians; the commune health stations all have the health worker with primary level of pharmacy to be in charge of pharmaceutical issues and a health workers to be trained on traditional medicine; 100% hamlet/village to have from 1 to 2
health workers to provide service with at least at the level of primary training. To develop the number of health volunteers at villages in the delta area.

By 2020: the whole commune health stations will have medical doctors, standardize the health workers working the commune health stations to have the qualification from the secondary school level up, to be competent to solve some of the common specialized diseases with basic techniques, such as: ophthalmology, dental and ear–nose-throat, reproductive health and child health …

In the first stage of implementation of the design, it is necessary to study revise, add in and expand the function, duties of the commune health stations to be more appropriate with the level of primary health care. With the commune health stations having medical doctors, it is necessary to be equipped with primary diagnosis equipment, such as microscope, consultation equipment, dental treatment and care, gynecological care, injury intensive care …to ensure that the common disease will be early detected and treated in time; the first aids and primary intensive care will be provided to accidents, injuries occurred in the cluster, or the area providing services.
PART 4
MEASURES FOR IMPLEMENTATION OF THE DESIGN

In order to achieve the objectives and indicators set up in the design for development of the health sector, a part from the subjective factors related to the economic growth speed and the investment of the Government to health, the health sector should set up the following key measures:

1. Health care financing – the natural resources and need for investment;
2. To assure the human resources for health;
3. To develop the science and technology, to ensure of environment.
4. To assure the drug supply with high quality for the people.
5. To assure the medical equipment supply with high quality for the health facilities..
6. To strengthen the international cooperation;
7. To strengthen the managerial capacity.

I. MEASURES RELATED TO HEALTH CARE FINANCING AND INVESTMENT:

1. Measures related to Finance:

a) Priorities will be increased gradually from the state budget to create a deciding step for the improvement of the health sector in the process to improve the health facilities, including the priority for consolidation, finalization of the health network at grass-root level, preventive medicine, the provincial and district general hospitals; Medical centres with high technology in the High Plateau, Mountainous areas in the North, centre and Mekong Delta. To assure the budget for consultation, curative care for the meritorious people, the poor, children under 6 and other social target groups.

b) To study and revise the regular norm from the state budget in the health areas oriented to more prioritized to the mountainous, remote and disadvantaged areas.

c) Regularly to convert the process of Government budget to be provided to the regular activities for consultation, curative care to direct support to the actual health care services’ beneficiaries through the various types of health insurance. A the same time to implement the development of user’s fee following the principles of correct and adequate calculation including all the direct expenditures for the patients.

d) To study carefully for adding, revising the policy on user’s fees for preventive medicine for all the services permitted by the Government, following the principles of having a partially subsidized budget to create an additional income to be added to the investment to the preventive medicine system.

e) To strengthen the international cooperation in order to mobilize more funds for the health sector.

f) To implement socialization in the health sector in accordance with the Decision No.05/2005/NQ-CP dated 18 April 2005 of the Government on promoting the socialization for education, health, culture and sport activities. To improve the advocacy
activities to mobilize the contribution and donation of the various organizations. Individuals in Viet Nam or overseas for the health sector.

g) To implement the self-arranged mechanism in finance for the public health facilities in order to promote the pro-active initiatives and improve the responsibilities at lower levels.

h) to manage and utilize the invested finance sources for health in accordance with the identified objectives with high effectiveness.

2. Investment need for health in the duration 2006-2010:
The need for development investment in the period of 2006-2010: 44,180 billion dong
Including: + State budget: 60% approximately 26,508 billion dong
+ ODA source: 25% approximately 11,045 billion dong
+ Mobilized source (socialization): 15% approximately 6,627 billion dong

Total investment expenditure for health were:

+ Expenditures of projects endorsed by the Ministry of Health: 10,400 billion dong
+ Expenditures for upgrading provincial/regional hospitals: 14,300 billion dong
+ Expenditures for upgrading district/inter-district hospitals: 8,630 billion dong
+ Investment expenditures for national health objective programme: 1,650 billion dong
+ Expenditures for upgrading commune health stations: 2,750 billion dong
+ Expenditures to upgrade provincial centres for preventive medicine: 2,450 billion dong
+ Investment expenditures for other facilities in the sector: 2,900 billion dong

(including the investment to upgrade the district centre for preventive medicine)

The annual average investment from all sources will be about 8,000 to 9,000 billion dong.

3. Measures on the natural resources: Land
The local authorities should give priority of the land funds for construction and development of the health facilities both in public and private sectors. To implement the policy to wave the land user’s fee and taxation for non-public health facilities operating the non-profit mechanism. To declare and simplify the process for land transfer and land rental.

The size of land required for construction of a hospitals will meet the following requirements:
- Hospital at levels 3 and 2 (Central and provincial ones): 60-100m²/bed
- Hospital at level 1 (District): 100 – 120 m²/bed

Among them, at least 25% of the hospital compound will be reserved for green trees.

The minimized size of average room/bed in hospital will be:
- General hospital at level 3 and 2: 60 - 70 m²
- Specialized hospitals at level 3 and 2: 50 – 60 m²
- Hospital at level 1: 45 - 50 m²
II. TO ASSURE THE HUMAN RESOURCES FOR HEALTH FACILITIES:

To strive for 2010, there will be over 7 medical doctors and 1.0 university pharmacist/10,000 inhabitants; to assure that the health personnel structure will be 1 medical doctor/3.5 nurses (secondary school level or above), and by 2020, there will be from 8-9 medical doctors and 2 to 2.5 university pharmacist/10,000 inhabitants, and there are at least 01 to 03 university pharmacist at District level. At the same time there will be sources for talented workers, postgraduates in both profession and managerial capacities to be provided to health facilities. The key measures are:

1. To increase the proportion of intakes for target groups of nurses, university pharmacists, technicians. To expand the intakes following the nominating process, focusing on selection of the minorities from the remote and disadvantaged areas.

2. To develop a system of legal documents appropriate with the training process, to assure the improvement of training quality and other policy regulations, such as tuition fees, operational budget. At the same time to propose training policies and distribution of health workers after graduation, there should be mechanism to draw the attention and utilization of public health personnel and policy to provide health workers to strengthen the local levels, especially the remote and disadvantaged areas.

+ To develop projects for nominated training and training contractors based on specific addressees for the northern mountainous area, the central region, the Mekong Delta and to organize the implementation of nomination project for High plateau.

+ To have policies to draw attention and well-treat the talented people and the policy to encourage the utilization of the public health workers, especially in the preventive medicine areas and the health workers working at the remote and disadvantaged areas. To appropriately adjust the health workers from the surplus to deficient areas.

+ To focus on comprehensive training for the leading health workers, to strengthen the managerial training for the leaderships and the managers that the health units in order to strengthen the managerial and directive capacities for the institutions in the marketing mechanism oriented to socialism.

+ To expand the training method of pharmaceutical in-service training, human resources development for traditional medical-pharmaceutical training and medical equipment technicians.

+ To have measures for human resources training for private health sector.

3. In order to ensure the provision of human resources and talented people for the health sector, the training network for health workers need to be rearranged following the models: The national focused University, the regional focus University; the Professional University; the system of medical and pharmaceutical high schools; medical equipment schools and human resources training facilities for private health sector.

In the near future, it is necessary to maintain the model of secondary medical and pharmaceutical schools. However, later, the secondary medical and pharmaceutical schools should be upgraded to the high schools to ensure of the training duration for human resources for health and quality assurance for the trained health workers.
By the year of 2010, at least there will be 40% and by 2020 most of the secondary medical and pharmaceutical schools will be developed and upgraded to high schools.

To encourage the establishment of the human resources training for private health sector, to assure the training quality in both profession and medical ethnics. The human resources training facilities for private health sector will use the hospitals in the area to be their practical hospitals for students based on the arrangement for economic contracts with the mentioned hospitals.

4. To improve the training curricular and to develop the training materials, to encourage the schools to collaborate in training materials development. To well solve the relationship between the quality and quantity, theory and practice, training and distribution of health workers in the training facilities.

5. To strengthen the capacity for trainers and managers at medical schools, to develop the criteria for training quality assurance, and move forward to review if it is acceptable for issuance of practice license, to gradually implement the standardization of all teachers and trainers. At the same time to have a quick development plan for the human resources for nursing tutors, and teachers on rehabilitation, medical equipment, medical techniques, traditional medicine; to strengthen the training capacity for teachers in the whole sectors at the Ha Noi medical University and the Ho Chi Minh City Medical and Pharmaceutical university.

6. To upgrade, invest the infrastructure for schools and practical facilities at schools. To upgrade the electronic libraries, and apply the informatics technology into the training management process, training and development of training materials.

7. To improve the researching capacity in medical and pharmaceutical schools and the health workers working the researching areas in the whole sector. To establish a training unit providing scientific methodologies at the national and regional focus medical and pharmaceutical universities. To design the laboratories with high technology.

III. TO DEVELOP SCIENCE AND TECHNOLOGY, ENVIRONMENT PROTECTION

Besides the upgrading investment, it is necessary to develop a primary health network, research for application of modern techniques and technology appropriate to each level of services of intensive care, diagnosis, treatment and prevention. To develop science and strengthen the technology transfer in the medical and pharmaceutical areas at all central, regional and provincial health facilities in order to solve most of the diseases that requires high technology in diagnosis and treatment.

Solutions for scientific and technology development focusing on the priorities to the following areas: preventive medicine (production of vaccines and biological products applied to human being, researches on prevention and control of non-communicable diseases, new-emerging diseases), curative care (disease curative and diagnosis), rehabilitation, pharmacy (pharmaceutical industry), medical equipment (high technology).
To gradually modernize the picture diagnosis techniques, biological and chemical diagnosis, physical biology, immunology, genetics and microbiology. To apply the advanced techniques and technology on cardio-vascular diseases, endoscopies, orthopedics, micro-surgery, organ replacement and transplantation. To establish some standard laboratories to control and assure the drug quality, quality of food safety, to control and assure the medical equipment in some focus areas.

To develop the biological technology, productive technology and cell transplantation to serve the drug, vaccines and biological production for diagnosis and treatment. To develop the automobile technology for manufacturing essential medical equipment, to manage the hospital waste and to operate the hospital management.

To expand the bilateral and multilateral cooperation in the development, application of advanced medical and pharmaceutical techniques.

To develop and apply the informatics technology in management and in operational activities in both medical and pharmaceutical areas.

To pay attention to the environmental hygiene, medical waste management in the health facilities following all regulated criteria. At the same time to issue measures for prevention, contain the expansion of the disease agents to the surroundings in the clinic and curative areas and the preventive medicine centre such as vaccines and medical biological productions.

**IV. TO ASSURE THE PROVISION OF ADEQUATE DRUGS WITH HIGH QUALITY FOR PEOPLE:**

Drug is a very special type of goods playing a very important role in the cause of protection, caring and promoting people’s health. Therefore, it is necessary to design and develop the pharmaceutical sector to become a leading economic-technical sector oriented to industrialization, professionalization and modernization, to improve the domestic manufacturing capacity, actively integrate with the region and in the world, to prioritize the various types of high pharmaceutical technology, in order to ensure the provision of drugs regularly with high quality, to assure the appropriate and safe use of drugs, to serve the cause of protection, caring and promoting people’s health.

To design the modern and advanced model of drug provision, appropriate with the mechanism of the marketing economy, to have healthy competition, to minimize the middle levels, to ensure the regular and adequate provision of drugs with high quality and appropriate prices for the need of preventive and curative care of the people.

To design the state administration model on pharmaceutical productions, cosmetics and food, appropriate with the conditions of the marketing economy oriented to socialism, to finalize the institutionalized system in order to meet with a comprehensive managerial need of the pharmaceutical sector in the new era.

To ensure the local production of 60% drug needs with high quality to serve the preventive and curative activities for people’s health, among which 20% is the traditional medicine, with the average usage per capital at the rate of USD 25-30/year. First of all, it is necessary to invest in depth to upgrade the local pharmaceutical manufacturing
facilities, to strengthen the international and regional cooperation to be able to access the modern and advanced technology in the world. By the year of 2010 to achieve:

- 100% pharmaceutical manufacturing facilities with drug production (including the modern drugs and drugs using the medica materials) to achieve WHO good manufacturing practice (GMP).

- 100% drug quality control institutions will achieve WHO standard on Good Laboratory Practice (GLP); the drug importing and distributing enterprises with large size will achieve the standard on good storage practice (GSP).

The design orientations for development of drug manufacturing, provision and supply will be focus on:

1. **Development of the drug provision and supply:**
   - To establish Viet Nam foundation for pharmaceutical investment and marketing following the principles of respecting all the basic economic laws of the marketing economy oriented to socialism; not to break the current provision of drug supplies and not to establish more state-owned enterprises.

   The Viet Nam foundation for pharmaceutical investment and marketing will have the organizational and operational structure following the model of the Parent Company and the Subsidiary Companies as regulated in the Decree number 153/2004/ND-CP dated 9/8/2004 of the Government.

   In the duration of 2010, to implement the development of organizational structure and the mechanism of the Parent Company and the Subsidiary Companies to add more members as the smaller companies. To develop the investment and marketing pharmaceutical company in the North and the South. After 2010, the research will be expanded to the joint-stock model and the investment and marketing pharmaceutical companies within all provinces and cities.
   - To invest for upgrading the drug storage system.

2. **Development of the pharmaceutical industry:**
   - To develop the pharmaceutical technology:
     - To develop and regulate the manufacturing based on the groups of pharmacy effects in order to meet with the treatment need following the disease model and pattern in Viet Nam.
     - To focus on the production of essential drugs, drugs with generic names (for antibiotics, transmission liquid, injection liquid, essential drugs …) and the drugs used for the national objective health programmes.
     - To invest for production of make-up drugs: doses spray, sparkling tablet, powder for injection, long-term effect drugs.
     - To carry out research for production of new drugs.
     - To establish the manufacturing in Viet Nam using the foreign investment, to produce or hand-over the rights for manufacturing drugs in Viet Nam.
   - To develop the pharmaceutical industry using the existing medica materials:
To expand the area of feeding and planting, exploring and developing the medica materials in Viet Nam; to develop the technology of producing from medica materials to drug at the same time to develop the producing, manufacturing drugs from medica materials and traditional medicine drugs.

- To develop the industry to produce chemical-pharmaceutical materials and biological pharmaceutical materials: to invest for construction of a factory to produce chemical-pharmaceutical materials and anti-biotic materials with the new generation, by 2010 to be able to produce:
  - Some materials to replace the imported materials: for the groups of drugs for cardio-vascular disease, cancer and endocrinology.
  - The antibiotic materials: to complete the researching stage and establishment of small size enterprise.

V. TO ENSURE THE PROVISION OF MEDICAL EQUIPMENT SUPPLIES WITH HIGH QUALITY FOR HEALTH FACILITIES:

Medical equipment is one of the most important factor to decide the effectiveness, quality of the health care activities, to actively support the physicians in the cause of preventive and curative care. Therefore, the area of medical equipment should be strengthened fro investment in both quality and quantity to ensure of the scientific and effective results. To supply adequate equipment for all levels, to gradually modernize the equipment and supplies for health facilities in order to improve the quality of protection and caring for the people’s health.

1. To develop the local production of medical equipment:

- To expand the medical equipment production, to ensure the supply of 60% need for the use of common medical equipment at the health facilities. To promote the high technology medical equipment usage, to invest the advanced assembly for the medical equipment production.

- To develop the models for joint-venture and joint-stock to transfer technology of medical equipment production with the well-known companies in the world

- To develop the medical equipment industry to have focus, focal point in order to serve the local needs, to improve the quality of the productions oriented to exporting them.

By 2010, all the medical equipment manufacturing companies will achieve the minimum standard of ISO or equivalent to that and to complete the joint-stock process.

To strive for 2020 to achieve the technical qualification on medical equipment at the same level of the advanced countries in the region. To develop the medical equipment industry in order to gradually increase the ratio of the local medical equipment and move forward to participate in exporting, to ensure the local production to meet with 80% need of common medical equipment in all health facilities.

The areas, encouraged the development of local production:

- Common medical equipment, consumable suppliers, disposable medical equipment using at the medical facilities or with the people.
- The electronic equipment: electrocardiogram (ECG) machine, ultrasound, diagnosis equipment (including the pictorial diagnosis), the monitor machine, the laboratory equipment and sterilizer.
- The other cold chain equipment used in for medical purposes.
- Dental equipment
- Rehabilitation equipment
- Equipment and supplies used to facilitate the disabled.
- The high technology medical equipment.

2. To strengthen the marketing management and medical equipment operation

To rearrange the marketing, importing system for medical equipment and supplies, to implement the joint-stock process at all state-owned medical equipment enterprises. To create a healthy competitive environment in the provision of medical equipment and supplies.

To strengthen the capacity of using, operating medical equipment at health facilities, to consolidate the human resources to deal with the maintenance, operating and keeping the medical equipment at the health facilities.

VI. TO STRENGTHEN THE INTERNATIONAL COOPERATION:

- To strengthen the multi-lateral and lateral cooperation with international organization, non-governmental organizations, especially with the organizations of the international banks and Government that have been applying special policies to support and cooperate with Viet Nam.

- To develop projects for focus investment to mobilize investment, donation for regional medical development and other areas in the sector for each stage of the design.

- To encourage the non-refundable donors to support and meet the need of consultation, curative care for the poor, children, the disabled and control and prevention of some diseases and dangerous epidemics such as Tuberculosis, malaria, HIV/AIDS and new-emerging diseases, epidemics…

- To encourage the donation for the development of sector development policy and scientific researches.

- To finalize the mechanism to effectively utilize the donation.

- To strengthen the training for health workers at the advanced countries in order to receive the advanced scientific achievements in the world and the region.

- To expand the collaboration, cooperation with international organizations, individuals and mobilize them to invest to the development of the various areas in the health sector. To strengthen the investment to modern technology assembly and transfer to the areas for production of vaccine, drug and medical equipment.
VII: TO STRENGTHEN THE MANAGERIAL CAPACITY:

To improve the administrative reform, complete the health legislation system to be more appropriate to the current socio-economic development situation of the country, to be in accordance with the International Treaties, which Viet Nam had already signed in or committed for participation. To study and adjust the legal aspect in order to protect the lives, health and dignity for the patient and the health workers while carrying out their duties; to apply the insurance for occupational hazard for health workers. To consolidate the health inspection system, to improve the health inspection activities in order to well implement the state administration by laws.

To clearly decentralize the various medical levels and local areas. To implement the decentralization by giving full authority on finance management for each health unit.

To strengthen the planning capacity (short-term and long term) in the operational areas of the health sector. To regularly monitor, supervise and evaluate the results of planning and implementation activities.

To improve the state administration and legal knowledge for the health workers in the sector. To well implement the democratic regulations in the health facilities. To formulate the competition movement, especially the formulation of advanced model or sample of unit and individuals within the sector.

To strengthen the capacity of health information and statistics activities, to apply the informatics soft-ware, to consolidate the health informatics and statistics system in order to timely provide information with high reliability for managerial activities at all levels.
PART FINE
PROCESS TO IMPLEMENT THE DESIGN

1. Duration from 2006-2007:
Priority should be given to the consolidation, rearrangement and establishment of new units: provincial centres for HIV/AIDS prevention and control; district preventive medicine.
To invest for upgrading the district hospitals and inter-region general hospitals (inter-district).
To consolidate the commune health station; to invest for upgrading the provincial hospitals, giving priority to the pediatrics hospitals or pediatrics wards in the general hospitals; the gynecology-obstetrics hospitals or the gynecology-obstetrics wards in general hospitals.
To develop projects for establishment, upgrading investment for laboratories such as: biological safety, quality of food safety at central and provincial levels; specialized hospitals; to upgrade the regional general hospitals.
To focus on investment for three highly specialized medical centres.
To invest for upgrading the researching institutions, vaccine production, vaccine and biological production control.
To design measures for arrangement of hospitals to treat infectious diseases at appropriate areas.

2. Duration from 2008 – 2010:
To continue investing to the district and provincial hospitals and the highly specialized medical centres, and the remaining regional hospitals.
To continued upgrading the provincial centre for preventive medicine at represented provinces in the region.
To invest for upgrading the health workers training schools: National University for Medicine and Pharmacy in Ha Noi; to establish University for medical techniques, to upgrade 12 provincial secondary medical schools to medical and pharmaceutical high schools.
To continue to invest to incomplete project in the period of 2006-2008 and other projects to be planned in the design by 2010.

3. Duration from 2011 to 2020:
To upgrade the remaining provincial secondary medical schools to medical and pharmaceutical high schools. To continue consolidating and upgrading the quality of health care services.
To continue investing to central hospitals, provincial hospitals achieved the special level for hospitals and hospitals at level I. To respond to the criteria for hospitals of an advanced industrialization country.
PART SIX
ORGANIZING FOR IMPLEMENTATION

Based on the contents of the Comprehensive design for development of the health system in Viet Nam, for the duration till 2010 and the vision till 2020, the prime Minister assigns the Ministries, sectors, Provincial people’s Committee and central cities to organize the implementation of the design:

The Ministry of Health will have the responsibilities to direct, provide guidance to other institutions belongs to the Ministry, the projects belonged to the national health programmes and the provincial health facilities to implement the design for development of the health system.

- To develop the 5 year plan for development for protection, caring of the people’s health in the duration of 2006-2010 in order to submit to relevant authorities for endorsement.

- To develop and complete the mechanism, policies on management of the investment for basic construction in the health sector oriented to the improvement of decentralization to lower levels, to propose specific policy on training, consolidating the organization, to create resources for sector developing investment.

- To design for development of the health network at the focus economic regions (North, Centre and South).

- To identify the investment priority, to invest with focus points to avoid the spreading and ineffective investment. To develop the investment project to submit to the Government for endorsement, such as: to invest for upgrading the commune health stations, general hospitals for regions of population clusters (district or inter-district), the project to invest for upgrading specialized medical centres, the regional general hospitals with high technology and the national institutions.

- Assign the Ministry of Health to coordinate, collaborate with other Ministries, sectors to review and endorse the design for development of the health system including: the consultation and curative network, preventive medicine network and the health manpower development plan.

- Regularly report to the Prima Minister on the result, the difficulties and shortcomings of the process of the design implementation.

The Ministry of planning and investment will be responsible for mobilizing and balancing funds and resources invested to the health sector to ensure that the design will be implemented as planned. To monitor the design implementation country wide.

The Ministry of Finance will be responsible to ensure the state budget allocation to the health sector in the 5 year plan and annually. Together with the Ministry of Health to balance the sector budget and to allocate budget to prioritized areas in the design.

The other Ministries/sectors has the responsibility to collaborate with the Ministry of Health to create resources from the respective sector for the development, consolidation and improving the quality of the sector health facilities in order to protect, caring and promoting the workers’ health.
The President of the Provincial People’s Committee has the responsibility to organize the implementation of the design, to allocate funds of land for the development of the health system within the province and have the responsibility to take care of the health status of the people within its territory.